epic ENVIRONMENTAL

John Holland CPB Joint Venture
WestConnex Stage 3B Rozelle, City West Link – Site Audit Report - 2023/SY037
City West Link
SY180068.01
27 November 2023

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SITE AUDIT STATEMENT - 2023/SY037

NSW Site Auditor Scheme

Site Audit Statement

A site audit statement summarises the findings of a site audit. For full details of the site auditor's findings, evaluations and conclusions, refer to the associated site audit report.

This form was approved under the *Contaminated Land Management Act 1997* on 12 October 2017.

For information about completing this form, go to Part IV.

Part I: Site audit identification

Site audit statement no. 2023/SY037

This site audit is a:

☑ statutory audit

☐ ~~non-statutory audit~~

within the meaning of the *Contaminated Land Management Act 1997*.

Site auditor details

(As accredited under the *Contaminated Land Management Act 1997*)

Name Mr Brad May

Company Epic Environmental Pty Ltd

Address Suite 5, Level 9, 189 Kent Street, Sydney NSW

Postcode 2000

Phone 1800 779 363, 0400 497 512

Email bmay@epicenvironmental.com.au

Site details

Address: City West Link, The Crescent, Chapman Road, Johnston Street, Annandale NSW

Postcode: 2038

Property description

(Attach a separate list if several properties are included in the site audit.)

Part Lot 20 Deposit Plan (DP) 1151746: Lots 21 and 22 DP 1151746:

Part Lot 4 DP 1209992: Part Lot 23 DP 1151746: Lot 20 DP 791554

Lots 1, 2 Lot 3 DP 827708: Part Lot 3 DP 827708: Lot 31 DP 1055559:

Part Lot 30 DP 1055559: Lot 10 DP 261985: Part Lot 5 DP 873379: The Crescent Roadway

Local government area Inner West Council

Area of site (include units, e.g. hectares) 21,882 m^2

Current zoning: Port and Employment Zone (Sydney Regional Environmental Plan No. 26 – City West)

Regulation and notification

To the best of my knowledge:

❑ ~~**the site is** the subject of a declaration, order, agreement, proposal or notice under the *Contaminated Land Management Act 1997* or the *Environmentally Hazardous Chemicals Act 1985,* as follows: (provide the no. if applicable)~~

- ❑ ~~Declaration no.~~
- ❑ ~~Order no.~~
- ❑ ~~Proposal no.~~
- ❑ ~~Notice no.~~

✓ **the site is not** the subject of a declaration, order, proposal or notice under the *Contaminated Land Management Act 1997* or the *Environmentally Hazardous Chemicals Act 1985*.

To the best of my knowledge:

❑ ~~the site **has** been notified to the EPA under section 60 of the *Contaminated Land Management Act 1997*~~

✓ the site **has not** been notified to the EPA under section 60 of the *Contaminated Land Management Act 1997*.

Site audit commissioned by

Name: Charles Scarf

Company: John Holland CPB Contractors Joint Venture

Address: 84 Lilyfield Road, Rozelle

Postcode: 2039

Phone: 0438 247 725

Email: Charles.scarf@rozelleinterchange.com.au

Contact details for contact person (if different from above)

Name: Ciara Moriarty

Phone: 0417 738 136

Email: ciara.moriarty@rozelleinterchange.com.au

Nature of statutory requirements (not applicable for non-statutory audits)

☐ ~~Requirements under the *Contaminated Land Management Act* 1997 (e.g. management order; please specify, including date of issue)~~

☑ Requirements imposed by an environmental planning instrument (please specify, including date of issue)

State Significant Infrastructure (SSI) 7485, issued 17 April 2018, Conditions of Approval for the WestConnex Stage 3B Rozelle Interchange, conditions relating to contaminated sites (E181 to E185) and waste (E202 to E203).

☐ ~~Development consent requirements under the *Environmental Planning and Assessment Act 1979* (please specify consent authority and date of issue)~~

☐ ~~Requirements under other legislation (please specify, including date of issue)~~

Purpose of site audit

~~❑ **A1** To determine land use suitability~~

~~Intended uses of the land:~~

OR

✓ **A2** To determine land use suitability subject to compliance with either an active or passive environmental management plan

Intended uses of the land: Road reserve, pedestrian, and bicycle pathways (including a footbridge at Buruwan Park) and minor landscape open space areas.

~~OR~~

~~(Tick all that apply)~~

~~❑ **B1** To determine the nature and extent of contamination~~

~~❑ **B2** To determine the appropriateness of:~~

- ~~❑ an investigation plan~~
- ~~❑ a remediation plan~~
- ~~❑ a management plan~~

~~❑ **B3** To determine the appropriateness of a **site testing plan** to determine if groundwater is safe and suitable for its intended use as required by the *Temporary Water Restrictions Order for the Botany Sands Groundwater Resource 2017*~~

~~❑ **B4** To determine the compliance with an approved:~~

- ~~❑ **voluntary management proposal** or~~
- ~~❑ **management order** under the *Contaminated Land Management Act 1997*~~

~~❑ **B5** To determine if the land can be made suitable for a particular use (or uses) if the site is remediated or managed in accordance with a specified plan.~~

~~Intended uses of the land:~~

Information sources for site audit

Consultancies which conducted the site investigations and/or remediation:

AECOM, Ramboll, WSP

Titles of reports reviewed:

- Ramboll 2019, 'WestConnex Stage 3B – Rozelle Interchange Contaminated Land – Sampling and Analysis Plan (SAQP)'. Revision D2, August 2019, (Ramboll SAQP 2019), Appendices K, O and P. August 2019.
- Ramboll 2019a, 'Underground Storage Tank Removal Technical Guidance Note, WestConnex Stage 3B Rozelle Interchange'. June 2019.

- WSP 2020, Work Plan – Sub Site Area – Crescent West. PS117368-CLM-LTR-WP-CRW, Revision B. 16 Mar 2020. 16 Mar 2020.
- WSP 2020a, Work Plan – Sub Site Area – Crescent Civil Site. PS117368-CLM-LTR-WP-Crescent Civil Site, PS117368-CLM-LTR-WP-Crescent Civil Site, Revision B. 28 Mar 2020.
- WSP 2021a, WestConnex Stage 3B - Rozelle Interchange, Sub Site Area - Crescent West (Buruwan Park), Detailed Site Investigation (DSI). PS117368-CLM-REPBuruwanPark, Revision D. 25 Nov 2021.
- WSP 2021b, WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent Civil – Detailed Site Investigation. Ref: PS117368-CLM-REP Crescent Civil, Revision D. 15 Jul 2021.
- WSP 2022, City West Link UST – Sampling and Validation Report. PS117368-CLM-REP-CWL UST, Revision D. 28 Feb 2022.
- WSP 2022a, *WestConnex Stage 3b – Rozelle, Interchange Subsite Area – City West Link (CWL), Site Status and Hydrogeology Report*. PS117368-CLM-REPCWL, Revision E. 31 Oct 2023.
- WSP 2023, Validation Report – WestConnex Stage 3B Sub-Site – The Crescent. PS117368-CLM-REP-CWL VAL RevD Final. 22 Nov 2023
- WSP 2023a, Long Term Environmental Management Plan – Various Lots, The Crescent, Annandale and Rozelle, NSW. PS117368-CLM-REP-CWL EMP RevE. 17 Nov 2023.

Other information reviewed, including previous site audit reports and statements relating to the site:

- AECOM 2016, 'WestConnex M4-M5 Link Rozelle Interchange, Stage 1 Preliminary Site Investigation '. Ref: M4M5-REP-4000-EN-030A. 19 May 2016.

Site audit report details

Title: WestConnex Stage 3B Rozelle, City West Link – Site Audit Report – 2023/ SY037, City West Link. SY180068.01, 27 November 2023.

Report no. SY180068.01_RepSAR_SY037_CityWWestLink_Rev0 Date 27 November 2023

Part II: Auditor's findings

Please complete either Section A1, Section A2 or Section B, not more than one section. (Strike out the irrelevant sections.)

- Use **Section A1** where site investigation and/or remediation has been completed and a conclusion can be drawn on the suitability of land uses **without the implementation** of an environmental management plan.

- Use **Section A2** where site investigation and/or remediation has been completed and a conclusion can be drawn on the suitability of land uses **with the implementation** of an active or passive environmental management plan.

- Use **Section B** where the audit is to determine:
  - (B1) the nature and extent of contamination, and/or
  - (B2) the appropriateness of an investigation, remediation or management plan[1], and/or
  - (B3) the appropriateness of a site testing plan in accordance with the *Temporary Water Restrictions Order for the Botany Sands Groundwater Source 2017*, and/or
  - (B4) whether the terms of the approved voluntary management proposal or management order have been complied with, and/or
  - (B5) whether the site can be made suitable for a specified land use (or uses) if the site is remediated or managed in accordance with the implementation of a specified plan.

[1] For simplicity, this statement uses the term 'plan' to refer to both plans and reports.

Section A1

I certify that, in my opinion:

The **site is suitable** for the following uses:

(Tick all appropriate uses and strike out those not applicable.)

- ☐ Residential, including substantial vegetable garden and poultry
- ☐ Residential, including substantial vegetable garden, excluding poultry
- ☐ Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry
- ☐ Day care centre, preschool, primary school
- ☐ Residential with minimal opportunity for soil access, including units
- ☐ Secondary school
- ☐ Park, recreational open space, playing field
- ☐ Commercial/industrial
- ☐ Other (please specify):

_____

OR

- ☐ I certify that, in my opinion, the **site is not suitable** for any use due to the risk of harm from contamination.

Overall comments:

_____

_____

_____

_____

_____

_____

Section A2

I certify that, in my opinion:

Subject to compliance with the **attached** environmental management plan[2] (EMP), the site is suitable for the following uses:

(Tick all appropriate uses and strike out those not applicable.)

❑ ~~Residential, including substantial vegetable garden and poultry~~

❑ ~~Residential, including substantial vegetable garden, excluding poultry~~

❑ ~~Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry~~

❑ ~~Day care centre, preschool, primary school~~

❑ ~~Residential with minimal opportunity for soil access, including units~~

❑ ~~Secondary school~~

☑ Park, recreational open space, playing field

☑ Commercial/industrial

☑ Other (please specify):

Roadway, footpath, cycleway

EMP details

Title: Long Term Environmental Management Plan, Various Lots, The Crescent, Annandale and Rozelle, NSW Ref: PS117368-CLM-REP-CWL EMP RevE Final

Author:WSP

Date: 17 November 2023 No. of pages 89

EMP summary

This EMP (attached) is required to be implemented to address residual contamination on the site.

The EMP: (Tick appropriate box and strike out the other option.)

❑ requires operation and/or maintenance of **active** control systems[3]

☑ requires maintenance of **passive** control systems only[3].

[2] Refer to Part IV for an explanation of an environmental management plan.
[3] Refer to Part IV for definitions of active and passive control systems.

Purpose of the EMP:

The purpose of the Long-Term Environmental Plan (LTEMP) is to manage potential adverse health and environmental impacts associated with residual soil contamination at the site. The LTEMP provides the passive management requirements to ensure the longevity of the installed capping system and pavement and to ensure any works that penetrate the capping system are appropriately controlled.

Description of the nature of the residual contamination:

Soils containing polycyclic aromatic hydrocarbons (PAHs), heavy metals and asbestos was identified at the Crescent Civil sub-site at concentrations requiring management under the LTEMP.

Summary of the actions required by the EMP:

- Environmental awareness and training
- 6-monthly visual inspections of capped areas
- Maintenance of capping
- Sets out imported fill and VENM testing and validation requirements
- Controls to be applied during minor sub-surface works (not involving breaching of capping layer)
- Management controls for observed breaches of containment (either hardstand or capped landscaped areas)
- Sets out procedures for subsurface works reinstatement to ensure protection of workers and future site users
- Sets out Unexpected finds protocols
- Incident and emergency procedures
- Provides complaint and environmental incident procedures and register
- Reporting and LTEMP review requirements

How the EMP can reasonably be made to be legally enforceable:

The Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) provides the primary mechanism for ensuring the LTEMP is enforced with respect to changes in the allowable land uses or material alterations to the site and surrounds. Future redevelopment work at the site is significant enough to require consent from the local council (Inner West Council) under the EP&A Act, which provides an avenue for enforcement as Council may require adoption of this LTEMP as a condition of development consent for the site.

The site owner (Transport for NSW) will be responsible for routine monitoring and maintenance of the LTEMP areas.

How there will be appropriate public notification:

As per condition E183 of the infrastructure approval, the Secretary of the NSW Department of Planning and Environment (or nominee) and Inner West Council (Council) are also to be provided a copy of the site audit statement. Council must provide a notification of the existence of the audit on the planning certificate/s for the site issued under section 10.7 of the EP&A Act.

Overall comments:

Section B

Purpose of the plan[4] which is the subject of this audit:

I certify that, in my opinion:

(B1)

- ☐ The nature and extent of the contamination **has** been appropriately determined
- ☐ The nature and extent of the contamination **has not** been appropriately determined

AND/OR (B2)

- ☐ The investigation, remediation or management plan **is** appropriate for the purpose stated above
- ☐ The investigation, remediation or management plan **is not** appropriate for the purpose stated above

AND/OR (B3)

- ☐ The site testing plan:
  - ☐ **is** appropriate to determine
  - ☐ **is not** appropriate to determine

  if groundwater is safe and suitable for its intended use as required by the *Temporary Water Restrictions Order for the Botany Sands Groundwater Resource 2017*

AND/OR (B4)

- ☐ The terms of the approved voluntary management proposal* or management order** (strike out as appropriate):
  - ☐ **have** been complied with
  - ☐ **have not** been complied with.

  *voluntary management proposal no.

  **management order no.

AND/OR (B5)

- ☐ The site **can be made suitable** for the following uses:

  (Tick all appropriate uses and strike out those not applicable.)
  - ☐ Residential, including substantial vegetable garden and poultry
  - ☐ Residential, including substantial vegetable garden, excluding poultry

[4] For simplicity, this statement uses the term 'plan' to refer to both plans and reports.

- ❑ ~~Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry~~
- ❑ ~~Day care centre, preschool, primary school~~
- ❑ ~~Residential with minimal opportunity for soil access, including units~~
- ❑ ~~Secondary school~~
- ❑ ~~Park, recreational open space, playing field~~
- ❑ ~~Commercial/industrial~~
- ❑ ~~Other (please specify):~~

_____

~~IF the site is remediated/managed* in accordance with the following plan (**attached**):~~

~~*Strike out as appropriate~~

~~Plan title~~

~~Plan author~~

~~Plan date~~ ~~No. of pages~~

~~SUBJECT to compliance with the following condition(s):~~

~~Overall comments:~~

Part III: Auditor's declaration

I am accredited as a site auditor by the NSW Environment Protection Authority (EPA) under the *Contaminated Land Management Act 1997.*

Accreditation no. 1603

I certify that:

- I have completed the site audit free of any conflicts of interest as defined in the *Contaminated Land Management Act 1997,* and
- with due regard to relevant laws and guidelines, I have examined and am familiar with the reports and information referred to in Part I of this site audit, and
- on the basis of inquiries I have made of those individuals immediately responsible for making those reports and obtaining the information referred to in this statement, those reports and that information are, to the best of my knowledge, true, accurate and complete, and
- this statement is, to the best of my knowledge, true, accurate and complete.

I am aware that there are penalties under the *Contaminated Land Management Act 1997* for wilfully making false or misleading statements.

Signed

Date 27 November 2023

Part IV: Explanatory notes

To be complete, a site audit statement form must be issued with all four parts.

How to complete this form

Part I

Part I identifies the auditor, the site, the purpose of the audit and the information used by the auditor in making the site audit findings.

Part II

Part II contains the auditor's opinion of the suitability of the site for specified uses or of the appropriateness of an investigation, or remediation plan or management plan which may enable a particular use. It sets out succinct and definitive information to assist decision-making about the use or uses of the site or a plan or proposal to manage or remediate the site.

The auditor is to complete either Section A1 or Section A2 or Section B of Part II, **not** more than one section.

Section A1

In Section A1 the auditor may conclude that the land is *suitable* for a specified use or uses OR *not suitable* for any beneficial use due to the risk of harm from contamination.

By certifying that the site is *suitable*, an auditor declares that, at the time of completion of the site audit, no further investigation or remediation or management of the site was needed to render the site fit for the specified use(s). **Conditions must not be** imposed on a Section A1 site audit statement. Auditors may include **comments** which are key observations in light of the audit which are not directly related to the suitability of the site for the use(s). These observations may cover aspects relating to the broader environmental context to aid decision-making in relation to the site.

Section A2

In Section A2 the auditor may conclude that the land is *suitable* for a specified use(s) subject to a condition for implementation of an environmental management plan (EMP).

Environmental management plan

Within the context of contaminated sites management, an EMP (sometimes also called a 'site management plan') means a plan which addresses the integration of environmental mitigation and monitoring measures for soil, groundwater and/or hazardous ground gases throughout an existing or proposed land use. An EMP succinctly describes the nature and location of contamination remaining on site and states what the objectives of the plan are, how contaminants will be managed, who will be responsible for the plan's implementation and over what time frame actions specified in the plan will take place.

By certifying that the site is suitable subject to implementation of an EMP, an auditor declares that, at the time of completion of the site audit, there was sufficient information satisfying guidelines made or approved under the *Contaminated Land Management Act 1997*

(CLM Act) to determine that implementation of the EMP was feasible and would enable the specified use(s) of the site and no further investigation or remediation of the site was needed to render the site fit for the specified use(s).

Implementation of an EMP is required to ensure the site remains suitable for the specified use(s). The plan should be legally enforceable: for example, a requirement of a notice under the CLM Act or a development consent condition issued by a planning authority. There should also be appropriate public notification of the plan, e.g. on a certificate issued under s.149 of *the Environmental Planning and Assessment Act 1979*.

Active or passive control systems

Auditors must specify whether the EMP requires operation and/or maintenance of active control systems or requires maintenance of passive control systems only. Active management systems usually incorporate mechanical components and/or require monitoring and, because of this, regular maintenance and inspection are necessary. Most active management systems are applied at sites where if the systems are not implemented an unacceptable risk may occur. Passive management systems usually require minimal management and maintenance and do not usually incorporate mechanical components.

Auditor's comments

Auditors may also include **comments** which are key observations in light of the audit which are not directly related to the suitability of the site for the use(s). These observations may cover aspects relating to the broader environmental context to aid decision-making in relation to the site.

Section B

In Section B the auditor draws conclusions on the nature and extent of contamination, and/or suitability of plans relating to the investigation, remediation or management of the land, and/or the appropriateness of a site testing plan in accordance with the *Temporary Water Restrictions Order for the Botany Sands Groundwater Source 2017*, and/or whether the terms of an approved voluntary management proposal or management order made under the CLM Act have been complied with, and/or whether the site can be made suitable for a specified land use or uses if the site is remediated or managed in accordance with the implementation of a specified plan.

By certifying that a site *can be made suitable* for a use or uses if remediated or managed in accordance with a specified plan, the auditor declares that, at the time the audit was completed, there was sufficient information satisfying guidelines made or approved under the CLM Act to determine that implementation of the plan was feasible and would enable the specified use(s) of the site in the future.

For a site that *can be made suitable*, any **conditions** specified by the auditor in Section B should be limited to minor modifications or additions to the specified plan. However, if the auditor considers that further audits of the site (e.g. to validate remediation) are required, the auditor must note this as a condition in the site audit statement. The condition must not specify an individual auditor, only that further audits are required.

Auditors may also include **comments** which are observations in light of the audit which provide a more complete understanding of the environmental context to aid decision-making in relation to the site.

Part III

In **Part III** the auditor certifies their standing as an accredited auditor under the CLM Act and makes other relevant declarations.

Where to send completed forms

In addition to furnishing a copy of the audit statement to the person(s) who commissioned the site audit, statutory site audit statements must be sent to

- the **NSW Environment Protection Authority**: nswauditors@epa.nsw.gov.au or as specified by the EPA

AND

- the **local council** for the land which is the subject of the audit.

SURVEYOR	SEAN FOLEY
	PROJECT SURVEY MANAGER
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

AUDIT BOUNDARY : RED

PREPARED FOR: CIARA MORIARTY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	29/11/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:1600

AUDIT BOUNDARY
THE CRESCENT

SHEET 1 of 1

REVISION

Plotted: 001 at Wed Nov 29 19:16:52 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

Design
for a better
future /

JOHN HOLLAND CPB

LONG TERM ENVIRONMENTAL MANAGEMENT PLAN

VARIOUS LOTS
THE CRESCENT,
ANNANDALE AND
ROZELLE, NSW

NOVEMBER 2023

Question today
Imagine tomorrow
Create for the future

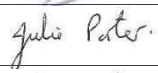
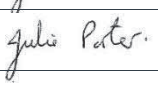
Long Term Environmental Management Plan
Various lots
The Crescent, Annandale and Rozelle, NSW

John Holland CPB

WSP
Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
wsp.com

REV	DATE	DETAILS
A	11/09/2023	Draft
B	23/10/2023	Updated draft to include Area 5
C	10/11/2023	Revised draft following IAA
D	14/11/2023	Revised draft following IAA
E	17/11/2023	Final

	NAME	DATE	SIGNATURE
Prepared by:	Matt Vanderheyden	17/11/2023	
Reviewed by:	Julie Porter	17/11/2023	
Approved by:	Julie Porter	17/11/2023	

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ABBREVIATIONS

CWL	City West Link
DSI	Detailed site investigation
EIL	Ecological investigation level
HIL	Health investigation level
LTEMP	Long term environmental management plan
mbgl	metres below ground level
NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999
NSW EPA	New South Wales Environment Protection Authority
PAH	Polycyclic aromatic hydrocarbon
POEO Act	Protection of the Environment Operations Act 1997
SWMS	Safe work method statement
TEQ	Toxic equivalence quotient
TfNSW	Transport for NSW
WCX3B	WestConnex Stage 3B
WHS	Work Health and Safety
WHT	Western harbour tunnel

1 INTRODUCTION

WSP Australia Pty Ltd (WSP) was commissioned by John Holland CPB Joint Venture (JHCPB) to prepare a long-term environmental management plan (LTEMP) for the City West Link (CWL) section of the WestConnex Stage 3B (WCX3B) Rozelle Interchange project. The portion of the CWL section pertaining to this LTEMP comprises the following areas (referred to collectively as 'the site'):

- Crescent Civil sub-site (east) – adjoining Rozelle Bay to the east;
- Buruwan Park sub-site (north-west) – adjoining City West Link roadway to the north and Sydney Light Rail corridor to the south/south-west; and
- Ancillary areas – comprises roadways, pedestrian and cycle paths, and open space/landscaped areas located outside of the Crescent Civil and Buruwan Park sub-site boundaries.

The site location (including sub-site areas) is shown on Figures 1 and 2 (Appendix A).

1.1 BACKGROUND

As part of the preliminary investigation planning for the WCX3B project, Ramboll Australia Pty Ltd (Ramboll) conducted a review of historical contamination data to determine contamination risk within the project footprint. The portion of the WCX3B project subject to this LTEMP was categorised by Ramboll (2019[1]) as comprising areas of low and moderate contamination risk as follows:

- Moderate risk – Crescent Civil and Buruwan Park sub-sites.
- Low risk – remaining ancillary areas, including The Crescent and Johnston Street roadways.

Detailed site investigations (DSIs) were subsequently undertaken for the "moderate risk" Crescent Civil and Buruwan Park sub-sites by WSP (2021a and 2021b[2], respectively; refer to Figure 2 in Appendix A). The DSIs did not identify a potential contamination risk to future users of Buruwan Park and this sub-site was considered suitable for the proposed open space and roadway land uses. However, soil containing polycyclic aromatic hydrocarbons (PAHs), heavy metals and asbestos was identified at the Crescent Civil sub-site at concentrations requiring management and/or remediation to render the sub-site suitable for the proposed open space and roadway land uses.

The contaminated areas within the Crescent Civil sub-site have been remediated via the construction of soil or hardstand capping layers. This LTEMP has been prepared to document the management requirements for the remediation capping layers constructed at the Crescent Civil sub-site, in addition to an unexpected finds procedure applicable to the entire site area (i.e. Crescent Civil and Buruwan Park sub-sites, as well as ancillary areas).

Two areas of residual land adjoining the Crescent Civil sub-site were also assessed as part of the DSI (WSP, 2021a; refer to Figure 2 in Appendix A). These areas were not subject to remediation and do not form part of this LTEMP. The residual land is described as follows:

- central-eastern portion of the Crescent Civil sub-site – not disturbed by JHCPB for the WCX3B project construction and has been established with topsoil and a finished turfed surface only; and

[1] Ramboll (2019) WestConnex Stage 3B – Rozelle Interchange Sampling, Analysis and Quality Plan.

[2] WSP (2021a) WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent Civil, Detailed Site Investigation, ref: PS117368-CLM-REP-Crescent Civil RevD, 15 July 2021
WSP (2021b) WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent West (Buruwan Park), Detailed Site Investigation, ref: PS117368-CLM-REP-Buruwan Park RevD, 25 November 2021

- north-eastern portion of the Crescent Civil sub-site – proposed to be retained for the western harbour tunnel (WHT) WestConnex project works.

1.2 PURPOSE

This LTEMP has been prepared to manage potential adverse health and environmental impacts associated with soil contamination at the site. This LTEMP provides the passive management requirements to ensure the longevity of the installed capping system and to ensure any works that penetrate the capping system are appropriately controlled. No active management is required for the site.

This LTEMP will apply indefinitely or until such a time that a site audit statement can be prepared by a NSW Environment Protection Authority (EPA) accredited site auditor stating that an EMP is not required for the site.

In handing over completed works to Transport for NSW (TfNSW), JHCPB has a contractual obligation under its Project Deed to provide all documentation that is required for TfNSW (and others) to operate and maintain the relevant works. This LTEMP forms part of such deliverables that JHCPB must handover at completion along with a Certificate of Completion ensuring that handover is on the basis that TfNSW is aware of and complies with the LTEMP requirements.

1.3 OBJECTIVES

The objectives of this LTEMP are to:

- define appropriate management and mitigation measures to be implemented to manage potential environmental and health and safety risks associated with residual subsurface soil impacted by PAHs, heavy metals and asbestos;
- outline the monitoring and maintenance measures required to maintain integrity of the constructed capping systems;
- ensure activities associated with any future site works are managed in a way that minimises the potential impact to the surrounding environment; and
- ensure all personnel involved are aware of environmental issues associated with residual PAHs, heavy metals and asbestos in soil.

The objectives are to be achieved through the application of health and safety procedures as well as the application of controls during the maintenance of utilities, site planning/preparation work and potential future excavation works at the site.

1.4 EMP REGULATORY CONTEXT

Key legislation relevant to the proposed works is listed below:

- *Contaminated Land Management Act 1997* (NSW)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cmlth)
- *Environmental Hazardous Chemicals Act 1985* (NSW)
- *Environmental Planning and Assessment Act 1979* (NSW)
- Landcom 2004, *Managing Urban Stormwater: Soils and Construction*
- *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPM, as amended 2013)
- NSW EPA 2014, *Waste Classification Guidelines*
- *Protection of the Environment Operations Act 1997* (POEO Act; NSW)

- *Protection of the Environment Operations Regulation 2009* (POEO Regulation; NSW)
- SafeWork Australia, 2019 *Code of Practice - How to Manage Work Health and Safety Risks*
- SafeWork Australia, 2019 *Code of Practice - Construction Work*
- SafeWork Australia, 2020 *Code of Practice - Excavation Work*
- *Waste Avoidance and Resource Recovery Act 2001* (NSW)
- *Work Health and Safety Act 2011*
- *Work Health and Safety Regulation 2017*.

1.5 CURRENT/FUTURE LAND USE

The site land uses consist of a road reserve, pedestrian and bicycle pathways (including a footbridge at Buruwan Park) and minor open space/landscaped areas.

2 SITE DESCRIPTION

2.1 SITE IDENTIFICATION

The general property identification information is provided in Table 2.1 below.

Table 2.1 Site details

SITE INFORMATION	
Property owner	Transport for NSW
Property address	The Crescent, Johnston Street and City West Link, Annandale and Rozelle NSW
Legal identification (study area)	Part Lot 20 Deposit Plan (DP) 1151746 Lots 21 and 22 DP 1151746 Part Lot 23 DP 1151746 Part Lot 4 DP 1209992 Lot 20 DP 791554 Lots 1, 2 and part Lot 3 DP 827708 Lot 10 DP 261985 Part Lots 30 and 31 DP 1055559 Part Lot 5 DP 873379
Study area	Approximately 2.4 ha
Current/future site use	Road reserve, pedestrian and bicycle pathways (including a footbridge at the Buruwan Park sub-site) and minor public open space (landscaped areas) (refer to Figure 5 in Appendix A).
Local authority	Inner West Council
Zoning information	RE1 – Public Recreation (under *Leichhardt Local Environmental Plan 2013)*

The location of the site is displayed on Figure 1 and the site layout is displayed on Figure 2 (Appendix A).

It is noted that the north-eastern portion of the Crescent Civil sub-site comprising residual land and the adjoining hardstand surface (hardstand area referred to herein as ‘Area 6’; refer to Figure 3 of Appendix A) comprises JHCPB offices for the WCX3B CWL construction area. The temporary construction office area is proposed to be retained for the WHT WestConnex project works. Further details are provided in Section 3.2.1.

2.2 SITE HISTORY SUMMARY

The eastern portion of the site (Crescent Civil sub-site) is likely to have been historically used for maritime/shipping purposes since at least 1930 and was owned by various individuals, including a timber merchant, until this time. Ownership of the site was transferred to The Sydney Harbour Trust Commissioners during the late 1920s and subsequently to various NSW government bodies. This area appeared to contain a boatshed on the north side of Whites Creek (abutting Rozelle Bay) from 1930 until sometime between 1982 and 1991. Realignment of the Whites Creek canal approximately 10 to 20 m to the south and minor reclamation works were also completed during this time. The area south of Whites Creek appears to have been cleared of infrastructure and buildings circa 1970. The Crescent Civil sub-site site

generally remained either vacant or was utilised for storage of apparent maritime associated materials until commencement of the WCX3B project works.

The Buruwan Park sub-site has historically been intersected by Whites Creek channel, in addition to an access road which was demolished circa 2000. The area north of Whites Creek historically formed part of the larger Rozelle Railyards, which appears to have included industrial and storage uses, until construction of the City West Link roadway circa 1990. The southern area appears to have been historically vacant and may have been used for potential storage uses during the 1950s. Buruwan Park appears to have remained vacant/open space since completion of the City West Link roadway in the 1990s.

The area located between the Buruwan Park and Crescent Civil sub-sites (i.e. The Crescent roadway) has historically comprised a roadway since at least 1930.

Works associated with the WCX3B project commenced at the site during late-2019, which included the excavation and removal of material at the site, widening of The Crescent roadway and construction of a pedestrian footpath/cycleway. Further information pertaining to the history of the site is presented in the WSP (2021a and 2021b) DSI reports.

2.3 CURRENT/FUTURE SITE USE

At the time of writing this LTEMP, the site has been developed as a road reserve, including pedestrian and bicycle pathways and minor public open space (landscaped areas). Two areas of residual land have also been set aside as follows:

- central portion of the site – proposed future development (land use unknown); and
- north-eastern portion of the site –proposed to be retained for the WHT WestConnex project works.

The site land use design (including locations of residual land) are shown on Figure 5 (Appendix A).

2.4 SITE-SPECIFIC SOILS AND GEOLOGY

Subsurface conditions encountered at the site during the WSP (2021a and 2021b) DSIs varied considerably across the site. A sandstone outcrop was encountered in the western/south-western portion of the site, with depth to rock ranging from 0.3 and 0.5 m below ground level (BGL) in the north-west (Buruwan Park sub-site) to 3.1 mBGL in the south-west (Crescent Civil sub-site).

Fill material (generally comprising silty/clayey sands or sandy clays) was recorded in the northern portion of the Buruwan Park sub-site at depths between 0.5 and 3.2 mBGL, underlain by natural alluvial sands and clay. Fill material was encountered to a maximum depth of 1.5 mBGL in the southern portion of the Buruwan Park sub-site.

The soil profile encountered in the Crescent Civil sub-site can be grouped into two sections – south/west and north/east of The Crescent road alignment. In the south-western portion of the Crescent Civil sub-site, the soil profile typically comprised approximately 0.5 to 1.5 m sandstone fill material, likely spoil imported from the WCX3B tunnelling activities. Underlying the sandstone fill was approximately 0.5 to 2 m historic fill material, consisting of black/dark brown silty, clayey sand with anthropogenic inclusions (tiles, plastic and concrete). The historic fill was underlain by extremely weathered sandstone.

In the north-eastern portion of the Crescent Civil sub-site, the soil profile encountered typically comprised 0.5 to 1 m grey gravels and crushed road base for the future footpath. Underlying the gravel/road base was historic fill material (dark brown/black sandy clay), which increased in clay content with depth. Anthropogenic inclusions (plastic material, clinker and nails) were noted at varying depths.

Fill material and residual soils across much of the site were excavated and disposed off-site by JHCPB following the DSI and were backfilled using sandstone tunnelling spoil from associated WCX3B tunnelling activities, in addition to various landscaping materials.

3 SUMMARY OF CONTAMINATION AND REMEDIATION

3.1 SUMMARY OF CONTAMINATION STATUS

Fill material containing PAHs, lead and asbestos has been retained on the Crescent Civil sub-site. These contaminants are present in some areas of this sub-site at concentrations that may present a potential risk to human health should exposure via dermal contact, ingestion and/or inhalation occur.

The general locations of retained soil contamination on the Crescent Civil sub-site are shown on Figure 4 (Appendix A) and are summarised as follows:

- PAHs and lead in fill material to depths of up to approximately 7.5 mBGL; and
- Asbestos in shallow fill material in the southern portion of the Crescent Civil sub-site.

Contaminated areas within the Crescent Civil sub-site have been remediated via the construction of soil or hardstand capping layers (refer to Section 3.2 for a description of remediation activities).

The remaining areas of the site (i.e. Buruwan Park sub-site and remaining ancillary areas) are considered to present a low contamination risk. However, the potential exists for impacted fill material to be present in these areas of the site, which should be managed via the implementation of an unexpected finds procedure (refer to Section 5.3).

3.2 REMEDIATION ACTIVITIES

The remediation activities undertaken at the Crescent Civil sub-site comprised the following[3]:

- placement of a basal layer of permeable coloured synthetic geotextile material in unsealed areas of the sub-site (i.e. portions of the site reserved for turfing or landscaping);
- installation of a capping layer across the site, comprising either of the following:
  - validated soil and a surficial layer (minimum 300 mm thickness) of either turf or mulch overlaying the geotextile; or
  - concrete and/or asphalt pavement in the portion of the sub-site encompassing the pedestrian footpath and cycleway, and The Crescent roadway. The geotextile layer was not installed in these portions of the sub-site.

For ease of reference, the landscaped portions of the Crescent Civil sub-site subject to remediation via geotextile marker layer and soil capping have been assigned an individual area reference (Areas 1 to 5). These areas are shown on Figure 3 (Appendix A). The surveyed locations of geotextile marker layer within the Crescent Civil sub-site are presented in Appendix E. The surveyed extent of geotextile marker layer and capping cross-sections for Areas 1 to 5 (including areas capped landscape areas extending beyond the Crescent Civil sub-site) are included as Appendix F.

The thickness of the soil capping layer overlying the geotextile was generally 300 mm. However, in some localised areas capping thicknesses were less than 300 mm in the vicinity of existing subsurface utilities. The soil capping layers are underlain by coloured synthetic geotextile material which provides the trigger for management controls (refer Section 5).

Three Port Jackson Fig trees were planted in Area 3 and one planted in Area 4 (refer to Figure 3 of Appendix A and survey plans in Appendices F3 and F4 for locations). The figs have a 200 L pot size and were planted within an

[3] Excluding Area 6 – refer to Section 3.2.1.

approximate 1.5 m × 1.5 m × 0.5 m excavation. During excavation the geofabric marker layer was breached and removed at these locations to achieve the required depth. Reinstatement of the geofabric marker layer was not conducted at these locations. The area surrounding the root ball has been backfilled with 0.5 m of topsoil. The locations the four Port Jackson Fig locations at which this planting methodology was adopted are shown on Figure 3 (Appendix A) and survey plans in Appendices F3 and F4.

3.2.1 AREA 6 – WESTCONNEX PROJECT OFFICES

Area 6 comprises JHCPB offices for the WCX3B CWL construction area and is proposed to be retained for this purpose for the WHT WestConnex project works. This portion of the site comprises a utility corridor which has been backfilled using thermally stabled bedding (TSB) cement mix and the entire Area 6 sealed with concrete and compacted densely graded base (DGB). Landscaping works are not proposed to be completed in Area 6 as part of the WCX3B project. The duration of occupation for the WHT WestConnex project works and subsequent land use is unknown.

4 LTEMP IMPLEMENTATION

4.1 IMPLEMENTATION OF THE LTEMP

Table 4.1 provides a summary of the responsibilities for the implementation and management of the LTEMP. The list of responsibilities does not replace any regulatory, planning, or licensing responsibilities of the parties in undertaking works at the property. In any instance where an inconsistency arises between this LTEMP and environmental law, the environmental law will take precedence over the LTEMP.

Table 4.1 Responsibilities

STAKEHOLDER	RESPONSIBILITIES
Property owner (Transport for NSW)	— Provide the LTEMP to the parties responsible for site management and maintenance (if separate to property owner, such as Council and asset/utility owners) and attach the LTEMP to all ground maintenance contracts commissioned for the site[1]. — Provide the LTEMP to Before You Dig Australia for implementation during intrusive works by asset/utility owners or their contractors. — Attach a copy of the LTEMP to any lease or contract for sale of the site. — Liaise with Council to include the LTEMP on any Section 10.7 planning certificate (i.e. zoning certificate) applicable to the site.
Property owner (Transport for NSW) or delegated authority (e.g. Council)	— Incorporate the LTEMP into any other management plans implemented at the site. — Review the effectiveness of the LTEMP annually and following any incident or other event that suggests the LTEMP is ineffective. — Implement and communicate improvements and amendments to the LTEMP as needed. — Provide sufficient resources, where needed, to comply with the requirements of this LTEMP. — Brief contractors of the existence of this LTEMP, and their roles within it. — Maintain records of maintenance and/or reports related to the site.
Council	— Attach a copy of the LTEMP to the Section 10.7 planning certificates. — Inform TfNSW if any reports are received through the Council Transport Management Centre relating to site.
Asset/utility owners Maintenance workers (including Council)	— Comply with the LTEMP, including relevant legislation and guidance (including the *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2017* or relevant legislation current at the time of the works) when conducting works at the property. — Inform the owner/occupant if disturbance of impacted soil may occur and/or if potential exposure to impacted soil is identified (e.g. existing containment barrier is compromised) or may result in the future.

[1] Includes parties responsible for future construction and/or site restoration within Area 6.

This LTEMP is prepared with the assumption that any future works on the site shall be undertaken in accordance with relevant regulations, guidelines and laws current at the date works, in NSW including but not limited to those referred to in Section 1.4.

4.2 ENVIRONMENTAL AWARENESS AND TRAINING

All site owners, occupants and maintenance/utility workers should be made aware of this LTEMP and the requirements it contains. In particular, maintenance workers should complete the following:

- a site induction;
- familiarisation with the requirements of the LTEMP; and
- environmental emergency response training.

A record of completion of the LTEMP induction should be recorded in the log in Appendix B and a checklist of LTEMP requirements for maintenance workers is presented in Appendix D.

4.3 NON-COMPLIANCES AND LTEMP DURATION/REVIEW

Any non-compliance with this LTEMP should be recorded on the non-compliance register in Appendix C2 and communicated to the site owner.

This LTEMP will apply indefinitely or until such a time that a site audit statement can be prepared by a NSW EPA accredited site auditor stating that an EMP is not required for the site.

Review of this LTEMP by the site owner (and other parties where delegated by the site owner) should be conducted every 12 months, and would include but not be limited to the following aspects:

- review non-compliances and corrective actions during the period;
- ensure inspections have been undertaken, including during and subsequent to any maintenance works conducted at the site, in addition to regular inspections to confirm that the capping layer is intact (refer to Table 5.1 for further details);
- ensure maintenance recommended (if any) during inspections and/or intrusive works has been completed;
- review whether proposed changes to land use may conflict with the LTEMP; and
- review and update this LTEMP to meet changes in applicable regulatory requirements.

4.4 APPROVAL AND CONSENT REQUIREMENTS

The need for approvals or consent for any maintenance works to be undertaken at the site should be assessed by the contractors undertaking the works.

4.5 REGULATORY FRAMEWORK AND ENFORCEMENT

In order for the LTEMP to be effective it must be practical and enforceable. With respect to environmental management of the subject site, the activities identified as needing to be controlled include:

- protection of the health risk of maintenance staff involved in future subsurface works;
- ensuring subsurface works are reinstated to suitable standard for protection of future site users; and
- consideration of environmental risk as part of any future redevelopment of the site.

The WCX3B infrastructure approval[4] requires that "*Contaminated land must not be used for the purpose approved under the terms of this approval until a Site Audit Statement is obtained that declares the land is suitable for that purpose and any conditions on the Site Audit Statement have been complied with*." This LTEMP has been prepared to fulfill the conditions of the site audit statement, specifically to facilitate suitability of the site for purpose subject to compliance with this LTEMP. The WCX3B infrastructure approval is subject to regulation by the NSW Department of Planning, Industry and Environment.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP) provides the primary mechanism for ensuring an LTEMP is enforced with respect to changes in the allowable land uses or material alterations to the site and surrounds. Of the above identified activities, future redevelopment work at the site is significant enough to require consent from the local council (Inner West Council) under the EP&A Act, which provides an avenue for enforcement as Council may require adoption of this LTEMP as a condition of development consent for the site.

The NSW Department of Urban Affairs and Planning (DUAP; now the Department of Planning, Industry and Environment) produced a guidance document titled *Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land* (NSW DUAP, 1998) which also provides guidance for Council or other planning authorities in how to assess if the land is contaminated through applying the NSW EPA investigation processes and guidelines. Along with the Resilience and Hazards SEPP (superseding *State Environmental Planning Policy 55 – Remediation of Land*; SEPP 55), the NSW DUAP (1998) guideline also makes provision for consent authorities to require a site audit statement to be prepared by a NSW EPA accredited site auditor if the consent authority consider it necessary in order for them to make their decision.

With respect to ensuring maintenance staff are protected during works and that the site surface is appropriately restored upon completion it is necessary to rely on the responsibility of TfNSW as the current owner of the site, and by delegation, their facilities management subcontractors. Both these parties have responsibilities under work health and safety (WHS) legislation which will require them to appropriately manage the risks during future subsurface maintenance works. Workers can be protected by provisions of the *Work Health and Safety Act 2011* provided they are notified of the presence of this LTEMP. Under Section 3.1 of the *Work Health and Safety Regulation 2017* a person who has a duty under the regulation to manage risks to health and safety must comply with requirements to manage risk, identify reasonably foreseeable health and safety hazards, eliminate risks to health and safety as far as practicable or if not reasonably practicable then minimise those risks. They must also maintain and review any control measures that are in place to protect worker health and safety. Risk assessment on construction projects is managed at the task level by preparation of work method statements and at the project level by preparation of WHS plans. Therefore, provided there is an adequate method for notification of the presence of the LTEMP, its recommendations can be readily built into the health and safety management of any construction project. Compliance with relevant WHS legislation is mandatory.

4.6 PUBLIC NOTIFICATION OF THIS LTEMP

The remediation of this site has been undertaken under the infrastructure approval (SSI 7485) and, under approval condition E182, the site is subject to a site audit. When a site audit statement states that the site is suitable for a particular use if managed in accordance with an EMP, the plan must be attached to the site audit statement and included in the site audit report. As per condition E183 of the infrastructure approval, the Secretary of the NSW Department of Planning and Environment (or nominee) and Inner West Council (Council) are also to be provided a copy of the site audit statement. Council must provide a notification of the existence of the audit on the planning certificate/s for the site issued under section 10.7 of the EP&A Act.

[4] Number SSI 7485.

5 RISK MANAGEMENT ACTIVITIES AND CONTROLS

Risk from soil contamination retained on the Crescent Civil sub-site may arise when contaminated soils are disturbed, including where the geotextile marker layer and hardstand capping is breached. These risks include:

- potential exposure of workers to contamination via direct contact, ingestion of soil/dust and/or inhalation of dust;
- potential erosion/discharge of contaminated soils to drains and waterways; and
- inappropriate disposal or placement of excavated contaminated soils.

Management controls will be required to be implemented for any ground disturbance activities within areas of retained contamination at the Crescent Civil sub-site. The capping management system to be maintained at the Crescent Civil sub-site is presented in Section 5.1 and controls for areas of retained contamination are discussed in Section 5.2.

5.1 CAPPING DESIGN

The remediation capping constructed at the Crescent Civil sub-site is described below and is shown on Figure 3 (Appendix A).

Grass/vegetative areas

- basal layer of permeable coloured synthetic geotextile material (overlying existing soils); overlain by
- capping layer comprising validated soil and surficial layer (approximately 300 mm thickness) of either turf or mulch. Due to the presence of subsurface utilities, the capping layer within Area 4 (refer to Figure 3 in Appendix A) is generally less than 300 mm, with minimum recorded thickness of 80 mm (refer to Figure 3 in Appendix A for area location and Appendix F for surveyed capping thickness).

General cap arrangement drawings for unsealed/landscaped areas of the Crescent Civil sub-site showing details of the geotextile and soil cap construction are presented in

Figure 5.1 below. An example of the geotextile marker layer is shown in Figure 5.2. The surveyed locations of geotextile marker layer within the Crescent Civil sub-site are presented in Appendix E. The surveyed extent of geotextile marker layer and capping cross-sections for Areas 1 to 5 (including areas capped landscape areas extending beyond the Crescent Civil sub-site) are included as Appendix F.

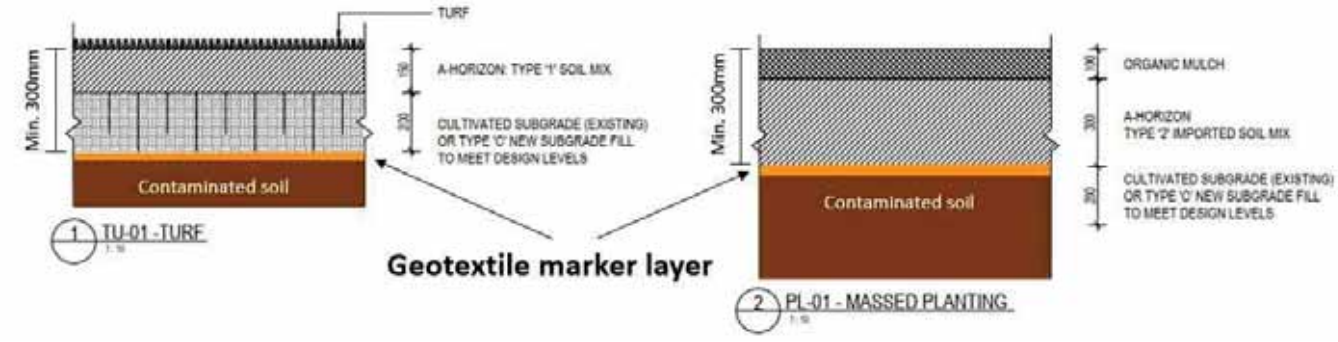


Figure 5.1 Soil cap construction

Figure 5.2 Geotextile marker layer

Three Port Jackson Fig trees were planted in Area 3 and one planted in Area 4 (refer to Figure 3 of Appendix A and survey plans in Appendices F3 and F4 for locations). The figs have a 200 L pot size and were planted within an approximate 1.5 m × 1.5 m × 0.5 m excavation. During planting the geofabric marker layer was breached and removed at these locations to achieve the required depth. Reinstatement of the geofabric marker layer was not conducted at these locations. The area surrounding the root ball has been backfilled with 0.5 m of topsoil.

Pavement/roadway

The pavement capping comprises an impervious layer of concrete and/or asphalt. A geotextile layer was not installed below asphalt or concrete pavement.

Area 6 – WestConnex project offices

Area 6 comprises JHCPB offices for the WCX3B CWL construction area, which will be retained for this purpose for the WHT WestConnex project works. This portion of the site comprises a utility corridor which has been backfilled using TSB cement mix and sealed with concrete and compacted DGB. A geotextile layer was not installed below concrete in Area 6.

5.2 MANAGEMENT CONTROLS

Management controls will be required to be implemented for any ground disturbance activities within areas of retained contamination at the Crescent Civil sub-site. The controls for these areas are outlined in Table 5.1 below and in Appendix D.

The Buruwan Park sub-site and ancillary areas beyond the sub-site boundaries (e.g. roadways, verges, footpaths; refer to Figure 2 of Appendix A) do not require specific management controls. However, due to the potential for fill material to be present in these areas of the site, the unexpected finds procedure documented in Section 5.3 should be implemented during works in these areas.

All activities/tasks that require the engagement of contractors should be undertaken in accordance with current regulatory requirements, in particular the *Work Health and Safety Act 2011* and the *Work Health and Safety Regulation 2017* (or relevant legislation current at the time of the proposed works).

A summary of the main legislation, planning instruments and guidelines that relate to the management of contaminated land in NSW at the time of preparation of the LTEMP is provided in Section 1.4. This list should be reviewed for

currency at the time of any proposed works. The advice of a suitably qualified environmental consultant, the NSW EPA, and/or Council should be sought where there is uncertainty as to the regulatory requirements.

5.3 UNEXPECTED FINDS PROCEDURE

An unexpected finds procedure shall be implemented during intrusive works at the site to ensure the health and safety of staff, contractors, and visitors with regards to potential unidentified contamination. The objective of the unexpected finds procedure is to describe procedures minimising exposure of all site users to possible contamination at the site through the development and implementation of the management systems outlined herein. It is the responsibility of the site owner to ensure that each time an action is undertaken, that the action is recorded and signed off.

Typical indicators of contamination include but are not limited to:

- unusual odours;
- stained soil;
- sheens on soil or water;
- unusual colours;
- crystalline or powdery substances;
- presence of drums
- fragments of asbestos containing material; and,
- underground storage tanks.

In the interests of ensuring worker health and safety, and protection of the environment, any unexpected findings should be handled with care including segregation of the area from general site workers and the public and obtaining specialist advice on the handling and disposal of the material.

Where unexpected finds are encountered, the following management measures shall be immediately conducted:

- Cease any further ground disturbance in the area of the find(s).
- Do not remove or unnecessarily disturb the area of the find(s).
- The discoverer of the find(s) will notify workers in the immediate vicinity of the find(s) so that work can be temporarily halted.
- The site owner will be informed of the find(s), including details regarding the location and nature of the find.
- Notify authorities needed to obtain emergency response for any health or environmental concerns (e.g. fire brigade).
- Notify any of the authorities that the site owner is legally required to notify (e.g. NSW EPA, Council).
- Restrict access to the area via placement of barricades to ensure that the area of the find(s) is adequately marked as a no-go area for workers and machinery or further disturbance and that the potential for accidental impact is avoided.
- Where feasible, ensure that any excavation/area of disturbance remains open so that the finds can be recorded and verified. Excavation/area of disturbance may be backfilled if this is necessary to comply with work safety requirements. An excavation/area of disturbance that remains open should only be left unattended if it is safe and adequate protective fencing is installed around it.

Following the immediate response outlined above a contingency plan is to be implemented. The contingency plan for the site should generally include:

- Suitably qualified environmental consultant (or occupational hygienist as appropriate) is to inspect the issue of concern and determine the nature of the issue and the appropriate approach to assessing or managing the issue.

- The environmental consultant (or occupational hygienist as appropriate) is to undertake an assessment considered necessary to determine the management strategy for the area. Assessment of occupational, public and environmental risk should be considered, particularly potential explosive or toxic gases, toxic chemicals and buried unexploded ordnance.
- If unexpected contamination is found and remediation action is considered necessary, a remediation strategy for the area is to be prepared by the environmental consultant.
- Excavated material is to be placed back into the excavation or removed from the site. Any material to be removed from site must be placed in labelled skip bins or stockpiled as instructed by the environmental consultant and tested for subsequent disposal to a licenced facility.

Development works in the area of the find(s) may re-commence, if and when outlined by the management strategy, developed in consultation with, and approved by the environmental consultant.

Table 5.1 Management controls – Crescent Civil sub-site

MANAGEMENT CONTROL	PERSON RESPONSIBLE
MAINTENANCE AND MONITORING	
Visual inspection of capping	
— All surfaces of the site (paved and unpaved) must be visually inspected every 6 months for breaches in containment. The inspection should document the condition of the grass surface or soil cover/planting and also record if any orange geofabric is visible. - Grass in good condition Y / N - Evidence of soil erosion Y / N - Orange geofabric visible Y / N — Where deterioration of the grass cover or soil surface/planting is recorded corrective landscape works should be undertaken within a 3-month period. — Where a breach is observed that may result in exposure to residual soil, repairs are to be conducted as soon as practicable.	Site owner
Maintenance of capping [1]	
General capping detail Landscaped areas on the Crescent Civil sub-site incorporate a cap comprising the following: — a barrier layer of geofabric impermeable to root penetration to confine the impacted material; — a layer of validated soil with general thickness 300 mm instated above the geofabric layer; and — surface layer of grass or mulch. Paved areas incorporate a cap comprising hardstand (no geofabric layer is installed beneath hardstand capping). **Maintenance** — Where additional material is required to maintain the capping layer, additional certified virgin excavated natural material (VENM[2]) or excavated natural material (ENM) shall be imported to the site. — If the imported fill requires testing to validate it as suitable, samples should be collected by a suitably qualified environmental consultant and analysed for heavy metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAHs), organochlorine and organophosphate pesticides (OCPs and OPPs), polychlorinated biphenyls (PCBs), per- and poly-fluoroalkyl substances (PFAS) and asbestos.	Site owner

MANAGEMENT CONTROL	PERSON RESPONSIBLE
— If VENM is imported to the site, 1 sample per 250 m^3 or a minimum of 4 samples will be analysed per source site (whichever is greater). If more than 1,000 m^3 is imported to the site, one additional sample shall be obtained per 1,000 m^3. — If ENM is imported to site the material will be tested in accordance with the NSW EPA resource recovery exemption for ENM. Should additional material be required to be imported to the site for landscaping purposes (such as topsoil, mulch, compost, etc.), these materials should be tested to validate as suitable for the site use. Sampling should be conducted at a frequency consistent with Table 3 of NSW EPA (2022) *Contaminated Land Guidelines: Sampling design part 1 – application* for volumes <200 m^3 and as per *Column 3 – Minimum number of samples for 95% UCL* of Table 4 NSW EPA (2022). Samples will be analysed for heavy metals, TRH, BTEXN, PAHs, OCPs and OPPs, PCBs, PFAS, asbestos, foreign materials and/or pathogen indicators (as required). Results will be compared to the applicable human health criteria outlined in the NEPM (2013), HEPA (2020) PFAS NEMP 2.0, NSW EPA *The compost order 2016* and/or Australian Standard 4454:2012 *Composts, soil conditioners and mulches.*	
MINOR WORKS (landscaping, subsurface works unlikely to breach cap/marker layer)	
During minor subsurface works the following tasks must be undertaken: — The site owner must inform all personnel who may undertake subsurface work that PAHs, heavy metals and asbestos may be present within soil across the site. — The extent of the geotextile marker layer must be communicated to all personnel who may undertake subsurface works, including the absence of a marker layer within areas of residual land and in the vicinity of select Port Jackson Fig trees (refer to Section 3.2). — A safe work method statement (SWMS) must be prepared for the work. — Appropriate work health and safety measures must be developed and implemented to minimise risk of exposure to contamination. The SWMS shall include the following contamination control measures (as a minimum): — employ confined space entry procedures for excavations and utility pits prior to entry; — workers wear appropriate personal protective equipment (PPE), e.g. gloves, eye and respiratory protection, disposable overalls which should be worn and disposed of appropriately at completion of each work shift, and use of a boot wash; — workers avoid creating dust (e.g. use of light water sprays, avoid working in hot and windy conditions). Where dust is unavoidable wear respiratory protection; — workers do not eat, drink, or smoke during works; — workers wash hands and face immediately after works;	Site owner Maintenance workers

MANAGEMENT CONTROL	PERSON RESPONSIBLE
— brush/wash excavation tools at end of each work shift. Ensure surplus materials returned to stockpile areas and avoid spreading potentially contaminated materials across site; — waste materials are managed so as not to generate dust; — during excavation works (including stormwater system maintenance works) all soil/fill materials should be considered to be potentially contaminated with PAHs, heavy metals and asbestos irrespective of visual/olfactory observations; — all stockpiled soil/fill materials excavated from the site be placed on sealed ground with bunds and sediment retention measures put in place immediately after the stockpile is formed; and — potentially contaminated stockpiled soil must be sampled, assessed and classified for disposal off-site at an appropriately licensed waste facility by an approved contractor in accordance with the requirements of NSW EPA (2014) waste classification guidelines.	
MAJOR WORKS (major civil/utility works likely to breach cap/marker layer)	
More stringent management requirements to those listed above are a possible requirement of the Planning Authority (e.g. Council) as part of the Development Application process. These requirements may include investigation or remediation of the PAH, heavy metals and asbestos contaminated soils.	Maintenance workers

Management controls for an observed breach of containment (hardstand or landscaped areas) will include immediate temporary cover of the affected area with clean material or geofabric (where practicable) and fencing off of the area. For repair of the containment/cap all subsurface maintenance controls are to apply. During any planned works on the site that breaches the cap it is important that the planning documentation be reviewed, and the progress and status on completion of the works should be inspected by the site owner or representative. The inspections are to be carried out on a daily basis during works and at completion of works. The inspector(s) shall note at least: — Date and personnel on site; — Activities being undertaken; — That works are being undertaken in accordance with an approved SWMS; — Level of compliance with the SWMS; and — Condition of all environmental controls. In the event of a non-conformance this information will be documented, and corrective actions implemented in a timely manner. Where no issues are identified the record should be kept for reference purposes. Should contaminated material be disturbed (i.e. material present in the Crescent Civil sub-site beneath the geotextile marker layer and/or hardstand capping layer), this material shall be disposed off-site under appropriate waste classification or be placed/maintained beneath the geotextile marker layer and/or hardstand cap. The marker layer and/or hardstand cap shall be subsequently reinstated as per the procedure outlined below. Upon completion of work that breaches the cap, validation of the containment/recapping shall be conducted by a suitably qualified environmental consultant. Records demonstrating that the re-capping has been adequately installed to the correct thickness and integrity shall be maintained these records should include details of material validation and location of the re-capping. The following steps must be followed: **1** Temporarily cover and fence area; **2** Notify site owner; **3** Engage contractor to repair hardstand or capping; **4** Site owner to engage a suitably qualified environmental consultant if repair to capping (geofabric and clean soil) is required; **5** Contractor to engage surveyor if repair to capping (geofabric and clean soil) is required to demonstrate that a sufficient thickness of material has been reinstated; **6** Environmental consultant to provide validation letter to site owner; and **7** Site owner to inspect and document that all hardstand areas have been adequately reinstated.	Site owner Maintenance workers

MANAGEMENT CONTROL	PERSON RESPONSIBLE
REPORTING REQUIREMENTS	
Annual capping inspection report to be provided to site owner.	Site owner Maintenance workers
Importation suitability report (as required) to be provide to site owner prior to material import.	Site owner Maintenance workers

[1] Excluding areas of residual land and Area 6 (refer to Figure 3 in Appendix A). At the time of preparation of this LTEMP, Area 6 comprises WestConnex project offices. This portion of the site comprises a utility corridor which has been backfilled using thermally stabled bedding (TSB) cement mix and the entire Area 6 sealed with concrete and compacted DGB. Landscaping works are not proposed to be completed in Area 6 as part of the WCX3B project.

[2] The *Protection of the Environment Operations Act 1997* (POEO Act) defines virgin excavated natural material (VENM) as 'natural material (such as clay, gravel, sand, soil or rock fines): (a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and (b) that does not contain any sulfidic ores or soils or any other waste, and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved for the time being pursuant to an EPA Gazettal notice.'

6 INCIDENT AND EMERGENCY PROCEDURES

Emergency procedures will be detailed and explained at the start up induction for any works being undertaken. These will include:

- the name(s) of the first aider/s on site;
- the location of first aid kits and fire extinguishers;
- emergency procedure details for the site, including contact details for emergency services and the nearest hospital;
- site addresses details and map with route to nearest hospital highlighted; and
- location of the site assembly area.

6.1 INCIDENT/EMERGENCY RESPONSE

All unplanned events, irrespective how minor, shall be reported at the first opportunity to the site owner (and other parties where delegated by the site owner). In the event that an environmental incident occurs which results in non-compliance with environmental requirements the incident will be classified as an emergency.

Any pollution or other environmental incident which occurs should be immediately managed and contained as much as can be safely done. The severity of the incident should be assessed and notification made to the appropriate parties:

- The site owner (and other parties where delegated by the site owner) should be notified of all environmental incidents.
- Appropriate regulatory authorities, such as the NSW EPA, SafeWork NSW, Council etc., should be notified as required.

Emergency contacts are listed in Table 6.1.

Table 6.1 Emergency contacts

PERSON/AGENCY	PHONE NUMBER
Site owner (Transport for NSW)	131 782
EMERGENCY SERVICES	
Emergency	000
Police – non-emergency (Balmain Police Station)	+61 2 9556 0624
Ambulance – non-emergency (Rozelle Ambulance)	+61 2 9320 7777
NSW Fire and Rescue – non-emergency (Balmain Fire Station)	+61 2 9818 2348
Balmain Hospital	+61 2 9395 2111
OTHER	
Inner West Council	(02) 9392 5000
SafeWork NSW	13 10 50

6.2 COMPLAINTS AND ENVIRONMENTAL INCIDENT REGISTER

The receipt of complaints will be handled and responded to according to Transport for NSW policy.

The purpose of the complaints and environmental incident register is to maintain a register of complaints from nearby residents or concerned parties, which will include a record of any action taken with respect to the complaints.

The complaints and environmental incident register is required to be completed immediately following the receipt of any complaints associated with works undertaken at the site. Written complaints should be addressed or acknowledged within five days of the complaint being received. Complaints made by telephone or in person should be addressed or acknowledged within two days of receipt. Complaints and incidents will be forwarded to Transport for NSW.

A copy of the complaints and environmental incident register is included in Appendix C.

7 LIMITATIONS

SCOPE OF SERVICES

This environmental site assessment report (the report) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the client and WSP (scope of services). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

RELIANCE ON DATA

In preparing the report, WSP has relied upon data, surveys, analyses, designs, plans and other information provided by the client and other individuals and organisations, most of which are referred to in the report (the data). Except as otherwise stated in the report, WSP has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. WSP will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.

ENVIRONMENTAL CONCLUSIONS

In accordance with the scope of services, WSP has relied upon the data and has not conducted any environmental field monitoring or testing in the preparation of the report. The conclusions are based upon the data and visual observations and are therefore merely indicative of the environmental condition of the site at the time of preparing the report, including the presence or otherwise of contaminants or emissions.

Within the limitations imposed by the scope of services, the assessment of the site and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

REPORT FOR BENEFIT OF CLIENT

The report has been prepared for the benefit of the client and no other party. WSP assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of WSP or for any loss or damage suffered by any other party in relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

OTHER LIMITATIONS

WSP will not be liable to update or revise the report to take into account any events, emergent circumstances or facts occurring or becoming apparent after the date of the report.

The scope of services did not include any assessment of the title to nor ownership of the properties, buildings and structures referred to in the report, nor the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

APPENDIX A

FIGURES

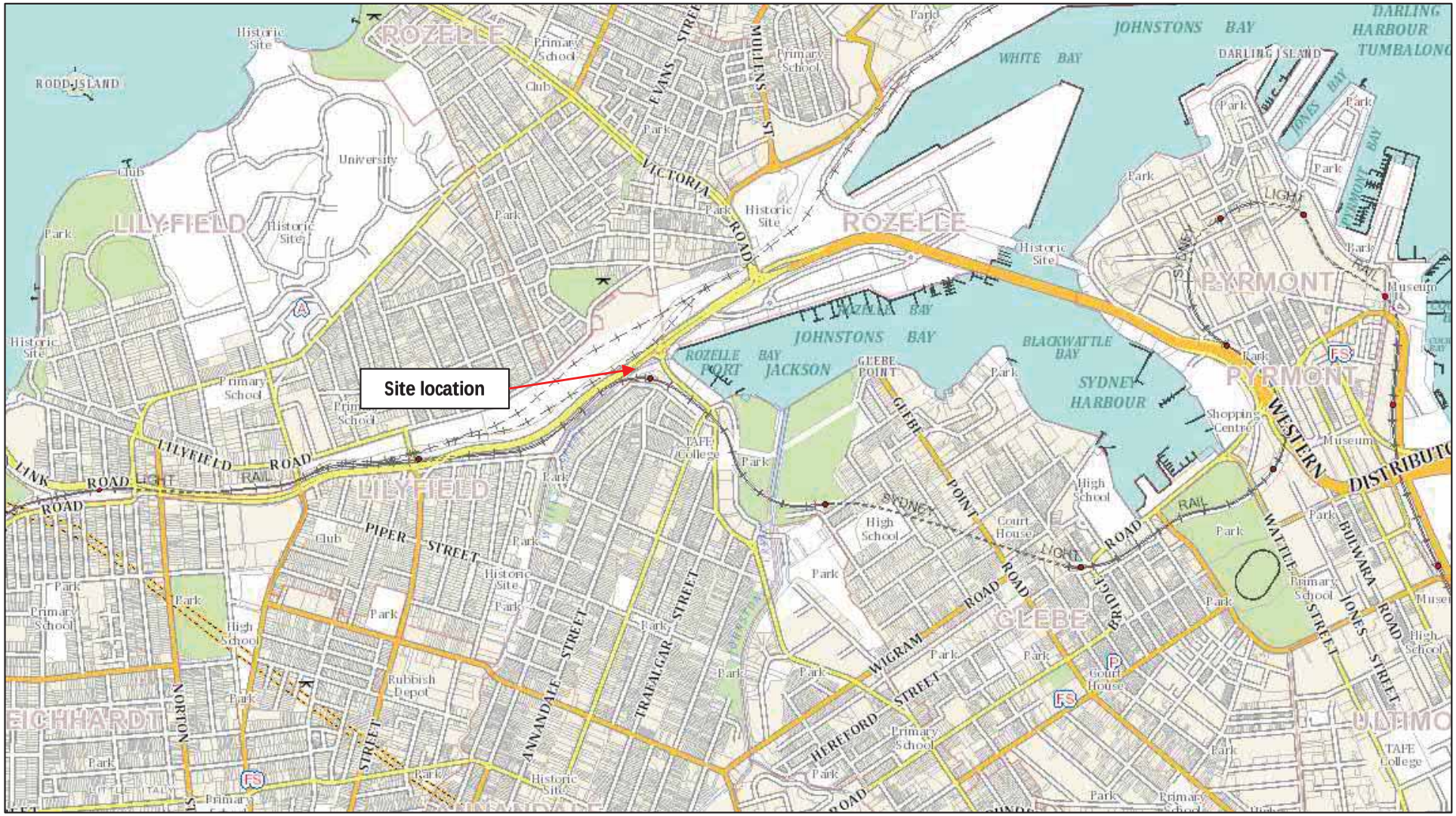


Image source: SixMaps

Figure 1 – Site locality plan

Image source: nearmap (3 Oct 2023)

Figure 2 – Site and investigation area boundaries

Approximate site boundary

Residual land – no remediation conducted

Retained as compound area for WHT (hardstand)

Geotextile and soil capping remediation area

Hardstand sealed area

Port Jackson figs

Figure 3 – Final site capping layout

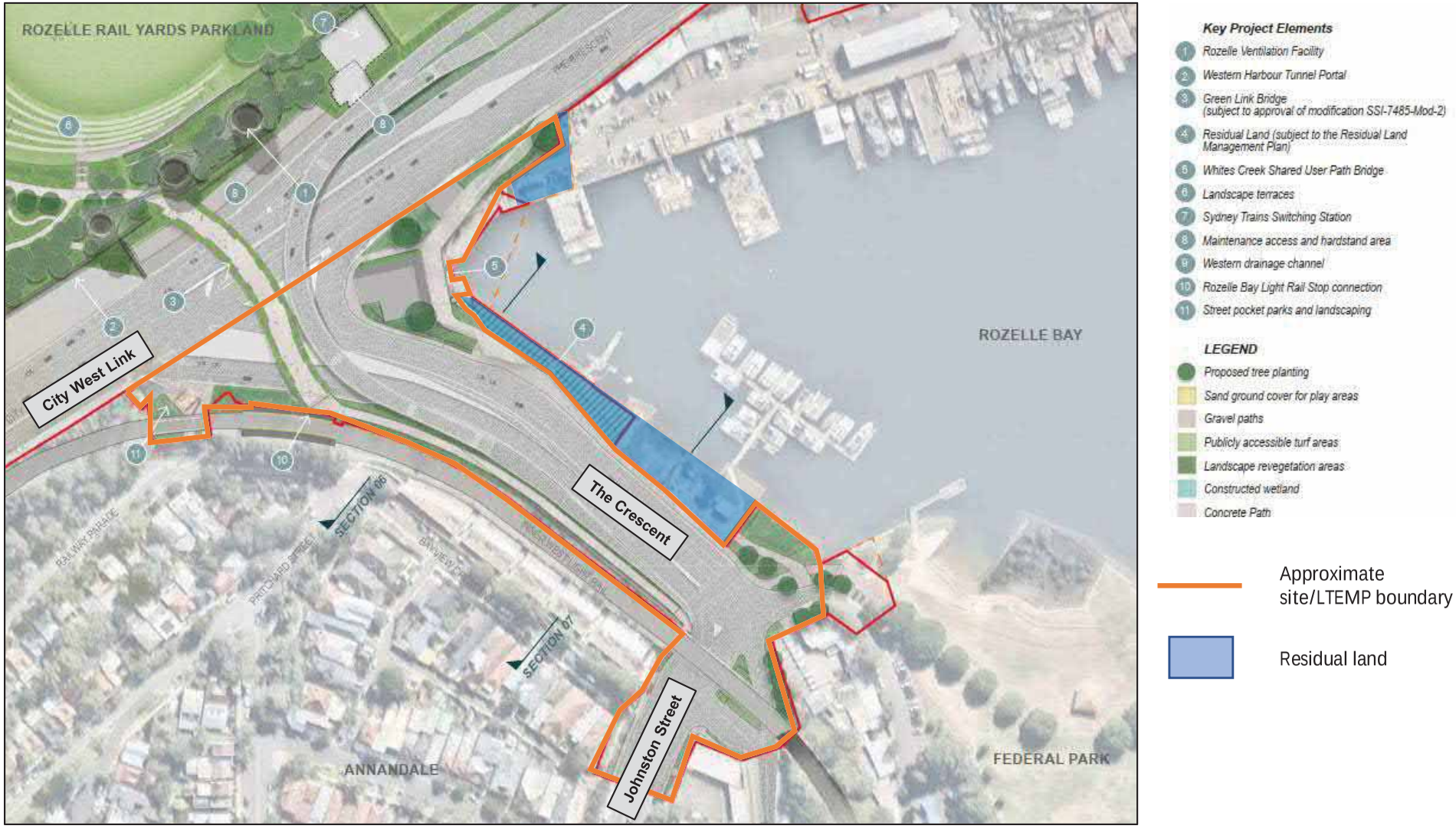
Approximate sub-site boundary

Residual land

PAHs, lead

Asbestos-containing material, PAHs, lead

Figure 4 – Approx. extent of retained soil contamination (Crescent Civil sub-site)



Extract from project Urban Design Landscape Plan

Figure 5 – Site land use design

APPENDIX B

LTEMP INDUCTION REGISTER

B1 LTEMP INDUCTION REGISTER

The purpose of the induction register is to acknowledge acceptance and compliance with the procedures outlined within this LTEMP by signing the attached log. Copies of this document must be made available for review and be readily available at the job site.

The induction register is required to be completed by each person inducted into the LTEMP.

DATE	PERSON	COMPANY	TASK/JOB	POSITION	SIGNATURE

APPENDIX C

COMPLAINTS/ENVIRONMENTAL INCIDENT AND NON-COMPLIANCE REGISTERS

C1 COMPLAINTS AND ENVIRONMENTAL INCIDENTS REGISTER

DATE & TIME	TYPE OF COMMUNICATION	NAME, ADDRESS, & CONTACT NUMBER OF COMPLAINANT	NATURE OF COMPLAINT	RESPONSE/ CORRECTIVE ACTION	DATE OF RESPONSE	DATE COMPLAINANT NOTIFIED OF RESPONSE TAKEN	SIGNATURE/ POSITION

C2 NON-COMPLIANCE REGISTER

DATE & TIME	DOCUMENTED BY	DETAILS OF NON-COMPLIANCE	DATE & TIME SITE OWNER NOTIFIED	OTHER PARTIES NOTIFIED	RESPONSE/ CORRECTIVE ACTION	DATE OF RESPONSE	DATE & TIME SITE OWNER NOTIFIED OF RESPONSE	SIGNATURE/ POSITION

APPENDIX D

SUMMARY OF LTEMP REQUIREMENTS FOR MAINTENANCE WORKERS

D1 SUMMARY OF LTEMP FOR MAINTENANCE WORKERS

SUMMARY MANAGEMENT PLAN FOR MAINTENANCE WORKERS	
MINOR WORKS (landscaping, subsurface works unlikely to breach cap/marker layer) Including weeding, gardening, cleaning and general maintenance activities.	
No specific controls required, providing the works do not significantly disturb the surfacing and underlying fill materials, and do not break any hardstand or compromise surface covering in landscaped areas.	☐
MAJOR WORKS (major civil/utility works likely to breach cap/marker layer) Including any activities that significantly disturb the surface ground cover and/or geotextile marker layer and expose the underlying fill materials, or break the hardstand surface or compromise surface covering in landscaped areas.	
Control measures are required to be implemented.	☐
All site workers and subcontractors to complete a site induction through Transport for NSW prior to commencing any major works at the site.	☐
During surface penetration Site personnel should use appropriate personal protective equipment (PPE) including: — Long sleeved shirt and long pants — P2 respirator or P2 dust mask — Protective gloves — Other PPE required under the WHS plan for the site works.	☐
Implement good personal hygiene, including: — No eating, drinking, or smoking during works — Avoid contact with soil (wear gloves) — Wash hands and clothes after work — Wash hands before eating, drinking or smoking.	☐
Implement dust control measures – this includes dampening of fill materials and any other exposed soil prior to and during excavation works.	☐
Classify and dispose of any soils excavated from beneath the capping layer or any other surplus soils in accordance with the NSW EPA (2014) *Waste Classification Guidelines*.	☐
Re-instate the geotextile and surface capping soils or hardstand surfaces following subsurface maintenance works.	☐
Validate any imported fill materials required in accordance with NEPM (2013).	☐
Transport for NSW representative contact details: Name: Position: Phone: E-mail:	

APPENDIX E

CRESCENT CIVIL SUB-SITE CAPPING SURVEY

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex

JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	6/10/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:1100

RAP AREA THE CRESCENT
BOUNDARY PICK UP
COMBINED RASTER

SHEET 1 of 1

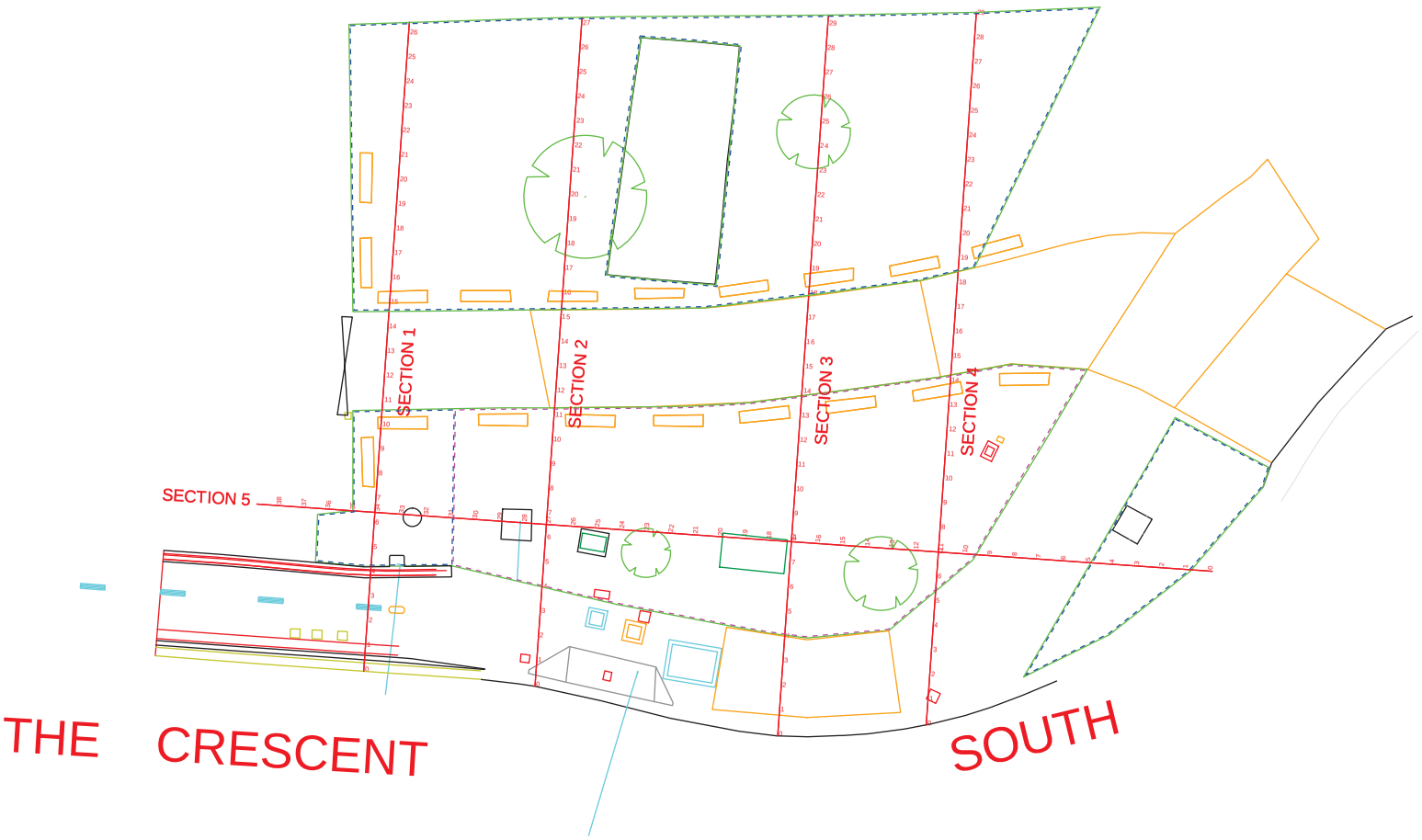
Plotted: at Fri Oct 6 06:07:43 2023

Project: C:\Users\afoley\Documents_JHCPB WCX\SB\Sean Foley's data\12D projects\SB CWL s20 MASTER SF v14

APPENDIX F

SITE AREA SURVEYS AND CROSS-SECTIONS

F1 AREA 1



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

EXTENT OF MARKER LAYER

BOUNDARY OF AREA LANDSCAPED AS TU-01

BOUNDARY OF AREA LANDSCAPED AS PL-01

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	23/05/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:200

CRESCENT SOUTH
LANDSCAPING

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Tue May 23 15:00:45 2023

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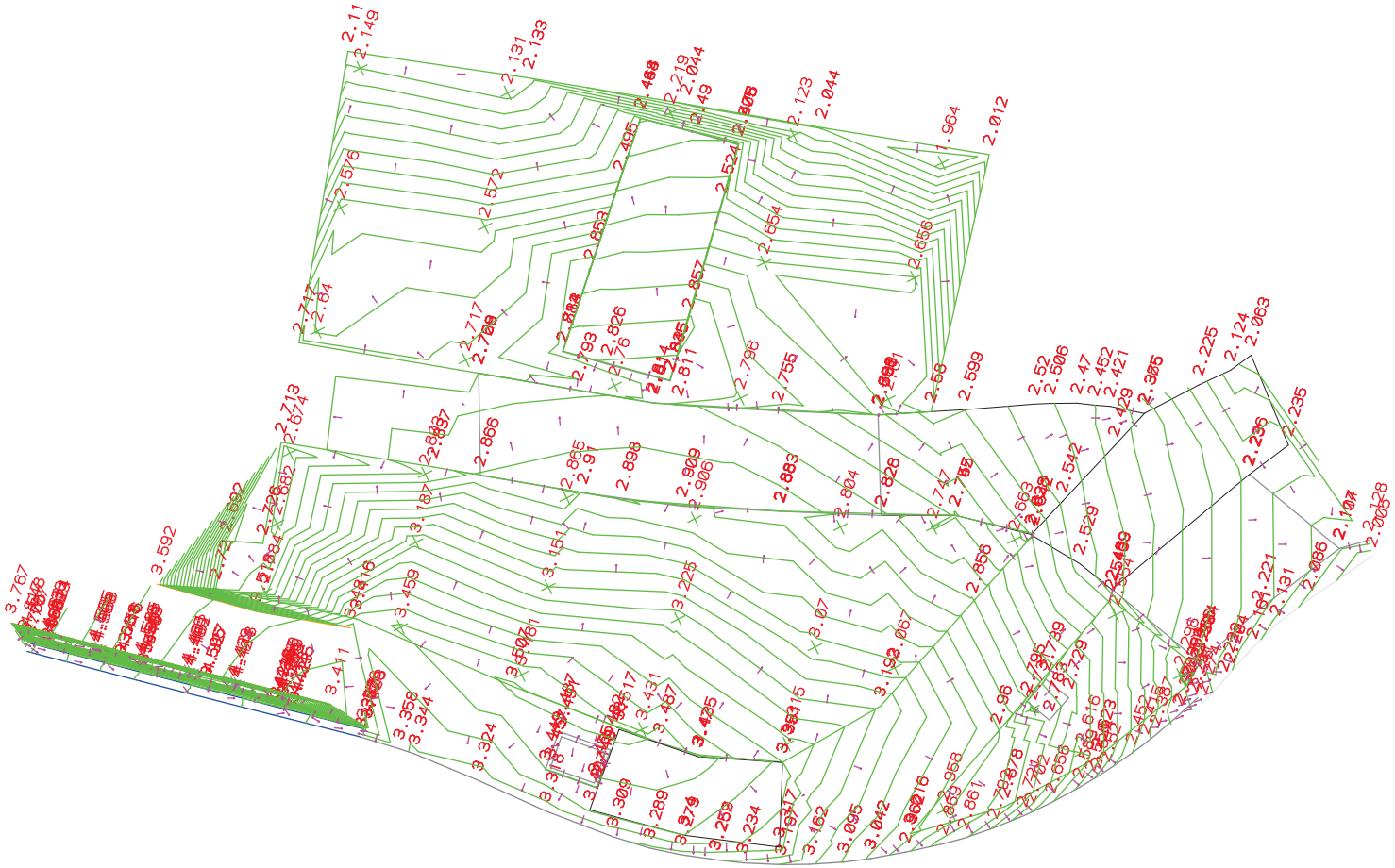

		GENERAL NOTES / REFERENCES
SURVEYED BY	Sean Foley	FOR INFORMATION ONLY
INSTRUMENT TYPE		FOR:RP
SERIAL NUMBER		
DATE OF SURVEY		
SIGNATURE		

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE	DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
DRAWN BY	SURV	CWL	CWL	LSC	13/07/21
COORDINATE SYSTEM: MGA94 Z56					
HEIGHT DATUM: A.H.D					
SCALE AT ORIGINAL A3 SIZE: 1:200					

TOPOGRAPHICAL SURVEY
THE CRESCENT
CONTOURS & DRAINAGE FLOW ARROWS

SHEET 1 of

REVISION

Plotted: Scda_PDF_Desktop_12_Port: at Tue Jul 13 14:59:00 2021

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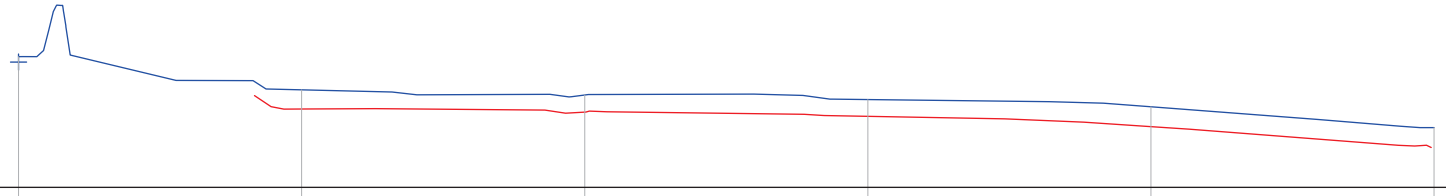
Z = 3.344

DATUM RL 1.000



CRES LAND FL	3.446	2.825	2.728	2.643	2.508	2.118
LANDSCAPING MARKER		2.466	2.408	2.329	2.136	
CL OFFSET	0.000	5.298	10.597	15.895	21.193	26.491

SURVEYED BY	SEAN FOLEY
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR: RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	CWL	ENV	16/06/16

CRESCENT SOUTH
SECTION 1

SHEET 1 of 1

REVISION

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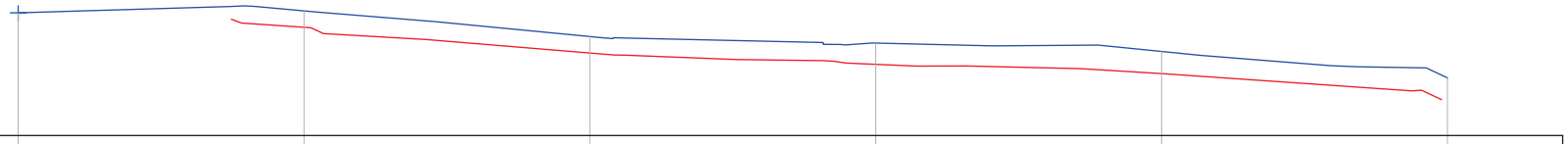

CRES LAND FL	3.344	3.382	2.891	2.766	2.606	2.102
LANDSCAPING MARKER		3.068	2.576	2.360	2.183	
CL OFFSET	0.000	5.459	10.918	16.377	21.836	27.295

SURVEYED BY	SEAN FOLEY
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR: RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	CWL	ENV	16/06/16

CRESCENT SOUTH
SECTION 2

SHEET 1 of 1

REVISION

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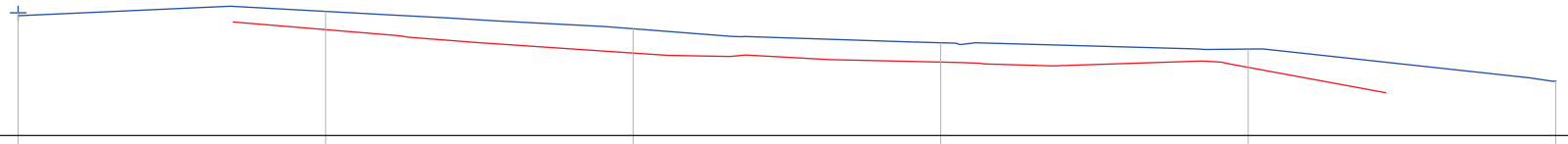
Project: C:\Users\Sean Foley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

Centreline Data
Y = 6250479.150
X = 331193.822
Z = 3.344

DATUM RL 1.000



CRES LAND FL	3.289	3.371	3.040	2.772	2.652	2.041
LANDSCAPING MARKER		3.023	2.575	2.403	2.302	
CL OFFSET	0.000	5.883	11.767	17.650	23.534	29.417

SURVEYED BY	SEAN FOLEY
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR: RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY

COORDINATE SYSTEM
MGA94 Z56

HEIGHT DATUM
A.H.D

SCALE AT ORIGINAL A3 SIZE
1:

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	CWL	ENV	16/06/16

CRESCENT SOUTH
SECTION 3

SHEET 1 of 1

REVISION

Plotted: Scda_PDF_Desktop_12_Port: at 16-Jun-2021 12:14:17

Project: C:\Users\Sean Foley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

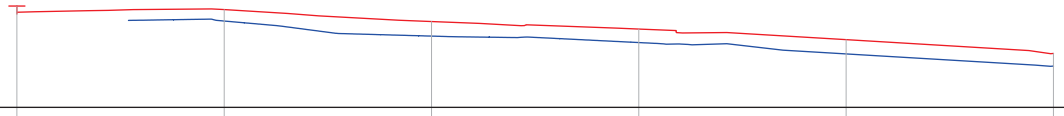
Centreline Data

Y = 6250475.874

X = 331198.922

Z = 3.344

DATUM RL 0.500



CRES LAND FL		3.245	2.909	2.698	2.400	2.013
LANDSCAPE MARKER		2.923	2.500	2.319	2.001	1.659
CL OFFSET	0.000	5.820	11.639	17.459	23.278	29.098

SURVEYED BY	SEAN FOLEY
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR: RP

Rozelle Interchange

WestConnex

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DO NOT SCALE

DRAWN BY

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	CWL	ENV	23/06/21

CRESCENT SOUTH

SECTION 4

SHEET 1 of 1

REVISION

Plotted: Scda_PDF_Desktop_12_Port: at 23-Jun-2021 12:46:16

Project: C:\Users\Sean Foley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

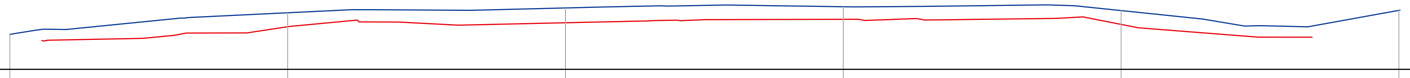
Centreline Data

Y = 6250473.901

X = 331211.997

Z = null

DATUM RL 1.500



5	(null)	(null)	(null)	(null)	(null)	(null)
CRES LAND FL	2.483	3.088	3.224	3.258	3.150	3.156
LANDSCAPING MARKER		2.696	2.808	2.904	2.761	
CL OFFSET	0.000	7.798	15.597	23.395	31.194	38.992

SURVEYED BY	SEAN FOLEY
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR: RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	CWL	ENV	16/06/16

CRESCENT SOUTH
SECTION 5

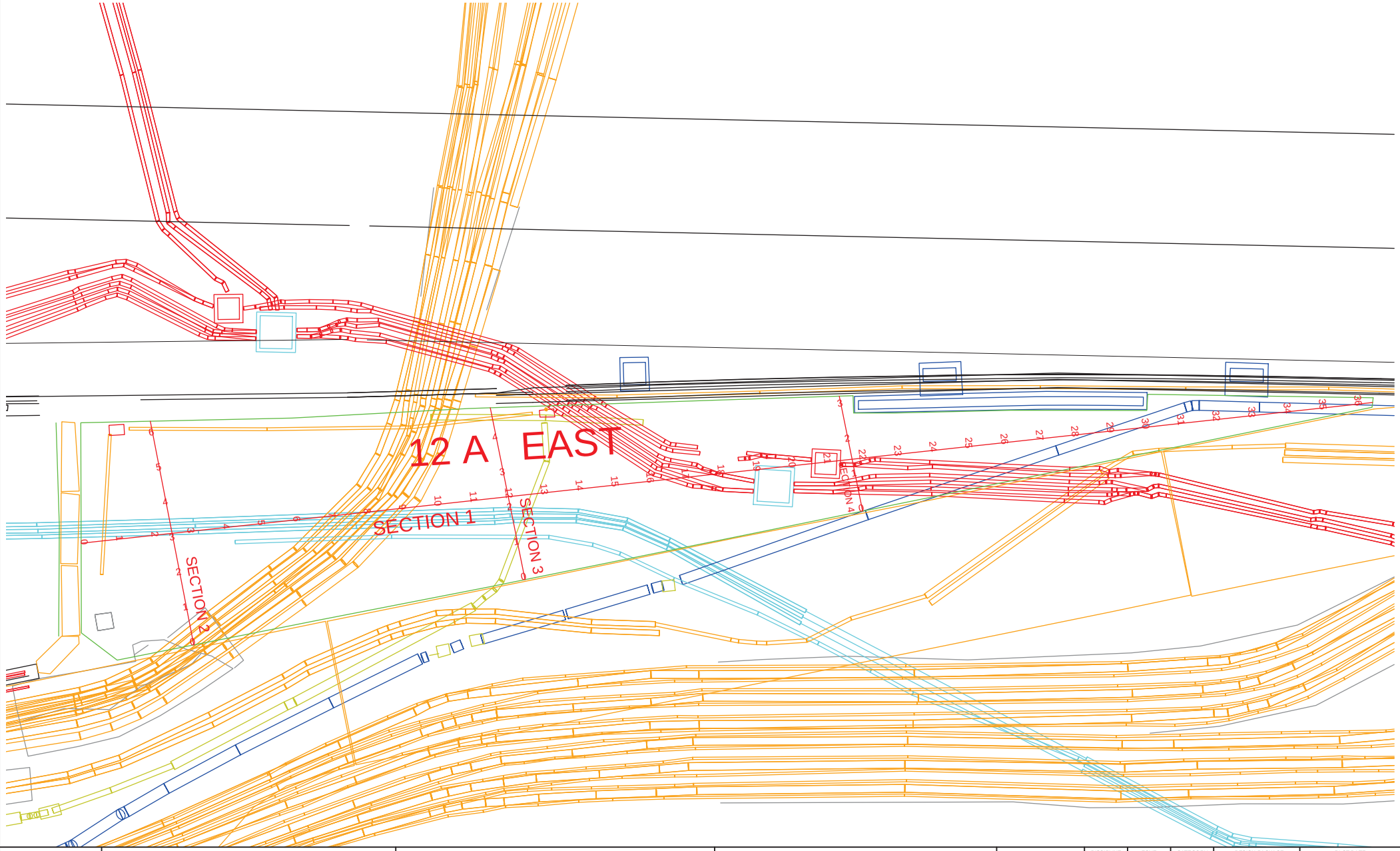
SHEET 1 of 1

REVISION

Plotted: Scda_PDF_Desktop_12_Port: at 16-Jun-2021 12:19:12

Project: C:\Users\Sean Foley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

F2 AREA 2



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	5/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:100

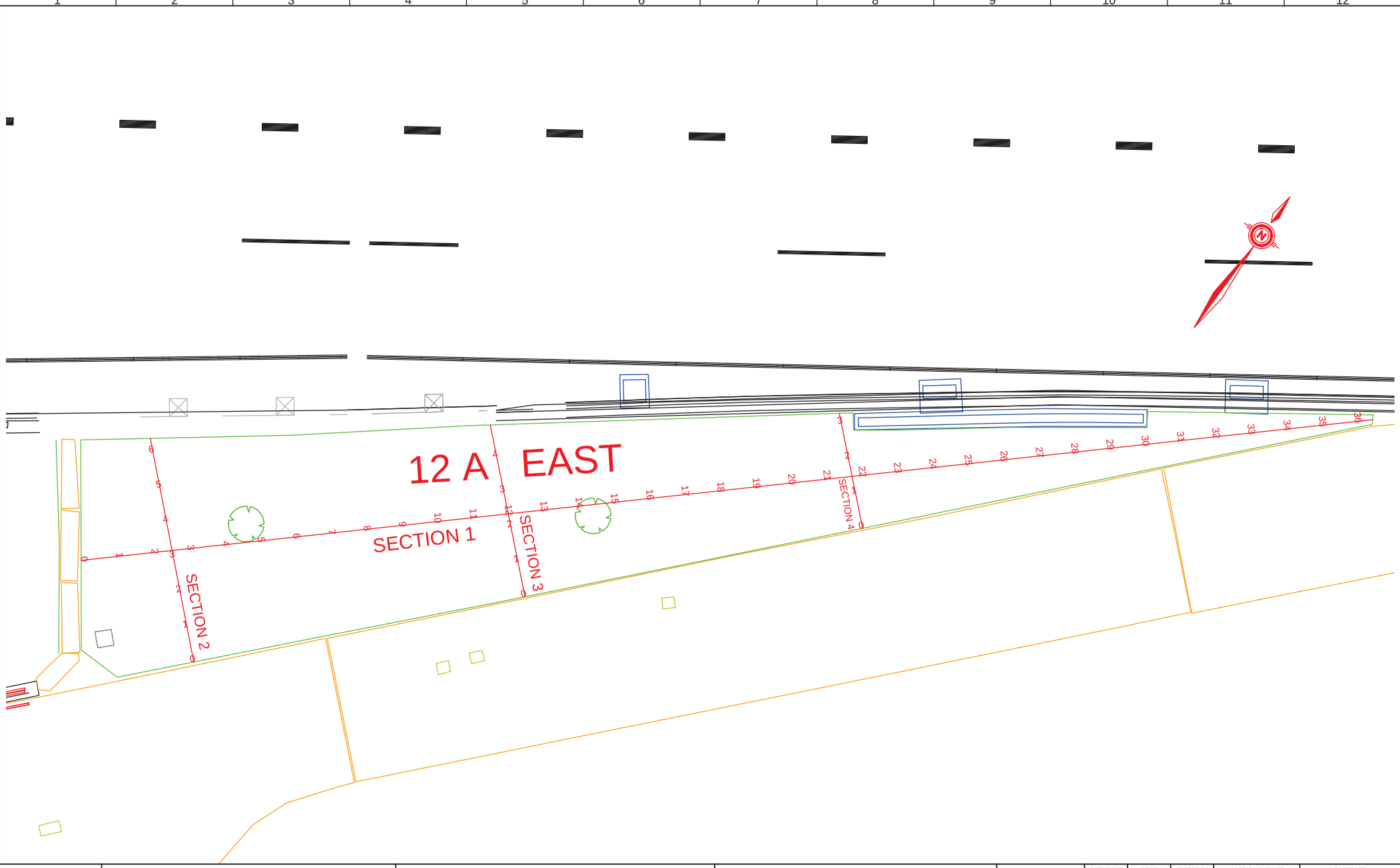
GATE 12A EAST
LANDSCAPING
WAE UTILITIES WCX3B

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Tue Jun 6 15:45:33 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY FOR :

RP

EXTENT OF MARKER LAYER

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:100

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	6/06/23

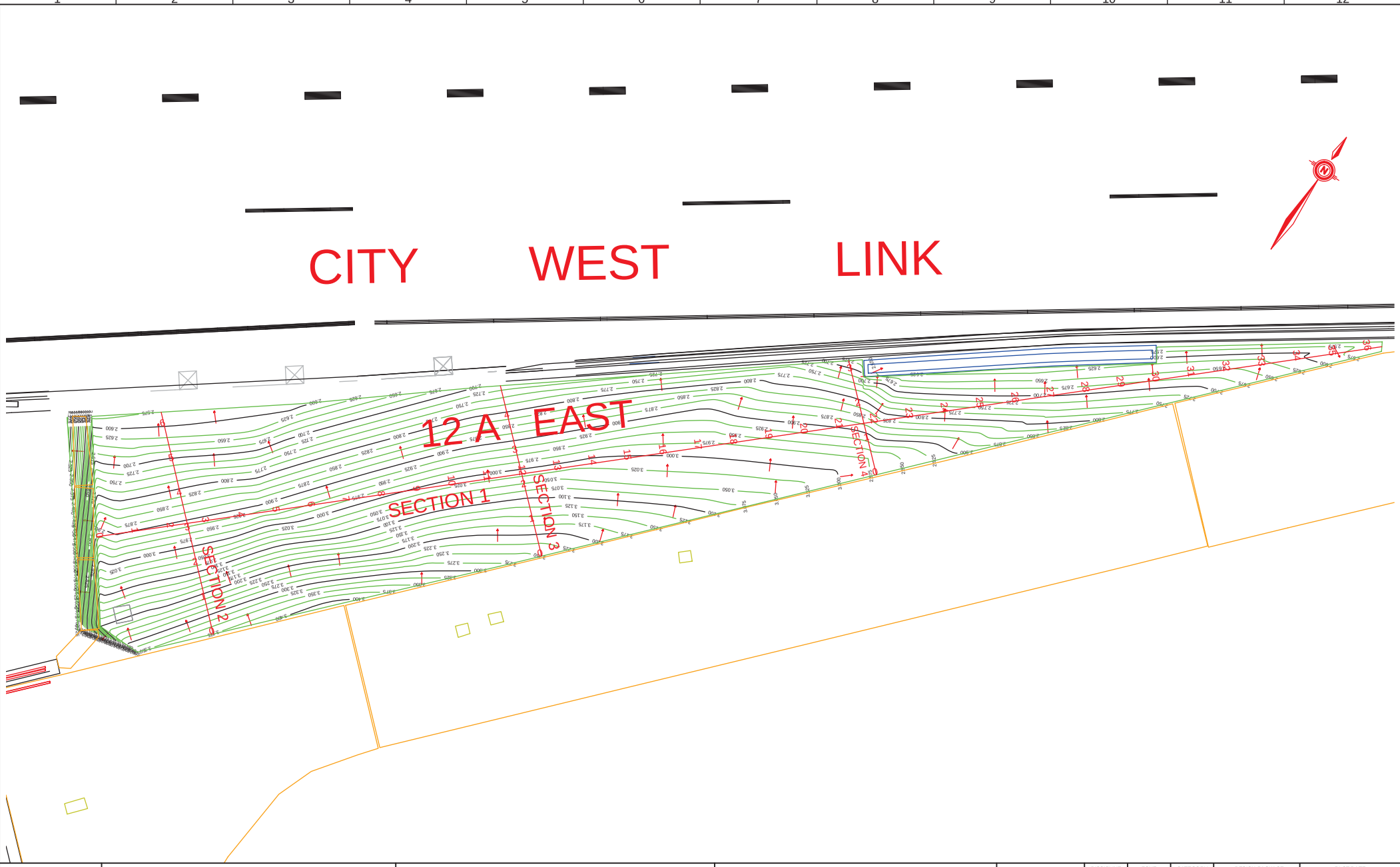
GATE 12A EAST
LANDSCAPING

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Tue Jun 6 15:24:02 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



		GENERAL NOTES / REFERENCES
SURVEYED BY		FOR INFORMATION ONLY
INSTRUMENT TYPE		FOR : RP
SERIAL NUMBER		
DATE OF SURVEY		
SIGNATURE		

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	23/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:100

TOPOGRAPHICAL SURVEY
12A EAST

SHEET 1 of 1

REVISION

Plotted: SF PLOTzz1 at Fri Jun 23 11:48:20 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

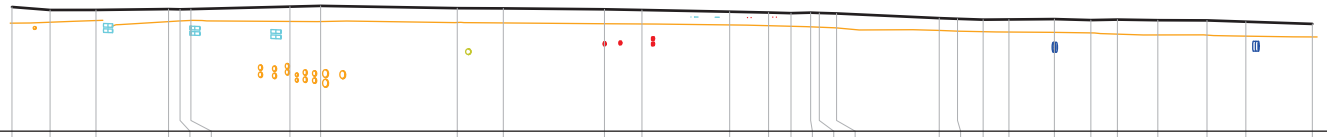
Centreline Data

Y = 6250658.579

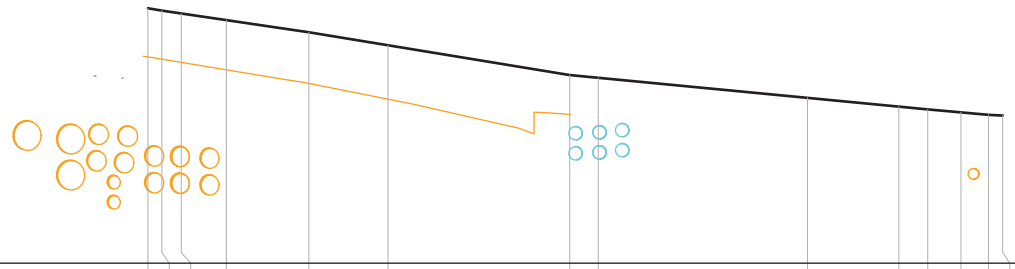
X = 331071.766

Z = 2.985

DATUM RL -0.500



| | | |



Centreline Data
Y = 6250658.149
X = 331076.006
Z = 3.408

DATUM RL 1.500

CURRENT FINISH SURFACE LEVEL	3.408	3.390	3.369	3.319	3.228	3.131	2.908	2.887	2.737	2.671	2.651	2.628	2.610	2.605
LANDSCAPING MARKER LAYER	3.043	3.027	3.003	2.947	2.845	2.727	2.614							
OFFSET	0.000	0.104	0.250	0.587	1.205	1.797	3.157	3.371	4.937	5.620	5.837	6.085	6.291	6.398

SECTION 2

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

MARKER LAYER THICKNESS VARIES FOR WAE UTILITIES

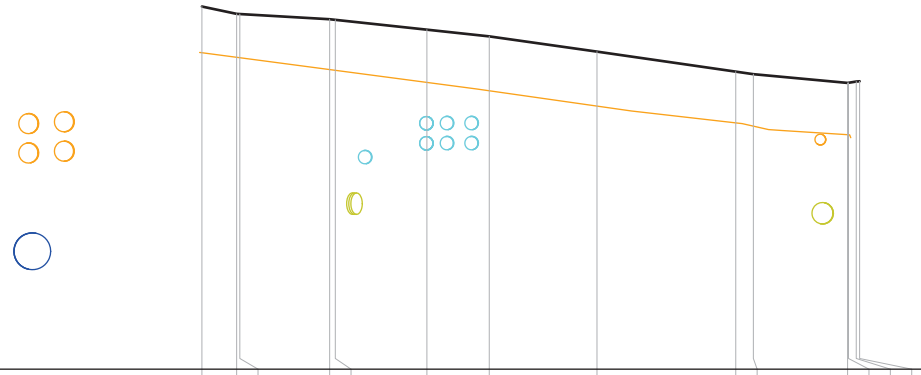
RISES FOR UTILITY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE	DISCIPLINE: SURV	ZONE: CWL	CATEGORY: LSCP	DESIGN PACKAGE: 20_01	PLOT DATE: 20/06/23
DRAWN BY: SF	SECTION 2				
COORDINATE SYSTEM: MGA94 Z56	GATE 12 EAST				
HEIGHT DATUM: A.H.D	WAE UTILITIES WCX3B				
SCALE AT ORIGINAL A3 SIZE: 1:	SHEET 1 of				REVISION

Plotted: zPLT CRESCENT SOUTH BOUND SECTIONSa001 at 20-Jun-2023 14:56:27

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



Centreline Data

Y = 6250665.131

X = 331082.427

Z = 3.214

DATUM RL 0.500

CURRENT FINISH SURFACE LEVEL	3.214	3.159	3.158	3.119	3.114	3.041	2.990	2.876	2.727	2.708	2.642	2.643	2.652	2.654
LANDSCAPING MARKER LAYER	2.868	2.834	2.831	2.742	2.736	2.646	2.583	2.469	2.343	2.319	2.255	2.254		
OFFSET	0.000	0.260	0.284	0.956	0.998	1.684	2.151	2.957	3.996	4.128	4.833	4.840	4.898	4.923

SECTION 3

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

MARKER LAYER THICKNESS VARIES FOR WAE UTILITIES

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	20/06/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

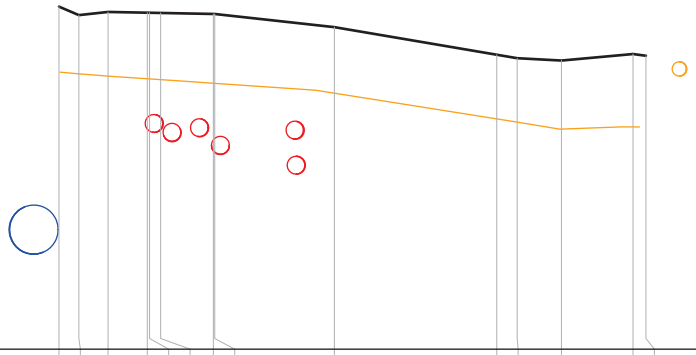
SECTION 3
GATE 12 EAST
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 20-Jun-2023 14:57:30

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



Centreline Data

Y = 6250672.291

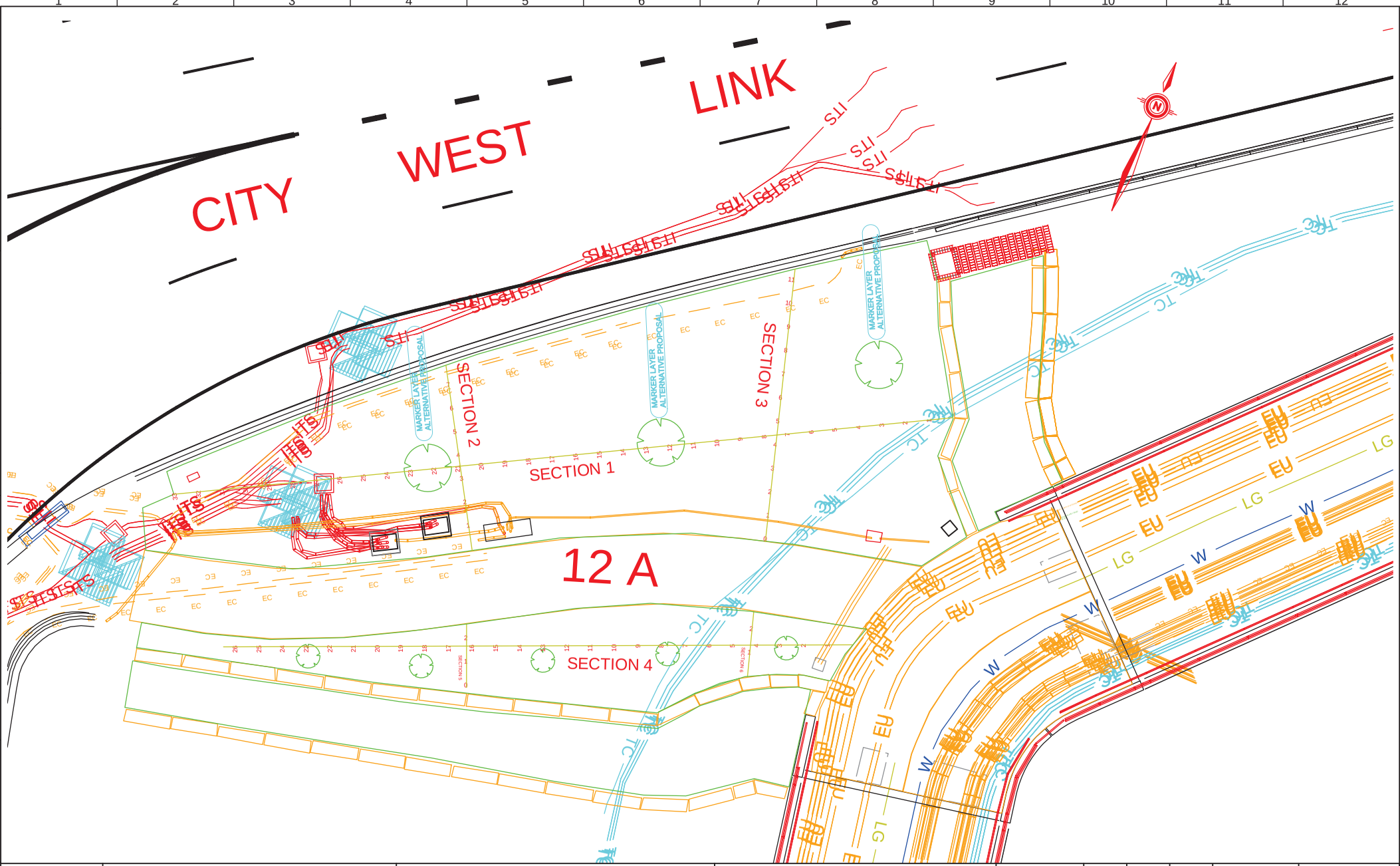
X = 331088.938

Z = 2.923

DATUM RL 1.000

| | | |

F3 AREA 3



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY FOR :

RP

EXTENT OF MARKER LAYER

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	21/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:150

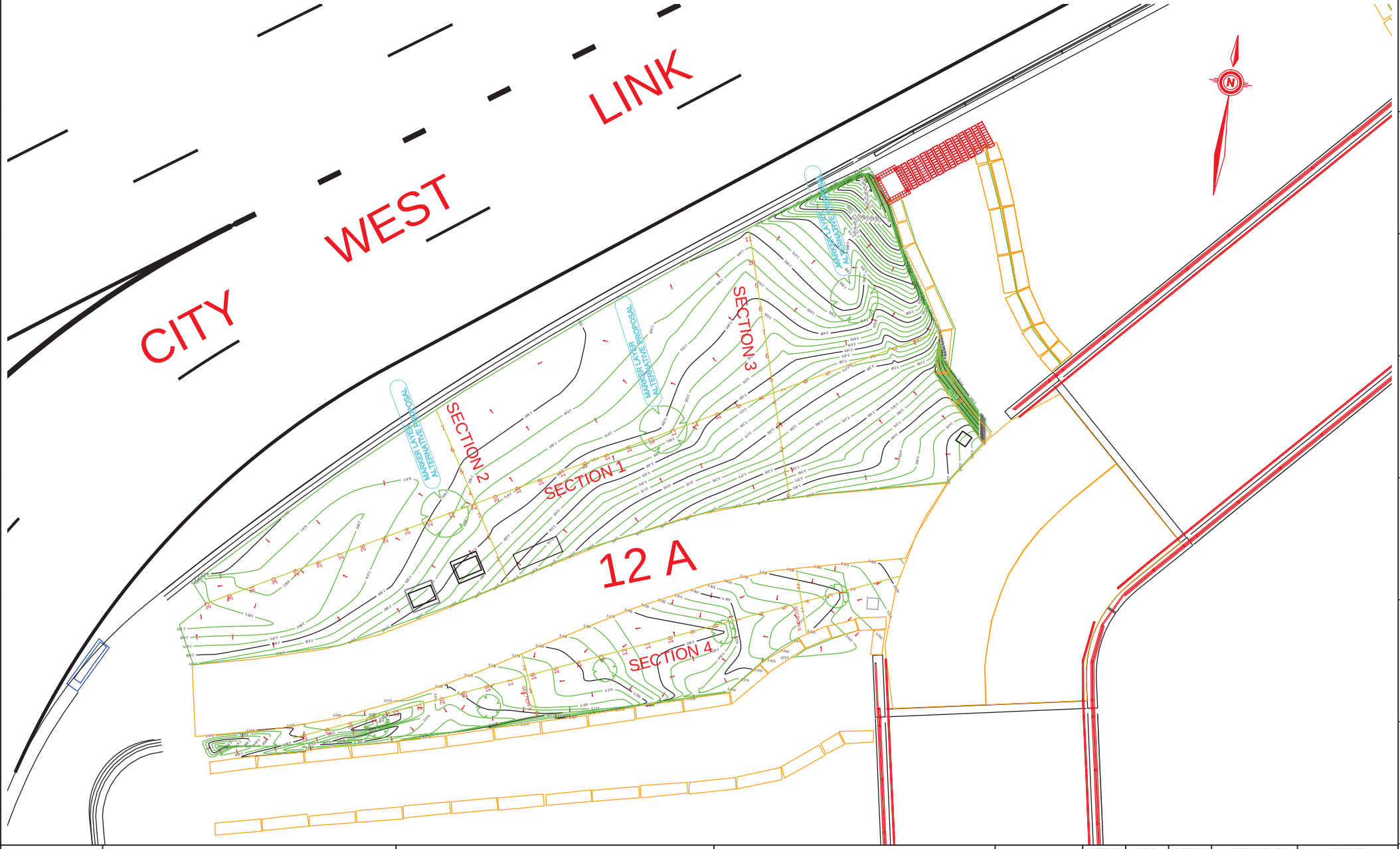
GATE 12A
LANDSCAPING

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Wed Jun 21 15:56:54 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	16/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:150

TOPOGRAPHICAL SURVEY
GATE 12A

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Fri Jun 23 14:11:42 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

Centreline Data

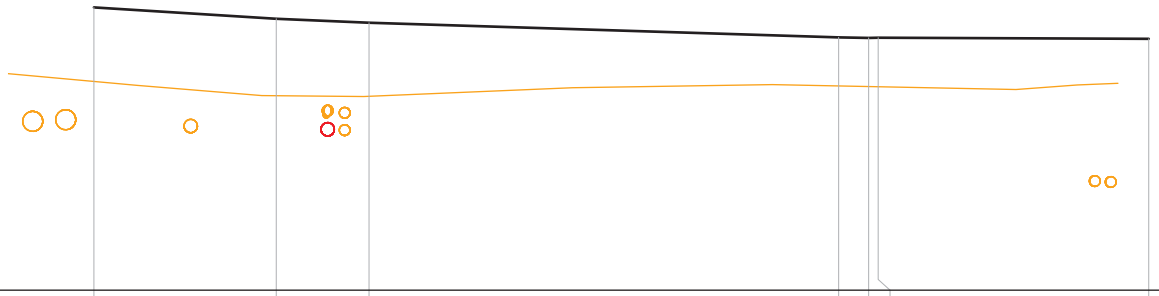
Y = 6250638.560

X = 331051.842

Z = null

DATUM RL 0.500

| | | |



Centreline Data

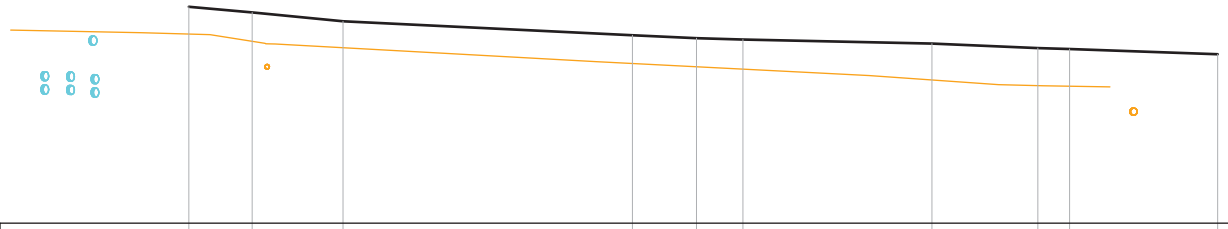
Y = 6250625.268

X = 331035.413

Z = null

DATUM RL 1.000

| | | |



Centreline Data
Y = 6250630.587
X = 331046.597
Z = 3.429

DATUM RL 1.000

CURRENT FINISH SURFACE LEVEL	3.429	3.366	3.266	3.109	3.076	3.061	3.016	2.965	2.955	2.896		
LANDSCAPING MARKER LAYER	3.123	3.041	2.969	2.792	2.756	2.729	2.607	2.544	2.537			
OFFSET	0.000	0.711	1.731	4.980	5.700	6.221	8.343	9.532	9.888	11.551		

SECTION 3

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

MARKER LAYER THICKNESS VARIES FOR WAE UTILITIES

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	21/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:

SECTION 3
GATE 12A
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 21-Jun-2023 15:35:20

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

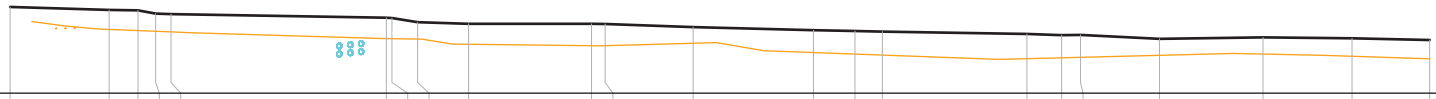
Centreline Data

Y = 6250628.056

X = 331051.736

Z = null

DATUM RL 2.000



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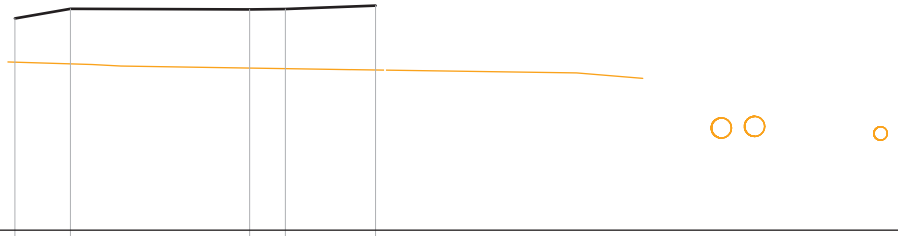


Centreline Data

Y = 6250619.896

X = 331037.486

Z = 3.084

DATUM RL 1.500

CURRENT FINISH SURFACE LEVEL	3.084	3.156	3.152	3.155	3.180	
LANDSCAPING MARKER LAYER	2.757	2.745	2.713	2.709	2.699	
OFFSET	0.000	0.416	1.757	2.024	2.699	

SECTION 5

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

MARKER LAYER THICKNESS VARIES FOR WAE UTILITIES

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	21/06/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

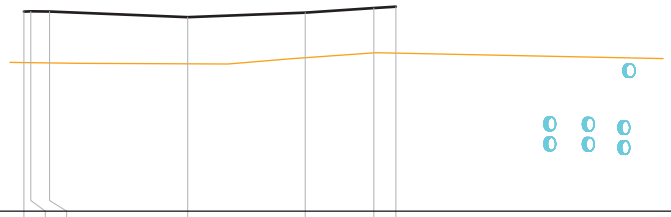
SECTION 5
GATE 12A
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 21-Jun-2023 15:19:42

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



Centreline Data

Y = 6250624.982

X = 331048.202

Z = null

DATUM RL 2.000

CURRENT FINISH SURFACE LEVEL	3.493	3.496	3.494	3.452	3.486	3.520	3.530
LANDSCAPING MARKER LAYER	3.112	3.111	3.109	3.103	3.148	3.185	3.183
OFFSET	0.036	0.087	0.228	1.262	2.141	2.655	2.820

SECTION 6

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

MARKER LAYER THICKNESS VARIES FOR WAE UTILITIES

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	21/06/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

SECTION 6
GATE 12A
WAE UTILITIES WCX3B

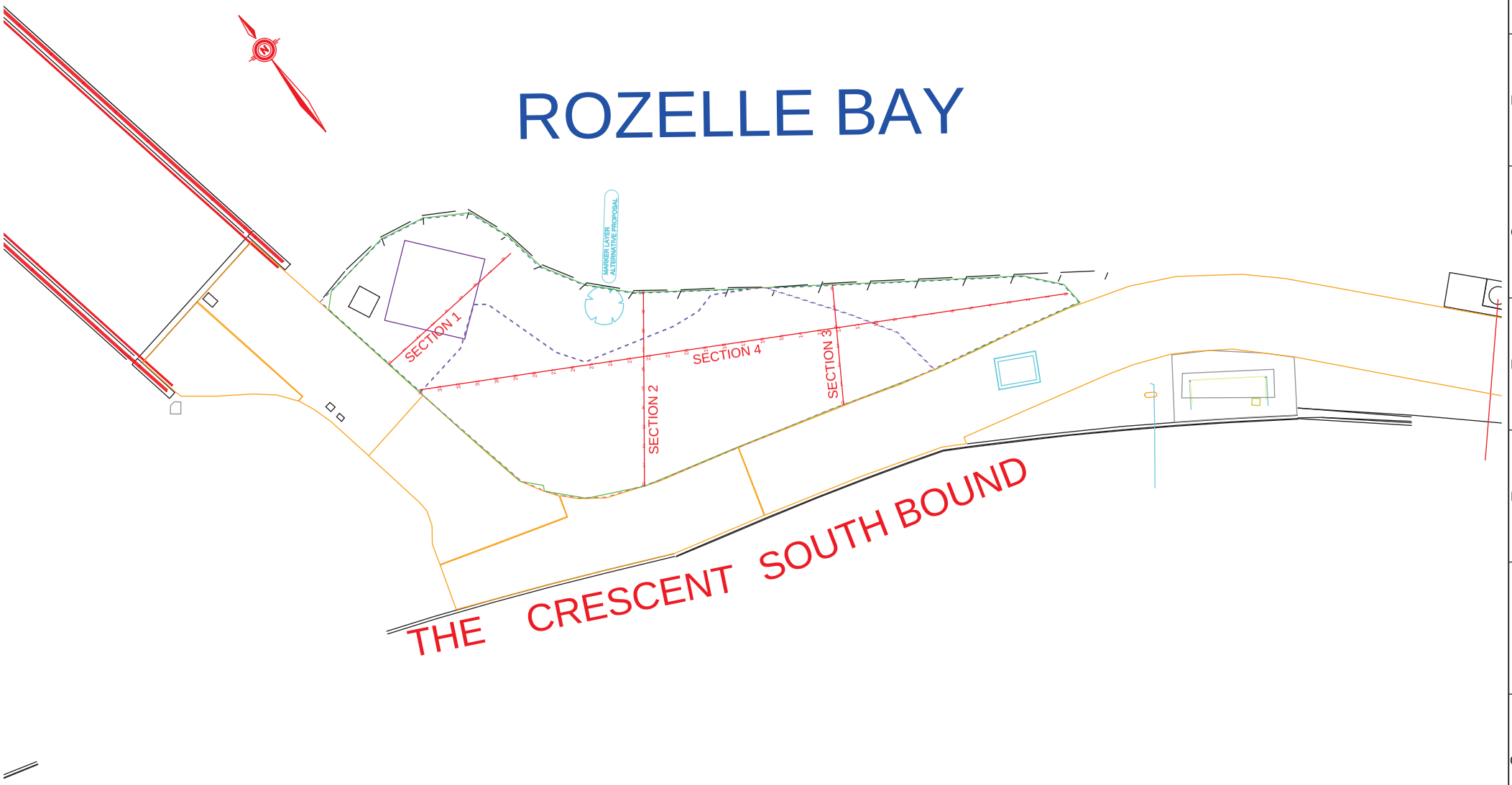
SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 21-Jun-2023 15:21:51

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

F4 AREA 4



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

EXTENT OF MARKER LAYER

BOUNDARY OF AREA LANDSCAPED AS TU-01

BOUNDARY OF AREA LANDSCAPED AS PL-01

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	30/05/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:200

CRESCENT SOUTH
LANDSCAPING

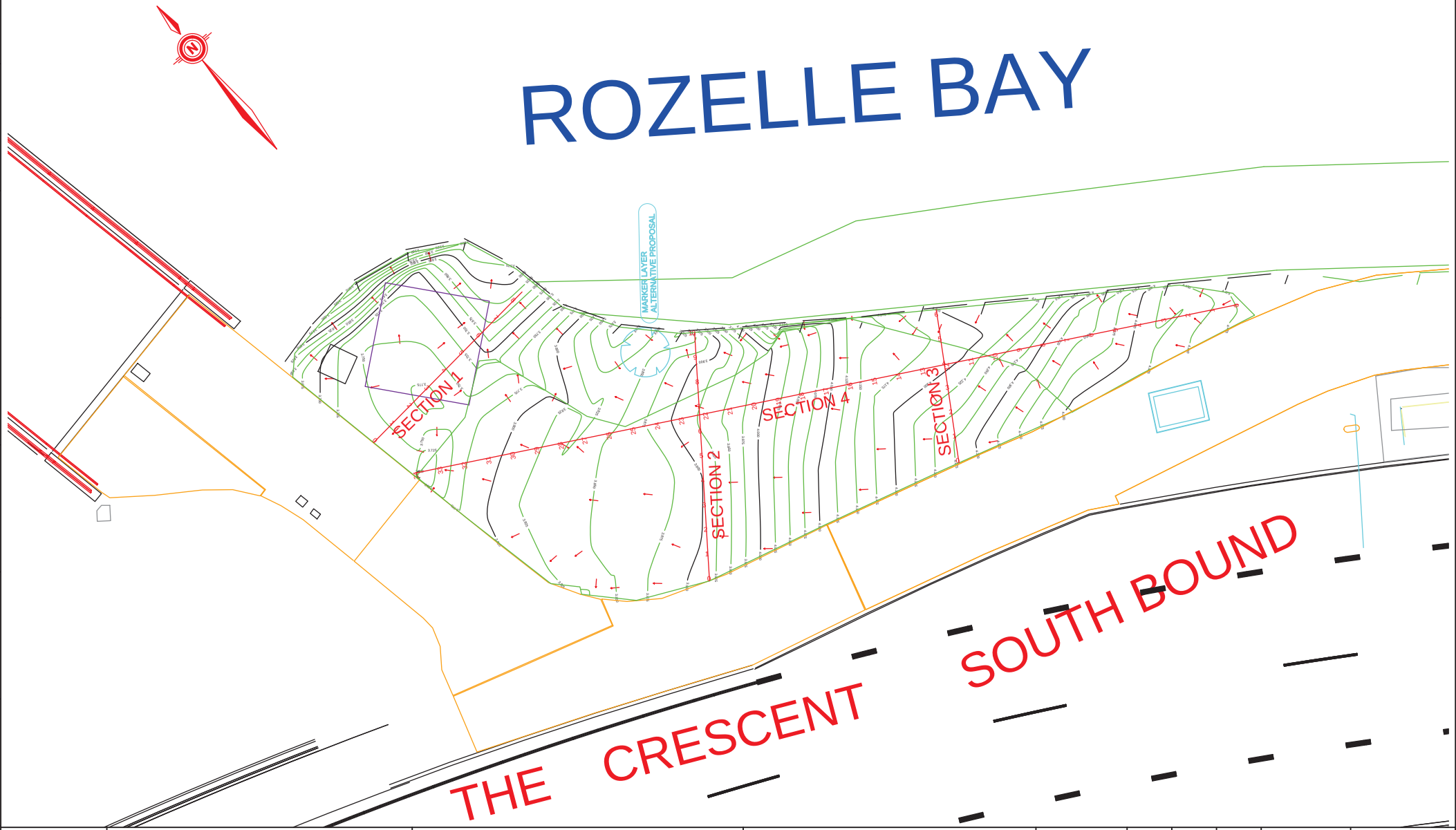
SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Tue May 30 11:28:40 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

ROZELLE BAY



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	23/06/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:150

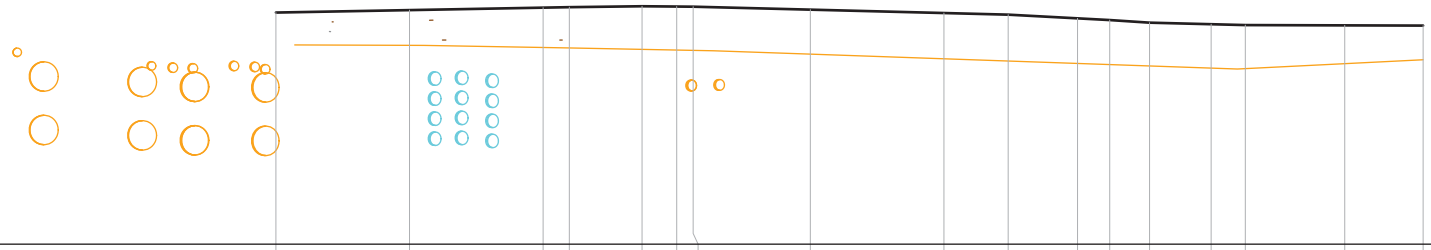
TOPOGRAPHICAL SURVEY
CRESCENT SOUTHBOUND

SHEET 1 of 1

REVISION

Plotted: SF PLOT1 at Fri Jun 23 11:30:56 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



Centreline Data

Y = 6250593.275

X = 331066.377

Z = 3.733

DATUM RL 2.000

CURRENT FINISH SURFACE LEVEL	3.733	3.752	3.770	3.774	3.780	3.778	3.777	3.755	3.730	3.718	3.690	3.677	3.658	3.646	3.640	3.637	3.636	
LANDSCAPING MARKER LAYER		3.488	3.472	3.468	3.458	3.453	3.450	3.422	3.387	3.371	3.352	3.344	3.334	3.318	3.314	3.351	3.380	
OFFSET	0.000	1.000	2.000	2.196	2.741	3.000	3.123	4.000	5.000	5.481	6.000	6.241	6.539	7.000	7.256	8.000	8.587	

SECTION 1

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

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FOR:RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	31/05/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

SECTION 1
CRESCENT SOUTHBOUND
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 000000001 at 22-Jun-2023 09:51:10

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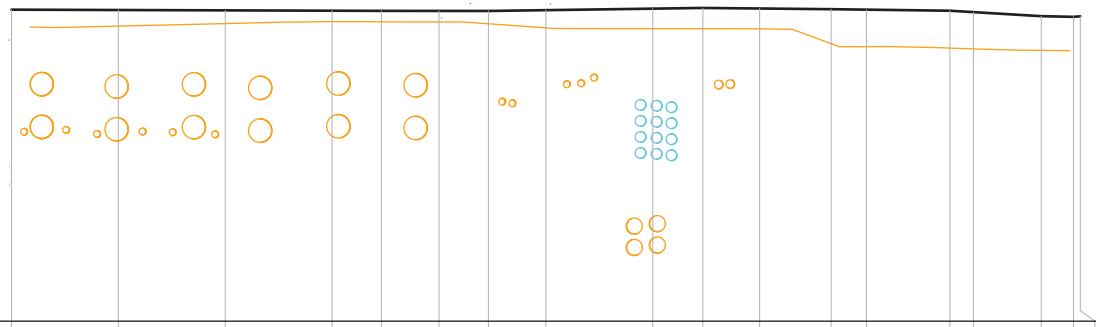

Centreline Data

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X = 331073.221

Z = 3.914

DATUM RL 1.000

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LANDSCAPING MARKER LAYER		3.760	3.784	3.801	3.800	3.799	3.782	3.744	3.736	3.736	3.735	3.596	3.568	3.554	3.547	3.533			
OFFSET	0.000	1.000	2.000	3.000	3.461	4.000	4.462	5.000	6.000	6.469	7.000	7.669	8.000	8.780	9.000	9.635	9.937	10.000	

SECTION 2

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR:RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	31/05/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

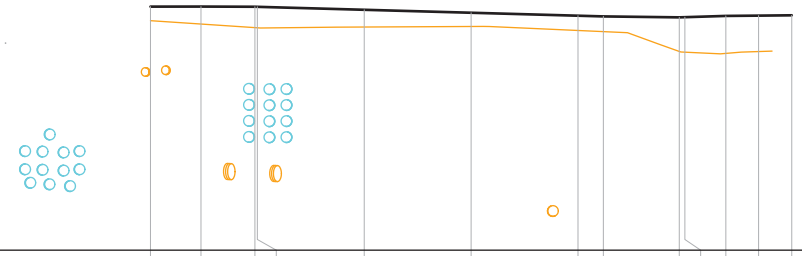
SECTION 2
CRESCENT SOUTH BOUND
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 31-May-2023 14:30:23

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



Centreline Data

Y = 6250577.383

X = 331084.064

Z = 4.278

DATUM RL 2.000

CURRENT FINISH SURFACE LEVEL	4.278	4.279	4.277	4.276	4.249	4.221	4.193	4.187	4.178	4.179	4.191	4.194	4.197	
LANDSCAPING MARKER LAYER	4.147	4.115	4.082	4.080	4.087	4.092	4.055	4.044	3.859	3.852	3.841	3.858		
OFFSET	0.000	0.473	0.977	1.000	2.000	3.000	4.000	4.237	4.948	5.000	5.383	5.690	6.000	

SECTION 3

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR:RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	31/05/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE: 1:

SECTION 3
CRESCENT SOUTH BOUND
WAE UTILITIES WCX3B

SHEET 1 of

REVISION

Plotted: 2PLT CRESCENT SOUTH BOUND SECTIONSa001 at 31-May-2023 14:28:43

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

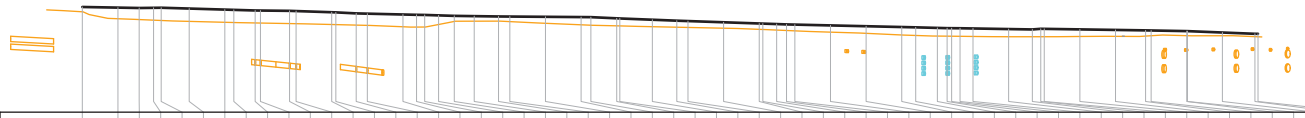
Centreline Data

Y = 6250575.506

X = 331096.002

Z = 4.452

DATUM RL 1.500



| | | |

F5 AREA 5

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	13/10/23

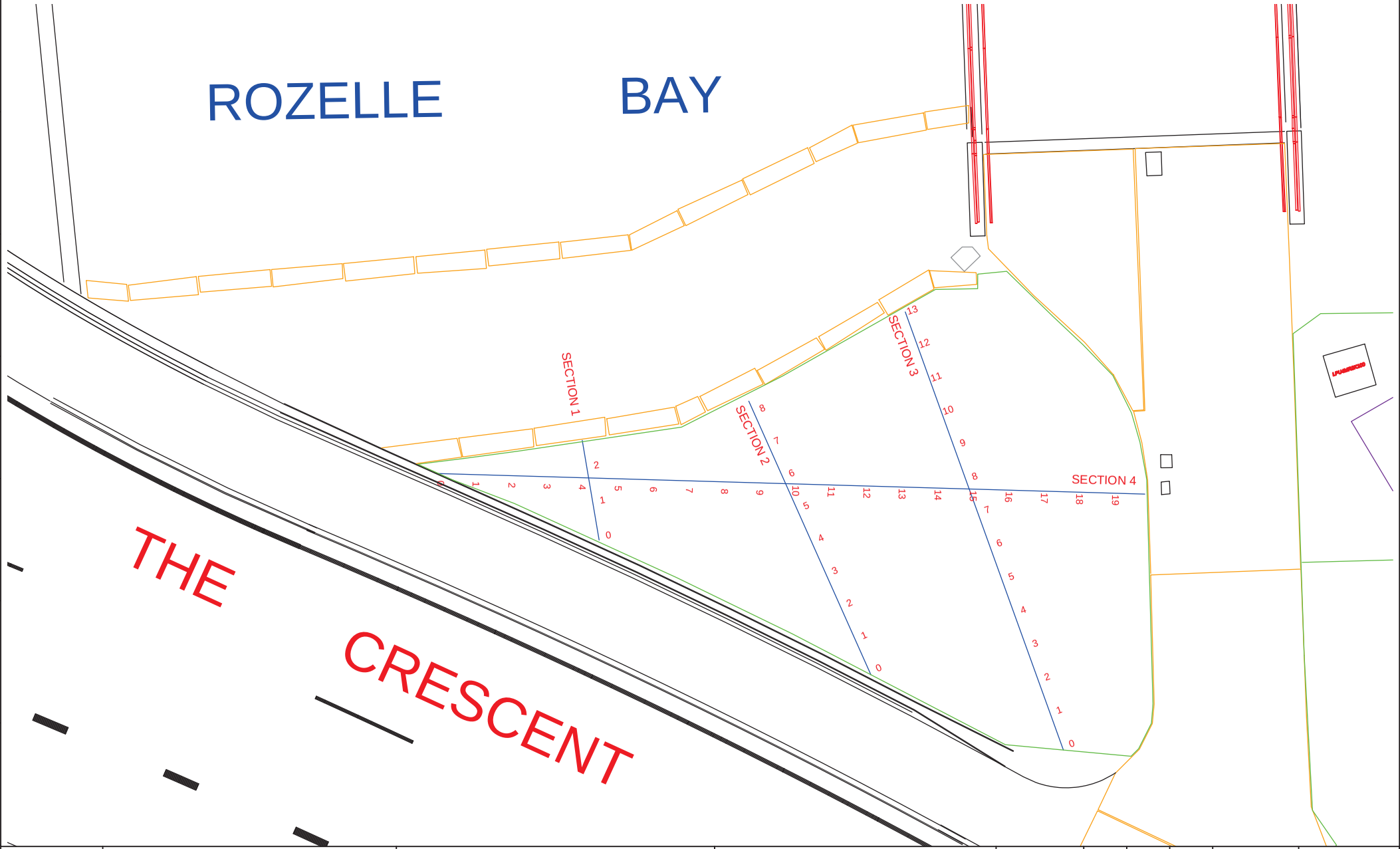
DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:100

AREA 5
TOPOGRAPHICAL
RASTER

SHEET 1 of 1

Plotted: at Tue Oct 17 14:21:01 2023

Project: C:\Users\ashley\Documents_JHCPB WCX\SB\Sean Foley's data\12D projects\SB CWL s20 MASTER SF v14



		GENERAL NOTES / REFERENCES
SURVEYED BY		FOR INFORMATION ONLY
INSTRUMENT TYPE		
SERIAL NUMBER		
DATE OF SURVEY		
SIGNATURE		

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	13/10/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:100

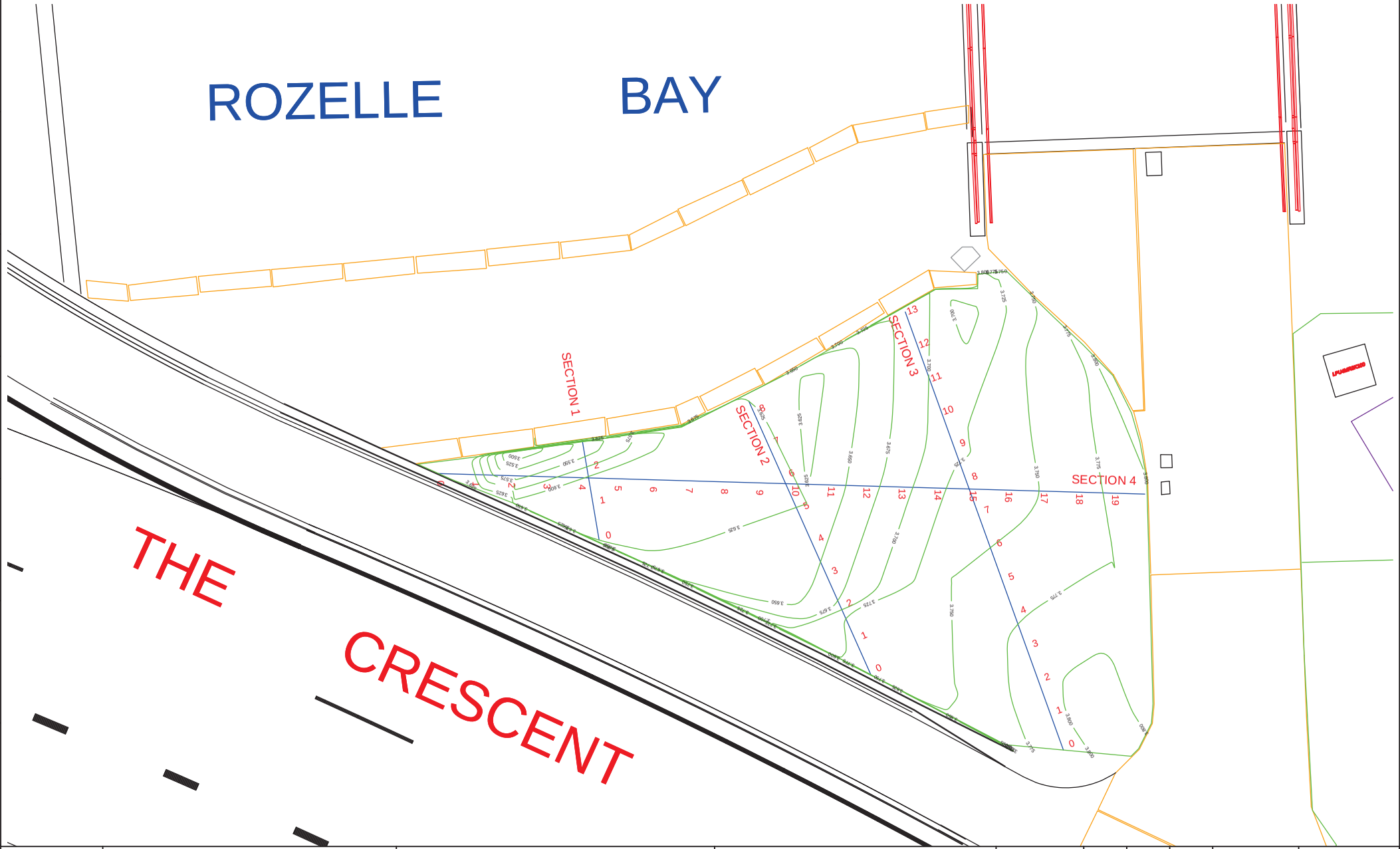
AREA 5
LANDSCAPING SECTIONS

SHEET 1 of 1

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\14 . Area 5\PLT PLAN LANDSCAPING SECTIONS AREA 5 2310.ZDat Tue Oct 17 09:53:36 2023

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14



SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	13/10/23

DRAWN BY	SF
COORDINATE SYSTEM	MGA94 Z56
HEIGHT DATUM	A.H.D
SCALE AT ORIGINAL A3 SIZE	1:100

AREA 5 TOPOGRAPHICAL SECTION

SHEET 1 of 1

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\14 . Area 5\PLT PLAN TOPOGRAPHICAL AREA 5 2310171.at Tue Oct 17 09:59:16 2023

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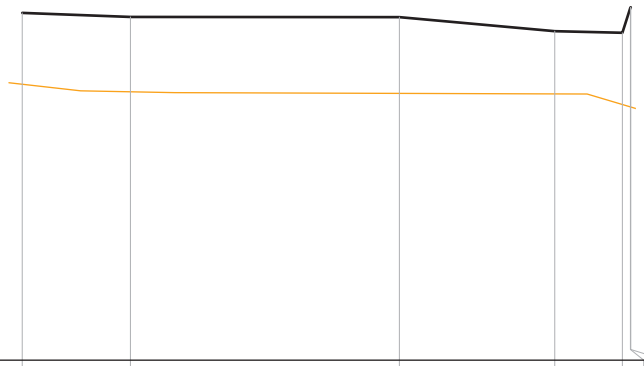

Centreline Data

Y = 6250588.625

X = 331047.189

Z = 3.624

DATUM RL 2.000

CURRENT FINISHED SURFACE LEVEL	3.624	3.605	3.604	3.539	3.531	3.649	3.650	
MARKER LAYER	3.291	3.255	3.248	3.235	3.196	3.185	3.184	
OFFSET	0.000	0.506	1.764	2.491	2.807	2.845	2.847	

SECTION 1

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	17/10/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE

SECTION 1
AREA 5

SHEET 1 of 4

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\14 . Area 5\SECTION 1 AREA 5 2310177001 at 17-Oct-2023 11:03:02

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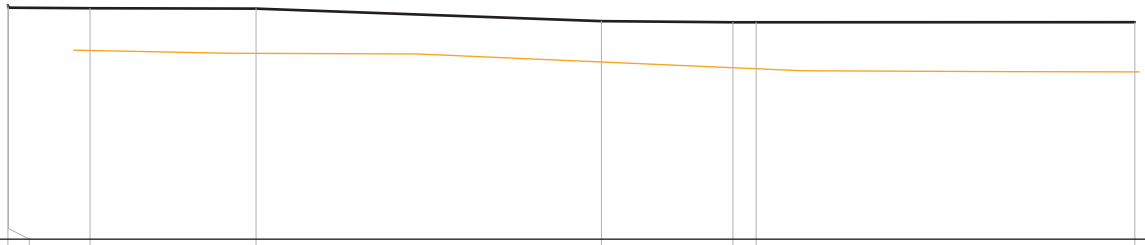

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Y = 6250586.079

X = 331055.341

Z = 3.750

DATUM RL 2.000

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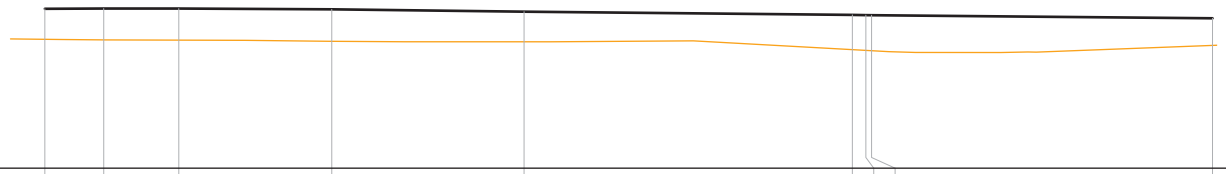

Centreline Data

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X = 331061.024

Z = 3.789

DATUM RL 2.000

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MARKER LAYER	3.446	3.440	3.437	3.424	3.419	3.330	3.322	3.319	3.378
OFFSET	0.000	0.661	1.504	3.221	5.380	9.066	9.218	9.282	13.110

SECTION 3

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	17/10/23

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE

SECTION 3
AREA 5

SHEET 3 of 4

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\14 . Area 5\SECTION 1 AREA 5 2310177001 at 17-Oct-2023 11:20:00

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

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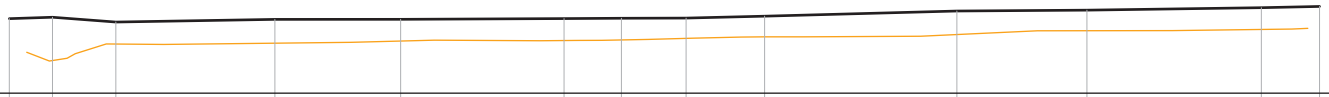
X = 331042.400

Z = null

DATUM RL 2.500



CURRENT FINISHED SURFACE LEVEL	3.615	3.636	3.564	3.604	3.605	3.616	3.621	3.624	3.652	3.730	3.742	3.779	3.798	
MARKER LAYER		2.988	3.235	3.248	3.280	3.288	3.297	3.320	3.343	3.377	3.435	3.454		
OFFSET	0.307	0.954	1.902	4.283	6.166	8.612	9.471	10.439	11.614	14.492	16.439	19.050	19.921	

SECTION 4

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DRAWN BY: SF

COORDINATE SYSTEM: MGA94 Z56

HEIGHT DATUM: A.H.D

SCALE AT ORIGINAL A3 SIZE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSCP	20_01	17/10/23

SECTION 4
AREA 5

SHEET 4 of 4

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\14 . Area 5\SECTION 1 AREA 5 2310177001 at 17-Oct-2023 11:25:56

Project: C:\Users\sfoley\Documents_JHCPB WCX3B\Sean Foley's data\12D projects\3B CWL z20 MASTER SF v14

F6 AREA 6

SURVEYED BY	
INSTRUMENT TYPE	
SERIAL NUMBER	
DATE OF SURVEY	
SIGNATURE	

GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex

JOHN HOLLAND | CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	4/10/23

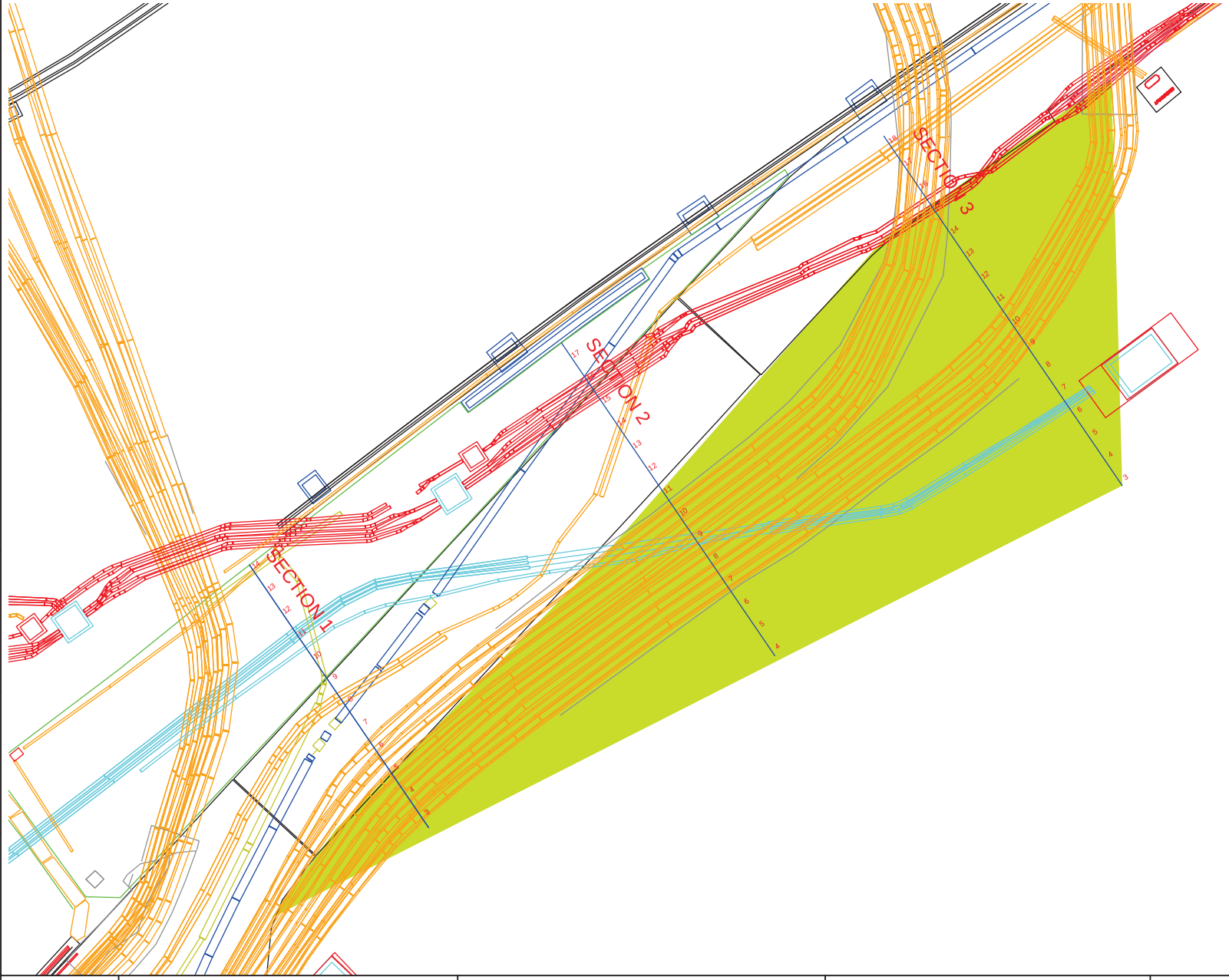
DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:150

AREA 6
LANDSCAPING
RASTER

SHEET 1 of 1

Plotted: at Wed Oct 4 15:44:52 2023

Project: C:\Users\afoley\Documents_J-HCPB WCX3B\Sean Foley's data\12D projects\3B CWL s20 MASTER SF v14



SURVEYED BY	
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SERIAL NUMBER	
DATE OF SURVEY	
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GENERAL NOTES / REFERENCES

FOR INFORMATION ONLY

FOR : RP

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB CONTRACTORS

DO NOT SCALE

DISCIPLINE	ZONE	CATEGORY	DESIGN PACKAGE	PLOT DATE
SURV	CWL	LSC	00_20	4/10/23

DRAWN BY: SF
COORDINATE SYSTEM: MGA94 Z56
HEIGHT DATUM: A.H.D
SCALE AT ORIGINAL A3 SIZE: 1:150

AREA 6
LANDSCAPING

SHEET 1 of 1

REVISION

Plotted: C:\Users\sfoley\John Holland Group\Survey - 20 CWL\Landcaping Closeout\12 . Area 6\PLT PLAN LANDSCAPING SECTIONS AREA 6 2304.dgt at Wed Oct 4 15:46:43 2023

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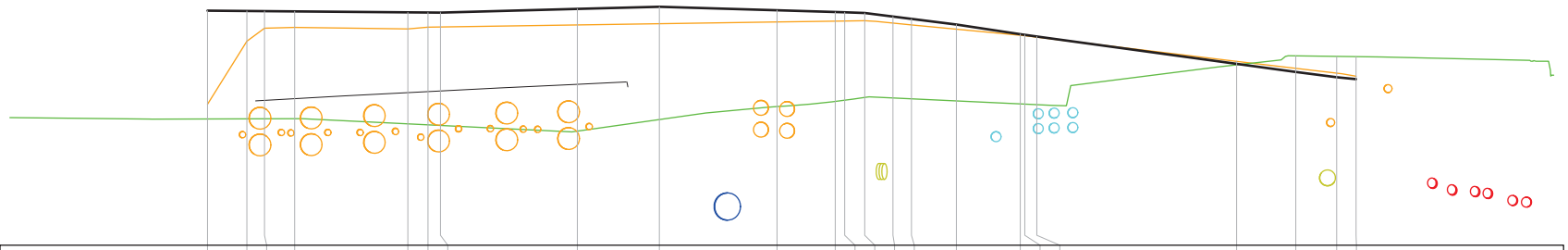
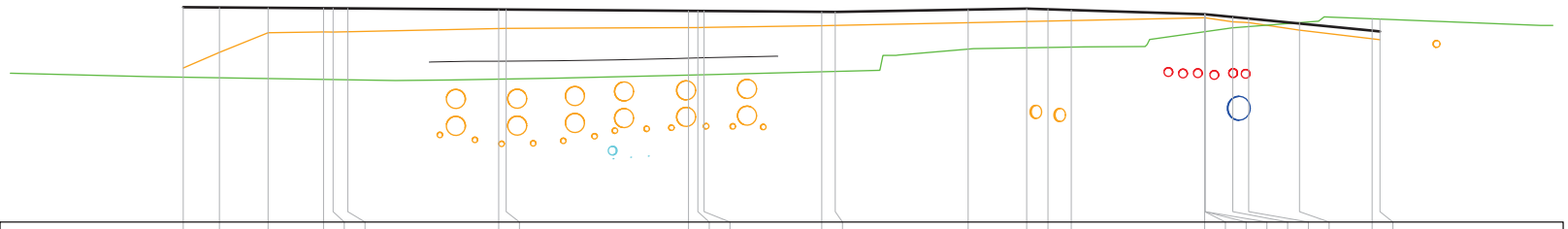


Centreline Data
Y = 6250657.048
X = 331087.255
Z = null

DATUM RL 1.000

| | | |



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X = 331100.591
Z = null

DATUM RL 0.500

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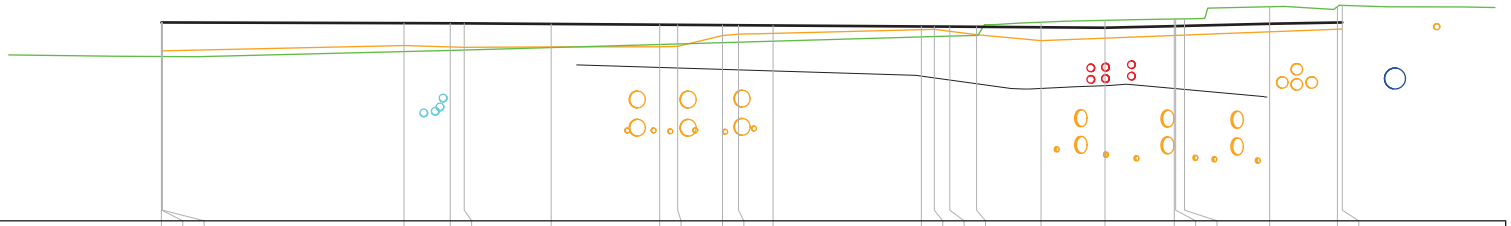

Centreline Data
Y = 6250669.494
X = 331112.697
Z = null

DATUM RL 0.000

| | | |

1 INTRODUCTION AND OBJECTIVES

Mr Brad May, a Site Auditor accredited under the New South Wales (NSW) *Contaminated Land Management Act 1997* (CLM Act) (Accreditation Number 1603) and an employee of Epic Environmental Pty Ltd (Epic), was commissioned by the John Holland CPB Joint Venture (JHCPB) to provide the services of NSW EPA Accredited Site Auditor (Site Auditor), where required under the project's State Significant Infrastructure (SSI) approval, for land to be used for construction of the WestConnex Stage 3B (WCX3B) Rozelle Interchange.

The purpose of the commission was to meet the requirements of Clauses E181 to E185 of SSI Approval No. 7485 for the WestConnex M4-M5 Link Project (Rozelle Interchange) regarding the provision of Site Audit Report (SAR) and Site Audit Statement (SAS) for land identified to be contaminated regarding suitability for the land's specified use.

The purpose of this document is to present a Site Audit Report (SAR) and Site Audit Statement (SAS) for land referred to as City West Link (CWL) (herein referred to as the site), including independent review of the environmental assessment documents listed in **Section 1.3 certifying that the land is suitable for its intended use, subject to compliance with an environmental management plan (i.e. Section A2 SAS).**

The site location and boundary, and audit area are shown in **Figure F1** (in the Figures Section of this report). The site is located adjacent to the west, southwest and south of Rozelle Bay and comprises of:

- Two (2) assessment areas known as 'Crescent Civil' and 'Buruwan Park'. Both these sub-sites were classified as "moderate risk" in the Ramboll (2019) sampling, analysis and quality plan (SAQP)
- Residual land[1] which will be returned to Transport for NSW (TfNSW) on completion of WCX3B construction works at the site. This land is not subject to the contaminated land site audit requirement outlined in Condition E182 of the project's SSI approval
- Other areas including roadways, footpaths and cycleways.

Site audit details are provided in **Section 3** and are summarised in **Table 1**.

Table 1. Audit summary table

Aspect	Details
Audit number	2023/SY037
Site address	Located adjacent to: • City West Link, Annandale/ Lilyfield/ Rozelle • The Crescent, Annandale • Chapman Road, Annandale • Railway Parade and Bayview Crescent, Annandale • Johnstone Street, Annandale
Objectives	The objective of this SAR is to present independent review confirming that the site is suitable for its intended uses (refer Table 4) subject to compliance with an environmental management plan (i.e. Section A2 SAS).
Audit boundary	As shown **Figure F1.**

[1] The project SSI approval defines residual land as "*Land owned by [TfNSW] and used for the purposes of constructing the critical state significant infrastructure (CSSI) that [TfNSW] considers is no longer required for the construction and/or operation of the CSSI, or any other road project*".

1.1 Overview of Site Audits

The site audit has been conducted in accordance with the requirements of the CLM Act. The CLM Act describes a site audit as:

A review:

a) that relates to management (whether under this Act or otherwise) of the actual or possible contamination of land, and

b) that is conducted for the purpose of determining any one or more of the following matters:

(i) the nature and extent of any contamination of the land

(ii) the nature and extent of any management of actual or possible contamination of the land

(iii) whether the land is suitable for any specified use or range of uses

(iv) what management remains necessary before the land is suitable for any specified use or range of uses, and

(v) the suitability and appropriateness of a plan of management, long- term management plan or a voluntary management proposal.

In NSW, the site assessment and site audit process include the following:

1. The contaminated land consultant, or other relevant party, designs and implements the site assessment and, where required, all remediation and validation activities to achieve the stated objectives, and
2. The site auditor independently reviews the works undertaken to ensure that they comply with current regulations, standards and guidelines, and that the site has been assessed, remediated and validated to a standard appropriate to the proposed landuse.

Section 53B of the CLM Act describes that site audits conducted by NSW EPA accredited site auditors must:

- Contain a critical review of the information collected in relation to the site audit and must clearly set out the reasons for the findings proposed to be contained in the relevant site audit statement
- Be undertaken in compliance with the provisions of the CLM Act and the CLM Regulations
- Be in accordance with the guidelines made or approved by the EPA; and
- Have regard to the provisions of any environmental planning instruments applying to the site

1.2 Guidelines Made or Approved by the NSW EPA

Guidelines made by the NSW Environment Protection Authority (EPA) that are applicable to this audit are:

- Department of Environment and Conservation NSW (DEC NSW) (March 2007) '*Contaminated Sites: Guidelines for the Assessment and Management of Groundwater Contamination*'. DEC NSW, Sydney NSW
- NSW Environment Protection Authority (NSW EPA) (December 2020), '*Underground Petroleum Storage Systems - Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019*', NSW EPA Sydney NSW
- NSW EPA (September 1995) '*Contaminated Sites: Sampling Design Guidelines*'. NSW EPA, Sydney NSW
- EPA (June 2003) *Contaminated Sites: Guidelines for the Vertical Mixing of Soil on Former Broadacre Agricultural Land*. NSW EPA, Sydney

- EPA (June 2005) *Contaminated Sites: Guidelines for Assessing Former Orchards and Market Gardens.* NSW EPA, Sydney
- NSW EPA (October 2017), '*Contaminated Sites: Guidelines for the NSW Site Auditor scheme (3rd edition)*'. NSW EPA, Sydney NSW
- NSW EPA (December 2019) '*Assessment and Management of Hazardous Ground Gases-Contaminated Land Guidelines*'. NSW EPA, Sydney NSW
- NSW EPA (November 2014) '*Waste Classification Guidelines – Part 1: Classifying Waste*'. NSW EPA, Sydney, NSW
- NSW EPA (April 2020) '*Consultants Reporting on Contaminated Land- Contaminated Land Guidelines*'. NSW EPA, Sydney, NSW
- NSW EPA (September 2015) '*Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997*'. NSW EPA, Sydney
- NSW EPA (October 2016) '*Addendum to the Waste Classification Guidelines (2014) – Part 1: classifying waste*'

Guidelines approved by EPA are:

- NEPC (1999) National Environment Protection (Assessment of Site Contamination) Measure, Schedule A and Schedules B(1)-B(10), amended April 2013. National Environment Protection Council, Adelaide (ASC NEPM (2013))
- Australian and New Zealand Governments (ANZG) (2018), 'Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, August 2018)
- Australian Drinking Water Guidelines, NHMRC and Natural Resource Management Ministerial Council of Australia and New Zealand (2011)
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Volume 3, Primary Industries - Rationale and Background Information (ANZECC & ARMCANZ (October 2000)
- Department of Health and Ageing and EnHealth Council (2012) 'Environmental Health Risk Assessment: Guidelines for Assessing Human Health Risks from Environmental Hazards'. Commonwealth of Australia, Canberra
- Lock, W. H., (1996) "Composite Sampling", National Environmental Health Forum Monographs, Soil Series No. 3. SA Health Commission, Adelaide
- The Heads of EPAs Australia and New Zealand (HEPA), 'PFAS National Environmental Management Plan', Version 2.0 (Jan 2020).

Technical notes made by EPA are:

- Department of Environment, Climate Change and Water NSW (NSW DECCW) (2010), '*Vapour Intrusion: Technical Practice Note*. (Ref. 2010/774). NSW DECCW, Sydney
- NSW EPA (April 2014a) '*Best Practice Note: Landfarming*'. NSW EPA, Sydney
- NSW EPA (January 2010) '*UPSS Technical Note: Decommissioning, Abandonment and Removal of UPSS*'. NSW EPA, Sydney
- NSW EPA (January 2010), '*UPSS Technical Note: Site Validation Reporting*', NSW EPA Sydney
- EPA (August 2015), '*Technical Note: Light Non-Aqueous Phase Liquid Assessment and Remediation*'. NSW EPA, Sydney

Further technical documents referenced by EPA are:

- Beck, P & Mann, B (2010). '*A technical guide for demonstrating monitored natural attenuation of petroleum hydrocarbons in groundwater*', CRC CARE Technical Report no. 15, CRC CARE, South Australia
- Clements, L, Palaia, T & Davis, J (2009) '*Characterisation of sites impacted by petroleum hydrocarbons: National guideline document*', CRC CARE Technical Report no. 11. CRC CARE, South Australia
- CRC CARE (2015) '*Technical Report No. 34. A practitioner's guide for the analysis, management and remediation of LNAPL*'. CRC CARE, South Australia

- Johnston, CD (2010) '*Selecting and assessing strategies for remediating LNAPL in soil and aquifers*', CRC CARE Technical Report no. 18, CRC CARE, South Australia

1.3 Referenced Reports

The primary reports (**Table 2**) prepared by AECOM, Ramboll and WSP Australia Pty Ltd (WSP) were reviewed or are referenced for the development of this document:

Table 2. Referenced Reports Reviewed as part of the Site Audit

No.	Location	Report Reference	Finalised document title	Finalised report date	Document comment
1	Rozelle Interchange	AECOM 2016	'*WestConnex M4-M5 Link Rozelle Interchange, Stage 1 Preliminary Site Investigation* '. Ref: M4M5-REP-4000-EN-030A	19/05/2016	Preliminary Site Investigation (PSI) for the Rozelle Interchange
2	Rozelle Interchange	Ramboll 2019	'*WestConnex Stage 3B – Rozelle Interchange Contaminated Land – Sampling and Analysis Plan (SAQP)*'. Revision D2, August 2019, (Ramboll SAQP 2019), Appendices K, O and P	08/2019	Sampling Analysis Quality Plan (SAQP) for the Rozelle Interchange
3	Rozelle Interchange	Ramboll 2019a	'*Underground Storage Tank Removal Technical Guidance Note, WestConnex Stage 3B Rozelle Interchange*'	06/2019	Technical guidance note for the removal of an underground storage tank (UST)
4	Buruwan Park	WSP 2020	*Work Plan – Sub Site Area – Crescent We*st. PS117368-CLM-LTR-WP-CRW, Revision B	16/03/2020	SAQP for Buruwan Park site (initially called Crescent West)
5	Crescent Civil	WSP 2020a	*Work Plan – Sub Site Area – Crescent Civil Site*. PS117368-CLM-LTR-WP-Crescent Civil Site, PS117368-CLM-LTR-WP-Crescent Civil Site, Revision B	28/03/2020	SAQP for Crescent Civil civil site
6	Buruwan Park	WSP 2021a	*WestConnex Stage 3B - Rozelle Interchange, Sub Site Area - Crescent West (Buruwan Park), Detailed Site Investigation (DSI)*. PS117368-CLM-REPBuruwanPark, Revision D	25/11/2021	Detailed Site Investigation (DSI) for Buruwan Park
7	Crescent Civil	WSP 2021b	*WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent Civil – Detailed Site Investigation*. Ref: PS117368-CLM-REP Crescent Civil, Revision D	15/07/2021	DSI for Crescent Civil site
8	Crescent Civil	WSP 2022	*City West Link UST – Sampling and Validation Report*. PS117368-CLM-REP-CWL UST, Revision D	28/02/2022	Removal of an unexpected UST and validation of the excavation
9	CWL	WSP 2022a	*WestConnex Stage 3b – Rozelle, Interchange Subsite Area – City West Link (CWL), Site Status and Hydrogeology Report*. PS117368-CLM-REPCWL, Revision E	31/10/2022	Report to provide summary of final site conditions (including groundwater) for the CWL (Buruwan Park and Crescent Civil)
10	Crescent Civil	WSP 2022b	*Sub-Area Crescent Civil (East) – Remediation Approach.* PS117368-CLM-MEM-003 Rev5	2/12/2022	Presents remediation capping strategy and associated specifications to manage soil impacts identified by the DSI.

No.	Location	Report Reference	Finalised document title	Finalised report date	Document comment
11	Crescent Civil	WSP 2023	*Validation Report – WestConnex Stage 3B Sub-Site – The Crescent.* PS117368-CLM-REP-CWL VAL RevD Final.	22/11/23	Validation report demonstrating that the remedial strategy implemented on the Crescent Civil site involving capping of the site has been successfully implemented.
12	CWL	WSP 2023a	*Long Term Environmental Management Plan – Various Lots, The Crescent, Annandale and Rozelle*, NSW. PS117368-CLM-REP-CWL EMP RevE	17/11/2023	The Long-term Environmental Management Plan (LTEMP) for CWL comprising: - Crescent Civil sub-site - Buruwan Park sub-site - Ancillary areas, including roadways, pedestrian and cycle paths, open space/landscaped areas.
13	All WCX	WSP 2023b	*Import Material Validation Sampling and Inspection,* 1 June 2023. PS124861-CLM-LTR-SAQP RevD	1/6/23	SAQP for the assessment of landscape material to be imported to the WestConnex Stage 3B (WCX3B) project as part of development works.

1.4 Site Audit Report Format

The report format for the remainder of the SAR is summarised in **Table 3**.

Table 3. Site Audit Report Format

Section	Aspect
Section 2	Audit limitations – scope and limitations of the site audit
Section 3	Site audit details – basic details of the audit, including requirement and background to the audit, site auditor, audit team, meetings and correspondence
Section 4	Site identification and surrounds – details the site identification and landuse and summarises the surrounding landuse and potentially sensitive human health and environmental receptors.
Section 5	Environmental setting – details the desktop study of the environment at and around the site, including published soils and geological information.
Section 6	Site history – summarises the site history and previous activities conducted on the site
Section 7	Contaminants, media, and environmental criteria – summarises the potential contaminants of concern, the relevant environmental media, based on-site history, and the environmental criteria used in the assessment of the site.
Section 8	Site assessment program – summarises the investigations conducted at the site. Includes the objectives and scope, methodology and an assessment of the data usability based on the field and laboratory Quality Assurance and Quality Control (QA/QC).
Section 9	Site Validation and Site Environmental Management Plan (LTEMP) review – summarises the validation program and the development of a Long-Term Environmental Management Plan to manage residual contamination. Remediation and validation program – summarises the remediation undertaken. Includes the objectives and scope, methodology and the validation work.
Section 10	Validation assessment results – Review of assessment results against relevant adopted criteria and summarises the consultant's conclusions of the assessment results described.
Section 11	Evaluation of the Conceptual Site Model – Source pathway receptor assessment and

Section	Aspect
Section 12	Site suitability discussion – discusses the relevant regulatory issues, the use of the LTEMP, migration and risk of contaminants and landuse suitability, including discussions by the consultant and the site audit.

2 AUDIT LIMITATIONS

This site audit relates only to those matters relevant to the CLM Act, which describes that "The general object of this Act is to establish a process for investigating and (where appropriate) remediating land areas where contamination presents a significant risk of harm to human health or some other aspect of the environment". The SAS and SAR do not seek to provide an opinion regarding other aspects of the environment not related to site contamination, or to the suitability of the site in regard to:

- Landuse planning and legal use of the land; and/or
- The occupational health and safety legislation; and/or
- The suitability of any engineering design.

By definition, site auditing involves the review and critique of consultants' and contractors' work, including, amongst others, site histories, site surveys, subsurface investigations, chemical and physical analyses, and risk assessments and modelling. Accordingly, Epic relies on the experience, expertise, and integrity of these organisations. The information sources referenced (in this SAR) have been used to determine site history and local subsurface conditions. While Epic has used reasonable care to avoid reliance on data and information that is inaccurate or unsuitable, Epic is not able to verify the accuracy or completeness of all information and data made available.

Sampling and chemical analysis of environmental media are based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements and site history, not on sampling and analysis of all media at all locations for all potential contaminants.

Limited environmental sampling and laboratory analyses were undertaken as part of the investigations reviewed by Epic, as described herein. Ground conditions between sampling locations may vary, and this should be considered when extrapolating between sampling points. Except at each sampling point, the nature, extent, and concentration of contamination is inferred only. Furthermore, the test methods used to characterise the contamination at each sampling point are subject to limitations and provide only an approximation of the contaminant concentrations. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history, and which may not be expected at the site.

Changes to the subsurface conditions may occur after the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this site audit are based on the available information at the time of the investigations.

As environmental sampling is based on achieving suitable sampling densities, rather than sampling all media at all locations, and analysis is based onsite histories and likely contaminants of concern (CoCs), rather than analysis of all media at all locations for all potential contaminants, the absence of any identified hazardous or toxic materials at the site should not be interpreted as a warranty or guarantee that such materials do not exist at the site. Therefore, future work at the site which involves subsurface excavation should be conducted based on appropriate management plans. These should include, inter alia, environmental management plans, including unexpected findings protocols, hazardous building materials management plans, and occupational health and safety plans.

3 SITE AUDIT DETAILS

3.1 Site Audit Statement

This SAR relates to Audit Number 2023/SY037 notified to the NSW EPA on the 4 February 2020.

3.2 Site Auditor

The EPA contaminated land accredited site auditor who conducted this site audit was Brad May, EPA Accreditation Number 1603.

3.3 Audit Independence

As per Section 54 of the CLM Act, the Site Audit is to avoid conflicts of interest. The Site Auditor confirms that:

- There is no relation to a person by whom any part of the land is owned or occupied, and
- There is no pecuniary interest in any part of the land or any activity carried out on any part of the land, or
- The site auditor is not reviewing any aspect of work carried out by, or a report written by, the site auditor or a person to whom the site auditor is related.

3.4 Technical Support

Assistance to the audit was provided by Epic staff. No external technical assistance apart from the audit support team was relied upon for this site audit.

3.5 Background to Site Audit

The M4-M5 link mainline tunnels form part of the WestConnex Stage 3 works and include a new multi lane road link connecting the M4 East project at Haberfield with the New M5 project at St Peters. The JHCPB JV has been engaged to construct Stage 3B of the project, which includes the new Interchange at Rozelle and Iron Cove Link. The Rozelle Interchange is located between Lilyfield Road to the north, City West Link and Crescent Civil to the south, Victoria Road to the east and the Lilyfield Light Rail Maintenance Depot to the west. The Iron Cove link is located on Victoria Road, to the south of Iron Cove Bridge. A map showing locations of Rozelle Interchange and Iron Cove Link properties is provided in Figure F1(Ramboll SAQP 2019: Figure 1 and Figure 2, Dwg Nos: F001 and F002, Ver 1). Subsite designations relating to the subject site are CR07, CR01 and RY08.

The purpose of the Site Audit is to meet the contaminated sites Clauses E181 to E185 of SSI approval no. 7485, which require:

Contaminated sites

E181 A **Site Contamination Report**, documenting the outcomes of Phase 1 and Phase 2 contamination assessments of land upon which the CSSI is to be carried out, that is suspected, or known to be, contaminated must be prepared by a suitably qualified and experienced person in accordance with guidelines made or approved under the *Contaminated Land Management Act 1997* (NSW).

E182 If a **Site Contamination Report** prepared under **Condition E181** finds such land contains contamination, a site audit is required to determine the suitability of a site for a specified use. If a site audit is required, a **Site Audit Statement** and **Site Audit Report** must be prepared by a NSW EPA Accredited Site Auditor. Contaminated land must not be used for the purpose approved under the terms of this approval until a **Site Audit Statement** is obtained that declares the land is suitable for that purpose and any conditions on the **Site Audit Statement** have been complied with.

E183 A copy of the **Site Audit Statement** and **Site Audit Report** must be submitted to the Secretary and relevant council for information no later than one (1) month prior to the commencement of operation.

E184 An **Unexpected Contaminated Land and Asbestos Finds Procedure** must be prepared and must be followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during construction.

E185 The **Unexpected Contaminated Land and Asbestos Finds Procedure** must be implemented throughout construction.

To address the above, Ramboll were engaged by JHCPB JV in August 2019 to conduct a gap analysis of existing contaminated land reviews and develop an 'overarching' Sampling, Analysis and Quality Plan (SAQP) for all of the properties that comprise the WCX Stage 3B Rozelle Interchange. As part of this work, Ramboll assessed and categorised each construction impacted property as low, moderate, or high-risk regarding contamination. The sites categorised as moderate or high risk were considered to warrant further investigation to assess contamination risk and the requirement for management and/or remediation. The SAQP included (in the SAQP Appendices B to Q), individual SAQPs for each identified site classified as moderate to high-risk. Appendices K, O and P of the Ramboll SAQP relates to the subject site.

WSP were subsequently engaged (in March 2020) to prepare refined SAQPs for each moderate to high-risk site to be assessed, and to carry out and report on the assessment and subsequent management/remediation and validation of each site.

This site audit forms one of a number of separate audits for the WCX3B project and has been prepared specifically with reference to the audit area (i.e. the site) and expected final land uses.

This SAR has been prepared to address the 'City West Link' site, also referred to as project designation RY08, CR01 and CR07, which were categorised as a moderate risk site (Ramboll 2019). The site history review indicated the site was substantially reclaimed and used for industrial purposes including timber handling, shipping, boatyards, storage and roadways.

3.6 Audit Meetings and Site Inspections

Project meetings and site inspections for the site were conducted by the Site Auditor (or their representative) with JHCPB representatives, on the following dates:

- 10 June 2021 (Brad May and Gary Bagwell)
- 10 November 2022 (Brad May and Gary Bagwell)
- 14 April 2023 (Brad May)
- 10 August 2023 (Brad May)

Selected photos taken during these inspections are included in the **Plates** section at the end of this report. Key items of note during the most recent of 10 August 2023 site visit were:

- The consists to roadway and pavement over the majority of the site due to road widening and the construction of footpaths, overpass and bridge works resulting in minimal areas of the site used for landscaping.
- Whites Creek enters the site from the west and enters Rozelle Bay in the northeast corner of the site, the drainage line of the creek was duplicated as part of the works, with significant portion of the creek bridged over.
- The new predestination walkway, connecting the Rozelle Railyards to the light rail station and Johnston street was in place.
- Construction was underway with temporary structures being removed and preparation for the construction of the western lanes of the Crescent underway.

3.7 Site Audit Correspondence

The following Interim Audit Advice (IAA) reports were completed prior to the completion of this SAR to support development process:

- Interim Audit Advice (IAA) #31 for Statutory Site Audit SY011/ SY180068.01. Review of WSP UST Sampling and Validation Report - Sub-site Area City West Link for WestConnex Stage 3B Rozelle Interchange, 17 Mar 2022
- IAA #35 for Statutory Site Audit SY011/ SY180068.01 - Review of WSP Detailed Site Investigation - WestConnex Stage 3B Rozelle Interchange Subsite Area – Crescent West (Burawan Park) – RevC 24/11/21
- IAA #37 for Statutory Site Audit SY011. Final endorsement of WSP Memo: 'Sub Area Crescent Civil (east) - Remediation Approach', 13 January 2023
- IAA#43: Final Review of WSP Rev E - Site Status and Hydrogeology Report – Interim Audit Advice, 16 Jan 2023
- Interim Site Audit Advice #46 (IAA#31) for Statutory Site Audit SY011/ SY180068.01. Review of WSP UST Sampling and Validation Report - Sub-site Area City West Link for WestConnex Stage 3B Rozelle Interchange
- IAA for Statutory Site Audit SY011/SY180086.01/8A: Close-out of WSP Work Plan – Sub Site Area: Crescent Civil West for WestConnex Stage 3B Rozelle Interchange – CR07 West (Crescent Civil West, Rozelle), 12 May 2020
- Interim Audit Advice #14B for Statutory Site Audit SY011. Review of WSP Work Plan - Sub Site Area – Crescent Civil Site (CR01) for WestConnex Stage 3B Rozelle Interchange, 16 June 2020
- Interim Audit Advice #61, for Statutory Site Audit SY011. Review of WSP Long-Term Environmental Management Plan (LTEMP) - Various Lots, The Crescent, Annandale and Rozelle, for WestConnex Stage 3B Rozelle Interchange, 17 November 2023
- Interim Audit Advice #54, for Statutory Site Audit SY011, Review of Validation Report, WestConnex Sub-Site – The Crescent, 22 November 2023.

The above IAA reports are included in **Appendix B**.

4 SITE IDENTIFICATION AND SURROUNDS

The site identification and land use details, including key information used to support the development of the conceptual site model, is provided in the following sub-sections. This information has been sourced from the:

- City West Link Site Status and Hydrogeology Report (WSP, 2022a)
- Sampling, Analysis and Quality Plan (SAQP) (Ramboll, 2019)
- As well as relevant published literature and land use information.

4.1 Location and Layout

The site location and boundary are shown on **Figure F1** (in the Figures section of the report). The site is located to the south/ southeast of the Rozelle railyards precinct of WCX3B and directly west, southwest and south of Rozelle Bay. It largely comprised of two (2) former assessment areas and sub-sites known as 'Crescent Civil' and 'Buruwan Park' and other areas including residual land, roadways, footpaths, and cycleway. The locations of these sub-sites and other areas in relation to the site (i.e. audit area) are shown in **Figure F2** (Figures Section).

4.2 Site Identification

Site identification details for the property are summarised in **Table 4**.

Table 4. Site Identification Details

Aspect	Description
Site name	SY037 – City West Link (comprising Crescent Civil and Buruwan Park sub-site areas)
Street address	Located is located adjacent to: • City West Link, Annandale/ Lilyfield/ Rozelle • The Crescent, Annandale • Chapman Road, Annandale • Railway Parade and Bayview Crescent, Annandale • Johnstone Street, Annandale The site location and boundary are presented on **Figure F1** (Figures Section).
Area	Site is approximately 21,882 m^2 and comprises of: • Crescent Civil – approximately 9,500 m^2 • Buruwan Park – approximately 6,000 m^2 • Balance of site as roadway area: 6,382m^2
Lot / Deposited Plan	The site comprises of: • Crescent Civil sub-site (including sub-precincts of CR01, CR05, CR06, CR07, and CR09) comprises of: a) Part Lot 20 Deposit Plan (DP) 1151746 b) Lots 21 and 22 DP 1151746 c) Part Lot 4 DP 1209992 d) Part Lot 23 DP 1151746 e) Lot 20 DP 791554 • Buruwan Park sub-site (formerly known as part of 'CR07') comprises of: a) Lots 1, 2 Lot 3 DP 827708 b) Part Lot 3 DP 827708 c) Lot 31 DP 1055559 d) Part Lot 30 DP 1055559 e) Lot 10 DP 261985 • Part Lot 5 DP 873379 (outside "moderate risk" sub-site areas) • The Crescent roadway
Local Government Area (LGA)	Inner West Council
Zoning	Port and Employment Zone (Sydney Regional Environmental Plan No. 26 – City West)

Aspect	Description
Current Use	Currently a construction site
Proposed use / land use	Road reserve, pedestrian, and bicycle pathways (including a footbridge at Buruwan Park) and minor landscape areas. An area of land adjacent to Rozelle Bay has been set aside (residual land) for future development and will be handed over to TfNSW at the end of the project (residual land is shown on **Figure F1**). The SSI approval defines residual land as "*Land owned by [TfNSW] and used for the purposes of constructing the critical state significant infrastructure (CSSI) that [TfNSW] considers is no longer required for the construction and/or operation of the CSSI, or any other road project*". WSP noted the following: • The area of residual land is not subject to the contaminated land site audit requirement outlined in Condition E182 of the infrastructure approval • JHCPB are not responsible for the future management or remediation of potential contamination that may be present within the portion of the site comprising residual land

4.3 Adjacent Land Uses

The following land uses are adjacent to the site:

- North: City West Link Road and the main Rozelle rail yard precinct of the WCX3B project beyond
- East: Rozelle Bay, Glebe Foreshore Parks, marinas, and commercial /industrial properties
- South: Sydney light rail corridor and Annandale residential properties beyond
- West: Sydney light rail corridor and Rozelle rail yard precinct of the WCX3B project beyond

The nearest environmentally sensitive receptors include:

- Rozelle Bay: Surface runoff from Crescent Civil portion of the site is expected to flow to the east to northeast towards Rozelle Bay, part of Sydney Harbour
- Whites Creek: Surface runoff from the Buruwan Park portion of the site is expected to the northeast towards Whites Creek and then to Rozelle Bay

4.4 Site Audit Discussion

Site identification and surrounding environment has generally been provided in the consultant reports and checked. The information is consistent with the site auditor's understanding of the site and the surrounding environment observed during site inspections.

5 ENVIRONMENTAL SETTING

The desktop study of the site environmental setting was summarised by Ramboll (2019) and WSP (2021b, 2021a and 2022a) including published soil and geological information. The following sections are based on the previous reports and the relevant published literature. Where discussed, the auditor has supplemented, or provided further comment on the relevant site information.

5.1 Local Meteorology

The nearest long-term Bureau of Meteorology (BoM) climate stations to the project are Observatory Hill (Station 066062; since 1858) and Sydney Airport (Station 066037; since 1929). Pan evaporation exceeds rainfall in many months and, in practice, most of the rainfall is lost to evapotranspiration, with only a small proportion available for recharge of groundwater resources.

Impacts of climate change on the water resources of Sydney were investigated by the Sydney Water Balance Study (Metropolitan Water Directorate of the NSW Government, 2010). It concluded that by 2030, there may be a decrease in annual rainfall and runoff in inland catchments and minor increases in the coastal catchments.

5.2 Topography and Drainage

Survey data provided by JHCPB, indicated prior to construction, the elevations across the site were as follows:

- *Crescent Civil sub-site:* Elevation generally ranged between approximately 3m Australian Height Datum (AHD) in the east near to the foreshore of Rozelle Bay and 4m AHD in the south and west
- *Buruwan Park sub-site:* Elevation ranged from approximately 1.4m AHD in the southwest to approximately 4m AHD in the southeast, with the southern portion sloping upwards towards the higher elevation of the Sydney Light Rail at approximately 8m AHD

The construction and excavation activities have significantly altered the site's topography. It is anticipated that surface runoff will flow to the northeast towards Whites Creek and Rozelle Bay, part of Sydney Harbour.

5.3 Geology and Soils

5.3.1 Regional Geology and Soils

Reference to the 1:100 000 Sydney Geological Sheet 9130 First Edition (Geological Survey of New South Wales, Sydney 1983) indicates the site is in the vicinity of the following two primary geological units:

- Holocene aged silty to peaty quartz sand, silt and clay including ferruginous and humic cementation in places with common shell layers
- Middle Triassic aged medium to coarse-grained quartz sandstone, very minor shale and laminite lenses

5.3.2 Site-Specific Soils and Geology

WSP (2022a) provides the following summary description of site-specific soils and geology:

- A sandstone outcrop was encountered in the western/south-western portion of the site, with depth to rock ranging from 0.3 and 0.5m below ground level (bgl) in the north-west to 3.1m bgl in the south-west. The encountered depth to bedrock and estimated extent of the sandstone outcrop (extent of shallow rock ledge) is shown on Figure 3 of WSP (2022a), included in **Appendix C.**

- Fill material, generally comprising silty/clayey sands or sandy clays, was recorded in the northern portion of the Buruwan Park sub-site at depths between 0.5 and 3.2m bgl, underlain by natural alluvial sands and clay.
- The soil profile encountered in the Crescent Civil sub-site can be grouped into two sections:
  - In the south-western portion of the Crescent Civil sub-site, the soil profile encountered typically comprised approximately 0.5 to 1.5 m sandstone fill material, which was likely tunnel spoil imported from the Rozelle tunnel sites. Underlying the sandstone fill was approximately 0.5 to 2 m historic fill material, consisting of black/dark brown silty, clayey sand with anthropogenic inclusions (tiles, plastic and concrete). The historic fill was underlain by extremely weathered sandstone.
  - In the north-eastern portion of the Crescent Civil sub-site, the soil profile encountered typically comprised 0.5 to 1m grey gravels and crushed road base for the future footpath. Underlying the gravel/road base was historic fill material (dark brown/black sandy clay), which increased in clay content with depth. Anthropogenic inclusions (plastic material, clinker and nails) were noted at varying depths.

5.4 Hydrogeology

A search of the WaterNSW Groundwater Database was undertaken by WSP (2022a), and no registered groundwater wells were identified within a 500 m radius of the site. The WSP (2022a) stated:

- The AECOM Australia Pty Ltd (AECOM) Groundwater Monitoring Interpretive Report (AECOM, 2018a) found:
  - Groundwater at the site is present in two main units consisting of alluvium around the banks of Rozelle Bay and Whites Creek and Hawkesbury Sandstone further inland
  - The alluvium around the banks of Rozelle Bay and Whites Creek forms an unconfined highly permeable aquifer that is often connected to surface water in nearby creeks or Rozelle Bay. Groundwater in the alluvium is expected to be of higher salinity with tidal influences.
  - Groundwater within the Hawkesbury Sandstone is expected to be acidic and of low salinity. Elevated levels of dissolved iron and manganese naturally occur within the Sandstone.
- Whites Creek canal:
  - Extends approximately east-west in the northern portion of the site and discharges to Rozelle Bay
  - Comprises a concrete lined canal and has undergone widening as part of the WCX3B project activities, including the construction of a new concrete wall. Based on information provided by JHCPB, the canal wall is understood to be cast in-situ with sealed joints and as such, it is anticipated that there is minimal interaction between surface water within the creek and groundwater at the site
  - Is not considered a receptor for groundwater migration directly from the site
- The closest recorded historical groundwater wells are RZ_BH44d and RZ_BH47d (PSM, 2019). Both wells are screened within Hawkesbury Sandstone and their standing water levels range from 1.02 to 1.87 mAHD and 0.63 to 1.79 mAHD, respectively
- Groundwater flow to be to the east and north toward Rozelle Bay.

5.5 Site Condition and Environment

The site construction had been almost complete at the time of the last Auditor inspection (10 August 2023). The Site comprises over 90% pavement or roadway with minor areas of the site prepared as landscaped areas. The bridgework and overpasses were completed, and temporary structures were being removed. A small triangular section adjacent Whites Creek bridge was yet to be landscaped. Access from the Crescent pedestrian footpath to Rozelle bay was restricted by a permanent 2m fence to restrict access to the bay embankment.

5.6 Site Audit Discussion

The information required by NSW EPA made or approved guidelines with regard to the desktop review of the environmental setting, has been provided. The Auditor sourced and confirmed additional information where it was considered relevant to the audit outcomes. The information provided is consistent with the site audit's understanding of the site conditions and environment in the vicinity of the site.

6 SITE HISTORY

6.1 Land Information

6.1.1 Land Titles

The review of the historical land titles, reported in the Detailed Site Investigation reports (WSP 2021 and 2021a), was undertaken by Ramboll (2019) to determine site owners, their occupations, and the dates to which they occupied the site. Site owners and/or occupants of:

- Crescent Civil sub-site included various timber merchants, the Maritime Services Board of NSW, the Sydney Harbour Trust Commissioners, and various NSW government bodies
- The Buruwan Park sub-site included the State of NSW, Roads and Traffic Authority, and Sydney Water (formerly the Water Board)

It is noted that the (Ramboll 2019) search of historical titles does not appear to cover the following lots, which comprise the site. This may reflect changes in property lot and plan details which have occurred between Ramboll's (2019) SAQP and the (WSP 2021 and 2021a) DSI reports.

- Crescent Civil:
  - Lots 21 and 22 DP 1151746
  - Part Lot 4 DP 1209992
  - Part Lot 23 DP 1151746
  - Lot 20 DP 791554
- Buruwan Park:
  - Lots 1 and part Lot 3 DP 827708
  - Lot 10 DP 261985
  - Part Lots 30 and 31 DP 1055559
- Part Lot 5 DP 873379 (outside "moderate risk" sub-site areas)

6.1.2 Historical Aerial Photographs

As part of the desktop site history review, aerial photographs of Crescent Civil and Buruwan Park sub-sites and their surrounds from 1930, 1943, 1951, 1961,1965, 1970, 1982, 1991, 2000, 2007, 2014 and 2015 were obtained and reviewed by Ramboll. The reviews concluded:

- Crescent Civil sub-site:
  - *Onsite:*
    - Aerial photographs between 1930 and 1970/1980s confirm the sub-site was used for maritime shipping purposes and commercial buildings were present between 1951 to the 1960s
    - The northeastern portion of the foreshore was reclaimed between 1961 and 2000 to provide additional commercial/industrial land, with the new land area constructed utilising a suspended slab built on piled piers
    - Between the 1970s and 1980s all infrastructure and buildings had been cleared, and some storage was occurring onsite. Storage of maritime associated materials occurred onsite since 2000
  - *North of sub-site:* The Rozelle Railyard (RRY) was present in the 1930 and further developed by 1951. By 2000, City West Link (CWL) was running directly to the north of the sub-site
  - *Southwest of sub-site:* Residential properties were present in 1930
  - *Southeast of sub-site:* A mix of open parklands and commercial/industrial were present in 1930. By 1991, the industrial complex had been redeveloped in open parkland, which formed part of the now Bicentennial Park.
  - *Rozelle Bay foreshore:* By 1943, warehouses and bulk fuel storage tanks present southern shore of Rozelle Bay, and further development occurred in the 1950s and 1970s. The bulk fuel storage tanks and associated industrial complex had been removed

by 1982, and the area was predominantly vacant land with some areas utilised for storage. The 2007 aerial photograph shows a rectangular portion of the foreshore land has been opened for access to Rozelle Bay and a wetland area has been created

- Buruwan Park sub-site:
  - *Onsite:*
    - The 1930 aerial photograph shows:
      - The northern portion of the site appears to form part of RRY
      - Whites Creek appears channelised, and runs through the sub-site before discharging into Rozelle Bay
      - The sub-site is largely vacant with an access road (located to the south of Whites Creek) running through the site
      - A single building is present in the northeastern corner
    - By 1951, another two industrial building and two smaller structures were present to the north and south of the access road. The 1965 aerial photographs show storage activities occurring in the northern portion, between Whites Creek and the site access road. All onsite structures had been removed before 1991
    - Whites Creek was further modified prior to 1943, and by 1991, it's outlet into Rozelle Bay was further modified, most likely as part of the new CWL intersection
  - *North and west of sub-site:* The RRY is present. By 1991, earthworks for CWL (which was completed prior to 2000) was running directly to the north of the sub-site, and several surrounding properties and buildings had been demolished
  - *East of sub-site:* The northern foreshore of Rozelle Bay is largely vacant, with shipping storage visible along the foreshore further southeast. Light industrial development has occurred on the foreshore by 1943, with further development occurring in 1950s.
  - *South of sub-site:* A mix residential and industrial properties were present in 1930

6.2 Environmental Records

6.2.1 NSW EPA Contaminated Land Database

A search of the NSW EPA Record of Contaminated Land Notices Database established under section 58 of the CLM Act conducted by WSP (2021 and 2021a) did not reveal any records for the site or immediately surrounding land. The nearest listed site is the White Bay Power Station which is located approximately 400 m to the northeast of the site. White Bay Power station was deemed to be contaminated by the prescribed activity of the disposal of chemical wastes, namely polychlorinated biphenyl (PCB) and asbestos wastes.

A search undertaken by the Auditor also identified the White Bay Power station at Robert Street Rozelle as the only site within 500m of the site listed on the NSW EPA Record of Contaminated Land Notices Database .

6.2.2 Protection of Environment Operations Act 1997 Public Register

A search of the public register established under section 308 of the *Protection of the Environment Operations Act 1997* was undertaken by WSP (2021 and 2021a). The Rozelle Interchange portion of the WestConnex Project is subject to an Environment Protection Licence (EPL). Crescent Civil and Buruwan Park sub-sites were not listed to have previously held any EPLs.

Current and historical EPLs within a 500 m of the site include:

- Boat mooring and storage, and boat construction and general maintenance occurring on James Craig Road to the northeast and east
- Former electroplaters at 51 Lilyfield road to the northeast

6.3 Activities Conducted

The activities at:

- Crescent Civil sub-site has been predominantly associated with timber handling, maritime/shipping purposes, and storage of maritime associated materials until the commencement of the WCX3B project works
- The Buruwan sub-site have included marine/store merchants, steel breakers, and grit or abrasive blasting as part of historic industrial activities

The area located between the Buruwan Park and Crescent Civil sub-sites, known as Crescent Civil roadway, has historically comprised a roadway since at least 1930.

6.4 Chemical Usage Storage

The following searches of the NSW SafeWork Dangerous Goods database were undertaken to identify licenses to keep dangerous goods onsite:

- *Crescent Civil sub-site:* Ramboll's (2019) search did not locate any records pertaining to the sub-site
- *The Buruwan Park sub-site:* WSP conducted a search in March 2021, and did not identify any records pertaining to the storage of hazardous chemicals at the sub-site

6.4.1 PFAS and Surrounding Impacts or Use

While WSP did not discuss the occurrence of per- and polyfluoroalkyl substances (PFAS) in the site history during this site investigation, it was included in the intrusive soil and groundwater assessments undertake at the site.

6.4.2 Incidents and Spills

No information was provided regarding any incidents or spills in the WSP DSIs (2021 and 2021a) conducted at Crescent Civil or Buruwan Park sub-sites.

6.4.3 Site Audit Comments

The site's historical land use has been adequately researched and there does not appear to be any significant data gaps. While there are some lots of the site where full historical title search has not been conducted, the auditor considers that other site history sources (such as historical aerial photographs, records of notices), provide adequate supplementary history search to provide an understanding of historical activities undertaken over the site, providing a reasonable basis for estimation of potential areas and chemicals of environmental concern for assessment.

6.5 Services

Dial Before You Dig (DBYD) searches for existing underground services were not provided in the WSP (2021 and 2021a) DSI reports. However, as the site is undergoing redevelopment, renewal of services is understood to have been carried out by JHCPB.

6.6 Hazardous Materials Audit

At the time of the audit, no structures apart from temporary structures were present on the site. A hazardous material audit for the site or the sub-sites was not supplied for review during this site audit.

6.7 Adjacent Land Use Activities

Reclamation of the Rozelle Bay area occurred in the late 1800s and led to the area becoming the largest timber handling wharves in the Sydney region. Concrete construction plants and the Maritime Service depot established following the construction of a viaduct or the goods railway in the 1920s.

Historical aerial photographs from 1930 to 2015 show that:

- The area located between Crescent Civil and Buruwan Park sub-sites was Crescent Civil roadway since the 1930s
- The Rozelle Railyards were located to the north, and north and west of Crescent Civil and Buruwan Park sub-sites, respectively
- Residential and industrial areas were to the south and southwest of the site
- Warehouses and bulk fuel storage was on the foreshore of the Rozelle Bay between the 1940s to 1980s

Based on the Auditor's review, potential current and historical land uses that may present a risk to groundwater at the site include:

- Located directly to the north, the former historical Rozelle Railyards, which was redeveloped into the current City West Link road infrastructure
- The existing Rozelle Bay Light Rail tracks located directly to the south and west of the site.

6.8 Site History Review Conclusions

6.8.1 Site History Summary

- Review of available historical records by WSP (2021, 2021a and 2022a) has indicated:
- Rozelle Bay area:
  - The Rozelle Bay area was originally mangrove low laying swampy areas and until late in the 19th century, Rozelle Bay was still rock and bushland
  - Initial reclamation works were undertaken by the Public Works Department in 1898-1899, and allowed the area to become the largest timber handling wharves in the Sydney region
  - A viaduct was built in 1920 at the head of Rozelle Bay for the goods railway. Further reclamation works occurred in 1927, and the area became a location for concrete constructions plants, and the depot for the Maritime Services. It is reported that the bay once appeared as a marine graveyard with rotting and rusting abandoned vessels
  - In the 1960's container shipping was introduced to the area
  - The Rozelle foreshore was owned by the NSW Maritime Services Board for the entirety of its operating history. Portions of the area were leased to various companies throughout the past 100 years
- The area located between the Buruwan Park and Crescent Civil sub-sites, currently referred to as Crescent roadway, has historically comprised a roadway since at least 1930
- Crescent Civil sub-site:
  - Prior to the 1930s, the sub-site was previously owned by various individuals including timber merchants
  - Since at least 1930, it is likely to have been historically used for maritime/shipping purposes, with a boatshed on the northern side of Whites Creek (abutting Rozelle Bay) until between 1982 and 1991
  - Circa 1970, the area south of Whites Creeks was cleared of infrastructure and buildings
  - This sub-site remained either vacant or was used for storage of maritime associated materials until the commencement of the WCX3B project works
- Buruwan Park sub-site:
  - The subsite was historically intersected by Whites Creek channel, and an access road which was demolished circa 2000
  - Prior to the construction of the CWL roadway, in circa 1990, the area north of Whites Creek historically formed part of the larger Rozelle Rail Yard (RRY) and appeared to be used for industrial and storage purposes
  - Historically the southern area was historically vacant and may have been used for storage purposes during the 1950s

- Onsite registered historical businesses included marine/store merchants in 1950 and steel breakers in 1970. Quarrying activities occurred adjacent to the sub-site at 300 Johnston Street from 1950 to the early 1990s and is likely to have comprised storage and/or logistical activities associated with off-site quarrying operations
- Anecdotal information indicated that grit or abrasive blasting was undertaken in the area as part of historic industrial activities, which may have involved the use of heavy mineral sands known to contain elevated levels of zircon, uranium and other 'hot' minerals
- Since the completion of the CWL roadway in the 1990s, the area has remained vacant, open space.

6.8.2 Site Audit Discussion

WSP (2021 and 2021a) presented a site history review from the following sources:

- Historical aerial imagery (from 1930, 1943, 1951, 1961, 1965, 1970, 1982, 1991, 2000, 2007, 2014 and 2015)
- Historical certificates of titles, as presented in Ramboll (2019) SAQP
- SafeWork NSW Dangerous Good License Database
- NSW EPA online registers of regulatory notices under the CLM Act and Protection of the Environment Operations Act 1997 (POEO Act)

The site auditor has reviewed the presented information and can confirm that the site history review identified that:

- *Rozelle Bay:*
  - The Rozelle Bay area was reclaimed in the late 1890s and used extensively for commercial/industrial purposes including:
    - The largest timber handling wharves
    - Concrete construction plants
    - Maritime Services depot, and reportedly the bay once appeared as a marine graveyard with rotting and rusting abandoned vessels in the 1920s
    - Container shipping in the 1960s
    - Light industrial purposes including storage, warehousing and bulk fuel storage
  - The Rozelle foreshore was owned by the NSW Maritime Services Board for the entirety of its operating history. Portions of the area were leased to various companies throughout the past 100 years
- The area located between the Buruwan Park and Crescent Civil sub-sites, currently referred to as Crescent Civil roadway, has historically comprised a roadway since at least 1930
- *Crescent Civil Civil sub-site:*
  - It was owned by various individuals including timber merchants prior to the 1930s. Since then, it has been used for maritime/shipping purposes, with a boatshed on the northern side of Whites Creek (abutting Rozelle Bay) present onsite until between 1982 and 1991
  - Circa 1970, the area south of Whites Creeks was cleared of infrastructure and buildings
  - It remained either vacant or was used for storage of maritime associated materials until the commencement of the WCX3B project works
- *Buruwan Park sub-site:*
  - It was historically intersected by Whites Creek channel, and an access road which was demolished circa 2000
  - Prior to the construction of the CWL roadway (circa 1990), the area north of Whites Creek historically formed part of the larger RRY and appeared to be used for industrial and storage purposes
  - The southern area was historically vacant and may have been used for storage purposes during the 1950s

  - Onsite registered historical businesses included marine merchants/store merchants and steel breakers in 1950 and 1970, respectively. Quarrying businesses, located adjacent to the sub-site at 300 Johnston Street from 1950 to the early 1990s, are likely to have comprised storage and/or logistical activities associated with off-site quarrying operations
  - Anecdotal information indicated that grit or abrasive blasting was undertaken as part of historic industrial activities, which may have involved the use of heavy mineral sands known to contain elevated levels of zircon, uranium and other 'hot' minerals
  - Since the completion of the CWL roadway in the 1990s, the area has remained vacant, open space

- *POEO Act Public Register – Environment Protection Licences (EPLs):*
  - Crescent Civil and Buruwan sub-sites are not listed to have previously held any Environment Protection Licences (EPLs)
  - The Rozelle rail yards premises of the WCX3B Project, located to ther north and northwest of CWL is subject to a current EPL (no. 21278)
  - Current and historical EPLs within a 500 m of the site include:
    - Boat mooring and storage, and boat construction and general maintenance occurring on James Craig Road to the northeast and east
    - Former electroplaters at 51 Lilyfield Road to the northeast
- *CLM Act – Record of Contaminated Land Notices Database:*
  - The site or immediately surrounding land are not currently listed under the CLM Act
  - The nearest listed site is the White Bay Power Station which is located approximately 400 m northeast of the site
- *NSW SafeWork Dangerous Goods database:* Searches conducted for Crescent Civil and Buruwan Park sub-sites did not identify any dangerous goods licensing records

The Auditor has reviewed historical aerial photography available via Nearmap[2] information and images and can confirm that the redevelopment timeline presented by WSP is consistent with the historical aerial photography record.

The NSW EPA made or approved guidelines (particularly the ASC NEPM Field Checklist 'Site Information' sheet) provides guidance on the information recommended to be sourced for a desktop site history review. The Auditor notes that the following recommended information was not provided in the WSP (2021 and 2021a) DSI reports:

- Interviews with former owners/ occupiers
- Details of previous onsite buildings and structures
- Onsite areas of chemical/ fuel storage, distribution pipework systems, and/or dispensing
- And specific details of manufacturing processes conducted onsite

However, the auditor considers that this information is likely unobtainable, given the time that has elapsed since the occurrence of onsite activities. Whilst this information is unobtainable, it is not considered to be material to the outcomes of the assessment and this Audit.

Offsite sources of contamination are not explored in the (WSP, 2021 and 2021a) DSI reports for the sub-sites of Crescent Civil and Buruwan Park, or the (Ramboll, 2019) SAQP. Both DSIs mention the presence of the former White Bay Power Station, which was deemed to be contaminated by the prescribed activity of the disposal of chemical wastes, namely PCB and asbestos wastes. The power station is located approximately 400 m to the northeast of the site, and the Auditor considers that it is not upgradient of the site. Hence the risk of contamination from this source to the site is low.

[2] http://maps.au.nearmap.com/

The auditor considers that there is the potential for impact to groundwater at the site from upgradient historical or current land uses. The information provided is consistent and agrees with the site audit inspections and understanding of the site and is considered sufficient for the purposes of the site audit.

7 CONTAMINANT, MEDIA, AND ASSESSMENT CRITERIA

7.1 Contaminants of Potential Concern (COPC)

Based on the documented site history, the contaminants of potential concern (COPC) were identified by WSP (2021) as summarised in **Table 5**. In accordance with the requirements of Section 4.2.7 of the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme* (3rd Edition), WSP considered the potential for PFAS to be present on the site, as follows:

- *Crescent Civil sub-site:*
  - Whilst PFAS storage or historical use was not identified, it could not be excluded, and WSP undertook PFAS analysis in soil and groundwater
  - Furthermore, PFAS concentrations were identified in sediment samples collected from Rozelle Bay by AECOM (2018). However, WSP concluded that the PFAS source was likely to be associated with the commercial/industrial precinct along James Craig Road, which included boat maintenance and fuel storage facilities
- *Buruwan Park sub-site:*
  - PFAS concentrations in groundwater were recorded in adjacent sites including the RRY and Crescent East, as such PFAS was included in the analytical suite during groundwater monitoring events conducted in September and December 2020 at Buruwan Park

Whilst maritime maintenance activities were not identified at the Buruwan Park site by the site history, WSP included tributyltin (TBT), an organotin compound used in maritime maintenance activities, in the September 2020 groundwater sampling event. Reported TBT concentrations were all below the laboratory's LOR, therefore no further TBT analysis was undertaken at Buruwan Park.

Table 5. Contaminants of Potential Concern (COPCs)

	COPCs based on site history											*
Sub-site location	**Asbestos**	**TRH & BTEX [1]**	**PAHs [2]**	**Heavy metals**	**Heavy metals including**	**Cyanide**	**TBT [3]**	**PCBs [4]**	**Phenols**	**OCP & OPP [5]**	**VOC & SVOCs [6]**	**PFAS [7]**
Crescent Civil	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	✓*
Buruwan Park	✓	✓	✓	×	✓	×	×**	✓	✓	✓	✓	✓*

Notes:

* Consideration given with respect to the requirements of Section 4.2.7 of the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme* (3rd Edition). WSP states that a review of the available information pertaining to the site history and land uses has been undertaken and as PFAS storage or use historically on site cannot be excluded, WSP considers that PFAS analysis in soil and groundwater is required.

** Maritime maintenance activities were not identified at the Buruwan Park site by the site history. However, TBT (as COPC for maritime maintenance activities) was included in the WSP groundwater sampling

1 total recoverable hydrocarbon (TRH) and benzene, toluene, ethylbenzene and xylenes (BTEX)

2 polycyclic aromatic hydrocarbons (PAHs)

3 tributyl tin (TBT)

4 polychlorinated biphenyl (PCBs)

5 organochlorine and organophosphorus pesticides (OCP and OPPs)

6 volatile and semi-volatile organic compounds (VOC and SVOCs)

7 per- and polyfluoroalkyl substances (PFAS)

7.2 Soil Assessment Criteria

The Site Auditor has assessed soil data provided by WSP with reference to criteria from the National Environmental Protection Council (NEPC) National Environmental Protection (Assessment of Site Contamination) Measure 1999, as amended 2013 (ASC NEPM).

WSP (2022a) stated:

- The site will comprise of road reserve, pedestrian, and bicycle pathways (including a footbridge at Buruwan Park) and minor landscape areas
- Landscaped areas will be screened against health-based and ecological investigation levels (i.e. HILs and EILs) for the landuse scenario of public open space
- A significant portion of the site will be paved to provide a widened road carriageway along The Crescent/City West Link and pedestrian/bicycle footpaths and footbridge, which does not typically reflect the following landuse scenarios associated with public open space or commercial/industrial
- NEPM (2013) suggests for a Tier 1 assessment that the magnitude of the exceedance should be considered in the context of the conceptual site model (CSM) (i.e. whether the exposure pathways are plausible and whether exposure will result in harm). WSP considered that in the areas where the final landuse would comprise substantial road pavement:
  - There was no plausible exposure pathway to a recreational user
  - The only potential human health receptor to contamination encapsulated below road pavement would be future maintenance/construction workers
- To make a qualitative risk assessment with respect to the requirement for future management (i.e. through the implementation of an environmental management plan (EMP)), WSP considered the health investigation level (HIL) for commercial/industrial (HIL-D) as the most applicable exposure scenario for Tier 1 assessment where the proposed final land use will be road pavement

The Auditor considered the above to be an acceptable approach.

Following from the above, the following Tier 1 (screening) criteria were referred to.

- Human Health Assessment (direct contact)
  - *Health Based Investigation Levels (**HIL-D**)* – considering that the majority of the site is to be paved (as roadway and pedestrian/bicycle footpaths), WSP has also screened soil results against both HIL-C (public open space) criteria for assessment of potential risks.
  - *Asbestos Health Screening Levels (**HSLs**)* – Recreational D (relevant to commercial and industrial), as the most conservative scenario based on proposed development
  - *Health Screening Levels (**HSL-C** and **HSL-D**)* – for soil vapour intrusion (assumed depth to source <4 m and sand). WSP has screened soil results against both HIL-C criteria and HSL-D criteria for assessment of potential risks.
- Terrestrial Ecological Assessment
  - *Ecological Investigation Levels (**EILs**)* – for urban residential/public open space and commercial/industrial landuse criteria. Site specific EILs[3] for chromium, copper, nickel, and zinc were calculated based on site specific criteria (analysed for pH, CEC, and clay content).
  - *Ecological Screening Levels (**ESL-D**)* – for selected petroleum hydrocarbon compounds applicable to urban commercial land use. ESLs were selected assuming coarse soils (sand) at 0m to 2m depth.
- Aesthetics
  - The Auditor has considered the need for assessment based on 'aesthetic' considerations as outlined in the ASC NEPM (2013)
- PFAS compounds
  - Criteria from the NEMP 2.0 2020 were adopted (Industrial and commercial)
- Management Limits (**MLs**) for TRH, applicable to residential, parkland and public open space assuming coarse soils, were applied after the consideration of the relevant HSLs and ESLs

[3] Site-specific EILs were determined using average laboratory measured soil properties for the Buruwan Park and Crescent Civil sub-sites for CEC (4.6 and 5 cmolc/kg), pH (8.2 and 6 pH units) and %clay (15%).

7.3 Groundwater Assessment Criteria

The Auditor has assessed the groundwater data provided by WSP with reference to the following Tier 1 (screening) criteria:

- Groundwater Investigation Levels (**GILs**) listed in the ASC NEPM (2013) for protection of aquatic ecosystems referenced in ANZECC (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality. The GILs are based on the following guidelines:
  - ANZG 2018, '*Australian and New Zealand Guidelines for Fresh and Marine Water Quality*', 2018
    - Trigger values (TVs) provided are concentrations that, if exceeded, may indicate environmental risk at the point of use and 'trigger' further investigation
    - The marine water 95% protection levels were adopted
  - NHMRC 2011, '*Drinking Water Guidelines*', 2011. It is noted that WSP (2022a) stated:
    - There were no registered groundwater users within 500 m radius of the site. Therefore, WSP did not consider the NHMRC (201) drinking water guidelines relevant to their investigation
    - The NHMRC (2008) *Guidelines for Managing Risk in Recreational Waters* provided an approach in which a substance occurring in recreational water at a concentration of 10 times that stipulated in the drinking water guidelines may merit further consideration. WSP adopted this when considering potential risk to recreational users of the Rozelle Bay
- Hydrocarbon levels in groundwater were also assessed against the ASC NEPM (2013) Health Screening Levels (HSLs) for vapour intrusion in the most conservative sand soil texture, applicable to both public open space (**HSL-C**) and commercial industrial (**HSL-D**) land uses
- PFAS NEMP 2.0 (HEPA 2020) provides a summary of guidelines values for screening level human health and ecological PFAS risk assessment for groundwater. The TfNSW *WestConnex – M4-M5 Link Environmental Impact Statement* (EIS) (2017), categorised the receiving body of water, Sydney Harbour (Rozelle Bay) as a highly disturbed aquatic marine ecosystem. For the purpose of WSPs investigation, the 95% protection values were adopted by WSP to assess PFAS impacts in the groundwater that may have the potential to migrate towards the receptor, Rozelle Bay

7.3.1 Beneficial Use Assessment

WSP (2022a) reported there were no high-priority groundwater dependent ecosystems within the project boundary, or registered groundwater wells within 500 m of the site. Given the low productivity of the Hawkesbury Sandstone aquifer and saline conditions recorded onsite within the alluvium and fill, there were no foreseeable beneficial uses for groundwater beneath the site that would require protection.

7.4 Site Audit Discussion

Based on site inspections, the site history, and the results of the site investigations, the Site Auditor considers that the criteria proposed are generally appropriate and consistent with EPA made and approved guidelines.

8 SITE ASSESSMENT PROGRAM

8.1 Summary of previous investigations

Table 6 below provides a summary of the key reports prepared prior to WSP investigation of the site (summarised from WSP 2022a).

Table 6. Summary of Previous Works Completed (from WSP, 2023)

Report and Date	Report Objectives, Scope and Outcomes
AECOM (2016) **'Stage 1 Preliminary Site Investigation, Westconnex M4-M5 Link Rozelle Interchange' (May 2016)**	The purpose of the Stage 1 Preliminary Site Investigation (PSI) was to identify potential contamination issues and liabilities within the study Area and identify where further investigation, assessment or remediation might be required for the proposed interchange development. The following additional objectives were identified: • Assess the general environmental condition of the study area including the potential health or environmental • risk associated with the presence of significant contamination. • Assess the current and past land uses which may have resulted in contamination of the study area. • Evaluate potential environmental liabilities associated with the acquisition of the Study Area and the proposed development of the study area as a motorway interchange (with consideration to potential future open space land use on part of the study area, subject to the final design of the interchange). • Identify where further investigation, assessment or remediation might be required within the study area. • The study area included the Rozelle railyards, White Bay (Victoria Rd East), City West Link and Pigtail (Brenan St) sub-precincts.
AECOM (2017) ***'WestConnex M4-M5 Link Tranche 1 and Tranche 2 Factual Contamination Assessment'* (2017)**	During 2017 AECOM conducted a combined geotechnical and contamination investigation for a number of areas comprising the WestConnex M4-M5 Link project. The investigation works conducted within the current site area included collection of soil samples during the drilling of two boreholes (TC_BH04 and TC_BH05) located on the southern bank of Whites Creek. The samples were submitted for the analysis of contaminants of potential concern (COPCs) including total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene and xylenes (BTEX), heavy metals, polycyclic aromatic hydrocarbons (PAHs), asbestos, organochlorine pesticides (OCPs), organophosphorous pesticides (OPPs), polychlorinated biphenyls (PCBs) and potential acid sulfate soils (PASS). The investigation identified fill material to depths of between 1 and 1.25 metres below ground level (mBGL). The results indicated: • Soil samples analysed for contaminants of potential concern (COPCs) including TRH, BTEX, heavy metals, PAHs, asbestos, OCPs, OPPs, PCBs and potential acid sulfate soils (PASS). • No soil samples reported COPC concentrations above the adopted human health site assessment criteria for recreational open space and commercial/industrial land uses. • However, zinc concentrations exceeded the NEPM (2013) generic ecological investigation levels (EILs) for urban residential/open space land use
AECOM (2018) **Stage 1 Preliminary Site Investigation with Targeted Sampling, City West Link and The Crescent, Rozelle"**	During 2018 AECOM conducted a Stage 1 preliminary site investigation and in-situ soil, fill and sediment sampling at the properties located in City West Link and The Crescent. The investigation works conducted within the current site area included collection of soil samples during the drilling of three boreholes (RZ_BH71 to RZ_BH73) on the southern bank of Whites Creek. The samples were submitted for the analysis of COPCs including TRH, BTEX, heavy metals, PAHs, asbestos, OCPs, OPPs, PCBs, ASS/PASS, phenols, VOC/SVOC, TOC, tri-butyl tin (TBT) and Per- and polyfluoroalkyl substances (PFAS). Toxicity characteristic leaching procedure (TCLP) analysis was also conducted on samples that exceeded the waste classification criteria. The investigation identified • fill material to depths of between 2.5 and 2.9 mBGL. • Some black staining and slight hydrocarbon odours were detected in all holes from approximately 2.5 to 3.0 mBGL. • A slight sheen was identified in RZ_BH72.

	• Groundwater was recorded between 2.4 and 2.8 mBGL. Laboratory analytical results for the soil samples collected from soil bores RZ_BH71 to RZ_BH73 were generally below human health site assessment criteria with the exception of carcinogenic PAH with an exceedance of the health investigation level (HIL) for recreational/open space land use recorded in sample RZ_BH73 (0.5m). • Zinc exceeded the NEPM (2013) generic ecological investigation levels (EILs) for urban residential/open space land use. It is noted that the portion of the site investigated during the AECOM (2018) investigation has since been excavated as part of the Whites Creek channel widening. ASS sampling was also undertaken at all three locations (RZ_BH71_3.1, RZ_BH72_3.0 and RZ_BH73_3.0). It was found that all samples exceeded the ASSMAC 1998 Guideline Criteria for Coarse Texture Sands to Loamy Sands <5% clay content and >1000 tonnes disturbed. These samples were identified as PASS.

8.1.1 Preliminary Soil Sampling and Human Health Risk Assessment (WSP 2020)

In November 2019, JHCPB commissioned WSP to undertake an occupational hygiene assessment of the Buruwan Park area following the detection of uranium above LOR in grab samples of water collected from test pits in the area. Prior to the utility diversion works that were scheduled to be undertaken in the area, JHCPB required an assessment of potential risks to construction workers associated with the recorded uranium. An occupational hygiene assessment focusing on potential human health exposures to uranium by workers during soil sampling of 6 test-pits to a maximum depth of 2.6 m BGL was undertaken. Further, surface dust loading samples were also collected to evaluate the contamination status across the site in the context of assessing potential risks to human health.

Soil samples were analysed for COPCs including TRH, BTEX, heavy metals (including uranium), PAHs, pesticides, PCBs, phenols, VOCs, SVOCs, asbestos and tributyltin. The majority of analytes tested in the soil samples were below the laboratory LOR, with some heavy metals reported above the LORs, but below the adopted guidelines.

Concentrations of uranium were below LORs in all soil samples. Five samples had detections of PAHs; four from shallow samples at 0.5-0.6 m BGL, with one sample from deeper soils (1.2 m BGL). TRH fraction C_{10}-C_{16} less naphthalene (F2) was detected in one sample (TP02) with concentrations recorded below the adopted guidelines. TRH fraction C_{16}-C_{34} was detected in 2 other locations (TP02 and TP03). Concentrations recorded were slightly above the LoR but no site-specific criteria had been adopted for this fraction.

It was found that the risk of exposure to airborne uranium in dust and soil is low to negligible for the exposure scenarios identified.

8.2 WSP Detailed Site Investigations

WSP completed a number of investigations that were further summarised in WSP (2022a). The primary source documents utilised by the project and the Audit have been detailed in the subsequent sections. A summary of the works undertaken through the WSP program was presented in WSP (2022a) and detailed in **Table 7.**

Table 7. WSP Summary of assessment program and timing

Aspect	Dates	WSP Comments and scope
Buruwan Park		
Test pitting (TP01-TP06)	29 November 2019	Site establishment and preliminary construction works only completed
Collection of excavation trench samples (EX01-EX04)	28 April 2020	Majority of site stripped of vegetation, excavation and soil removal work commenced.
ADE installation of GW01 and GW03	10 June 2020	-
Groundwater sampling #1	26 June 2020	GW01 and GW03 sampled.

Aspect	Dates	WSP Comments and scope
Groundwater sampling #2	18 September 2020	GW01 and GW03 sampled.
Drilling/installation of GW02	23 November 2020	Majority of site levelled with bedrock exposed in some areas.
Groundwater sampling #3	2 December 2020	GW02 and GW03 sampled (GW01 destroyed during site levelling).
Groundwater sampling #4	13 January 2021	GW02 sampled (GW03 destroyed).
Crescent Civil		
ADE installation of GW01	25 May 2020	-
Groundwater sampling #1	4 June 2020	GW01 sampled.
Drilling/installation of GW03, GW04, GW05b, GW06, GW08	19-20 August 2020	Majority of site stripped of vegetation, construction of The Crescent and public pathway realignment commenced north-east of former location.
Groundwater sampling #2	1 September 2020	GW01, GW03, GW04, GW05b, GW06 and GW08 sampled. Realignment of The Crescent and public pathway completed. Construction works continue in northern and southernmost portions of the sub-site and south of The Crescent.
Drilling/installation of BH07, BH08, BH09, GW02, GW07	8-9 October 2020	Construction works continue in northern and southernmost portions of the sub-site and south of The Crescent.
Groundwater sampling #3	16 October 2020	GW02, GW03, GW04, GW05b, GW06, GW07 and GW08 sampled. GW01 buried beneath pathway during realignment.
Groundwater sampling #4	2 December 2020	I&M well sampled.
Groundwater sampling #5	17 December 2020	GW02 and GW07 sampled. GW03 and GW08 lost/destroyed.
Groundwater sampling #6	20 May 2021	GW04, GW05b and GW06 sampled. GW02 and GW07 lost/destroyed.
Groundwater sampling #7	7 July 2021	GW04, GW05b and GW06 sampled.

8.2.1 WestConnex Stage 3B - Rozelle Interchange Sub Site Area - Crescent West (Buruwan Park) Detailed Site Investigation – WSP (25/11/2021) PS117368-CLM-REP-BuruwanPark RevD.

The objectives of the work carried out by WSP were to assess soil and groundwater conditions at the site by targeting potential sources of contamination identified in the Ramboll SAQP (Ramboll 2019) and subsequent WSP Work Plan (WSP, 2020). The following scope of work was carried out:

- review of previous investigation works conducted at the site and extraction of relevant results, including test pitting works conducted by WSP as part of a Preliminary Soil Sampling and Human Health Risk Assessment and four insitu waste classification assessments conducted by ADE Consulting Group (ADE)
- review of bore logs for two groundwater monitoring wells (GW01 and GW03) installed within soil boreholes (BH7 and BH3) drilled by ADE as part of waste classification works
- drilling of one borehole and subsequent installation of a groundwater monitoring well (GW02) to a depth of 6.0 mbgl
- sampling of a service trench excavation of approximate dimensions 2m x 3m x 2m as an alternative to borehole drilling which could not be completed because of access restrictions
- collection of soil samples from the borehole at the surface and at nominal depths of approximately 0.1 m bgl, 0.5 mbgl, 1.0 m bgl and every metre thereafter, as well as any additional depth intervals which exhibited visual or olfactory evidence of potential contamination
- field screening of soil samples using a hand-held photo-ionisation detector (PID) to evaluate the potential presence of volatile organic compounds (VOCs)

- development and sampling of all three groundwater monitoring wells (two installed by ADE and one installed by WSP). Four groundwater monitoring events (GME) were undertaken to work around site constraints and the progressive decommissioning of wells. Groundwater levels and the potential presence and thickness of non-aqueous phase liquids (NAPL) were recorded for each location
- surveying of each monitoring well location (including horizontal position) following completion of fieldworks by a surveyor supplied by JHCPB
- development of a CSM
- preparation of this DSI report detailing the findings of the intrusive investigation, including identified risks and data gaps.

8.2.1.1 Sampling and Analytical Strategy and Methodology

The auditor has assessed the sampling and analysis program by reviewing information presented in the DSI, supplemented by field observations. The Auditor's assessment is presented in **Table 8.**

Table 8. Review of sampling and analytical strategy

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Sampling pattern, locations, density and depth Soil: A targeted soil sampling was undertaken by WSP to assesses identified areas of concern. The sampling density was targeted to achieve the minimum sampling points required in Table A of the NSW Sample Design Guidelines (NSW 1995). Site area is approximately 6,000m^2, requiring a minimum 15 sample locations. In total, 5 locations were sampled historically by AECOM, 6 locations were sampled previously by WSP in 2019, 21 locations were sampled during ADE in-situ waste classification and one location was sampled by WSP during this current investigation. In total 33 borehole locations had been sampled across the site between 2017 and 2020. Samples submitted for identified contaminants of concern. Targeted soil samples were collected as follows: • 2 targeted borehole locations to 1.5m to identify shallow impacts associated with uncontrolled filling (BH01 and BH02). • 2 targeted hand auger locations to 1.5m assess historical fill (HA01 and HA02). • 4 targeted groundwater wells (GW01 and GW04) to 4mbgl to assess the deeper soil profile, baseline groundwater and the potential for off-site migration of contamination. Sampling was also caried out in the service trench for the installation of utilities.	The locations are considered adequate to address the identified data gaps. The groundwater sampling locations were considered adequate to provide updated information to assess up-gradient and downgradient groundwater quality.
Drilling and Well Construction Soil bores and groundwater wells were drilled using a hand auger or solid flight auger. Monitoring well GW02 was installed with a screen interval between 1 m BGL and 6 m BGL targeting the sandstone material, GW01 and GW03 were installed with a screen interval between 1 m BGL and 5 m BGL targeting the alluvium/fill material. Sand, comprising clean inert granular silica material (2 mm diameter), was installed in the annulus between the boring and the well to 0.5 m above the slotted section. Hydrated bentonite was placed above the sand pack approximately 0.5 m thick, followed by grout sealing to ground level. The monitoring well GW02 was finished with a metal monument (approximately 1 metre high)with GW01 and GW03 finished with a road box. Monitoring wells GW01 and GW03 (installed by ADE) and monitoring well GW02 (installed by WSP) were developed a minimum 5 days prior to sampling	Drilling and well construction details provided are adequate. All borelogs were provided. The Auditor has a good understanding of site geology and hydrogeology and the use of ADE installed wells are considered appropriate.

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
WSP deemed the wells were usable, with the groundwater level within the screened level of each well and across appropriate lithology. The existing wells were purged by the removal of 10 x well volumes to remove sand /silt buildup, in conjunction with development of the new well.	
Sample collection method (soil and groundwater) Soil: Soil samples were nominally collected at surface, 0.5 m, 1.0 m and at meter intervals thereafter. Soil samples were collected directly from the hand auger or drill auger tip using dedicated disposable nitrile gloves. The quantitative assessment of bonded asbestos as per NEPM 2013 could not be undertaken due to limitations of collecting samples from boreholes. Groundwater: Wells were developed using a stainless-steel bailer. Wells were initially gauged using an interface probe and no separate phase product was identified in any of the wells. Groundwater samples were collected using a HydraSleeve™ at one-half sleeve-length below the centre of the screen interval. Once the water level recovered to its original elevation following the displacement of a small quantity of groundwater during installation, a representative water sample was taken. Samples were collected by transferring the groundwater from the HydraSleeve™ to sample bottles by piercing the sleeve with a provided disposable plastic instrument or a disposable syringe.	Adequate, given soil samples collected via auger using disposable gloves. Well development, gauging and sampling methodology considered appropriate.
Asbestos Assessment WSP reported that a semi quantitative method for assessment of asbestos materials from borehole cuttings, along with laboratory analysis of Asbestos Fines/ Fibrous Asbestos (AF/ FA) was undertaken. This method involved the driller laying out drill cutting onto a light-coloured tarp for visual inspection, with borehole cuttings being crumbled with light finger pressure and the soil inspected for evidence of ACM. A minimum 500ml sample was collected from each borehole location for AF/ FA determination.	The auditor notes that assessment for ACM in soils was not in accordance with the ASC NEPM as a quantitative assessment of ACM in soils via a 10L sample and weight % analysis of asbestos was not undertaken. However, the method applied is considered adequate, given that sampling was undertaken from boreholes and not test pits, and that AF/ FA laboratory analysis from 500mL sample was also undertaken. WSP noted that the analysis of AF/FA to the detection limits required by the ASC NEPM (0.001%) is not a NATA accredited test and that there are currently no laboratories able to achieve NATA accreditation for these detection levels.

8.2.2 ADE Waste Classification Program

WSP summarised the ADE Consulting Group Pty Ltd (ADE) program of waste classification that was commissioned by JHCPB to facilitate the excavations at Buruwan Park. Soil samples analysed for COPCs including heavy metals, TRH, BTEX, PAHs, OCPs, OPPs, PCBs, phenols, VOCs, SVOCs, PFAS, TBT and/or asbestos. WSP presented a summary for the following ADE reports:

- WCX-08- 17868/WAC169/v2f 2 December 2020
- WCX-08- 18311/WAC208/v1f 4 September 2020
- WCX-08- 18474/WAC223/v1f 4 November 2020

8.2.3 Data Usability

The WSP DSI (WSP, 2021) included a QA/ QC program and review of data quality meeting the established Data Quality Objectives (DQOs). Following their review, WSP concluded that the assessment data was 'sufficiently precise and accurate for the purposes of this project'.

The auditor has conducted a detailed assessment of the WSP Buruwan Park DSI (2021) QA/QC data as part of the audit. The data usability summary is provided in **Appendix B**. While there are some deficiencies, overall, the data is considered to be suitable to support the conclusions made in this report. Of note however, soil investigation criteria listed in Section 5 Table 5.3 does not match with the Table 1 Soil results and Site Adopted Criteria Table 1 does not include ecological criteria nor HIL/HSL A

The following issues were identified with the data:

- Precision
  - RPD's for intra and inter laboratory duplicates were less than 30% for analytes <10 x the LOR. Laboratory duplicates exceeded laboratory QA/QC criteria. Laboratory duplicate exceedances were not significant or indicative of large errors.
- Accuracy
  - Minor exceedances of Laboratory Control Spikes were noted. The dataset is considered accurate to 95% confidence.
  - Rinsates and Rinsate Blanks were not analysed during the assessment
- Representativeness
  - No outliers have been reported for QC samples collected to assist in the qualification of representativeness.
  - Decontamination procedures were noted within the soil investigation methodology, procedure was noted to be "not required" and not included in the Data Quality Indicator Assessment
- Comparability
  - The data is considered to be acceptable; NATA accredited laboratories were used and the LORs were consistent with the exception of QA01A. The dataset is considered comparable.
  - Limited information was provided regarding the experience level of sampling staff.
- Completeness
  - Laboratory and field documentation is considered to be complete with the exception of COC's, which have not been provided.

8.2.4 WestConnex Stage 3B - Rozelle Interchange Sub Site Area - Crescent Civil Detailed Site Investigation – WSP (15/07/2021) PS117368-CLM-REP-Crescent Civil RevD.

WSP Australia Pty Ltd (WSP) undertook a detailed site investigation (DSI) at sub-site area Crescent Civil (former CR01 and eastern portion of CR07) located to the south of the main site for the WestConnex Stage 3B Rozelle Interchange project. The objectives of the work carried out by WSP were to assess soil and groundwater conditions at the site by targeting potential sources of contamination identified in the Ramboll SAQP (Ramboll 2019) and subsequent WSP Work Plan (WSP, 2020). The following scope of work was carried out:

- review of previous investigation works conducted at the site and extraction of relevant results, including in-situ waste classification assessments conducted by ADE Consulting Group (ADE)
- review of a bore log for one groundwater monitoring wells (GW01) installed within soil borehole (BH1) drilled by ADE as part of waste classification works
- drilling of ten soil bores and subsequent installation of seven groundwater monitoring wells (GW02-GW08) to a maximum depth of 5.5 m BGL
- logging of soils in accordance with Unified Soil Classification System (USCS)
- collection of soil samples from each location at the surface and at nominal depths of approximately 0.1 m bgl, 0.5 mbgl, 1.0 m bgl and every metre thereafter, as well as any additional depth intervals which exhibited visual or olfactory evidence of potential contamination
- development and sampling of all eight groundwater monitoring wells (one installed by ADE and seven installed by WSP). The wells were developed and left to equilibrate for a minimum of one week prior to purging and sampling. Four groundwater monitoring events (GME)

were undertaken to work around site constraints and the decommissioning of wells. Groundwater levels and the potential presence and thickness of non-aqueous phase liquids (NAPL) were recorded for each location
- review of groundwater data logger outputs from JHCPB monitoring well (RIC-JV_PZ_BH002) referred to herein as I&M. One round of groundwater sampling was also conducted at groundwater well I&M
- analysis of selected soil and groundwater samples at a National Association of Testing Authorities (NATA) accredited laboratory for identified contaminants of concern potential concern (COPC).

8.2.5 Sampling, analytical strategy and methodology

The auditor has assessed the sampling and analysis program by reviewing information presented in the Crescent Civil DSI, supplemented by field observations. The Auditor's assessment is presented in **Table 9.**

Table 9. Review of sampling and analytical strategy

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Sampling pattern, locations, density and depth Soil: A targeted soil sampling was undertaken by WSP to assesses identified areas of concern. The sampling density was targeted to achieve the minimum sampling points required in Table A of the NSW Sample Design Guidelines (NSW 1995). It is noted that during historic investigations only limited testing of TBT, TRH and asbestos was conducted with no analysis for OCP/OCC. The site area is approximately 9,500m^2, requiring minimum 20 sample locations. In total, 6 locations were sampled historically by AECOM, 12 locations were sampled historically by Jacobs, 38 locations were sampled during ADE in-situ waste classification and 10 locations sampled by WSP during this current investigation. In total 66 locations have been sampled across the site between 2014 and 2020. Samples submitted for identified contaminants of concern. Targeted soil samples were collected as follows: • 2 targeted borehole locations to a depth of 4mbgl to identify shallow impacts associated with uncontrolled filling (BH07 to BH09). • 7 targeted groundwater wells (GW02, GW03, GW04, GW05b, GW06, GW07 and GW08) to assess baseline groundwater conditions and the potential for off-site migration of contamination.	The locations are considered adequate to address the identified data gaps. The groundwater sampling locations were considered adequate to provide updated information to assess up-gradient and downgradient groundwater quality.
Drilling and Well Construction Soil bores and groundwater wells were drilled using a hand auger or solid flight auger. GW02 and GW07 were installed with screen intervals between 2 m BGL and 5 m BGL targeting the interface between alluvium and weathered sandstone material. Monitoring wells GW03, GW04 and GW05b were installed with screens between 2.5 m BGL and 5.5 m BGL, GW06 was installed with a screen between 2.2 m BGL and 5.2 m BGL and GW08 was installed with a screen between 2 m BGL and 5.5 m BGL, targeting the alluvium/fill material. A water strike during drilling was encountered between 2.5mBGL in GW08 to 4.0mBGL in GW05b. The monitoring wells GW02 and GW07 were finished with a metal monument (approximately 1 metre high) with GW01, GW03-GW06 and GW08 were finished with a road box.	Drilling and well construction details provided are adequate. All logs were provided and logs for construction. The Auditor has a good understanding of site geology and hydrogeology and is considered appropriate.
Sample collection method (soil and groundwater) Soil: Soil samples were nominally collected at surface, 0.5 m, 1.0 m and at metre intervals thereafter. Soil samples were collected directly from the hand	Adequate, given soil samples collected via auger using disposable gloves.

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
auger or drill auger tip using dedicated disposable nitrile gloves. The quantitative assessment of bonded asbestos as per NEPM 2013 could not be undertaken due to limitations of collecting samples from boreholes. Groundwater: Wells were developed using a stainless-steel bailer. Groundwater samples were collected using a HydraSleeve™ at one-half sleeve-length below the centre of the screen interval. Once the water level recovered to its original elevation following the displacement of a small quantity of groundwater during installation, a representative water sample was taken. Samples were collected by transferring the groundwater from the HydraSleeve™ to sample bottles by piercing the sleeve with a provided disposable plastic instrument or a disposable syringe.	Well development, gauging and sampling methodology considered appropriate.
Asbestos Assessment WSP reported that a semi quantitative method for assessment of asbestos materials from borehole cuttings, along with laboratory analysis of Asbestos Fines/ Fibrous Asbestos (AF/ FA) was undertaken. This method involved the driller laying out drill cutting onto a light-coloured tarp for visual inspection, with borehole cuttings being crumbled with light finger pressure and the soil inspected for evidence of ACM. A minimum 500ml sample was collected from each borehole location for AF/ FA determination.	The auditor notes that assessment for ACM in soils was not in accordance with the ASC NEPM as a quantitative assessment of ACM in soils via a 10L sample and weight % analysis of asbestos was not undertaken. However, the method applied is considered adequate, given that sampling was undertaken from boreholes and not test pits, and that AF/ FA laboratory analysis from 500mL sample was also undertaken. WSP noted that the analysis of AF/FA to the detection limits required by the ASC NEPM (0.001%) is not a NATA accredited test and that there are currently no laboratories able to achieve NATA accreditation for these detection levels.

8.2.6 ADE Waste Classification Program

WSP summarised the ADE Consulting Group Pty Ltd (ADE) program of waste classification that was commissioned by JHCPB to facilitate the excavations at Crescent Civil site. Soil samples analysed for COPCs including heavy metals, TRH, BTEX, PAHs, OCPs, OPPs, PCBs, phenols, VOCs, SVOCs, PFAS, TBT and/or asbestos. WSP presented a summary for the following ADE reports:

- WCX-08- 17868/WAC169/v1f 1 July 2020
- WCX-08-17868 / WAC170 v1f 23 June 2020
- WCX-08-17049 / WAC023 V1f 17 December 2019

8.2.7 Data usability

The WSP DSI (WSP, 2021b) included a QA/ QC program and review of data quality meeting the established Data Quality Objectives (DQOs). Following their review, WSP concluded that the assessment data was 'sufficiently precise and accurate for the purposes of this project'.

The auditor has conducted a detailed assessment of the WSP Crescent Civil DSI (2021b) QA/QC data as part of the audit. The data usability summary is provided in **Appendix B.** While there are some deficiencies, overall, the data is considered to be suitable to support the conclusions made in this report. The following issues were identified with the data:

- Precision
  - RPD's for intra and inter laboratory duplicates were less than 30% for analytes <10 x the LOR. Laboratory duplicates exceeded laboratory QA/QC criteria. Laboratory duplicate exceedances were not significant or indicative of large errors.

- Accuracy
  - Minor exceedances of Laboratory Control Spikes were noted. The dataset is considered accurate to 95% confidence.
  - Rinsates and Rinsate Blanks were not analysed during the assessment.
- Representativeness
  - No outliers have been reported for QC samples collected to assist in the qualification of representativeness.
  - Decontamination procedures were noted within the soil investigation methodology, procedure was noted to be "not required" and not included in the Data Quality Indicator Assessment
- Comparability
  - The data is considered to be acceptable, NATA accredited laboratories were used and the LORs were consistent with the exception of QA01A. The dataset is considered comparable.
  - Limited information was provided regarding the experience level of sampling staff.
- Completeness
  - Laboratory and field documentation is considered to be complete with the exception of COC's, which have not been provided.

8.2.8 WestConnex Stage 3B - Rozelle Interchange Sub-Site Area - City West Link Site Status and Hydrogeology Report WSP (31/10/2022)

WSP Australia Pty Ltd (WSP) to prepare a site status and hydrogeology report for sub-site areas Crescent Civil and Buruwan Park, referred to collectively as City West Link (CWL). The Auditor was informed that an area of residual land located on the bank of Rozelle Bay is not subject to the contaminated land site audit requirement outlined in Condition E182 of the infrastructure approval. The objectives of the WSP site status and hydrogeological report were to:

- provide a summary of the soil conditions across the site with regard to potential contamination
- summarise the findings of groundwater and surface water sampling conducted at the site and at Rozelle Bay, respectively
- present a summary of the hydrogeology at the site
- prepare an updated conceptual site model (CSM) for the site and assess the risk of any identified contamination hazards
- make conclusions as to whether sufficient information has been obtained to inform site suitability and identify additional investigations (if required) to address data gaps
- to inform the suitability of the site for the intended final land use
- provide sufficient information to allow preparation of a site suitability statement by the appointed NSW Accredited Site Auditor.

The following scope of works was completed:

- review of previous investigation works conducted at the site, including in-situ waste classification assessments conducted by ADE Consulting Group (ADE) and the WSP (2021a and 2021b) DSIs
- completion of two additional groundwater monitoring events (GMEs) during May and July 2021 at accessible wells in the Crescent Civil sub-site (i.e. GW04, GW05b and GW06), including submission of groundwater samples to a National Association of Testing Authorities (NATA) accredited laboratory for analysis for contaminants of potential concern (COPCs);
- completion of two surface water sampling events during May and July 2021, comprising the collection of samples from five locations at Rozelle Bay in the vicinity of the site, and submission of surface water samples to a NATA accredited laboratory for analysis for PAHs
- update of the CSM previously prepared for the site in the WSP (2021a and 2021b) DSIs and preparation of a site status and hydrogeology report.

8.2.8.1 Sampling and Analytical Strategy and Methodology

The auditor has assessed the sampling and analysis program by reviewing information presented in the Hydrology and Status Report, supplemented by field observations. Significant excavation had been conducted across the site to facilitate WCX3B construction works. Cross-Sections showing the pre-construction, excavated and final design surface levels for the Buruwan Park and Crescent Civil subsites were provided by WSP. At the time of issue, it was reported that a total of approximately 50,000 t material was disposed off-site during the Buruwan Park and Crescent Civil excavation work. The Auditor's assessment is presented in **Table 10.**

Table 10. Review of sampling and analytical strategy – October 2022

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Sampling pattern, locations, density and depth Soil: Assessment based on earlier reported results.	See earlier comments
Sample collection method (surfacewater and groundwater) Groundwater: Wells were developed using a stainless-steel bailer. Groundwater samples were collected using a HydraSleeve™ at one-half sleeve-length below the centre of the screen interval. Once the water level recovered to its original elevation following the displacement of a small quantity of groundwater during installation, a representative water sample was taken. Samples were collected by transferring the groundwater from the HydraSleeve™ to sample bottles by piercing the sleeve with a provided disposable plastic instrument or a disposable syringe. Surfacewater: Surface water samples were collected within the upper 0.5m of the surface water profile using an extendable sampling pole with an attached reusable sample container. Surface water samples were collected from five locations within Rozelle Bay. The locations were selected based on accessibility, proximity to previously identified groundwater PAH impacts at Crescent Civil monitoring wells GW05b and GW06 (sampling locations SW3 and SW4), and general spatial distribution to assess surface water conditions in the vicinity of the site. Depth to groundwater was measured between 1.876 m below top of casing (btoc) and 4.983 mbtoc in the alluvium/fill material, and between 2.390 and 2.843 mbtoc in the deeper alluvium/bedrock. The measured depth to groundwater at the deeper I&M well was measured at 5.476 mbtoc1. No separate phase product was identified in the wells.	Well development, gauging and sampling of surface water and groundwater methodology considered appropriate.

8.1 Site audit discussion

Reference is made to the auditor's review of the three primary assessment reports WSP (2022a) documented in Interim Audit Advice #46, #43 and #35, included in **Appendix B**. The following summary is provided:

- WSP have completed a number of assessments across the area to facilitate both construction and the outcomes of the Audit. The program has been supplemented by historical data and waste classification information. The sampling in some locations has been restricted by roadway infrastructure or construction however the number of locations ultimately developed satisfies the sampling requirements and is consistent with the NSW EPA (2022), 'Sampling design part 1 Application.
- WSP did not present a detailed assessment of the reliability or useability of the historical data contained in reports prepared by others. WSP placed a degree of reliability of the data to inform subsequent assessment works without a statement of reliability. WSP also noted that material that was represented by the historical sampling has been removed from the site.

- The auditor notes that systematic sampling is appropriate for this site and that WSP has undertaken sampling on a generally systematic basis with the number of sampling locations (48 WSP locations + 51 historical locations) exceeding the minimum systematic sampling required by NSW EPA (2022) guideline (40 locations) for a site area of 22,000m^2.
- It was reported that approximately 50,000t material was disposed off-site during the Crescent Civil and Buruwan Park excavation works at the time of reporting. Following site excavation works, exceedances of the health investigation level (HIL) C, HIL D and/or health screening level (HSL) D criteria remain in deeper fill material on the Crescent Civil sub-site, in addition to shallow fill material in the south of the Crescent Civil sub-site. Soil remediation and/or management is considered to be required at the Crescent Civil sub-site to mitigate potential future human health and environmental risks associated with soil impacts at the site.
- The details of the excavation and disposal process will be documented by WSP in the final validation report for CWL and will be subject to a subsequent site Audit statement.
- Groundwater is present in fill/alluvium material, and shallow sandstone in the southern/southeastern area of the site. Some hydrogeological interaction between groundwater within the fill/alluvium and Rozelle Bay is apparent. Groundwater in the fill/alluvium and sandstone is inferred to flow in the general direction of Rozelle Bay.
- Heavy metals and perfluorooctanesulfonic acid (PFOS) were identified in groundwater above the adopted ecological and/or recreational use criteria. Dissolved heavy metals concentrations are considered to be representative of urban ambient background levels and were not considered to be associated with any historical land use on site. PFOS was detected above the marine water ecological criteria in one groundwater well (GW02) at the Crescent Civil sub-site during the WSP (2021a) DSI only and was not considered to present a risk to ecological receptors at the site.
- Polycyclic aromatic hydrocarbons (PAHs) were detected above the marine water and recreational health site criteria in groundwater monitoring wells located on the Crescent Civil sub-site during the DSI and the recent May/July 2021 GMEs. PAHs were not reported above ultra-trace laboratory limits of reporting in the recent surface water samples collected from Rozelle Bay.
- A large volume of fill comprising PAH contaminants has been removed and areas reinstated with up to 2m of tunnel spoil. It is expected that the concentrations of PAH in groundwater observes at the Crescent Civil to reduce over time.
- On review of the minimal water infiltration expected on completion of landscaping works and the significant proportion of hardstand significant risks to offsite human health or environmental receptors associated with PAHs in groundwater are not likely.
- The area of the site comprising Johnston Street and Chapman Road was not subjected to intrusive investigation as the roadway construction was limited to resurfacing activities only. Johnston Street is likely to comprise minimal fill and will remain roadway pavement. A small portion adjacent of Chapman Road closet to Rozelle Bay was found to contain residual fill and will be managed under the proposed EMP for the site.
- Significant portions of the site will comprise residual fill that is located beneath hardstand or a suitable surface barrier system and will therefore require ongoing management at the site will be documented in a long-term environmental management plan.

9 SITE VALIDATION AND SITE ENVIRONMENTAL MANAGEMENT PLAN

9.1 Validation Report, WestConnex Stage 3B (WCX3B) - The Crescent (RevD - Final)

Following JHCPB completion of capping layers and landscaping across the site, WSP prepared a validation report to demonstrate that the remedial strategy (WSP, 2022b) has been successfully implemented. The validation report is documented as:

- WSP: 'Validation Report, WestConnex Stage 3B Sub Site – The Crescent', Ref: PS117368-CLM-REP-CWL VAL Final, dated: 22 November 2023. (WSP, 2023).

For the purposes of the validation report, the site boundary is the Crescent Civil area (sub-site of the CWL audit area), was as shown in **Figure F1.** The validation report also refers to 'residual land' (also shown on **Figure F1)**, where no remediation has been conducted and which does not form part of the audit area. While no specific remediation has been conducted for residual land, it is understood that these areas have been completed with approximately 100mm topsoil and turf.

9.1.1 Objective and scope of work

The objective of the remediation works was to remove potential risk to human health and ecological receptors associated with PAH, heavy metals and asbestos contaminated near surface soil and fill.

WSP carried out the following scope of works for preparation of the validation report:

- Periodic inspection and review of photographs provided by JHCPB for installation of the geofabric marker layer in landscape areas of the Crescent Civil sub-area
- Review of site inspection test plan (ITP) checklist documentation provided by JHCPB;
- Assessment of imported backfill material for site suitability, including collection of representative soil samples and submission for laboratory analysis for contaminants of potential concern (COPCs)
- Review of documentation associated with export and off-site disposal of material from the site
- Assessment of the implementation of the remediation strategy at the site and provision of recommendations for additional ongoing management to address deviations from the remedial design (if any)
- Preparation of the validation report, including site details, site environmental setting, summary site history and previous investigations, conceptual site model, capping installation details and details of imported and exported materials and waste classifications.

9.1.2 Remediation implementation

The validation report provides details for 6 areas where capping has been installed:

- Areas 1 to 5 where soil landscape capping has been installed comprised of coloured permeable geotextile fabric, overlain with clean imported topsoil mix and turf or mulch.
- Area 6 comprised of hardstand concrete over compacted gravel base layer. It is understood that Area 6 comprises a utility corridor, retained for Western Harbour Tunnel (WHT) WCX construction works.

Area 1 to 6 are shown on **Figure F3**.

The remaining audit areas (outside of Areas 1 to 6), are comprised of:

- Former area known as 'Buruwan Park', which was the subject of separate detailed site investigation (WSP, 2021a) which did not identify any remediation requirements for this area
- Capping comprised of engineered concrete or asphalt in the areas of The Crescent, Johnston Street and Chapman Road roadways, as well as associated verge, pedestrian footpaths and cycleway

- The area of the widened Whites Creek channel and associated concrete pedestrian bridges.

With regard to landscape capping installation in Areas 1 to 5, WSP reported:

- The marker layer was installed by JHCPB and HL Landscapes between May 2021 and October 2023.
- Based on survey and inspections carried out by WSP, geofabric at Areas 1 to 5 extends across the defined remediation areas and individual sheets of geofabric were confirmed to overlap by a minimum 200 mm, with no defects observed.
- Survey carried following installation of the geotextile layer and then additional survey after the soil cap was completed indicated that the capping had been installed generally in accordance with the caping design outlined in WSP (2022b), with the exception of Area 4 (approximate area 280m^2), where minimum capping thickness was measured at 80mm. WSP reported that the reduced capping thickness was due to the presence of existing subsurface utilities within this portion of the site.
- Three Port Jackson Figs were planted in Area 3 and one in Area 4. Each Fig required excavation of dimensions approximately 1.5m x 1.5m x 0.5m depth, breaching the geofabric marker layer which was removed at these locations. Excavation surrounding the root balls were backfilled with clean topsoil, with no geofabric marker present at these locations. Appropriate management of capping in the Port Jackson Fig areas is to be included in the LTEMP.

WSP reported that in areas of hardstand capping, the concrete was in good condition with no cracking, subsidence or damage.

9.1.3 Validation of imported materials

Approximately 588m^3 of imported topsoil used in landscape capping areas, which was comprised of VENM and ENM blended with pasteurised organic compost material. Approximately 112m^3 of mulch was also placed in these areas. Validation of VENM/ ENM sands, blended topsoil, compost and mulch materials included:

- Review of assessment information carried out by others, relating to VENM and ENM sources
- Inspections of topsoil materials at resource recovery source sites, at:
  - Greenlife Resource Recovery, 761 The Northern Road Bringelly and 25 Harris Avenue, Marsden Park NSW
  - Resources NSW facility at 1 Kangaroo Avenue, Eastern Creek NSW.
- Sampling and analysis of stockpiles topsoils proposed to be imported from the resource recovery sites, in accordance with an auditor approved SAQP (WSP, 2023b) for imported materials , including sampling and analysis for the following:
  - TRH
  - BTEXN
  - PAHs
  - heavy metals (arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc)
  - asbestos (absence/presence)
  - OCPs
  - OPPs
  - PCBs
  - PFAS (28 analytes)
  - foreign materials (glass, metal, plastics)
  - pathogens indicators.
- Regular inspections of topsoil as it was delivered to site carried out by JHCPB and WSP, to confirm that imported materials were consistent across loads and to assess for the presence of demolition wastes or suspected ACM. Inspections were carried out and recorded using material Inspection and Test Plan (ITP) checklists.

WSP reported sampling frequencies across all materials for use in the WCX project, as per **Table 11**, below.

Table 11. CWL – Imported material sampling frequencies

Material type	Approx. sampled stockpiled volume (m^3)	Stockpile/ sample IDs	SP sampling frequency (primary samples)	Overall sampling frequency
Topsoil	20	SP13/ SP13_2 to SP13_4, SP13_FMT[4]	3 samples (1/7m^3)	1/7m^3
Compost	1,000	SP08_1 to SP08_4, SP08_FMT, SP13_PT1[5]	4 samples (1/250m^3)	1/224m^3
	200	SP22_1 to SP22_8, SP22_FMT1, SP2_FMT2	8 samples (1/25m^3)	
	3000	SP40_1 to SP40_12, SP40_FMT (12)	12 samples (1/250m^3)	
	5000	SP41_1 to SP41_20, SP41_FMT1 to SP41_FMT4	20 samples (1/250m^3)	
	3,000	SP45_1 to SP45_12, SP45_FMT1 to SP45_FMT3	12 samples (1/250m^3)	
	3000	SP54_1 to SP54_12, SP54_FMT1 to SP54_FMT3	12 samples (1/250m^3)	
Mulch	3,000	SP14_1 to SP14_4, SP14_FMT	4 samples 1/750m^3	1/278m^3
	1,000	SP44_1 to SP44_10, SP44_FMT1	10 samples (1/100m^3)	
	1,000	SP55_1 to SP55_4, SP55_FMT1	4 samples (1/250m^3)	
VENM/ ENM sands	Not reported	SP09_1 to SP09_4, SP09_FMT	4 samples	Unknown
	Not reported	SP10_1 to SP10_4, SP10_FMT	4 samples	
	670	SP18_1 to SP18_3	3 samples (1/223m^3)	
	Note reported	SP24_1 to SP24_4	4 samples	

The auditor evaluated imported material sampling and analysis frequencies with respect to sampling frequencies provided in WSP (2023b) and notes the following:

- Topsoil: minimum 3 samples collected for <75m^3 – compliant
- Compost: minimum 8 samples collected for <200m^3 and min 10 or 1/250m^3 for >1000m^3 – compliant
- Mulch: one sample per 250m^3 and minimum of 4 samples per source and material type – non-compliant for SP14, however noted that minimum 4 samples were collected for this stockpile. Remaining stockpiles (SP44 and SP55) are compliant. Considering that mulch should not contain soil fraction and contamination, lower sampling frequency for SP14 is not considered to present contamination risk
- VENM/ ENM sands: four samples per source, along with review of supplier documentation – generally compliant, noting 3 samples only for SP18.

[4] Foreign materials sample – not included in sample frequency calculations.
[5] Pathogen screening sample – not included in sample frequency calculations.

In addition to the above sampling for COPCs, WSP also conducted laboratory based foreign materials testing, generally at a rate of 1 sample per stockpile.

As part of its assessment of VENM and ENM materials used in blended topsoils, WSP presented a review of assessments conducted by JBS&G (2021) and Coleman Adams Environmental (CAE, 2021). The auditor notes that:

- JBS&G (2021) reports a VENM assessment of natural soil and rock at the Green Square Town Centre development in 2021 to facilitate bulk excavation works. The assessment consisted of a review of historical environmental and geotechnical investigations, in addition to the collection and analysis of eight samples across the property. In-situ samples were collected from test pits and during piling installation. Laboratory analytical results for analysed COPCs were reported below laboratory LORs or within natural background levels. Based on the results of the investigation, JBS&G considered that the natural material was consistent with the definition of VENM. JBS&G noted that field inspections identified that the sampled material:
  - consisted of natural material (sand, clay sandstone and shale)
  - was located in an area not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities
  - did not contain sulfidic ores or soils;
  - did not contain any other waste, including potential ACM
  - did not contain evidence of seepage, staining or odours was noted within the assessed/sampled soil materials.
- WSP also reviewed an ENM assessment report for the materials sourced from the Green Square Town Centre development CAE (2021) during November 2021. A total of 20 soil samples were collected from the material stockpiled at the Greenlife Bringelly facility (excavated and transported from the Green Square Town Centre property) and analysed for COPCs. No odours or signs of contamination were observed during the ENM investigation. Laboratory analytical results for the analysed COPCs were reported below laboratory LORs, NEPM (2013) HILs for low-density residential land use and/or the criteria outlined in the NSW EPA (2014) The excavated natural material order 2014. Asbestos was not detected in the samples tested. Based on these findings, CAE considered that the material classified as ENM.

Summary of laboratory analytical results for imported topsoil materials obtained by WSP is provided in **Section 10.3**. The results obtained for the imported materials did not report concentrations above previously approved imported material assessment criteria, except for Total Petroleum Hydrocarbons (TPH), which initially exceeded the NEPM (2013) management Limits for TPH fractions F1 – F4 in soil, for the majority of collected samples. Samples with TPH detected concentrations were subsequently reanalysed for TPH following silica gel clean-up, which returned results for all samples below the laboratory Limit of Reporting. The auditor agrees that this indicates that TPH detections are organic hydrocarbon and are not petroleum based and are acceptable for imported materials.

The auditor has reviewed imported materials validation information and has confirmed suitability for use as landscape capping materials, based on information presented by WSP:

- WSP review of source materials assessment for VENM/ ENM (pre blended materials)
- Inspections carried out by WSP at the resource recovery sites
- Sampling and analysis undertaken by WSP of blended and pre blended topsoils and mulch at the resource recovery sites
- Inspections conducted by JHCPB and WSP personnel as materials were delivered to the WCX site (including CWL).

9.1.4 Disposal/ re-use of excavated materials

Prior to capping, existing (potentially contaminated) soils and fill were excavated for either offsite beneficial re-use or offsite disposal, as required by project construction works. Based on information

provided by JHCPB, WSP reports that an approximate total of 86,464 tonnes of was removed from the site, with details provided in **Table 12** below.

Table 12. CWL – Offsite disposal summary

Material Type	Quantity (t)	Disposal dates
Waste categories		
General solid waste - GSW	70,430	Nov 2019 – May 2023
General solid waste (asbestos) – GSW asb	5,080	Nov 2018 – May 2021
Restricted solid waste – RSW	56	Jun 2020
Restricted solid waste (asbestos) – RSW asb	90	Dec 2019
Beneficial re-use categories		
Excavated public road material – EPRM[1]	8,536	May – Jun 2020
Virgin excavated natural material – VENM[2]	2,272	Nov 2020 – May 2021

1. EPRM – materials as defined by the Excavated public road material order 2014, made under the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation)
2. VENM – materials as defined under the Protection of the Environment Operations Act 1997 (POEO Act)

The auditor notes the following regarding offsite disposal from CWL:

- Waste classification for disposed materials were conducted previously (in-situ) by ADE Consulting Group (ADE). Waste classification assessment included collection and analysis of soil samples for COPCs including heavy metals, TRH, BTEX, PAHs, OCPs, OPPs, PCBs, phenols, VOCs, SVOCs, TBT and/or asbestos. Waste classification results for CWL were documented in the following reports:
  - ADE 2020a, Waste Analysis & Classification Report, Westconnex Stage 3B – The Crescent Work Site, Rozelle NSW, WCX-08-17049/WAC023 v2f, 20 February 2020.
  - ADE 2020b, Waste Analysis & Classification Report, Westconnex Stage 3B – The Crescent Work Site, Rozelle NSW, WCX-08-16890/WAC004 v1f, 8 April 2020.
  - ADE 2020c, Waste Analysis & Classification Report, Westconnex Stage 3B, City West Link Site, Annandale NSW, WCX-08-17868/WAC169 v1f, 1 July 2020.
  - ADE 2020d, Waste Analysis & Classification Report, Westconnex Stage 3B, City West Link Site, Annandale NSW, WCX-08-17868/WAC170 v1f, 23 June 2020.
- JHCPB maintains a materials tracking system, which has previously been audited by Epic. The materials tracking register for CWL offsite disposal generated by the system is included in Appendix F of WSP (2023).
- Regarding offsite disposal destinations for materials, the auditor notes that:
  - Materials classified in waste categories GSW, GSW asb, RSW and RSW asb were disposed offsite to landfills licensed to accept the materials
  - EPRM – consisted of materials classified as GSW and being waste that does not contain coal tar, asbestos or any waste that is classified as hazardous, restricted solid, special or liquid waste as defined in the POEO Act, which were exported for beneficial use at other road projects in accordance with the Waste Regulation.
  - VENM – which was exported off site for beneficial re-use in accordance with the POEO Act.

Based on review of the offsite disposal information presented by WSP, the auditor considers that materials were lawfully disposed or beneficially re-used in accordance with NSW EPA waste requirements.

9.2 Long Term Environmental Management Plan

WSP (2023a) states the objectives of the Long-Term Environmental Management Plan (LTEMP) were to:

- Define appropriate management and mitigation measures to be implemented to manage potential environmental and health and safety risks associated with residual subsurface soil impacted by PAHs, heavy metals and asbestos

- Outline the monitoring and maintenance measures required to maintain integrity of the constructed capping systems
- Ensure activities associated with any future site works are managed in a way that minimises the potential impact to the surrounding environment
- Ensure all personnel involved are aware of environmental issues associated with residual PAHs, heavy metals and asbestos in soil.

In summary, the LTEMP requirements include:

- Environmental awareness and training
- 6-monthly visual inspections of capped areas
- Maintenance of capping
- Imported fill and VENM testing and validation requirements
- Controls to be applied during minor sub-surface works (not involving breaching of capping layer)
- Management controls for observed breaches of containment (either hardstand or capped landscaped areas)
- Sets out procedures for subsurface works reinstatement to ensure protection of workers an future site users
- Unexpected finds protocols
- Incident and emergency procedures
- Complaint and environmental incident procedures and register
- Reporting and LTEMP review requirements.

The auditor's review of the LTEMP found that the LTEMP substantially conformed with the NSW EPA (April 2020) 'Consultants Reporting on Contaminated Land- Contaminated Land Guidelines' and that the LTEMP can be made enforceable via:

- The LTEMP may be made enforceable through the planning system (primarily the EP&A Act and State Environmental Planning Policy - Resilience and Hazards 2021) with respect to changes in the allowable land uses or material alterations to the site and surrounds.
- Future redevelopment work at the site significant enough to require consent from the local council (Inner West Council) under the EP&A Act, will provide an avenue for enforcement as Council may require adoption of this LTEMP as a condition of development consent for the site.
- As per condition E183 of the infrastructure approval, the Secretary of the NSW Department of Planning and Environment (or nominee) and Inner West Council (Council) are also to be provided a copy of the site audit statement. Council must provide a notification of the existence of the audit on the planning certificate/s for the site issued under section 10.7 of the EP&A Act.

9.3 Site audit discussion

Reference is made to the auditor's review of the validation report (WSP 2023) and the LTEMP (WSP 2023a) documented in Interim Audit Advice #61 and #65 included in **Appendix B**. The following summary is provided:

- The validation report adequately demonstrates that the remediation capping strategy has been implemented over the audit area in accordance with the remediation specification (WSP, 2022b), except for:
  - Area 4, where capping thickness was minimum 80mm
  - Around Port Jackson Fig trees in Area 3 and Area 4 (each covering an area of 1.5m x 1.5m), where the geofabric marker layer is discontinuous
- Materials excavated and exported from the site were appropriately classified and disposed to facilities licensed to accept the materials, or to sites for beneficial re-use as either VENM or in accordance with the Excavated public road material order 2014

- Materials imported to the site were validated for use as suitable for use as landscape capping materials
- The LTEMP provides appropriate management and mitigation measures in the context of the proposed and foreseeable landuse to manage potential environmental and health and safety risks associated with residual subsurface soil impacted by PAHs, heavy metals and asbestos and may be made enforceable via the planning system.

10 EVALUATION OF ANALYTICAL RESULTS

Relevant extracts from WSP (2021a) and WSP (2021b), including borelogs and results summary tables are included in **Appendix C.**

10.1 Soil

The following field and analytical results have been reported by WSP (2022a):

10.1.1 Sub-Surface Conditions

Fill material was recorded at depths between 0.5 and 3.2 mBGL in the northern portion of the Buruwan Park area underlain by natural alluvial sands and clay. Excavation works within the Buruwan Park comprised the following:

- limited excavation of material in the northern portion of the Buruwan Park sub-site (north of Whites Creek)
- approximately 4 mBGL south of Whites Creek to facilitate channel widening
- approximately 1 m material removed from the central portion of the sub-site
- stripping of material to shallow bedrock in the south-east.

The soil profile encountered in the Crescent Civil sub-site generally comprised 0.5 to 1.5 m fill material imported as part of the WCX3B project works, overlying historical fill material and sandstone bedrock. Excavation works within the Crescent Civil and comprised the following:

- approximately 4 mBGL south of Whites Creek to facilitate channel widening and in the north to facilitate construction of the utilities bridge
- excavation of up to approximately 1.5 m material along The Crescent roadway and area to the north-east
- limited excavation of material in the north and south due to the presence of existing utilities
- stripping of material to shallow bedrock along the south-western boundary.

10.1.2 Soil Assessment Results

Soil analytical results representing the site are discussed in 2 parts:

- WSP 2021a, WestConnex Stage 3B – Rozelle Interchange Sub Site Area – Crescent Civil, Detailed Site Investigation, ref. PS117368-CLM-REP-Crescent Civil RevD.
- WSP 2021b, WestConnex Stage 3B – Rozelle Interchange Sub Site Area – Crescent West (Buruwan Park), Detailed Site Investigation, ref. PS117368-CLM-REP-BuruwanPark RevD.
- WSP 2022a WestConnex Stage 3B - Rozelle Interchange Sub-Site Area - City West Link Site Status and Hydrogeology Report Ref: PS117368-CLM-REPCWL RevE

Soil exceedance summary with respect to adopted site criteria (Section 7.2) is summarised in **Table 13.**

Table 13. Soil exceedance summary – Crescent Civil Investigation Locations (mg/kg)

Analyte	LOR s	HSL/HIL[1]	ESL/EIL[2]	No. of Samples	No. of exceed	Range	Exceedances
Heavy Metals							
Arsenic	2	3,000	100	18	-	<3.2 – 18	-
Cadmium	0.4	900	-	18	-	< 0.4	-
Chromium (iv)	5	3,600	360	18	-	<5 – 17	-
Copper	5	240,000	230	18	-	<5-34	-
Lead	5	1,500	1100	18	-	<5-110	-
Mercury	0.1	730	-	18	-	<0.1 -0.2	-
Nickel	5	5,000	480	18	-	<5- 5.7	-
Zinc	5	400,000	810	18	-	<5-240	-
BTEXN							
Benzene	0.1	4	65	18	-	<0.1	-

Analyte	LOR s	HSL/HIL[1]	ESL/EIL[2]	No. of Samples	No. of exceed	Range	Exceedances
Toluene	0.1	NL	105	18	-	<0.1	-
Ethylbenzene	0.1	NL	125	18	-	<0.1	-
Total Xylene	0.3	NL	45	18	-	<0.2	-
Naphthalene	0.5	NL	170	18	-	<0.5	-
Total Recoverable Hydrocarbons							
F1 TRHs C_6–C_{10}	20	215	180	18	-	<20	-
F2 TRHs >C_{10}–C_{16}	50	170	120	18	1	<50 - 340	TP02 EIL exceedance
F3 TRHs >C_{16}–C_{34}	100	2,500	1300	18	-	<100 – 810	-
F4 TRHs C_{34}–C_{40}	100	-	5600	18	-	<100 – 1150	-
Polynuclear Aromatic Hydrocarbons							
B(a)P TEQ	0.5	40	0.7	18	2	<0.05 – 2.8	2 x EIL exceedance TP04 and TP03
Total PAHs	0.5	4000	-	18	-	ND – 12.4	-
Total PCBs							
PCBs	0.5	7	-	6	-	<0.1	-
Organochlorine Pesticides							
OCPs	-	-	-	6	-	ND	-
Asbestos							
Asbestos	0.001%	Detected	-	11	-	ND	-
Chlorinated Solvents							
SVOC/VOC	0.5			8	-	ND	-

Notes:

1. Health investigation levels for Commercial industrial use (HIL/HSL-A), NEPM 2013 with HSL 1m in clay
2. Ecological investigation levels for urban residential and public open space land use (fine soil), taking into account the most conservative criteria
3. Suitable following UCL 95% and statistical assessment

Bold – samples that exceeded highlighted criteria are highlighted and listed
LORs = laboratory limits of reporting
nd = not detected, concentrations less than the LOR
- = no criteria, not tested, no exceedances.

Soil exceedance summary with respect to adopted site criteria (Section 7.2) is summarised in **Table 14.**

Table 14. Soil exceedance summary – Buruwan Park Investigation Locations (mg/kg)

Analyte	LOR s	HSL/HIL[1]	ESL/EIL[2]	No. of Samples	No. of exceed	Range	Exceedances
Heavy Metals							
Arsenic	2	3,000	100	29	-	<3.2 – 210	-
Cadmium	0.4	900	-	29	-	<0.4 - 2	-
Chromium (iv)	5	3,600	360	29	-	<5 – 24	-
Copper	5	240,000	230	29	4	<5 - 868	4 EIL exceedance
Lead	5	1,500	1100	29	-	<5 - 1000	-
Mercury	0.1	730	-	29	-	<0.1 - 1.0	-
Nickel	5	5,000	480	29	1	<5 - 34	1 EIL exceedance
Zinc	5	400,000	810	29	5	<5 - 4500	5 x EIL exceedance
BTEXN							
Benzene	0.1	4	65	30	-	<0.1	-
Toluene	0.1	NL	105	30	-	<0.1	-
Ethylbenzene	0.1	NL	125	30	-	<0.1	-
Total Xylene	0.3	NL	45	30	-	<0.2	-
Naphthalene	0.5	NL	170	30	-	<0.5	-
Total Recoverable Hydrocarbons							
F1 TRHs C_6–C_{10}	20	215	180	27	-	<20	-
F2 TRHs >C_{10}–C_{16}	50	170	120	27	-	<50 - 70	-
F3 TRHs >C_{16}–C_{34}	100	2,500	1300	27	-	<100 – 1270	-

Analyte	LOR s	HSL/HIL[1]	ESL/EIL[2]	No. of Samples	No. of exceed	Range	Exceedances
F4 TRHs C_{34}–C_{40}	100	-	5600	27	-	<100 – 340	-
Polynuclear Aromatic Hydrocarbons							
B(a)P TEQ	0.5	40	0.7	28	1	<0.05 – 45	Exceedance HIL at GW08 2.0m. 14 EIL exceedances
Total PAHs	0.5	4000	-	28	1	ND – 466	Exceedance HIL at GW08 2.0m.
Total PCBs							
PCBs	0.5	7	-	6	-	<0.1	-
Organochlorine Pesticides							
OCPs	-	-	-	27	-	ND	-
Asbestos							
Asbestos	0.001%	Detected	-	20	-	ND	BH09 w/w detection 0.002% FA and AF
Chlorinated Solvents							
SVOC/VOC	0.5			8	-	ND	-
Per- and Polyfluoroalkyl Substances							
PFAS Sum	0.0004			5		Nd- 0.0004	-

Notes:

1. Health investigation levels for Commercial industrial use (HIL/HSL-A), NEPM 2013 with HSL 1m in clay
2. Ecological investigation levels for urban residential and public open space land use (fine soil), taking into account the most conservative criteria
3. Suitable following UCL 95% and statistical assessment

Bold – samples that exceeded highlighted criteria are highlighted and listed
LORs = laboratory limits of reporting
nd = not detected, concentrations less than the LOR
- = no criteria, not tested, no exceedances.

10.2 Groundwater

The key findings of the groundwater monitoring events conducted and reported in WSP DSI 2022a are summarised below. Groundwater investigations previously conducted at the site (WSP, 2021a) have identified concentrations of heavy metals, PFOS and PAHs above the adopted ecological and recreational use criteria. Dissolved heavy metals concentrations are considered to be representative of urban ambient background levels and were not considered to be associated with any historical land use on site (AECOM, 2018a). PFOS was detected above the PFAS NEMP (2020) 95% marine criteria in one groundwater well (GW02) at the Crescent Civil sub-site during the WSP (2021a) DSI only and was not considered to present a risk to ecological receptors at the site.

Benzo(a)pyrene and/or fluoranthene were detected above the ANZG (2018) marine water 95% toxicant criteria (low reliability values) and/or recreational health site criteria in monitoring wells GW05b and GW06 during the previous (WSP, 2021a) and July 2021 GMEs. Analytical results for surface water samples collected from Rozelle Bay did not report PAHs above ultra-trace laboratory LORs.

The source of PAHs identified in groundwater at the Crescent Civil is likely to be associated with historical fill material. The toxicity characteristic leaching procedure (TCLP) analysis completed by ADE did not report concentrations of benzo(a)pyrene above laboratory LORs. The material type and relative concentrations of benzo(a)pyrene in ADE samples from TP3 and TP8 were generally consistent with those reported during the WSP (2021a) investigation and as such, the leachability results for these samples are considered likely to be representative of the material identified in WSP locations GW05b and GW06.

The significant hard standing across the CWL site is anticipated to result in considerable shedding of surface water. Given these considerations and the import of up to 2m of tunnel spoil material placed at the site it was considered that surface water infiltration would be minimal.

10.2.1 Groundwater analytical results

The groundwater results from the single round of sampling conducted during the DSI are summarised below in **Table 15.**

Table 15. Groundwater analytical results ug/L

Analyte	PFAS NEMP	Marine Waters[1]	Recreational Water (x10)	Health Screening Levels[2]	Site Maximum concentration	Exceedances
Metals						
Arsenic	-	-	10	-	24	GW04 GW05b GW06 all exceeded on the 20 May 2021
Cadmium	-	5.5	2	-	0.2	-
Chromium	-	-	50	-	34	-
Copper	-	1.33	2000	-	165	All locations recorded an exceedance for the 95% DGVs
Lead	-	4.4[3]	100	-	468	GW06 and GW04 exceeded Rec water
Nickel	-	70	20	-	50	
Zinc	-	15	-	-	1000	All locations exceeded the 95% DGVs
Mercury	-	0.4	1	-	0.2	
BTEXN						
Benzene	-	700	1	800	ND	
Toluene	-	-	800	NL	4	
Ethylbenzene	-	-	300	NL	3	
Total Xylene	-	-	600	NL	9	
Naphthalene	-	70	-	NL	ND	
TRH						
F1 TRHs C_6–C_{10}	-	-	-	NL	20	
F2 TRHs C_{10}–C_{16}	-	-	-	NL	120	
F3 TRHs C_{16}-C_{34}	-	-	-	-	500	
F4 TRHs C_{34}–C_{40}	-	-	-	-	ND	
TRHs C_6– C_{40}	-	-	-	-	ND	
Polycyclic Aromatic Hydrocarbons						
Acenapthene	-	-	-	-	ND	
Benzo(a)pyrene	-	-	0.01	-	1.35	GW05b and GW06
Fluoranthene	-	-	-	-	2.9	
Phenanthrene	-	-	-	-	0.5	
Per- and poly-fluoroalkyl substances (PFAS)						
PFOS	0.13	-	-	-	0.16	Exceedance of 95% species protection
PFOA	220	-	-	-	0.05	
Organochlorine Pesticides						
Aldrin + Dieldrin	-	-	0.3	-	ND	
Phenols						
Phenol	-	400	-	-	ND	
VOC						
Total VOCs	-	-	0.03	-	ND	

Notes:
1. Criteria from NEPM, 2013 and ANZG (2018) Marine 95 % DGV
2. HSLs for Comm/Ind.
3. Criteria are low reliability trigger values, sourced from ANZECC, 2000.
NL – no limit.

10.3 Imported fill

Approximately 588m^3 of imported topsoil was validated for use in landscape capping areas by inspection, sampling and analysis carried out and reported by WSP (2023). Imported materials were sampled at the source sites prior and post blending for potential contaminants of concern as described in **Section 9.1**. Imported fill laboratory results for VENM/ ENM sands, blended topsoil, mulch and compost materials are presented in Appendix D of WSP (2023) the results are summarised below:

- TRH results were below LOR or the adopted site criteria (NEPM ESL and management limits for open space / recreational) with the exception of results at SP19 (Compost), SP23 (compost) and SP25 (mulch). Due to the potential of naturally occurring TRH derived from organic matter, silica gel clean-up was scheduled for analysis. Following silica gel clean-up, all results were below detection limits.
- Heavy metal results were below LOR or the adopted site criteria (NEPM EIL, HIL open space / recreational and excavated natural material order 2014))
- PAH results were below LOR or the adopted site criteria (NEPM EIL, HIL open space / recreational and excavated natural material order 2014)
- BTEXN results were below LOR or the adopted site criteria (NEPM ESL open space / recreational)
- OCP/OPP results were below LOR or the adopted site criteria (NEPM EIL and HIL open space / recreational)
- PFAS results were below LOR or the adopted site criteria (PFAS NEMP 2020, public open / space))
- PCB results were below LOR or the adopted site criteria (NEPM HIL open space / recreational)
- Foreign materials results were below the adopted criteria (NSW EPA Pasteurised Organics Order 2016, Compost Order 2016 and excavated natural material order 2014) with the exception of plastics detected within SP49, and SP52.
- Asbestos testing and visual inspection did not identify any asbestos

10.4 Consultant conclusions

The findings of the DSIs (WSP, 2021a and 2021b) and works conducted as part of the site status and hydrogeology review, WSP provided the following conclusions:

- A total of approximately 50,000 t material was disposed off-site during the Crescent Civil and Buruwan Park excavation works. Following site excavation works, exceedances of the HIL C, HIL D and/or HSL D criteria remain in deeper fill material on the Crescent Civil sub-site, in addition to shallow fill material in the south of the Crescent Civil sub-site. Soil remediation and/or management is considered to be required at the Crescent Civil sub-site to mitigate potential future human health and environmental risks associated with soil impacts at the site. The preferred method of remediation comprises encapsulating the soil impacts beneath a capping layer in accordance with the WSP July 2021 Memorandum "Sub-Area Crescent Civil (east) Remediation Approach".
- Given the minimal anticipated water infiltration at the site, in addition to the findings of previous leachability testing, encapsulation of residual soil impacts with an impermeable capping layer is not considered to be required. Ongoing management of the capping at the site will be documented in a long-term environmental management plan.
- Exceedances of the HIL C and HIL D criteria remain in the area of residual land along the north-eastern Crescent Civil sub-site boundary, however, it is understood that JHCPB are not responsible for the investigation, remediation and/or management of potential contamination that may be present within the portion of the site comprising residual land.

Transport for NSW will be responsible for the ongoing management of the residual land noting that the residual land is outside of the audit boundary).

- Groundwater at the site is present in fill/alluvium material, in addition to shallow sandstone in the southern/southwestern area of the site. Based on field-measured EC and variability in groundwater elevation, some hydrogeological interaction between groundwater within the fill/alluvium and Rozelle Bay is apparent. Groundwater in the fill/alluvium and sandstone is inferred to flow in the general direction of Rozelle Bay.
- Heavy metals and PFOS were identified in groundwater above the adopted ecological and/or recreational use criteria. Dissolved heavy metals concentrations are considered to be representative of urban ambient background levels and were not considered to be associated with any historical land use on site. Additionally, PFOS was detected above the PFAS NEMP (2020) 95% marine criteria in one groundwater well (GW02) at the Crescent Civil sub-site during the WSP (2021a) DSI only and was not considered to present a risk to ecological receptors at the site.
- PAHs were detected above the ANZG (2018) marine water 95% toxicant criteria (low reliability values) and/or recreational health site criteria in monitoring wells GW05b and GW06 during the previous (WSP, 2021a) and May/ July 2021 GMEs. However, PAHs were not reported above ultra-trace laboratory LORs in surface water samples collected from Rozelle Bay, indicating that the PAH impacts identified in groundwater at the Crescent Civil sub-site do not appear to be impacting the water within the adjacent Rozelle Bay.
- Given the considerable volume of PAH impacted fill material removed from the site, significant thickness of site reinstatement (i.e. up to 2 m clean tunnel spoil) and that no ongoing sources of benzo(a)pyrene in soil have been identified which may significantly contribute to groundwater quality in the future, the concentrations of PAHs in groundwater at the Crescent Civil sub-site are anticipated to reduce over time. Additionally, based on the minimal anticipated water infiltration following completion of landscaping works (including the construction of hardstand across much of the site area) and the low apparent leachability of PAHs in soil at the site, no significant risks to offsite human health or environmental receptors associated with PAHs in groundwater are considered to be present.
- Based on the data obtained during the previous (WSP, 2021a, 2021b and 2022a)) investigations at the Buruwan Park and Crescent Civil sub-sites, it is considered that sufficient information has been obtained to inform site suitability and remediation planning and that no data gaps remain at the site.
- At the Crescent Civil sub-site, soil remediation works have been implemented to render the site suitable for the proposed land uses, as described in the validation report (WSP, 2023). The remediation capping strategy has been implemented in accordance with the WSP July 2021 Memorandum "Sub-Area Crescent Civil (east) Remediation Approach".
- Ongoing management at the site to be implemented as documented in the LTEMP (WSP, 2023a).

10.5 Site audit discussion

In reviewing the field and analytical results for soil and groundwater at CWL, the auditor notes the following:

Soils:

- The site has been subject to significant excavation and disturbance since 2018, including removal of fill spoil that comprise elevated concentrations of contaminants. Residual fill remains at the site beneath roadway pavement, footpaths, overpasses, and minor areas of landscaping. Portions of the have also been subjected to 2m of fill using the tunnel spoil generated through the project.
- The residual fill material is likely to contain elevated concentrations of contaminants identified in the assessment program such as:

- Heavy metal concentrations that may exceed the EILS but are unlikely to exceed the HIL-D criteria applicable to commercial/ industrial use
- Heavy metal concentrations (particularly zinc and copper) that may exceed EIL criteria applicable to commercial/ industrial use. However, as per ASC NEPM guidance, EILs apply principally to the top 2m of soil, corresponding to the root zone and habitation zone of most species. In addition, the site is primarily roadway and hardstand with only minor areas of landscaping or exposed soil or grasses. Therefore, contamination exceeding the adopted EILs below the current top 2m of soil do not present ecological risk.
- It is likely that some areas may contain elevated PAH concentrations in soil may exceed the recreational open space criteria however are unlikely to exceed the commercial / industrial HIL adopted for the bulk of the site.
- The auditor notes that it is possible that some minor asbestos, or asbestos containing material, may be present in historical residual fill below the top 2m of clean fill. Given the future commercial/ industrial landuse setting (roadway, pavement and pathways) and low probability that excavation below 2m will occur, the health risk associated with asbestos contamination in soils at depth >2m bgl is considered negligible. As residual fill is present there is a risk of asbestos to be present and should be noted on any proposed management plan.

Groundwater:

- Groundwater at the site is present in fill/alluvium material, in addition to shallow sandstone in the southern/southeastern area of the site. It is likely that hydrogeological interaction between groundwater within the fill/alluvium and Rozelle Bay is apparent. Groundwater in the fill/alluvium and sandstone is inferred to flow in the general direction of Rozelle Bay. The recharge from upgradient of the CWL site or through surface water infiltration is expected to be low and therefore reduce the rate of movement along the hydraulic gradient. The movement of groundwater would be dominated by tidal influences.
- Heavy metals and perfluorooctanesulfonic acid (PFOS) were identified in groundwater above the adopted ecological and/or recreational use criteria. Dissolved heavy metals concentrations are considered to be representative of urban ambient background levels based on historical reporting. Some localised elevated groundwater would be likely however sure to residual fill soils.
- PFOS was detected above the marine water ecological criteria in one groundwater well (GW02) at the Crescent Civil sub-site during the WSP (2021a) DSI only and was not considered to present a risk to ecological receptors at the site.
- Polycyclic aromatic hydrocarbons (PAHs) were detected above the marine water and recreational health site criteria in groundwater monitoring wells located on the Crescent Civil sub-site during the previous DSI and subsequent GMEs.
- Additionally, based on the minimal anticipated water infiltration following completion of landscaping works and the expected low apparent leachability of PAHs in soil at the site, significant risks to offsite human health or environmental receptors associated with PAHs in groundwater are considered to be unlikely.
- Based on the data obtained during the previous WSP DSIs and the current investigations at the Buruwan Park and Crescent Civil sub-sites, it is considered that sufficient information has been obtained to inform the future management of the site.

Imported Fill

- Imported fill materials used in capping and general landscaping in the form of blended topsoil and mulch have been validated to meet environmental criteria relevant to public open space use.

11 CONCEPTUAL SITE MODEL

The conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. As part of the assessment Ramboll (2019) developed an initial CSM, that was later adopted by WSP (2021a and 2021b) and further developed in WSP (2022a). The CSM is further developed in the Validation Report (WSP, 2023).

Based on review of previous assessment results and their own collected data, WSP identified concentrations of heavy metals and PAHs in site soils. The auditor's assessment of the CSM presented by WSP (2021) is summarised in **Table 17**:

Table 16. CSM discussion

Element	CSM discussion	Auditor's Opinion
Contaminants of potential concern	Following field sampling and analysis, WSP (2022a) identified contaminants of concern for the site as: Soils: • Asbestos • Total recoverable hydrocarbons (TRH) • Benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) • Polycyclic aromatic hydrocarbons (PAHs) • heavy metals • PFAS • Polychlorinated b-phenyls (PCBs) • Phenols • Organochlorine pesticides and organophosphate pesticides (OCP and OPP) • Volatile organic compounds (VOCs). Dissolved metals, particularly cobalt, copper, nickel and zinc. Heavy metals exceeded the ANZG (2018) marine water 95% toxicant criteria, which were attributed to regional/ offsite sources.	The known and potential sources of contamination and contaminants of concern including the mechanism(s) of contamination have been identified and adequately described
Affected Media	Each of the contaminant sources and the corresponding COPC identified in the previous site investigations (refer to Section 8 and 9) have the potential to impact soils, sediments, groundwater, surface water and vapours (indoor and ambient air). The results of these investigations are summarised in the investigation and site validation reports, documenting the current extent of known impacts in the various environmental media.	The potentially affected media have been adequately identified.
Receptor Identification	Potential receptors were identified as: Onsite • Future site users, maintenance and construction workers • Future site maintenance workers Offsite • Offsite residents, who may be exposed to dusts or groundwater • Ecological soil values • Whites Creek stormwater channel and Rozelle Bay	The potential human and ecological receptors have been adequately identified.
Exposure pathways and presence of preferential pathways	• Ingestion, dermal contact and inhalation for human receptors • Leaching and plant uptake • Groundwater and surface water flows for offsite environment.	Potential exposure pathways have been identified and adequately described in the investigation and validation reports.

Element	CSM discussion	Auditor's Opinion
Likelihood of potential pollutant linkages	No potential pollutant linkages were confirmed, given that: • Approximately 90% of the site comprises of roadway, hardstand to other pavement that would greatly reduce interaction with human receptors utilising the site. • Remaining unsealed areas have been capped with a landscape cap comprising a marker layer and clean topsoil or mulch capping layer, to be managed and maintained under the documented LTEMP (WSP, 2023a). • The movement of groundwater is limited do to the limited upgradient rechange or surface water infiltration. The movement of groundwater at CWL is likely to be dominated by tidal influence from Rozelle Bay. • Human health linkages to contaminated groundwater are not likely given that groundwater in the area is not used for drinking water purposes and lack of recreational use of waters in Rozelle Bay and Whites Creek	Potential linkages to residual contamination have been identified and adequately described and appropriately managed through remediation activities and the implementation of the LTEMP.
Data gaps	No significant data gaps were considered to remain following WSP (2022a) field assessment works.	The Auditor has not identified residual data gaps for the CWL link site that are material for the long-term management of the site.

11.1 Site audit discussion

The auditor considers that the source – contaminant – pathway - receptor linkages described in the WSP (2023) CSM provides an adequate basis for consideration of risk and site suitability for the proposed use of the site.

12 SITE SUITABILITY DISCUSSION

12.1 Risk and Migration

12.1.1 Soil contamination

Elevated concentrations of contaminants in residual fill soils are unlikely to limit the use of the site or inhibit the construction activities.

12.1.2 Groundwater

Human health risk associated with heavy metal and PAH contamination in groundwater is considered to be low and acceptable, given that groundwater is not used for drinking water purposes and that Rozelle Bay and Whites Creek is generally not used for recreational purposes.

The movement of groundwater is limited do to the limited upgradient rechange or surface water infiltration. The movement of groundwater at CWL is likely to be dominated by tidal influence from Rozelle Bay

12.2 Land use suitability

Following completion of all construction works, including capping of the site achieved by:

- Hardstand cap formed by concrete/ asphalt roadways, road verges, pedestrian footpaths and cycleways
- Landscape capping comprised of marker layer and 80 to 300mm thick, clean validated landscape cap.

The audit site is considered suitable for use as road reserve and public open space, with the implementation of the documented Long Term Environmental Management Plan (WSP, 2023a).

It is noted that a portion of the Project Deed footprint was nominated as Residual land that did not form part of the investigation program or Audit process. The Residual Portion as shown on the figures was not considered under this landuse suitability assessment.

Guidelines for the NSW Site Auditor Scheme (3rd edition) EPA (2017) states that in assessing the suitability of a site for an existing or proposed landuse in an urban context, the decision process for assessing urban redevelopment sites should be followed. For sites that are in the context of the use of the area as a roadway and pavement with limited landscaping and open space as a commercial and industrial should be assessed in determining landuse suitability:

- All site assessment, remediation and validation reports follow applicable guidelines.
  - The auditor considers that site assessment and validation reports developed for the site are considered to sufficiently comply with EPA made and approved guidelines to allow certification of landuse suitability.
  - A number of non-material deficiencies have been identified, addressed and do not change the outcome of this Audit based on the lines of evidence presented above.
- Any aesthetic issues relating to site soils have been adequately addressed.
  - No aesthetic issues were identified at this site.
- Soils have been assessed against relevant health-based investigation levels and the potential for migration of contamination from soils to groundwater has been considered.
  - Soils have been assessed in accordance with EPA made and approved guidelines including NEPM, 1999 amended 2013. The health investigation levels for commercial industrial landuse were applied. ESLs and open space were also referenced due to the presence of landscaped areas associated with pedestrian accessible areas
  - Based on the contamination identified in soils, the potential for contamination to migrate from soils to groundwater is considered to be low.

- Groundwater (where relevant) has been assessed against relevant health-based investigation levels and, if required, any potential impacts to buildings and structures from the presence of contaminants considered.
  - Groundwater has been assessed against relevant NEPM (2013) GILS and groundwater contamination has not been identified.
  - Groundwater has been assessed against relevant health-based investigation levels.
  - No potential impacts to buildings and structures from the presence of contaminants are considered applicable.
- Hazardous Ground Gases (where relevant) have been assessed against relevant health-based investigation levels and screening values.
  - No contamination is considered to be present at the site with the potential to generate hazardous ground gases.
- Any issues relating to local area background soil concentrations that exceed relevant investigation levels have been adequately addressed in the site assessment report(s)
  - No local soil concentration issues are considered to be relevant.
- The impacts of chemical mixtures have been assessed
  - The site auditor considers that no chemical mixture issues have arisen at this site.
- Any potential ecological risks have been assessed.
  - The risk to ecological receptors has been assessed and is considered to be low.
- Any evidence of, or potential for, migration of contaminants from the site has been appropriately addressed, including potential risks to off-site receptors, and reported to the site owner or occupier
  - No offsite migration is apparent on this site.
- The site management strategy is appropriate
  - The site auditor considers that the LTEMP that requires the maintenance of the applied capping and pavement areas as the primary management requirement to limit access to the residual contamination identified at this site.

12.3 Regulatory summary

EPA (2017) states that 'regulatory consent, licenses, notifications and other requirements may apply for some aspects of contaminated site investigation, remediation and validation work'. A summary of the regulatory requirements applicable to the site are described in **Table 18**.

Table 17. Regulatory summary

Act, regulation, policy, etc.	Relevant requirements	Project specific application
Environmental Planning & Assessment (EP&A) Act 1979 All development proposals in NSW must be assessed to ensure they comply with relevant planning controls and, according to nature and scale, that they are environmentally and socially sustainable. State, regional and local plans and policies indicate what level of assessment is required, and who is responsible for assessment. Planning and development is carried out under the EP&A Act and the Environmental Planning and Assessment (EP&A) Regulation 2000. Under S. 79C of the EP&A Act, the consent authority needs to consider the suitability of the site for the development, including whether the site is contaminated.		
The proposal has been deemed critical State Significant Infrastructure (SSI) under schedule 5, clause 4 of *State Environmental Planning Policy (State and Regional Development) 2011*. Approval of SSI 7485 has been granted by the Minister for Planning, subject to notice of determination, including	Relevant requirements regarding site audit are provided by notice of determination (SSI 7485), Schedule 2: Clauses E181 to E183: E181: A Site Contamination Report, documenting the outcomes of Phase 1 and Phase 2 contamination assessments of land upon which the	E181 has been addressed by WSP (2021) and AECOM (2016). E182 is addressed by this SAR and SAS. E183 requires that this SAR and SAS is to be submitted to the Secretary and relevant council for information no later than one (1) month prior to the

Act, regulation, policy, etc.	Relevant requirements	Project specific application
Schedule 2 conditions, dated 17th April 2018.	CSSI is to be carried out, that is suspected, or known to be, contaminated must be prepared by a suitably qualified and experienced person in accordance with guidelines made or approved under the Contaminated Land Management Act 1997 (NSW). E182: If a Site Contamination Report prepared under Condition E181 finds such land contains contamination, a site audit is required to determine the suitability of a site for a specified use. If a site audit is required, a Site Audit Statement and Site Audit Report must be prepared by a NSW EPA Accredited Site Auditor. Contaminated land must not be used for the purpose approved under the terms of this approval until a Site Audit Statement is obtained that declares the land is suitable for that purpose and any conditions on the Site Audit Statement have been complied with. E183: A copy of the Site Audit Statement and Site Audit Report must be submitted to the Secretary and relevant council for information no later than one (1) month prior to the commencement of operation.	commencement of operation (i.e. site opening).
State Environmental Planning Policy (resilience and Hazards) 2021	Chapter 4 – Remediation of land. Specifies category 1 and or 2 remediation, i.e. where consent is required for the remediation works, and includes prior notice for Category 2, requirements for compliance with guidelines, notices of completion for Category 1 works, and various planning considerations.	Site is not currently suitable for planned or intended use and remediation and/ or management is required. Remediation assumed to be category 2, not requiring consent as project approval is provided under the SSI. Under clause 4.13 (1) 'A person who proposes to carry out a category 2 remediation work on any land must give notice of the proposed work to the council for the local government area in which the land is situated (or, if the land is within the unincorporated area, to the Minister).'

Act, regulation, policy, etc.	Relevant requirements	Project specific application
Local government contaminated lands policy or development control plans (DCPs)	Varies based on local government area. Policies and/or DCPs provide specific guidance as to what the consent authority requires for remediation, including site management requirements.	Contamination management at the site are assumed to have complied with the City of Sydney Council DCP.
Contaminated Land Management (CLM) Act 1997 The CLM Act establishes a legal framework that gives EPA powers to require the assessment and remediation of site where contamination is significant enough to warrant regulation. Under the CLM Act, EPA can agree to voluntary investigation and management of sites, or impose orders for investigation or management.		
Section 60: Duty to report, duty for landowners and persons who have responsibility for contamination to notify EPA.	Assessment of duty to report based on the considerations and criteria described in NSW EPA (2015) 'Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997'.	Contamination on the site has not been deemed significant enough to warrant regulation under the CLM Act and the site is not listed under the NSW EPA contaminated land record of notices.
Protection of the Environment Operations (POEO) Act 1997 The objectives of the Act include to protect, restore and enhance the quality of the environment in NSW, having regard to the need to maintain ecologically sustainable development. The requirements of the POEO Act and associated schedules and regulations, are relevant to the assessment and management of contaminated land.		
Air, noise, water General provisions in regard to requirements not to pollute waters, to prevent or minimise air pollution, to maintain and operate plant in a proper and efficient condition/manner and to deal with materials in a proper and efficient manner to minimise noise impacts.	Development of appropriate management plans, e.g. environmental management plan (EMP), having regard to specific approvals and relevant guidance. The Act also requires notification when a pollution incident occurs that causes or threatens material harm to the environment.	No specific issues have been identified.
Environment protection licences (EPL), required for scheduled development work and scheduled activities, required under Part 3.2 of POEO Act.	Schedule 1 of the POEO Act defines road construction as scheduled activity, triggering the WestConnex Stage 3B – M4-M5 Rozelle interchange project. EPL No. 21278 issued by EPA.	Construction including remediation to meet EPL requirements.
The Act defines 'waste' for regulatory purposes and establishes management and licensing requirements.	Includes waste classification, resource recovery exemptions, general immobilisation approvals, requirements for immobilisation, and licensing requirements.	No outstanding issues relating to waste.

Act, regulation, policy, etc.	Relevant requirements	Project specific application
Underground Petroleum Storage Systems (UPSS) Regulation 2019 Best practice in the design, installation and on- going operation of a UPSS, which applies to all UPSSs in NSW.	Specific requirements include: • loss monitoring and detection, • incident management (response), • groundwater monitoring wells, • site validation following decommissioning/ • removal/replacement and environmental protection plan (EPP).	No remaining UPSS have been identified to be present on the site. UPSS have been removed and reporting would be included in the final Validation report. UPPS specific reports will be forwarded to Council.
Environmentally Hazardous Chemicals (EHC) Act 1985 The main provisions of the EHC Act relate to a statutory chemical assessment function, and the regulation and control of chemicals via Chemical Control Orders (CCOs), licences and regulations. The EHC Act regulations set general requirements for fees, provision of information, exemptions and penalties while the CCOs set controls for specific chemicals both through generic requirements and by requiring that certain processes be subject to particular licence conditions.		
Chemical Control Orders Chemical control orders in force in NSW: aluminium smelter wastes; dioxin-contaminated wastes; scheduled chemical wastes (SCW); organotin waste materials; and polychlorinated biphenyls (PCBs) and wastes.	A CCO provides set requirements for a broad range of activities, including the manufacture, processing, distribution, use, sale, transportation, storage and disposal of chemicals and chemical wastes. In regard to the assessment and management of contaminated land, CCOs can be applicable to on-site use or to off-site disposal.	No CCO issues were identified.
Water Management Act (WMA) 2000 The object of the WMA and the Water Management (General) Regulation 2004 is the sustainable and integrated management of the State's water for the benefit of both present and future generations. It includes the establishment of water sharing plans, and various approvals and licenses to protect and maintain surface and ground waters.		
Controlled activity approval A controlled activity approval (CAA) under Part 3, Chapter 3 of the WMA is required for controlled activities carried out in, on or under waterfront land.	Waterfront land includes the bed and banks of a river, lake or estuary, including land to within 40 metres of the highest bank or the mean high-water mark (also check NSW Fisheries).	Not considered relevant to this site.
Licensing of groundwater wells Licenses are required under Part 5 for water bores, including monitoring wells.	A licence is required to establish a groundwater bore for any purpose, including groundwater monitoring.	Monitoring wells were installed as part of the investigation. Copies of bore licenses have not been provided.
Heritage Act 1977		

Act, regulation, policy, etc.	Relevant requirements	Project specific application
A relic is any deposit, object or material evidence which relates to the settlement of NSW, not being Aboriginal settlement, and which is 50 or more years old.	If any relics or suspected relics are discovered, they should not be removed or disturbed, as an archaeological investigation may be required and a permit under the Act may be required.	No specific heritage issues were identified.

13 REFERENCES

Coleman Adams Environmental (CAE, 2021) 'Material Classiifcation Certificate, 751 The Northern Roas, Bringelly NSW, 4 November 2021

JBS&G (2021) 'L09 – Virgin Excavated Material Assessment, Block 15, Green Square Development Site, Zetland, NSW 2017', 7 January 2021.

Ramboll (2016) '*WestConnex M4-M5 Link Rozelle Interchange, Stage 1 Preliminary Site Investigation*', 19 May 2016, Ref: M4M5-REP-4000-EN-030A

Ramboll (2019) '*WestConnex Stage 3B – Rozelle Interchange Contaminated Land – Sampling and Analysis Plan (SAQP)*, Revision D2, August 2019, (Ramboll SAQP 2019), Appendix K, O and P

Ramboll (2019a) '*Underground Storage Tank Removal Technical Guidance Note, WestConnex Stage 3B Rozelle Interchange*' dated June 2019

WSP (2020) '*Work Plan – Sub Site Area – Crescent West*', PS117368-CLM-LTR-WP-CRW, Revision B, dated 16 March 2020'

WSP (2020a) '*Work Plan – Sub Site Area – Crescent Civil Site. PS117368-CLM-LTR-WP-Crescent Civil Site'*, PS117368-CLM-LTR-WP-Crescent Civil Site, Revision B, dated 28 Mar 2020

WSP (2021) '*WestConnex Stage 3B - Rozelle Interchange, Sub Site Area - Crescent West (Buruwan Park), Detailed Site Investigation*'. PS117368-CLM-REPBuruwanPark, Revision D, 25 November 2021

WSP (2021a) '*WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent Civil – Detailed Site Investigation',* Ref: PS117368-CLM-REP Crescent Civil, Revision D, dated 15 July 2021

WSP (2022) '*City West Link UST – Sampling and Validation Report',* PS117368-CLM-REP-CWL UST, Revision D, dated 28 February 2022

WSP (2022a) '*WestConnex Stage 3b – Rozelle, Interchange Subsite Area – City West Link (CWL), Site Status and Hydrogeology Report*', PS117368-CLM-REPCWL, Revision E dated 31 October 2022

WSP (2022b) '*Memorandum: Sub-Area Crescent Civil (east) – Remediation Approach'* PS117368-CLM-MEM-003, Revision 5 dated 2 December 2022

WSP (2023) '*Validation Report – WestConnex Stage 3B Sub-Site – The Crescent'.* PS117368-CLM-REP-CWL VAL RevD Final. 22 November 2023.

WSP (2023a) '*Long Term Environmental Management Plan* – Various Lots, *The Crescent, Annandale and Rozelle'*, NSW. PS117368-CLM-REP-CWL EMP RevE. 17 November 2023.

WSP (2023b) '*Import Material Validation Sampling and Inspection'.* PS124861-CLM-LTR-SAQP RevD. 1 June 2023.

14 LIMITATIONS AND DISCLAIMER

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15 ACRONYMS

ACM	Asbestos containing material
AF	Asbestos fines
AHD	Australian height datum
ANZECC	Australia and New Zealand Environment and Conservation Council
ANZG	Australian and New Zealand Governments
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
ASC NEPM	*National Environmental Protection (Assessment of Site Contamination) Measure 1999*
ASLP	Australian standard leaching procedure
ASS	Acid sulfate soil
Bgl	Below ground level
BTEXN	Benzene, toluene, ethylbenzene, xylenes, naphthalene
BTOC	Below top of casing
CBD	Central business district
CLM	Contaminated land management (Act)
COC	Chain of custody
CoPC	Contaminants of potential concern
CSM	Conceptual site model
DAF	Dilution and attenuation factor
DEC	Department of Environment and Conservation
DQI	Data quality indicators
DQOs	Data quality objectives
DSI	Detailed site investigation
EIL	Ecological investigation level
EPA	Environmental Protection Authority
EPL	Environment protection license
ESL	Ecological screening level
FA	Fibrous asbestos
GIL	Groundwater investigation level
GME	Groundwater monitoring event
GWMW	Groundwater monitoring well
HIL	Health investigation level
HSL	Health screening level
JHCPB JV	John Holland CPB Joint Venture
LOR	Limit of reporting
LOSP	Level of species protection
mbgl	Metres below ground level
mBTOC	Metres below top of casing
NATA	National Association of Testing Authorities
ND	Non detect
NEPC	National Environment Protection Council
NEPM	National Environmental Protection Measure
NHMRC	National Health and Medical Research Council
PAHs	Polycyclic aromatic hydrocarbons
PASS	Potential acid sulfate soil
PFAS	Per- and polyfluoroalkyl substances
PFOS	Perfluorooctanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
QA/QC	Quality assurance / quality control
RPD	Relative percent difference
SAC	Site assessment criteria
SAR	Site audit report
SAQP	Sampling analysis and quality plan
SAS	Site audit statement

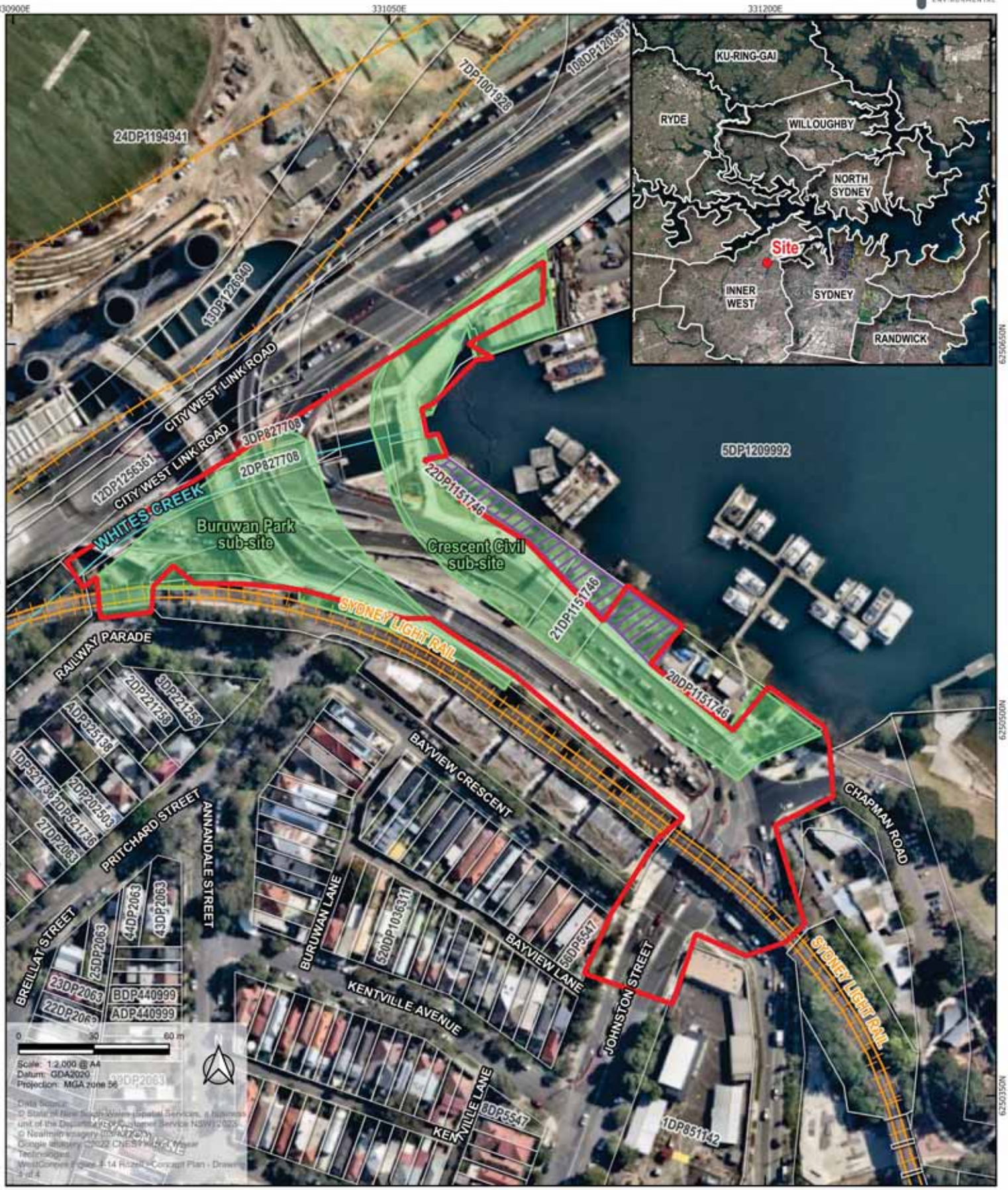
SMC	Sydney Motorway Corporation
SSI	State significant infrastructure
SVOCs	Semi-volatile organic compounds
SWL	Standing water level
TEQ	Toxicity equivalence quotient
TRH	Total recoverable hydrocarbons
UCL	Upper confidence limit
UPSS	Underground Petroleum Storage System
VOCs	Volatile organic compounds
WCX	WestConnex

FIGURES

Figure F1: Site Location and Boundary

Figure F2: Intrusive Investigation Locations – Buruwan Park

Figure F3: Intrusive Investigation Locations – Crescent Civil

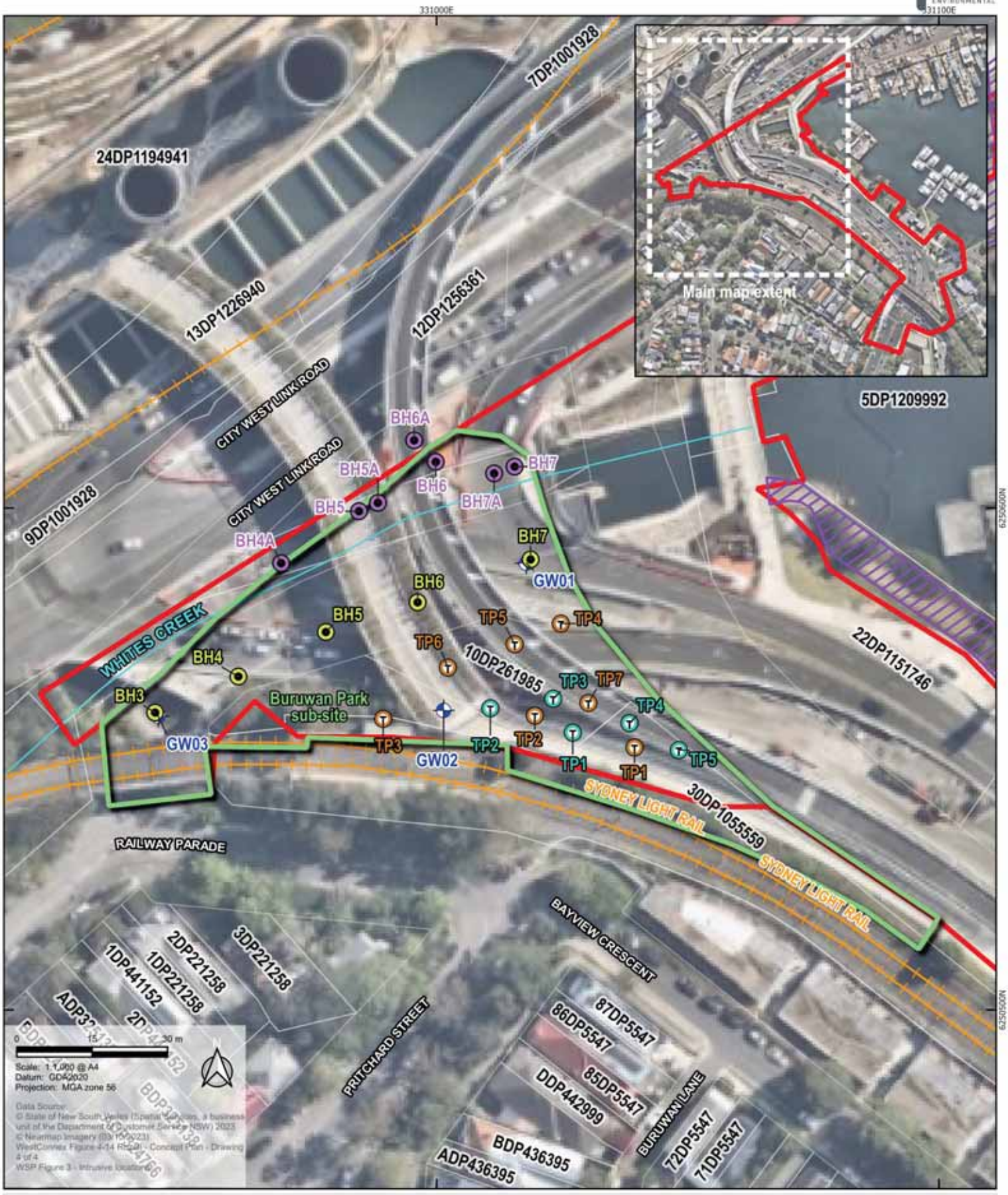


Legend

- Site boundary
- Lot boundary
- Approximate moderate risk investigation area
- Residual land
- Railways
- Watercourses

JHCPB JV
City West Link, Annandale
City West Link: Site Audit Report

Figure F1
Site location and audit boundary

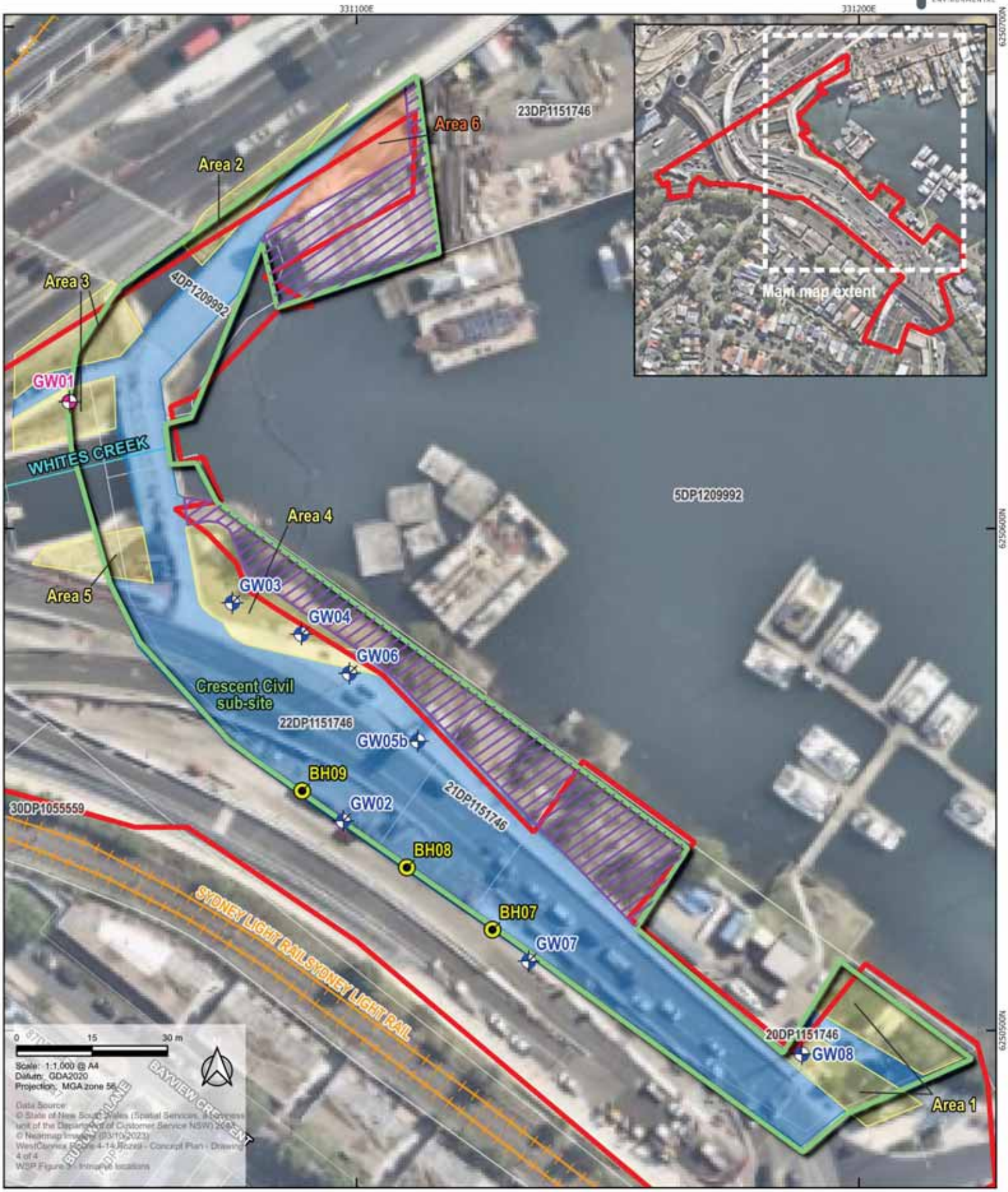


Legend

- Site boundary
- Lot boundary
- Buruwan Park sub - site
- Residual land
- Railways
- Watercourses
- Soil borehole - ADE (June 2020)
- Soil borehole - ADE (September 2020)
- Test pit - ADE (October 2020)
- Test pit - ADE (November 2020)
- Groundwater monitoring well - WSP

JHCPB JV
City West Link, Annandale
City West Link: Site Audit Report

Figure F2
WSP intrusive investigation locations - Burrawan Park



Legend

- Site boundary
- Lot boundary
- Crescent Civil sub-site
- Residual land
- Geotextile and soil capping remediation area
- Hardstand sealed area
- Retained as compound area for WHT (no landscaping)
- Railways
- Watercourses
- Soil borehole
- Groundwater monitoring well - WSP
- Groundwater monitoring well - ADE

JHCPB JV
City West Link, Annandale
City West Link: Site Audit Report

Figure F3
WSP intrusive investigation locations - Crescent Civil

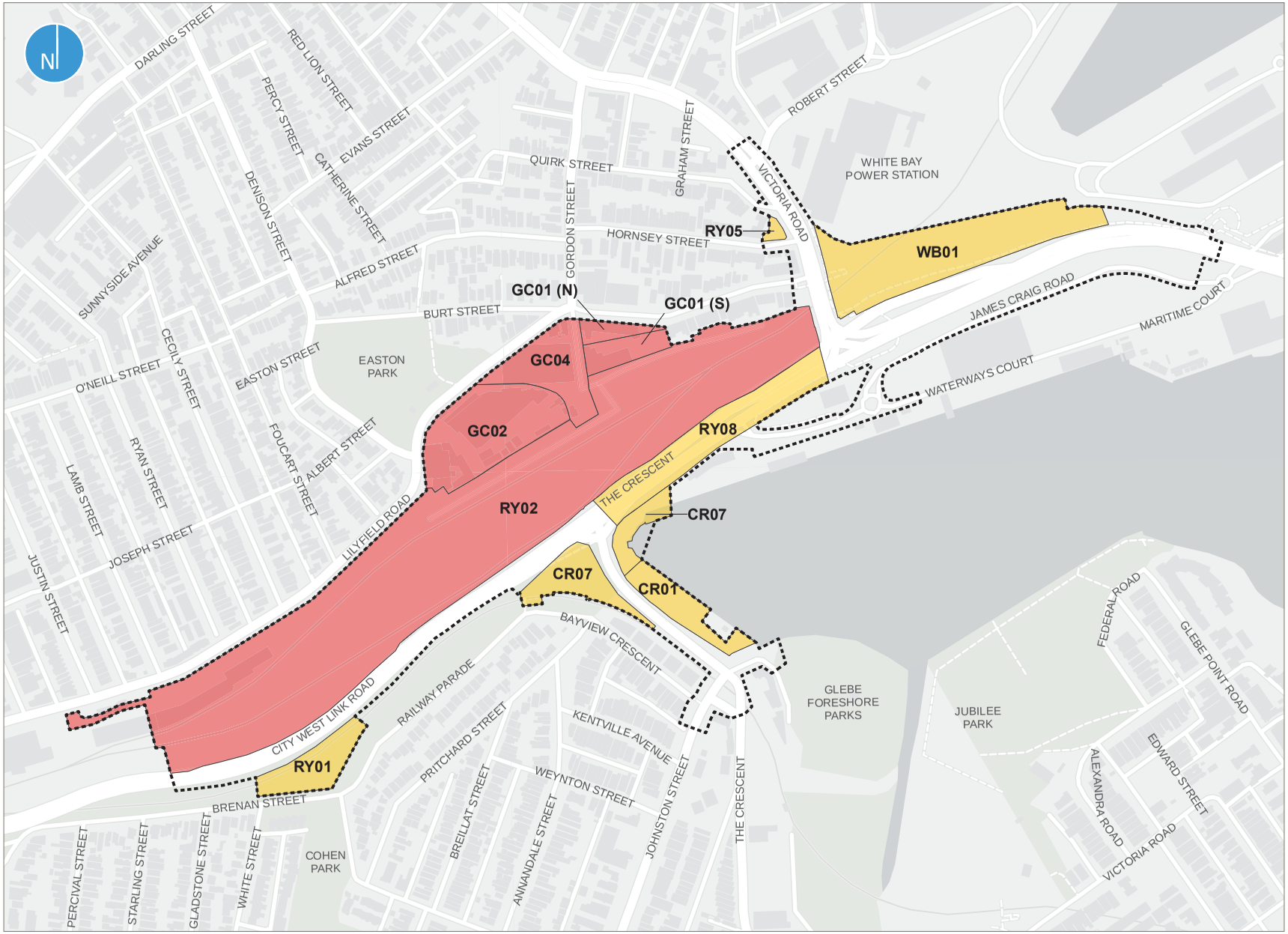
PLATES

Audit Inspection Photographs – City West Link

Photo	Description	Image
Plate P1 Residual land CWL	10 June 2021 prior to installation of footpath and fences.	
Plate P2 CWL Whites Creek headworks	10 June 2021, headworks of second channel for Whites Creek and bridging work	
Plate P3 Whites Creek Bridge	10 June 2021	
Plate P4 CWL Roadway – view 1	10 August 2023, overpass completed and temporary structures being removed	

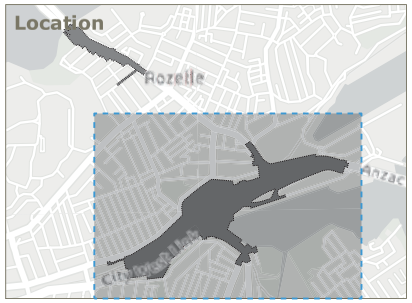
Photo	Description	Image
Plate P5 CWL Roadway – view 2	10 August 2023, The Crecent and footpath adjacent residual land	
Plate P6 CWL constuction	10 August 2023, Exposed soils within CWL. Pavement and landscaping to be installed	

APPENDIX A RAMBOLL SAQP 2019: FIGURE 1 AND FIGURE 2



Legend

- Project boundary
- High Risk Site
- Moderate Risk Site



0 200 400m

RAMBOLL

Figure 1 – Rozelle Interchange SAQP Site Locations

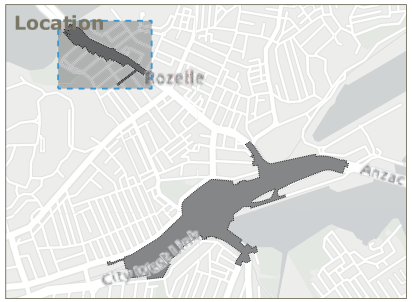
Overarching Sample Analysis and Quality Plan

PROJECT: WestConnex Stage 3B - Rozelle Interchange			CLIENT: JHCPB
SCALE: 1:5,000	A3	DRAWN BY: jchen	PROJECT #: 318000500
PAGE: 01 of 01	COORDINATE SYSTEM: GDA 1994 MGA Zone 56	REVIEW: VW	DATE: 30/07/2019
MAP #: F001	VER: 1		

RAMBOLL AUSTRALIA - GIS MAP file : JHCPB3BRozelle_GIS_P006_OverarchingSAQP_F001_SAQPSiteLocations_RI_v1 | Z:\Projects\JHCPB 3B Rozelle\Spatial

Legend

- Project boundary
- High Risk Site
- Moderate Risk Site



0 50 100m

RAMBOLL

Figure 2 – Iron Cove Link SAQP Site Locations

Overarching Sample Analysis and Quality Plan

PROJECT: WestConnex Stage 3B - Rozelle Interchange			CLIENT: JHCPB
SCALE: 1:1,750	A3	DRAWN BY: jchen	PROJECT #: 318000500
PAGE: 01 of 01	COORDINATE SYSTEM: GDA 1994 MGA Zone 56	REVIEW: VW	DATE: 30/07/2019
MAP #: F002	VER: 1		

RAMBOLL AUSTRALIA - GIS MAP file : JHCPB3BRozelle_GIS_P006_OverarchingSAQP_F002_SAQPSiteLocations_IC_v1 | Z:\Projects\JHCPB 3B Rozelle\Spatial

APPENDIX B INTERIM AUDIT ADVICE(S) AND DATA RELIABLITY ASSESSMENT

From: Gary Bagwell
To: Brad May; Ciara Moriarty-W3B
Cc: Roger Posgate-W3B
Subject: Re: CWL The Crescent LtEMP Rev C with comments Addressed
Date: Friday, 17 November 2023 8:09:44 AM
Attachments: image004.png

Hi Ciara
Can WSP finalise the LTEMP.
The comments are all addressed.

Regards
Gary

Get Outlook for Android

From: Ciara Moriarty-W3B <Ciara.Moriarty@rozelleinterchange.com.au>
Sent: Tuesday, November 14, 2023 5:06:51 PM
To: Gary Bagwell <gbagwell@epicenvironmental.com.au>; Brad May <bmay@epicenvironmental.com.au>
Cc: Roger Posgate-W3B <roger.posgate@rozelleinterchange.com.au>
Subject: RE: CWL The Crescent LtEMP Rev C with comments Addressed

Hi Gary,

Please see Rev D of The Crescent LtEMP with comments addressed.

Rev D

Thanks,
Ciara

From: Gary Bagwell <gbagwell@epicenvironmental.com.au>
Sent: Monday, November 13, 2023 3:12 PM
To: Ciara Moriarty-W3B <Ciara.Moriarty@rozelleinterchange.com.au>; Brad May <bmay@epicenvironmental.com.au>
Cc: Charles Scarf-W3B <Charles.Scarf@rozelleinterchange.com.au>; Roger Posgate-W3B <Roger.Posgate@rozelleinterchange.com.au>
Subject: RE: CWL The Crescent LtEMP Rev C with comments Addressed

Hi Ciara, et al
Please find comments register on the CWL LTEMP received Friday.
Can you please pass on to WSP to finalise.

Structure is much better, so a good template for the coming LTEMPs.

Regards

Gary Bagwell

Principal Environmental Engineer BE (Chem), MEL
CEnvP – CL Site Contamination Specialist

gbagwell@epicenvironmental.com.au
M: +61 499 001 031 | 1800 779 363

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www.epicenvironmental.com.au

Epic Environmental acknowledges the Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work.

From: Ciara Moriarty-W3B <Ciara.Moriarty@rozelleinterchange.com.au>
Sent: Friday, November 10, 2023 2:03 PM
To: Brad May <bmay@epicenvironmental.com.au>; Gary Bagwell <gbagwell@epicenvironmental.com.au>
Cc: Charles Scarf-W3B <charles.scarf@rozelleinterchange.com.au>; Roger Posgate-W3B <roger.posgate@rozelleinterchange.com.au>
Subject: CWL The Crescent LtEMP Rev C with comments Addressed
Importance: High

Hi Brad and Gary,

Thanks so much for moving things along the past few weeks. Final stretch now.

See link to CWL LTEMP Rev C with your comments addressed 03. The Crescent. The Boundary in Figure 2 is correct and what we want to use please.

Can you please look at this as a priority? Then these comments can also be included in the RY02 LtEMP if you are happy with the responses. Im very conscious to keep that moving too.

I will be sending a task list email out shortly but I am aware you are working on finalising a number of letters etc. I think youre going to be sick of hearing from me next week but our time is (has already) run out and quick turnarounds for the next two weeks will be so appreciated.

Thank you and please let me now if there are any questions or issues as we go. Let me know if I can help in any way to make your reviews easier.

Ciara Moriarty
Environment Operations Manager

Rozelle Interchange & Western Harbour
Tunnel Enabling Works

Level 4, 410 Concord Rd
Rhodes, 2138
M 0417738136
E
Ciara.Moriarty@rozelleinterchange.com.au

Contaminated Site Audit Log and Reporting Checklist

Audit Details

Project Reference: SY180068.01
Site Audit Notification No. (NSW only): SY11
Site Address: WestConnex Stage 3B - Rozelle interchange - Sub-Site area - The Crescent
Lot on Plan: Part Lot 20 DP 115746, Lots 21 and 22 DP 115746, Part Lot 4 DP 1209992, Part Lot 23 DP 115746, Lot 20 DP 791554
Document name: ***Long-Term Environmental Management Plan, Various Lots, The Crescent, Annandale and Rozell, NSW***
Document details: RevB, dated 23/10/23
RevC, dated 10/11/23
RevD, dated 14/11/23
RevE - Final, dated 17/11/23

Table 1. Interim Audit Advice IAA61

Comment No.	Reviewer	Doc Rev	Review commence date	Reference/ Report Section	Review #1 Auditor Comments to be Addressed [27/10/2032]	Review #1 WSP Response [10/11/2023]	Review #2 Epic Auditor Comments [13/11/23]	Review #2 WSP Response 17/11/23 Auditor closeout 22/11/23	Date Action Closed	Comment Status (Open / Closed)
1	BM (Epic)	Rev B	30/10/2023	General Comment	Epic Environmental (Epic) were commissioned by John Holland CPB Joint Venture (JHCPB JV), the Client, to undertake the role of NSW Site Auditor (Auditor) for the Rozelle Interchange - Sub-site Area, The Crescent / Crescent Civil (the site), located in Sydney, NSW. The scope of works for this review will be limited to this site.	-	-	-	10/11/2023	Closed
2	BM (Epic)	Rev B	30/10/2023	General Comment	It should be noted that the contaminated land auditor (CLA) services for this site were undertaken in general accordance with the provisions of the *Contaminated Land Management Act 1997* (CLM Act), including (but not limited to) the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd Edition)*.	-	-	-	10/11/2023	Closed
3	BM (Epic)	Rev B	30/10/2023	General Comment	This communication has been provided as interim audit advice (IAA) only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report (SAR) or site audit statement (SAS), and does not pre-empt the conclusions which will be drawn at the end of the audit process.	-	-	-	10/11/2023	Closed
4	BM (Epic)	Rev B	30/10/2023	General Comment - Structure	While the LTEMP generally meets the key reporting requirements checklist for environmental management plans contained in the NSW EPA (2020) 'Consultants reporting on contaminated land', the auditor considers that the LTEMP would be more interpretive and effective with the following structure inclusions: 1. Introduction and purpose (including background, purpose, objectives & regulatory framework) 2. Site description (incl. site identification, site history summary and future/ proposed land use) 3. Existing environment (topography, geology/ hydrogeology, hydrology and ASS) 4. Description of contamination/ site status (i.e. CoCs, contaminated media, depths and extents with reference to site plan, capping details and with reference to Figures) 5. LTEMP implementation (stakeholders, roles and responsibilities, duration and review of the LTEMP, Legal enforceability, notifications, training and awareness) 6. Management activities (monitoring of site conditions, controls for maintenance workers, controls for major works, unexpected finds procedure).	EMP structure amended. Note S3 not added - soil/geology included in S2, Hydrology, ASS, etc. not considered relevant to this EMP.	Noted, closed	-	13/11/2023	Closed
5	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	Residual land: Residual land is considered outside of the audit. While the LTEMP should note the residual land areas, it is assumed that these areas are not addressed by the LTEMP.	EMP + Figures updated accordingly throughout.	Noted	-	13/11/2023	Closed
6	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose Figure 2	This section should refer to EMP boundary, assumed to be shown in Figure 2. However Figure 2 boundary does not concur with previously communicated audit boundary for CWL (also noting changes in residual land areas). As discussed in meeting of 3/11, LTEMP should include all project areas clearly denoting road, verge, cycleway and public open space areas and their management.	EMP + Figures updated accordingly throughout.	Noted, including JHCP instruction that LTEMP boundary to be consistent with the audit boundary.	-	13/11/2023	Closed
7	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	6th para: refers to Area 6 - include a Figure reference for Area 6 (Figure 3?). Further, with regard to this area (temporary WHT construction office area), can the LTEMP include likely time period that this use will occur (if temporary) as well as details of how this area is to be managed once this use is completed? for example, is this area to be returned to parkland?	S2.1 updated with description + Fig 3 reference. Duration of occupation for WHT construction offices and subsequent land use unknown - text added to this effect in S3.2.2.	Noted, closed	-	13/11/2023	Closed
8	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	7th para: Refers to purpose including to 'ensure the works that penetrate the capping system (including within the area of residual land) are appropriately controlled'. Can this be more specific? Including reason for the EMP (e.g. to manage health or environmental impacts from retained soil contamination) and the proposed time period that the LTEMP will apply.	S1.2 updated. Proposed duration of LTEMP is provided in S1.2 - "This LTEMP will apply indefinitely or until such a time that a site audit statement can be prepared by a NSW Environment Protection Authority (EPA) accredited site auditor stating that an EMP is not required for the site".	Noted, closed.	-	13/11/2023	Closed
9	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	While described later, include in this section current/ future land use relevant to the LTEMP.	S1.5 added.	Noted, closed	-	13/11/2023	Closed
10	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	Include in this section whether the LTEMP is active or passive plan (as required by NSW EPA 2020).	S1.2 updated.	Noted, closed	-	13/11/2023	Closed
11	BM (Epic)	Rev B	30/10/2023	Section 1.1 - Overview and purpose	Include how/ where the LTEMP will be recorded (as required by NSW EPA 2020)	Refer to S4.6 - SAS to be provide to Dept Planning and Council (for inclusion on s10.7 certificate).	Noted, closed	-	13/11/2023	Closed

Comment No.	Reviewer	Doc Rev	Review commence date	Reference/ Report Section	Review #1 Auditor Comments to be Addressed [27/10/2032]	Review #1 WSP Response [10/11/2023]	Review #2 Epic Auditor Comments [13/11/23]	Review #2 WSP Response 17/11/23 Auditor closeout 22/11/23	Date Action Closed	Comment Status (Open / Closed)
12	BM (Epic)	Rev B	30/10/2023	Section 1.2 - Objectives	Include sub-objective to outline the monitoring and maintenance measures to maintain integrity of installed capping systems	S1.3 updated.	Noted, closed	-	13/11/2023	Closed
13	BM (Epic)	Rev B	30/10/2023	Section 1.5 - Regulatory framework and enforcement	This section doesn't really explain how the LTEMP will be made enforceable? To elaborate.	S4.5 updated. (subject to regulation by the NSW Department of Planning, Industry and Environment.)	Noted, closed.	-	13/11/2023	Closed
13A	BM (Epic)	Rev B	30/10/2023	Section 2.1 - Site identification			NEW COMMENT: To make consistent with the Validation report and LTEMP boundary as shown in Figure 2, update Property address: The Crescent, Johnston Street and City West Link, Annandale and Rozelle	Table 2.1 updated. Noted, closed.	22/11/2023	Closed
14	BM (Epic)	Rev B	30/10/2023	Section 2.3 - Previous environmental investigations and findings	This section potentially not relevant to EMP implementation - suggest include this detail in an Appendix or omit. Replace with a description of contamination type/ depth/ extent, that would be understandable to a general tradesman.	Section removed - S3 added, including contamination status.	Noted, closed	-	13/11/2023	Closed
15	BM (Epic)	Rev B	30/10/2023	Section 2.6 - Future site use	Include in this section reference to Figure showing various sub-uses/ treatments (i.e. roads, footpaths, verges etc.)	Fig 5 added.	Noted, closed.	-	13/11/2023	Closed
16	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities	As per comment No. 4, include here list of stakeholders for the LTEMP. Stakeholders should include (and may not be limited to) utilities who will own assets in the LTEMP area and who are likely to be accessing the site.	Table 4.1 updated.	Noted, closed	-	13/11/2023	Closed
17	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities - Table 3.1	Property owner is listed as Transport for NSW. Can this be more specific? Are there any departments within TfNSW that could be listed here?	Not known. TfNSW considered sufficient for the purpose of the LTEMP.	Noted, closed	-	13/11/2023	Closed
18	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities - Table 3.1	Given that this is public road and associated land - who are site occupants? Is this relevant?	Previously included for potential future occupation of residual land - no longer applicable, removed.	Noted, closed	-	13/11/2023	Closed
19	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities - Table 3.1	Given that utility assets are present on the site, utility organisations will be relevant. Include utilities with assets on the site	Table 4.1 updated.	Noted. Utilities include water, electricity, gas?	-	13/11/2023	Closed
20	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities - Table 3.1	Include Inner West Council/ Council responsibilities	Table 4.1 updated.	Inner West Council/ responsibilities not included. Include.	Refer row 2 - Council noted as delegate of site owner. New row 3 also added (Council). Noted, closed.	22/11/2023	Closed
21	BM (Epic)	Rev B	30/10/2023	3 - Responsibilities - Table 3.1	Include parties with responsibility for review and maintenance of the LTEMP (TfNSW?) and timing for when review is to occur	Included in Table 4.1 - "Review the effectiveness of the LTEMP annually and following any incident or other event that suggests the LTEMP is ineffective."	Noted, closed	-	13/11/2023	Closed
22	BM (Epic)	Rev B	30/10/2023	3.2 - Environmental awareness and training	Include also utility workers	S4.2 updated.	Noted, closed	-	13/11/2023	Closed
23	BM (Epic)	Rev B	30/10/2023	3.3 - Non-compliances and LTEMP review	How/ where should non-compliances be recorded? Also include dot point that LTEMP should be updated to meet any changes in regulatory requirements	Non-compliance register added as App C2. Bullet point added to S4.3 re: regulatory updates.	Noted, closed	-	13/11/2023	Closed
24	BM (Epic)	Rev B	30/10/2023	4.1 - Capping design	First paragraph is confusing to the layman, as asphalt capping is not presented below (only the two types of soft capping). Also should make reference to Figure 3 (Appendix A), showing capping type extents. what Figure shows 1. geotextile and soil cap and 2. pavement cap? D Also list variations to capping installed (such as Area 4 - around the trees?) and if possible include schematic for surface treatment in these areas.	S5.2 amended. Reference to asphalt capping removed (included in error).	In S5.1, note areas where soil cap does not meet design thickness 300mm, (as per Validation plan). Also under Area 6 - Westconnex project offices, it is assumed that a geotextile layer was not installed here?.	In S5.1, note areas where soil cap does not meet design thickness 300mm, (as per Validation plan). Also under Area 6 - Westconnex project offices, it is assumed that a geotextile layer was not installed here?. Noted, closed	22/11/2023	Closed
25	BM (Epic)	Rev B	30/10/2023	4.1 - Capping design	Include in this section a photo of the marker layer used, so that the layman can recognise when this is uncovered.	Figure 5.2 added.	Noted, closed	-	13/11/2023	Closed
26	BM (Epic)	Rev B	30/10/2023	4.2 - On-site risk management	Suggest to either delete or re-write this section (risk will not present a risk?). Could possible re-frame in CLM terms: Risk from retained site contamination may arise when contaminated soils are disturbed, including where marker layer is breached, including: - potential worker exposure to contamination, following skin contact, ingestion or inhalation of dusts - potential erosion/ discharge of contaminated soils to drains and waterways - inappropriate disposal or placement of excavated contaminated soils	S5 and 5.2 revised. RE: Fig Trees - no known planned removal.	Noted, closed	-	13/11/2023	Closed
27	BM (Epic)	Rev B	30/10/2023	4.3 - Environmental controls, Table 4.1 Environmental controls	Suggest this section(s) could be improved if it was structured: 1. Maintenance and monitoring 2. Minor works (e.g. landscaping/ planting not likely to breach the clean cap/ marker layer) 3. Major works (major civil/ utilities works likely to breach the clean cap/ marker layer) that this also relates to structure used in Appendix D: Summary of LTEMP requirements.	Table 5.1 + App D amended accordingly.	Noted, closed	-	13/11/2023	Closed
28	BM (Epic)	Rev B	30/10/2023	4.3 - Environmental controls, Table 4.1 Environmental controls	Under heading 'maintenance', clarify person/ organisation is responsible. Is it proposed that a consultant should be involved to review results?	Column 1 Table 5.1 updated - "If the imported fill requires testing to validate it as suitable, samples should be collected by a suitably qualified environmental consultant"	Noted, closed	-	13/11/2023	Closed
29	BM (Epic)	Rev B	30/10/2023	4.3 - Environmental controls, Table 4.1 Environmental controls	With regard to sample frequency clarify that '1 sample per 1,000m3/ 1 sample per additional 1,000m3 relates to VENM. Also include VENM definition from legislation/ guidelines.	Table 5.1 updated.	Noted, closed	-	13/11/2023	Closed

Comment No.	Reviewer	Doc Rev	Review commence date	Reference/ Report Section	Review #1 Auditor Comments to be Addressed [27/10/2032]	Review #1 WSP Response [10/11/2023]	Review #2 Epic Auditor Comments [13/11/23]	Review #2 WSP Response 17/11/23 Auditor closeout 22/11/23	Date Action Closed	Comment Status (Open / Closed)
30	BM (Epic)	Rev B	30/10/2023	4.3 - Environmental controls, Table 4.1 Environmental controls	Under heading 'Environmental management control', include control that potentially contaminated soil must not be placed on the site unless it is maintained under capping conditions.	Request clarification. Import of contaminated material is not permitted by law.	Not imported to the site, but generated from other site locations. Feasible that contam soils could be excavated during other works (services, footings, whatever) and excess soils placed on surface as part of cap. So this is a control.	Table 5.1 (Major Works) updated - "Should contaminated material be disturbed (i.e. material present in the Crescent Civil sub-site beneath the geotextile marker layer and/or hardstand capping layer), this material shall be disposed off-site under appropriate waste classification or be placed/maintained beneath the geotextile marker layer and/or hardstand cap. The marker layer and/or hardstand cap shall be subsequently reinstated as per the procedure outlined below." Noted, closed.	22/11/2023	Closed
31	BM (Epic)	Rev B	30/10/2023	4.3 - Environmental controls, Table 4.1 Environmental controls	Include 'Unexpected finds procedure', including what may constitute an unexpected find.	S5.4 added.	Noted, included in S5.3	-	13/11/2023	Closed
32	BM (Epic)	Rev B	30/10/2023	Appendix E: Site plans and surveys	With regard to the first figure in this Appendix, what is the relevance to the EMP of the coloured areas in the Figure (Areas 1 to 5)? In addition the orange line site boundary (ric_land_sas_boundary?) doesn't appear to be consistent with the boundary provided in Appendix A, Figure 2. Note that if this Figure is not relevant to the EMP, then remove.	Figure removed.	Noted, closed	-	13/11/2023	Closed
33	BM (Epic)	Rev B	30/10/2023	Appendix E: Site plans and surveys	With regard to the second Figure of this Appendix, what is the purpose of this Figure ? How do the yellow areas relate to the LTEMP? (noting there is no legend on this Figure).	Figure presents capping survey boundary coordinates.	Appendix E isn't referred to in the EMP. Maybe include in S3.2: These areas are shown on Figure 3 (Appendix A), *which are based on the capping survey in Appendix E* . However, the Auditor notes there are inconsistencies between the capping survey and Figure 3 of Appendix A?	S3.2 updated - "The surveyed locations of geotextile marker layer within the Crescent Civil sub-site are presented in Appendix E. The surveyed extent of geotextile marker layer and capping cross-sections for Areas 1 to 5 (including areas capped landscape areas extending beyond the Crescent Civil sub-site) are included as Appendix F." Figure 3 also updated for Area 5. Noted, closed.	22/11/2023	Closed

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13 January 2023

Chetan Jayaram
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By email: Chetan.jayaram@rozelleinterchange.com.au

Project name: WestConnex Stage 3B Rozelle Interchange – Contaminated Land Audit
Project number: SY180068.01

Dear Chetan

Subject: Interim Audit Advice (IAA) #37 for Statutory Site Audit SY11/ SY180068.01. Final endorsement of WSP Memo: 'Sub Area Crescent Civil (east) - Remediation Approach'

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure Approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 and E185.

1 PURPOSE

This IAA provides the JHCPB JV with interim advice as part of statutory site audit No. SY011 – Crescent Civil – East, being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land (CLM) Management Act. The advice forms part of the statutory site audit for the WestConnex Stage 3B Project[1].

This IAA specifically provides the Auditor's endorsement of the WSP decument titled:

- WSP (2022), 'Sub-Area Crescent Civil (east) – Remediation Approach', Ref: PS117368-CLM-MEM-003 Rev5, dated 2 December 2022.

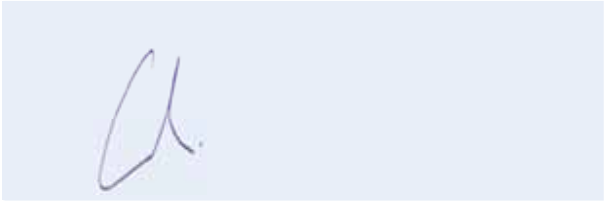
Endorsement of this Remediation Approach Memo (Rev5) is provided following the Auditor's review and comments on the previous drafts: Rev1 to Rev3 versions of the memo. Epic notes that revision from Rev3 to Rev5 has been undertaken to include the sustainability hierarchy to the remediation strategy selection. The Auditor considers that all comments have been addressed and provides endorsement of the Remediation approach memo.

The Auditor has noted that the project has made the decision not to develop a standalone Remediation Action Plan. It is expected that a detailed Validation Report will be prepared following remediation works in accordance with NSW EPA Reporting guidelines, which will also support the development of an LTEMP for the site.

[1] *This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.*

On Auditor review and finalisation of the LTEMP and Validation Report it is intended that a Site Audit Statement will be prepared by the Auditor.

Kind regards



Gary Bagwell, Principal Environmental Engineer, for

Brad May
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17 March 2022
Project Number: SY180068.01

Mr Chetan Jayaram
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JHCPB JV
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Re: Interim Site Audit Advice #46 (IAA#31) for Statutory Site Audit SY011/ SY180068.01. Review of WSP UST Sampling and Validation Report - Sub-site Area City West Link for WestConnex Stage 3B Rozelle Interchange

Dear Chetan,

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure Approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 and E185.

1 PURPOSE

This IAA provides the JHCPB JV with interim advice as part of Statutory Site Audit No. SY014 being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land Management (CLM) Act. The advice forms part of a statutory site audit for the WestConnex Stage 3B Project[1].

This interim advice report specifically addresses the Auditor's review of the Detailed Site Investigation Report (DSI) report titled:

- City West Link UST – Sampling and Validation Report, Rozelle Interchange – Sub-Site Area City West Link, Ref: PS117368-CLM-REP-CWL UST_RevD, 28 February 2022.

This review has been carried out following the Auditor's review of the RevA, RevB and RevC versions of the above report. The Auditor's final review of the RevC version of the report was documented in an email provided to Chetan Jayaram of JHCPB, dated 25 February 2022. WSP subsequently provided RevD as the final document.

[1] This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.

Based on the Auditor's review of the WSP City West Link UST – Sampling and Validation Report, the Auditor is now able to endorse this report.

Regards,

Brad May
Director / Principal Environmental Engineer / NSW and Qld Accredited Auditor

Enclosures:
CC: Table 1: IAA #31 – DSI Review Comments, Attachment A: Data Reliability Assessment

Table 1 – IAA #31 for Statutory Site Audit SY014/SY180068.01. Review of WSP Detailed Site Investigation - Sub Site Area – Iron Cove Link/ IC01

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	ISSUES TO BE ADDRESSED				
1.1	Include intended site use in this section	Added to Section 1.1 "*The future intended use of the site is public open space comprising a widened footpath and landscaped areas.*"	Noted. Closed.	-	-
2.0	Site background should include a review from available sources (including on-line and previous reports) of Acid Sulfate Soil risk for the site.	Additional Section 2.5 Acid Sulphate Soil added. Section provides detail of Inner West Council and ASRIS mapping. ASS testing was not undertaken by AECOM at nearby sample locations.	Noted that area has been mapped as Class 5 ASS risk. This section could include interpretation of Class 5 risk apart from only stating that ASS investigation was not undertaken in the investigation. Consultant should assess whether ASS investigation is required. Note that Class 5 is land not mapped as having probability of having ASS risk but is within 500m of Class 1 – 4. Is any activity proposed that is likely to alter groundwater levels on the site?	Section 2.5 updated	Noted. Closed.

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	Council Records: Site background review carried out to date does not appear to have included sourcing Council records for the site, including Planning Certificate under Section 10.7 (5) and (2) of the EP&A Act and /or request for information under GIPA Act. These records may provide information relating to decommissioning and validation of former UPSS infrastructure associated with historical service station, including whether a validation report exists or any Audit of this work. **Can JHCPB JV or their consultant please carry out these searches.**	A copy of the Planning Certificate under Section 10.7 (5) and (2) of the EP&A Act was obtained by Ramboll. WSP has reviewed the Inner West Council Development Application online resources. A number of DA applications have been lodged for the property however, no associated records or reports were available for review. Council GIPA search was conducted – information provided indicated that the service station was decommissioned and remediated/validated in 1993. Details summarised in Section 2.10 and provided in Appendix L. New Section 2.10 Local Government Information added to report.	Noted. Closed.	-	-

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
2.1, Table 2.1	Include site address (Street, suburb, postcode). The SAQP refers to this site as 212 – 218 Victoria Road, Rozelle NSW 2039 and WSP state that the site has been extended towards Callan Street to include part of 224 Victoria Road, Rozelle, NSW 2039.	Street address added to Table 2.1	Noted. Closed.	-	-
	Include site current owner (assume this is RMS).	Added, site owned by TfNSW.	Noted. Closed.	-	-
	Proposed Construction Activity: If have this information include whether is to be filled/ raised and final landform.	The final proposed landform is lower than the existing ground level. Additional information provided in Table 2.1: — "*Additional excavation in western portion of the site to achieve proposed final cut levels (refer to Appendix J, Cross Section Drawing RIC-HSL-DRG-30-UD-020-423)* — *Installation of a drainage swale*"	Noted. Closed.	-	-

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	Include past and proposed zoning, if known.	Refer to table 2.1, Site is zoned "B2 - Local Centre (Sydney Regional Environmental Plan No. 26 – City West)".	Noted. Closed.	-	-

2.2	If possible, update site observations to include current excavated condition of the site. Include any observations of contamination during inspections, i.e. staining/ odours etc.	The site has been sealed with concrete and/or bitumen. Photograph taken 30/6/20 below shows the extent of excavation works being conducted at this time in the northern portion of the site alongside Victoria Rd.	Partially addressed. Include observation (or absence) of staining, odours or other indications of contamination, at the time of the assessment. If none observed, then should note this.	Section 2.2 updated – No visual or olfactory evidence of contamination (such as staining, odours or asbestos containing material) was noted on the site surface during the February 2020 drilling works or July 2020 trench sampling."	Noted. Closed.

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	Include site boundary conditions.	Detail added to Table 2.1 "*At the time of the investigation the site was secured with temporary construction fencing, gated access was positioned on Victoria Road and Callan Street.*"	Noted. Closed.	-	-

2.7 – 2.10	A summary of Historic land uses is included in Table 3.1, however this is not included in the site history review sections 2.7 – 2.10. Please include. It is noted that Aecom (2016) referred to previous Petrol Service station operations on this site (212 – 218 Victoria Rd). Has WSP carried out any independent verification of service station history and likely location of UPSS infrastructure on the site? Include this research in site history review.	Section 2.13 Additional Site History Review added to report. Additional discussion on UST added to Section 2.9. According to information provided in Universal Business Directories (UBD) from 1950, 1970 and 1991:- — Springside Service Station was located at the site in 1970 and Ampol Service Station was located at the site in 1991 AECOM (2018a) noted an area of patched bitumen in the concrete in the northern carpark which appeared to be the likely location of decommissioned USTs. No vent pipes or evidence of the location of the former fuel dispensing infrastructure was observed. WSP has reviewed the Google StreetMap imagery from 2018 and concur that an area of patched bitumen is visible in the northern car park. The patched bitumen is also visible on the Google StreetMap imagery from 2007 and 2013.	Note Table of Contents needs to be updated to include S2.13. Noted. Closed, assuming this information included in report.	Table of contents updated.	Noted. Closed.

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
		Information from Council GIPA search also added to Section 2.10 – indicates the site was a service station between approx. 1959 to 1993, and was subject to remediation and validation during decommissioning.			
	Include data gap assessment. This should include location(s) of former UPSS infrastructure, given that part of the site had previously been occupied by an Ampol Service Station, however Dangerous Goods search undertaken on 212 – 218 Victoria Rd did not identify any records of petroleum storage on the site. Therefore, layout of storage depots, fuels stored, UST decommissioning method and whether validation was carried out is unknown.	Based on the findings of the Council GIPA search it is considered that the location of former UPSS infrastructure no longer represents a data gap at the site. Figure 7 added showing approximate location former UPSS infrastructure and sample locations.	Noted. Closed.	-	-
3.1 - 3.5	Summary of Previous Investigations: It's not clear from the review whether these reports are specific to the subject site, or apply to the general area, or adjacent sites. Can please comment.	Opening sentence added for each investigation noting whether report relates to subject site, or apply to the general area, or adjacent sites.	Noted. Closed.	-	-

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	It's noted that the ADE (2020) report identified elevated levels of leachable lead in the central northern portion of the site. This material also had TRH (F2 fraction) co-contamination. WSP notes that this material has been removed from site during utilities excavation conducted by JHCPB. The auditor requests that evidence be provided that this contamination has been removed from the site (also see comment under S5.1, Table 5.1).	Material disposal dockets associated with this hotspot attached.	Include the dockets in the report and consultant's assessment that soils excavated from the site have been legally disposed.	Dockets added as Appendix M, Section 3.5 updated.	Noted. Closed.
3.6 (Table 3.1)	Include evaluation of potential offsite sources of contamination, i.e. upgradient service stations (7-eleven and Caltex).	Potential offsite sources added to Table 3.1.	Noted. Closed.	-	-
Table 3.1	COPCs: Due to historic petroleum /chemical storage and risk of fire, PFAS chemicals may have been present in on-site firefighting systems. Please provide further justification for omitting PFAS from COPCs.	Additional justification has been included in Table 3.1. In summary based on the historical site use, no evidence for the use of PFAS at the site has been noted. In consideration, the potential risk to future receptors associated with potential PFAS impacts at the site is considered to be low.	Noted. Closed.	-	-

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
4.0	Include discussion as to which species field screening is applied, and limitations.	-	It might be obvious (to contamination consultants), but please include reference that screening is carried out to identify samples with potential volatile organic contamination.	WSP presume this comment pertains to field screening of soil samples using a PID and is to be presented in Section 5 (methodology). Section 5.1 + Table 5.2 (field screening) updated – Soil samples were screened in the field using a calibrated photo-ionisation detector (PID) as an indicative measure to determine the potential for VOCs to be present and to assist in the selection of soil samples for analysis.	Noted. Closed.

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
5.1, Table 5.1	Sampling Design and Rationale: States that BH01 and BH02 is targeting location of former UPSS infrastructure. Similarly, GW02 and GW03 are stated to be cross gradient and down-gradient of former UPSS infrastructure. However, this report or previous assessments have not established the location of former UPSS infrastructure. Please explain the source and veracity of UPSS location information referred to here. (see comment above S2.7 – 2.10)	AECOM (2018a) noted an area of patched bitumen in the concrete in the northern carpark which appeared to be the likely location of decommissioned USTs. No vent pipes or evidence of the location of the former fuel dispensing infrastructure was observed. WSP has reviewed the Google StreetMap imagery from 2018 and concur that an area of patched bitumen is visible in the northern car park. The patched bitumen is also visible on the Google StreetMap imagery from 2007 and 2013.	Included in S2.9. Closed.	-	-

	ADE Waste Analysis and Classification Report No: WCX-08-17515-WAC149, dated 15/06/2020, identified the following elevated contamination levels at test pit location TP4: ▪ Pb = 2950 mg/kg at TP4 (0.8m bgl); ▪ Pb = 646 mg/kg at TP4 (0.5m bgl); ▪ TRH (C10 – C16, F2) = 72 – 884 mg/kg at TP4 (2.0-2.4m bgl). Can WSP comment on whether any of the locations listed in Table 5.1 were carried out to target the above contamination, particularly to identify whether this was a larger hot-spot of contamination remaining on site, requiring assessment. Previous comment is noted that this material has been removed from site during utilities excavation conducted by JHCPB. However, based on	The WSP soil investigation was completed prior to this ADE waste classification (ADE site works conducted in May 2020). As such, none of the WSP locations have targeted the hotspot reported by ADE. A minor utility trench which was open at the time of the WSP investigation (February 2020) was included in the WSP soil sampling programme (samples TR1 to TR3). WSP agree with the Auditor that sampling locations TR1 to TR3 are remote from the ADE TP4 location. Additional excavation wall samples were collected on 9th July 2020 from an open excavation (excavated to install a major utilities corridor). These samples were collected to target potential contamination associated with former UST infrastructure, given the uncertainty on the former UST location. Samples were analysed for TRH, BTEXN, PAH, VOCs, SVOCs, OCPs, OPPs, phenols[1] and asbestos. Analysis for metals was not conducted.			

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
	WSP Figure 3, the services trench appears to be remote from ADE TP4 location. The Auditor requests that the trench, trench validation locations and (ADE) TP4 be plotted on the same Figure and comment made regarding the current status of this contamination (also noting WSP note 3 that metals were omitted from the services trench analytical suite).	TP4 added to Figure 7. Material disposal dockets associated with this hotspot attached. The ADE assessment comprised the collection of soil samples from five initial test pits, followed by an additional seven delineation test pits. In total 20 samples of Horizon A material were analysed for lead. Concentration were below the HIL for public open space land use with the exception of TP4 and TP4W2(0.5). Elevated concentrations of TRH were recorded within Horizon B soil at TP4 (2.0 to 2.4mBGL) at concentrations below HSL criteria for public open space. In total 13 samples of Horizon B material were analysed for TRH, concentrations were below the laboratory LOR in 10 of the 13 samples. Based on the above, WSP conclude that the impact recorded by ADE at TP4 is not part of a larger hot-spot.			

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
5.2, Table 5.2	Can comment on whether groundwater wells were gauged for Standing Water Level (SWL) and potential presence of Non-Aqueous Phase Liquid (NAPL).	Comment added to Table 5.2.	Noted. Closed.	-	-
	Can comment on whether groundwater wells were surveyed and method used.	Comment added to Table 5.2.	Noted. Closed.	-	-
5.2	Sampling methodology doesn't adequately discuss sample collection methodology, at surface and at depth (auger). Include.	Additional soil sample collection methodology added to Table 5.2.	Noted. Closed.	-	-
7.0	It would be useful if this section included a summary of previous results.	Refer to new sections 7.4 and 7.7.	Noted. Closed.	-	-
9.1	Field QA/ QC states that a trip blank and spike sample was included, however results are not discussed. Include.	Refer to Table 9.1. "*One equipment rinsate blank was collected during both the borehole drilling and groundwater sample collection. A trip blank was transported with each batch of samples sent to the laboratory. The analytical results for the rinsate blank and trip blank samples were below laboratory detection limits.*"	Noted. Closed.	-	-
	Include duplicate/ sample splitting technique.	Added to table 5.2.	Noted. Closed	-	-

10.	Include discussion of potential data gaps in the assessment, particularly addressing no site assessment data in the south east of the site, where there was an existing building (at time of the assessment).	New Section 10.1 added.	Noted. Include how this data gap is proposed to be addressed.	Section 10.1 updated. It is noted that the inaccessible area is less than the hotspot diameter adopted for the assessment (NSW Sample Design, Table A). For a site of approximately 1,200 m2 (based on 7 sample locations, average 12m distance between locations). The absence of soil sampling data in this portion of the site is not considered to affect the outcomes of this assessment based on the following: — Additional excavation in this portion of the site is required in the future to achieve proposed final cut levels (refer to	Noted. Closed.

				Appendix J, Cross Section Drawing RIC-HSL-DRG-30-UD-020-423), which comprises a swale drain. Construction of the swale drain will also result in capping of existing in-situ soils, which will remove direct contact with material in this portion of the site; — No significant, widespread soil impacts were identified in fill material at the site. It is noted that the lead hotspot identified by ADE (2020) was delineated to the central-northern portion of the site; and — The location of former UPSS and associated infrastructure has been identified	

Report Section	Auditor Comment	WSP Response 26 May 2021	Auditor Response 30 Jul 2021	WSP Response 12 Aug 2021	Auditor Response 10 Sep 2021
				and is not located in close proximity to this area of the site. In addition, an unexpected finds protocol is to be followed for the proposed excavation in this area (as per Section 10.2).	

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16 January 2023

Chetan Jayaram
Environmental Advisor
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By email: chetan.jayaram@rozelleinterchange.com.au

Project name: WestConnex Stage 3B Rozelle Interchange Audit
Project number: SY180068.01

Dear Chetan

Subject: City West Link – IAA#43: Final Review of WSP Rev E - Site Status and Hydrogeology Report – Interim Audit Advice

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure Approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 and E185.

1 PURPOSE

This IAA provides the JHCPB JV with interim advice as part of Statutory Site Audit No. SY011 being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land Management (CLM) Act. The advice forms part of a statutory site audit for the WestConnex Stage 3B Project[1].

This interim advice report specifically addresses the Auditor's final review of revision E of WSP Detailed Site Investigation (DSI: Site Status and Hydrogeology Report) addressing the City West Link precinct, titled:

- WestConnex Stage 3B – Rozelle Interchange Sub-Site Area – City West Link – Site Status and Hydrogeology Report. Dated 31/10/2022. Ref: PS117368-CLM-REP-CWL RevE.

Preparation of the DSI has been informed by previous assessments conducted of the City West Link area. The auditor considers that previously raised comments following review of the previous versions of this report have been satisfactorily addressed and that RevE is the final report. The auditor also considers that any residual comments from IAA#34 and IAA#35 have been addressed within the above document.

However, the Auditor also reiterates the following information requirements for preparation of the Site Audit Report/ Site Audit Statement (SAR/ SAS) for this area:

[1] This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.

1. JHCPB documented evidence for fill (i.e tunnel spoil) placement on the CWL site, preferably including environmental quality (VENM/ RRO), source, destination and volume
2. JHCPB to provide waste classification and disposal information, noting lawful re-use or disposal of all materials from the site (quantity removed, dates, destination, tip dockets), indexed to the relevant ADE waste classification reports.

Should you have any questions regarding the advice provided, please contact Brad May or the undersigned.

Yours sincerely

Gary Bagwell, Principal Environmental Engineer, for

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Principal Environmental Engineer/ NSW and Qld.
Accredited Auditor

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12 July 2021
Project Number: SY180068.01

Mr Chetan Jayaram
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Re: Interim Site Audit Advice #34 for Statutory Site Audit SY011/ SY180068.01. Review of WSP Detailed Site Investigation: Sub Site Area - Crescent Civil for WestConnex Stage 3B Rozelle Interchange

Dear Chetan,

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure Approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 and E185.

1 PURPOSE

This IAA provides the JHCPB JV with interim advice as part of Statutory Site Audit No. SY011 being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land Management (CLM) Act. The advice forms part of a statutory site audit for the WestConnex Stage 3B Project[1].

This interim advice report specifically addresses the Auditor's review of RevC of the Detailed Site Investigation Report (DSI) report titled:

- WSP (2021) 'WestConnex Stage 3B – Rozelle Interchange – Sub Site Area – Crescent Civil – Detailed Site Investigation, Ref: PS117368-CLM-REP-Crescent Civil Rev C, dated 1/06/2021.

A Sampling Analysis and Quality Plan (SAQP) was previously prepared for the site by Ramboll Australia Pty Ltd (Ramboll), which was documented as Appendix O and P to the 'overarching' SAQP (Ramboll, August 2019, Rev D2). The review carried out for the SAQP identified the IC01 site as being 'moderate risk' due to a historical use as a timber yard, timber handling and mill area, concrete construction, and maritime services at the site, therefore a DSI of this site was required. WSP subsequently completed a review of the Ramboll SAQP to produce an update Site Work Plan. The Site Work Plan was reviewed by the Site Auditor prior to the completion of site investigation works.

[1] *This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.*

An initial DSI report was prepared by WSP (Ref: PS117368-CLM-REP-Crescent Civil RevB, dated 5/ 03/2021), which was reviewed by the Auditor (Ref: SY180068.01_SY11_IAA#34, dated 7/05/2021).

2 SPECIFIC DSI COMMENTS

Specific comments on the DSI are provided in the attached **Table 1**, detailing areas that are required to be addressed in the next revision of the DSI, to allow the Auditor endorsement of the report.

Regards,

Brad May

Principal Environmental Engineer / NSW and Qld Accredited Auditor

Enclosures:

CC: Table 1: IAA #34 – DSI Review Comments, Attachment A: Data Reliability Assessment

Table 1 – IAA #34 for Statutory Site Audit SY011/SY180068.01. Review of WSP Detailed Site Investigation - Sub Site Area – Crescent Civil Site

Report Section	Auditor Comment	WSP Response	Auditor Response
Section 1.5	Incorrect dates are provided for NSW DEC (missing) and assessment of hazardous ground gases. Please update accordingly.	Section 1.5 updated.	Closed.
Table 2.1	Legal identification - Auditor review of the site area indicates Lot 20 DP791554 may be within the site boundary. Can the consultant please confirm whether this property lot is within the site and update the appropriate report sections if required.	Lot 20 DP 791554 is located within the site boundary – Table 2.1 & 3.3 updated.	Closed.
	Proposed site use – the final proposed landform figure has not been attached in Appendix A. Can the consultant please include this figure in the updated report.	Proposed landform figure added.	Closed.
Section 2	The site boundary conditions are not discussed. This is required to assess potential offsite migration of site contamination including the influence of tidal flux.	Table 2.1 updated.	Closed.
Table 5.1	The table refers to locations BH01-BH06. These locations do not appear on consultant figures or lab results. Please confirm the locations and appropriate descriptions.	BH01-BH06 not advanced. These details pertain to BH07 to BH09 – Table 5.1 updated accordingly.	Closed.
5.1	Sampling rational is based on ADE waste classification however these locations are not depicted on a summary figure with dates etc. Please indicate waste sampling on summary figures and exceedances. Date required critical review by the consultant to justify suitability in the use for the DSI	Figures 8 + 9 added showing locations of ADE data and human health criteria exceedances. ADE data review added to Section 7.4 + 9.3.	Table 7.2 not complete. Last row refers to a report but no relevant sample locations have been provided. Please also include the date (month, year) in the table for when samples were collected.

Report Section	Auditor Comment	WSP Response	Auditor Response
Table 5.3	The consultant states that boreholes were completed using a solid stem auger. It should be noted that auger drilling is not recommended for the sampling of volatile organic compounds. Groundwater well installation in alluvium may also be comprised if using a solid stem auger as hole collapse can prevent the installation of a gravel pack surrounding the well screen, leading to increased suspended solids. Please discuss and outline implication for data reliability	No significant borehole collapse was recorded during well installation. Table 5.3 updated.	Closed.
	Sample splitting techniques are required to be stated.	Table 5.3 updated.	Closed.
Section 6	As per NSW EPA (2017) Guidelines for the NSW Site Auditor Scheme (3rd Edition) *The site auditor must check that the potential for hazardous ground gases has been adequately assessed*. Can the consultant please note how the assessment of hazardous ground gases has been completed.	Section 5.1 updated – based on desktop and field information, investigation of potential hazardous ground gases is not considered to be required as part of this DSI	Closed.
Section 7.4	As the consultant is adopting data used by ADE for the assessment of in situ soils, the report would be improved by including all assessed locations in a single figure. A statement on the reliability of data adopted from ADE should also be included in the report.	Figures 8 + 9 added. ADE data review added to Section 7.4.	Closed.
Table 7.3	The consultant has not included the ANZG (2018) Marine ecosystem criteria for PAH species. The auditor notes that there are several potential exceedances of this criteria, which will need to be evaluated in the report. It should also be noted and discussed if the laboratory limit of reporting used in the assessment is above the site criteria.	PAH criteria added to groundwater results table (Appendix E) and Section 7.6 + 8.2 updated. Given unknown reliability of these values, the results will be reviewed in conjunction with the surface water sampling data to be obtained from Rozelle Bay and reviewed in the proposed site status and hydrogeology report. The criteria exceedances have not been included in Table 7.4 as the values are of unknown reliability. Table reference also updated from Table 7.3 to 7.4.	To be included in the hydrogeology report. Closed.

Report Section	Auditor Comment	WSP Response	Auditor Response
Table 8.1 and Section 10	The table dismisses the elevated concentrations of PAH detected in groundwater wells in GW06 and GW05b as localised with minimal potential impact, however they may represent a point source of contamination in close proximity to the surface water receptors. Further evaluation of the elevated detections and potential risk to receptors (including marine ecosystems) in the adjacent Rozelle Bay is required. The Auditor notes that elevated concentrations of PAH have been detected in soils at GW06. An evaluation of the leachability of PAH at this location, and the monitoring well construction should be considered. The TCLP analysis undertaken during waste classification analysis were not in the vicinity of the potential groundwater plume and may not be relevant.	Table 8.1 and Section 10 updated noting that groundwater the results will be reviewed in conjunction with the surface water sampling data to be obtained from Rozelle Bay and reported separately in the proposed site status and hydrogeology report. The guideline values represent target concentrations within the surface water resource (of surface water body) and are used as a conservative trigger value for groundwater in this assessment. WSP note that that six wells have been installed along the site boundary with Rozelle Bay. Surface water quality within the receiving urban waterways and bays are currently affected by a range of point and diffuse sources of pollutants which has led to contamination of sediments. As such, the PAH detected in groundwater at GW06 and GW05b are considered minor given that the delineated extent of the point source is unlikely to represent a significant risk given that the receiving environment is a tidal bay. The material type and relative concentrations of benzo(a)pyrene in ADE samples from TP3 and TP8 were generally consistent with those reported during the current investigation and as such, the leachability results for these samples are considered likely to be representative of the material identified in WSP locations GW05b and GW06. WSP further note that site area in the vicinity of GW06 and GW05b has been entirely encapsulated with hardstand pavement (road and footpath), as such leaching of contaminates via rainfall infiltration will not occur in the future.	Noted. To be included in the hydrogeology report. However please include the information provided in the third paragraph (highlighted) in the report. Once updated, closed.

Report Section	Auditor Comment	WSP Response	Auditor Response
Section 8.2	The consultant does not provide a description of field observations during groundwater sampling. Visual and olfactory observations during development and sampling are potentially critical sources of information. Groundwater development field sheets including the volume removed from each specific well are also required.	Groundwater field observations summarised in Table 7.3. Well development sheets added to Appendix D.	Closed.
8.2	Groundwater needs to be considered across the entire Crescent area and inclusion of wells in the adjacent site areas also required. The groundwater flow and hydraulic gradient should be developed not just utilising the onsite wells but location upgradient and expected receiving water levels. Tidal influence should be considered in the sampling and analytical data review.	There does not appear to be groundwater connectivity between the wells at Buruwan Park and Crescent West, noting the presence of a shallow rock ledge in the southern areas of the sites. Given the proximity of Rozelle Bay, it is considered reasonable to presume that groundwater flow will be toward the east, with associated tidal influences affecting groundwater elevation. Further details pertaining to groundwater/hydrogeology will be presented in subsequent site status and hydro report for the combined areas.	To be included in the hydrogeology report. Closed.
Appendix B	All figures should include details on dates for each sample location and include the areas of Waste classification with relevant ADE references.	Dates added to Figure 2a.	Closed.
	A groundwater figure should be developed to include all surrounding wells that can be used to generate a more effective view of the hydrogeological profile for the site.	As above re: Section 8.2.	To be included in the hydrogeology report. Closed.
	A detailed cross section of the site should be developed once the borelogs have been reviewed to demonstrate the CSM and hydrogeological aspects. Tidal influence, and ultimately contaminant migration potential to the receiving environment developed.	Will be presented in subsequent site status and hydro report for the combined CWL areas.	To be included in the hydrogeology report. Closed.
Appendix C	Borelogs do not appear to have been reviewed, and include locations with unlabelled fill, natural soils over fill horizons and no standing water level. Can the consultant please ensure all borelogs are reviewed appropriately and reissued to allow an informed review of the raw site information.	Borelogs updated as required.	Closed.

Report Section	Auditor Comment	WSP Response	Auditor Response
	Monitoring wells GW1, GW06 and GW07 have been screened across fill and natural soils. The consultant should assess this data reliability issue, and consider the representativeness and reliability of the data collected.	The screened intervals at wells GW06 and GW07 installed by WSP were based on field encountered moisture conditions and considered the potential variability in groundwater elevation due to tidal influences. Monitoring well GW01 was generally screened within a single lithology described as silty sand fill, with the toe of the well extended marginally (approximately 0.2 m) into a silty clay horizon. Monitoring well GW06 was screened within fill material and GW07 was screened across a fill and siltstone lithology. The PRM site wide hydrogeology report shows that the shallow and deep aquifer units are unconfined across the site and given the tidal influence in the vicinity of GW07, the well was screened above the bedrock given the potential variability in groundwater elevation due to tidal influence. Section 5.1 updated.	Closed.
	The consultant notes the impact of tide during well installation however it is not discussed in the context of analytical results and potential contaminant migration. Further sampling events are likely required to evaluate the groundwater surface water interaction, influence of tide and potential offsite migration of contamination and contaminant flux.	A groundwater data logger has been installed by JHCPB in the I&M monitoring well which is screened in the deeper alluvium aquifer. Groundwater fluctuations between the period 2 February 2020 to 1 October 2020 are presented in Appendix D. The data shows a daily variation in groundwater levels between 0.2 m and 0.3 m (tidal influence). During the groundwater monitoring conducted 1 September 2020 and 16 October 2020, significantly elevated EC readings were recorded which confirms that the shallow groundwater aquifer is in continuity with the tidal flow.	This discussion should be included in the report, please update. If this discussion is to be included in the hydrogeology report, this comment may be closed.

Report Section	Auditor Comment	WSP Response	Auditor Response
Appendix D	Can the consultant please provide a cross section of the site and present a graphical CSM of the site layout of the final site layout including fill removed offsite following waste classification sampling.	Cross-section CSM will be presented in subsequent site status and hydro report for the combined City West Link (CWL) areas. JHCPB to provide information pertaining to fill removal.	To be included in the proposed site status and hydrogeology report. Closed.
Appendix G	Please include Eurofins laboratory report 724158 (duplicate sample QA01A).		Once updated, closed.
Appendix H	The WSP report states that each piece of equipment was calibrated by the rental company prior to use however no calibration certificate was provided for the water quality metre. In addition calibration certificates were provided for the PID and Interface meter however calibration was due for each piece of equipment prior to the completion of the investigation. Please include updated calibration certificates where relevant. (Ex. Oil/water interface meter for groundwater sampling).		Once updated, closed.
Abbreviations List	Additional comment – please include an abbreviations list		

24 November 2021
Project Number: SY180068.01

Mr Chetan Jayaram
Environmental Advisor
JHCPB Joint Venture
L4, 410 Concord Road
Rhodes, NSW 2148

Re: Interim Audit Advice #35 for Statutory Site Audit SY011/ SY180068.01 - Review of WSP Detailed Site Investigation - WestConnex Stage 3B Rozelle Interchange Subsite Area – Crescent West (Burawan Park) – RevC

Dear Chetan,

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure Approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 and E185.

1 PURPOSE

This IAA provides the JHCPB JV with interim advice as part of Statutory Site Audit No. SY010 being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land Management (CLM) Act. The advice forms part of a statutory site audit for the WestConnex Stage 3B Project[1].

This interim advice report addresses the Auditor's review of the report titled 'WestConnex Stage 3B – Rozelle – Interchange -Sub Site Area – Crescent West (Burawan Park), Detailed Site Investigation' (Ref: PS117368-CLM-REP-BuruwanPark Rev C), dated 16 November 2021, prepared by WSP. This report has been updated following the Auditor's last round of comments on WSPs Rev B report, provided on 10 November 2021 (Epic Ref: SY180086.01 _IAA#35_BurawanParkDSI_RevB_WSP).

We consider that the remaining Auditor's comments made on RevB have now been adequately addressed or can be addressed in WSPs City West Link (CWL) Site Status and Hydrogeology report, which is currently under Auditor review. Therefore, Rev C of the Buruwan Park DSI may be considered as final. The attached Table 1 records how the comments have been closed out, or are to be addressed in the CWL Site Status and Hydrogeology report.

[1] This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.

Should you have any questions regarding the above or the attached Table, please contact the undersigned.

Regards,

Brad May

Director / Principal Environmental Engineer / NSW and Qld Accredited Auditor

Enclosures: Table 1 – IAA 35B

CC:

Table 1 – IAA #35 for Statutory Site Audit SY011/SY180068.01. Review of WSP Detailed Site Investigation - Sub Site Area – Crescent West (Burawan Park)

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 1.4	It is stated that surveying of each monitoring well was completed by a surveyor supplied by JHCPB. Can the consultant please include the survey data in relevant sections of the report.	Survey data added to Appendix I gauging table.	Noted	-
Section 1.5	Incorrect dates are provided for NSW DEC (missing) and assessment of hazardous ground gases. Please update accordingly.	Section 1.5 updated.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Table 2.1	Site identification details should include current owners and GPS co-ordinates of the site	Table 2.1 updated accordingly.	Noted	-
Section 2	The site boundary conditions are not discussed. This is required to assess potential offsite migration of contamination including the influence of tidal flux.	Section 2.2 updated.	Discussion regarding tidal flux and Whites Creek still absent	Additional text added to Section 2.5 and Table 7.2. **AUDITOR RESPONSE (24/11/21):** Noted, this is now discussed.
Section 2.2	The site inspection does not include all information specified in the ASC NEPM Field Checklist.	WSP considers the relevant items in the ASC NEPM Field Checklist have been addressed throughout Section 2, noting that the site is an active construction site.	No comments on odours or staining, no comments on vegetation and phytotoxicity, no discussion of surface water bodies within site footprint (i.e. Whites Creek), no comment on electrical transformers or services. Please ensure audited reports are compliant with appropriate guidelines and present a complete conceptual site model. Comments can be addressed in the final status report for CWL.	Additional text added to Section 2.2. **AUDITOR RESPONSE (24/11/21):** Noted, now addressed. However a graphical CSM is included in the CWL status report.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 2.3	The Google Earth data and site topography during ADE sampling has a difference of up to 4 m. Can the consultant please confirm whether > 4 m of soil has been removed. A reference for the ADE site levels should also be provided. It is also noted that the site levels have increased by 400 mm between the ADE sampling and GW02 survey. Can the consultant please confirm if the site level has been raised.	Clarified based on JHCPB site survey – 1.4 to 4mAHD across the majority of the site (noting elevated portion to the south adjoining Sydney Light Rail at approx. 8mAHD). Surface level at ADE wells measured at 3.3 to 3.6mAHD. Section also added to Appendix K. Site level at GW02 is naturally elevated above the remaining site area based on upward slope toward the south due to higher elevation of Sydney Light Rail. GW02 is located on this slope.	Auditor notes this is explained in further detail in section 7.4	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 2.4	Should also include the soils observed within previous intrusive investigations, and whether they correlate with the identified geology maps	Section 2.4 updated.	Noted	-
Section 2.7	Aerial photograph review would be improved if the specific site outline was shown, not just the project outline adopted from earlier reports.	Noted. Aerial imagery was purchased during previous Phase 1 investigations.	Aerial imagery is now available free via the NSW Spatial exchange. The PDF from the Phase 1 investigations can also be edited to display relevant site. Please include as part of final CWL status report.	Noted – site-specific historical aerial photographs to be added to revised CWL status report. **AUDITOR RESPONSE (24/11/21):** Not included in RevA of the CWL Site Status and Hydrogeology Report

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 2.8	Please provide results from the SafeWork NSW database search when received.	Section 2.8 + App J updated. It is noted that SafeWork NSW provided Hazardous Chemicals Register information pertaining to a portion of the Rozelle Rail Yards site (licence # 35/023859, located approximately 250 to 300 north-east of the site, former Lot 1 The Crescent, corner of Victoria Road and The Crescent). Given that the identified hazardous chemicals storage information is not associated with the site, these details have not been included as part of this DSI and will be reported separately as part of the Rozelle Rail Yards investigation.	Noted. Can the results of the search still be provided in the appendix to avoid confusion for future readers of the report.	SafeWork results added to App J. **AUDITOR RESPONSE (24/11/21):** Noted, included.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 2.10	Historical titles are only provided for a single property lot at the site. Please justify the omission of remaining lots.	The Phase 1 completed by Ramboll for the SAQP only included historic search for this single property. Given that a Universal Business Directories (UBD) from 1950, 1970 and 1991 is available for the site (LotSearch Environmental Risk and Planning Report), WSP consider that sufficient information on historic use has been obtained to inform the site history.	Noted. Please include explanation in report.	Footnote added to Section 2.10. **AUDITOR RESPONSE (24/11/21):** Noted, included.
Section 2.11	The business records do not match the land uses provided in historical titles. Discussion of the discrepancy should be included	Lot 2 DP 827708 (for which title certificates were reviewed) pertains to the north-eastern portion of Whites Creek channel, and as such, no recorded businesses available for this lot. Footnote added to Section 2.10 noting the above.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 3	Significant volumes of waste have been classified at the site, however it is unclear how much waste has been removed, and if the adopted data is relevant to the current site level. The report requires a cross section indicating the depths of stratigraphy, samples and areas removed.	Cross-section attached as Appendix K and Figure prepared indicating material removed.	Noted	-
Section 3.2	It is stated that laboratory results did not report results above criteria however it is not stated whether this is recreational open space or commercial industrial criteria	Results reported below open space and commercial/industrial criteria. Section 3.2 updated accordingly.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 3.5	Can the consultant please confirm the analytes tests in this assessment	Section 3.5 updated. Test pit logs, tables and location figure added to Appendix D.	Noted	-
Section 3.6	It is noted that Whites Creek is within the site boundary presented in figures, however potential contamination of surface water or sediments is not discussed. The consultant should include a discussion on the sediments in Whites Creek and why these have not been assessed or do not require further assessment.	The Whites creek is a concrete lined channel (integrity confirmed during recent site construction activity). Whites Creek is currently being widened by JHCPB with a new concrete wall installed. Given the concrete construction Whites Creek is not a receptor for groundwater migration directly from the site. Whites Creek channel construction works added to proposed final landform.	Potentially contaminated sediments are a contaminated media, not a receptor. Are potentially contaminated sediments still present in the concrete lined channel? Can WSP confirm that the concrete wall is a tanked structure without joints? Information can be provided in the final CWL status report.	Additional design and construction information requested from JHCPB will be provided in the Site Status report. **AUDITOR RESPONSE (24/11/21):** It does not appear that this information request has been addressed in RevA of the CWL Site Status and Hydrogeology Report.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Table 5.1	Sample locations in the table are referenced by WACXXX while figures refer to dates. Can the consultant please ensure consistency between figures and the report. Suggest all waste classification areas are shown as polygons on a new figure.	Figure 3 updated to include WAC reference. Figure 7 added showing ADE waste classification areas.	Noted	-
Section 5.2	Please confirm whether the sampling methods refer only to WSP or ADE. It is noted that the majority of data has been collected by ADE, and an assessment of their sampling methods and standard operating procedures should be included.	Methodology as undertaken by WSP – wording added to Section 5.2 to clarify. Comments re: ADE data reliability added to Section 7.4 + 9.3.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Table 5.3	It is stated that all of the newly constructed wells were developed. Can please confirm whether that includes the wells previously installed by ADE.	WSP developed GW01 to GW03 – Table 5.3 updated accordingly and development sheets added to Appendix I.	Noted	-
	Please confirm whether the four groundwater monitoring events were completed by ADE or WSP	GMEs completed by WSP – Table 5.3 updated accordingly.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 6	As per NSW EPA (2017) Guidelines for the NSW Site Auditor Scheme (3rd Edition) *The site auditor must check that the potential for hazardous ground gases has been adequately assessed*. Can the consultant please note how the assessment of hazardous ground gases has been completed.	Given that no apparent current or historical sources of hazardous ground gases were identified during the historical data review, observations indicative of potential hazardous ground gases were not identified during field investigations (such as putrescible materials, odours, etc.) and the absence and/or low detection of volatile COPCs in soil and groundwater at the site (WSP and previous investigations), it is considered that investigation of potential hazardous ground gases is not considered to be required as part of this DSI. Text added to Section 5.1.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 7.1 Appendix F	Borelogs are only provided for the four monitoring well locations, despite data from 33 borehole locations included in the assessment. Can the consultant please provide all relevant borehole logs. If borelogs are unable to be provided a comment on the completeness of the dataset, and implications on reliability and representativeness of the data will need to be evaluated.	Borelogs for ADE WAC169 in Appendix D. Borelogs for ADE WAC208 + WSP 2020 added to Appendix D. Test pit logs for WAC223 and WAC236 not provided in waste classification letters.	Noted. Please include comment in body of report regarding WAC223 and WAC236 and evaluate any impact on data reliability.	Text added to Section 7.4. **AUDITOR RESPONSE (24/11/21):** Noted, included.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Table 7.3	The consultant has not included the ANZG (2018) Marine ecosystem criteria for PAH species. It should be noted and discussed if the laboratory limit of reporting used in the assessment is above the site criteria.	Section 7.6 + 8.2 updated. Given unknown reliability of these values, the results will be reviewed in conjunction with the surface water sampling data to be obtained from Rozelle Bay and reviewed in the proposed site status and hydrogeology report. PAH criteria for anthracene also added to groundwater results table (Appendix G)	Noted. Will await surface water data in future report?	Surface water data presented in CWL status report. **AUDITOR RESPONSE (24/11/21):** Noted, surface water results for Rozelle Bay included in RevA CWL Site Status and Hydrogeology Report.
Section 8	The consultant states that some areas of the site will be assessed as HIL C while others HIL D. Can the consultant please provide a graphical representation of this, with an overlay of the future site plan to allow an evaluation of future exposure pathways.	Figure 8 added.	Noted. HIL C/ HIL D locations not indicated.	Figure 10 added. **AUDITOR RESPONSE (24/11/21):** Noted, this Figure generally corresponds with the Landscaping Plan. .

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 8.2	Groundwater needs to be considered across the entire Crescent area and inclusion of wells in the adjacent site areas also required. The groundwater flow and hydraulic gradient should be developed not just utilising the onsite wells but location upgradient and expected receiving water levels.	There does not appear to be groundwater connectivity between the wells at Buruwan Park and Crescent West, noting the presence of a shallow rock ledge in the southern areas of the site. Given the proximity of Rozelle Bay to the Buruwan Park site, and in consideration of available groundwater elevation data, it is considered reasonable to presume that groundwater flow will be toward the east. Further details pertaining to groundwater/hydrogeology will be presented in subsequent site status and hydrogeology report for the combined areas.	Noted, will await hydrogeology report to evaluate.	**AUDITOR RESPONSE (24/11/21):** To be addressed in the CWL Site Status and Hydrogeology Report.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Section 9	The consultant has only included an evaluation of WSP QA/QC. A detailed review of ADE data usability is required if this is to be the basis of the report, with particular discussion of duplicate analysis and frequency, completeness of data and implications on the representativeness of the dataset. It should also be made clear whether the data relates to soils currently on site, or whether these have already been removed.	Comments re: ADE data reliability added to Section 7.4 + 9.3. Confirmation of in-situ soils will be presented in subsequent site status and hydrogeology report for the combined areas. Note added to Section 7.4 - Based on survey data provided by JHCPB, the majority of material classified by ADE has been removed from the site, with the exception of some material from the northeastern, and central portion of the site. Figure 9 (Appendix A) and cross-section added to of Appendix K.	Noted, will await status report.	**AUDITOR RESPONSE (24/11/21):** Details to be reviewed in Site Status and Hydrogeology report.

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Table 9.1	It is stated that percentage variance can be exacerbated by concentrations nearer the detection limit, however some of the RPD exceedances are >100 x the LOR. Can this discussion please be revised.	All reported concentrations in samples with elevated <10x LOR. As such, it is considered that this discussion is valid.	Noted	-
Section 10	Exceedances of ecological criteria are dismissed because they are not considered to be widespread. This is not appropriate, and the relevance of ecological criteria should be evaluated based on exposure pathways and potential receptors on site.	Section 10 updated. Concentrations of metals were below the site-specific ecological criteria and 95% UCL for benzo(a)pyrene was also below the NEPM (2013) ESL. As such, the historically reported ecological criteria exceedances are not considered to present a potential risk to ecological receptors at the site.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Appendix D	Historical investigation data is presented across multiple tables and it is unclear which consultant has obtained the data. Can all data used for the assessment please be combined into a single table to assist readability and analysis of the report. It is noted that the ADE samples do not provide a sample depths do not appear to have been provided for ADE samples, which questions the representativeness of the data	WSP has not been provided with Excel tabulated data for ADE samples and as such, ADE data is presented as provided in relevant waste classification reports. Cover pages have been added to Appendix D + G for clarity. Note added to Section 7.4 - Based on survey data provided by JHCPB, the majority of material classified by ADE has been removed from the site, with the exception of some material from the northeastern, and central portion of the site. Figure 9 (Appendix A) and cross-section added to of Appendix K.	Noted	-

Report Section	Auditor Comment	WSP Response	Auditor Response	WSP Response
Appendix H	Laboratory certificates are only provided for current WSP data. Certificates for all data assessed in the report are required.	Lab data for ADE reports added to App D.	Lab summary tables are included in the report but it is noted that lab reports are not provided. Can WSP request that JHCPB JV provide a separate submission for the relevant ADE report to be provide to the Auditor for verification.	ADE lab reports not added to App D in error. Lab data for ADE reports now added to App D. **AUDITOR RESPONSE (24/11/21):** Noted.
Figures	It is expected that details cross sections for the larger area are developed using the surrounding wells and develop a clear CSM for the fill material, final landform and configuration and groundwater regime.	Confirmation of in-situ soils including cross sections will be presented in subsequent site status and hydrogeology report for the combined areas.	Noted	**AUDITOR RESPONSE (24/11/21):** Noted to be reviewed in CWL Site Status and Hydrogeology Report.

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27 November 2023

Ciara Moriarty
Environmental Advisor
JHCPB Joint Venture
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RHODES NSW 2138
By email:Ciara.Moriarty@rozelleinterchange.com.au

Project name: WestConnex Stage 3B Rozelle Interchange
Project number: SY180068.01

Dear Ciara

Subject: Interim Audit Advice (IAA) #54 for Statutory Site Audit SY011/ SY180068.01 - Review of WSP Validation Report - WestConnex Stage 3B Sub-Site – The Crescent

1 INTRODUCTION AND PURPOSE

The John Holland and CPB Joint Venture (JHCPB JV) have engaged Brad May as the NSW EPA Contaminated Site Auditor to satisfy the requirement of the infrastructure approval under section 5.19 of the Environmental Planning and Assessment Act (1979) referred to as the State Significant Infrastructure (SSI) 7485 conditions of approval E181 to E185 for the WestConnex Stage 3B (WCX3B) project.

This Interim Audit Advice provides JHCPB JV with advice as part of Statutory Site Audit No. SY011 being undertaken by Brad May, a NSW EPA Site Auditor accredited under the Contaminated Land Management (CLM) Act. The advice forms part of a statutory site audit for the WestConnex (WCX) Stage 3B Project[1]. The purpose of this IAA letter is to document the Auditor's review of The Crescent Civil sub-site validation report, titled:

- WSP: 'Validation Report, WestConnex Stage 3B Sub-Site – The Crescent', Ref:PS117368-Rep-CWL-VAL RevD, 22 November 2023.

The Crescent Civil area is a sub-site of the City West Link (CWL) audit area as shown on the attached **Figure 1**. CWL is a sub-site of the overall WCX project. Contaminated land investigation of the CWL area was required to meet condition E181 of the infrastructure approval which requires a site contamination report to be prepared by a suitable qualified consultant for land suspected or known to be contaminated. Condition E182 further requires that "If a Site Contamination Report prepared under condition E181 finds such land contains contamination, a site audit statement is required to determine the suitability of a site for a specific use."

2 REVIEW

This interim advice specifically addresses the Auditor's review of RevD of the WSP Validation report (WSP, 2023). The closed-out auditor comments on The Crescent Validation report are provided in the attached **Table A**.

[1] This communication has been provided as interim advice only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report or site audit statement and does not pre-empt the conclusions which will be drawn at the end of the audit process. A site audit report and site audit statement will be issued when the audit process has been completed.

3 CONCLUSION

Following review of RevD of the Validation report, the auditor endorses the report including the conclusion presented by the consultant regarding The Crescent sub-site.

Should you have any questions regarding this advice, please contact either of the undersigned.

Regards

Gary Bagwell
Principal Environmental Engineer
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Brad May
Principal Environmental Engineer/ NSW EPA
Contaminated Site Auditor (1603)
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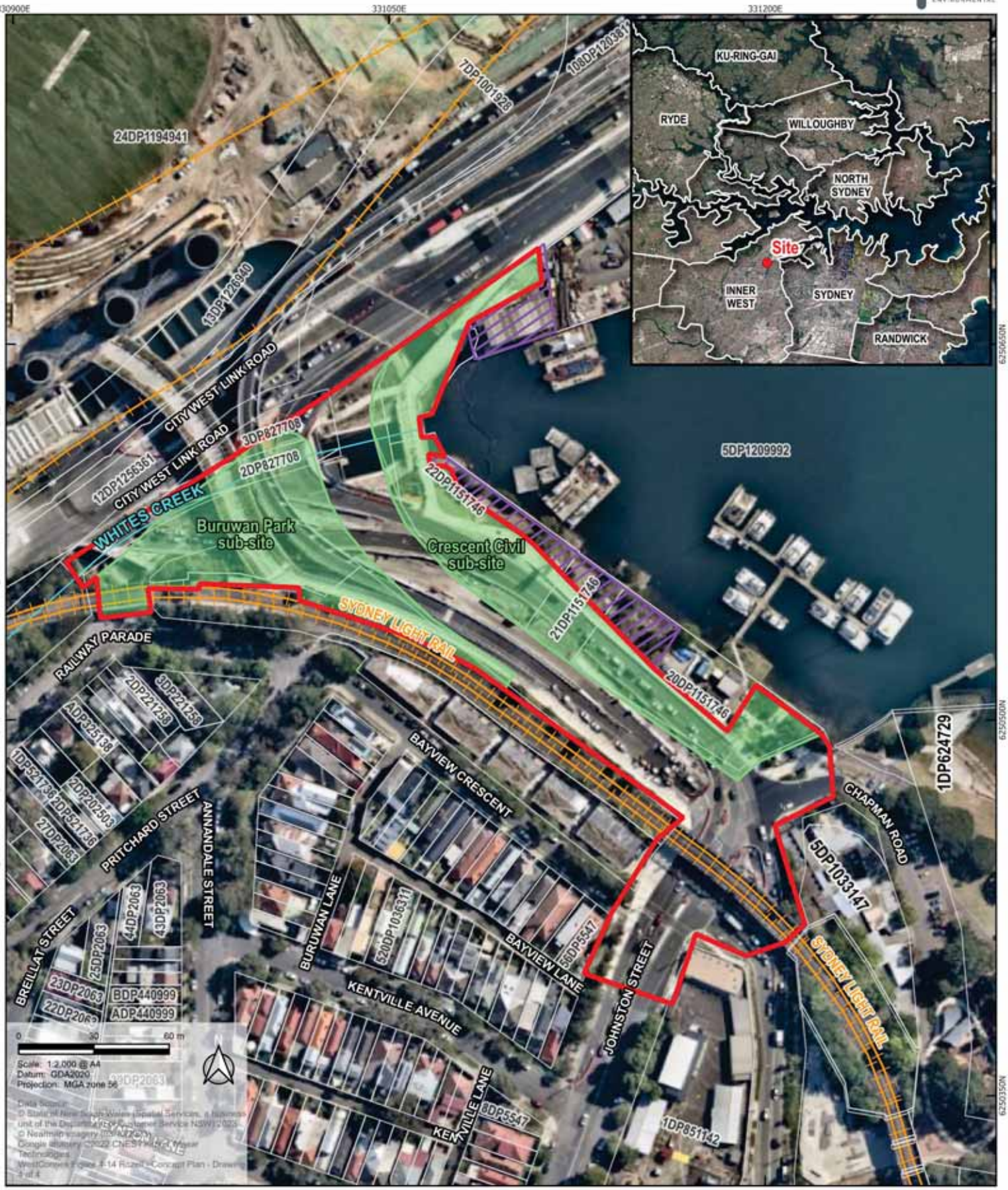
Enclosures: Table A – Auditor's comments on The Crescent Validation
Figure 1 – Site Location and Audit Boundary



Legend

- Site boundary
- Lot boundary
- Approximate moderate risk investigation area
- Residual land
- Railways
- Watercourses

JHCPB JV
City West Link, Annandale
City West Link: Site Audit Report

Figure F1
Site location and audit boundary

TABLE A

Contaminated Site Audit Log and Reporting Checklist

Audit Details

Project Reference: SY180068.01
Site Audit Notification No. (NSW only): SY11
Site Address: WestConnex Stg3B Rozelle Interchange Project (WCX3B) - sub-site area "The Crescent / Crescent Civil"
Lot on Plan: Part of Lot 20 Deposit Plan (DP) 115746, Lots 21 and 22 DP 115746, Part of Lot 4 DP 1209992, Part of Lot 23 DP 115746, and Lot 20 DP 791554
Document name: ***Validation Report, WestConnex Sage 3B (WCX3B) Sub-Site - The Crescent***
Document details: Draft Rev B dated 23/10/23. Prepared by WSP. Ref.no. PS117368-CLM-REP-CWL VAL RevB
Draft Rev C dated 17/11/23. Prepared by WSP. Ref.no. PS117368-CLM-REP-CWL VAL RevC
Draft Rev D dated 22/11/23. Prepared by WSP. Ref.no. PS117368-CLM-REP-CWL VAL RevD

Table 1. Interim Audit Advice IAA54 for the "*Validation Report, WestConnex Sage 3B (WCX3B) Sub-Site - The Crescent*" (RevB 23/10/23)

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [23/10/2023]	Review #2 - of Draft RevB dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
1	BM (Epic)	Rev A	8/09/2023	General Comment	Epic Environmental (Epic) were commissioned by John Holland CPB Joint Venture (JHCPBJV), the Client, to undertake the role of NSW Site Auditor (Auditor) for the Rozelle Interchange - Sub-site Area, The Crescent / Crescent Civil (the site), located in Sydney, NSW. The scope of works for this review will be limited to this site.	-		-		-	8/09/2023	Closed
2	BM (Epic)	Rev A	8/09/2023	General Comment	It should be noted that the contaminated land auditor (CLA) services for this site were undertaken in general accordance with the provisions of the *Contaminated Land Management Act 1997* (CLM Act), including (but not limited to) the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd Edition)*.	-		-		-	8/09/2023	Closed
3	BM (Epic)	Rev A	8/09/2023	General Comment	This communication has been provided as interim audit advice (IAA) only. Where applicable, the information provided is consistent with NSW EPA guidelines and policies. The advice does not constitute a site audit report (SAR) or site audit statement (SAS), and does not pre-empt the conclusions which will be drawn at the end of the audit process.	-		-		-	8/09/2023	Closed
4	BM (Epic)	Rev A	8/09/2023	General Comment	Please expand all acronyms prior to using them. For example the following acronyms are used and there is no explanation/ expansion of the acronym: - [Section 1.2] "ITP" - [Section 4.1] "CWL"	S1.3 and 2.3.1 updated.	Noted, closed.	-		-	2/11/2023	Closed
5	BM (Epic)	Rev A	8/09/2023	EXECUTIVE SUMMARY and General comment	The NSW EPA Guideline (2020) for *"Consultants reporting on contaminated land: Contaminated Land Guidelines"* (herein referred to as the "Reporting Guideline") provides a reporting framework for contaminated land reporting, including validation reports. The Auditor considers that the Validation Report should meet the information requirements of the guideline, particularly: 1. [Executive summary] Clearly articulate the: project background; objectives of the investigation (i.e. remediation and validation works); and the project's and investigation's scope of work	Executive summary updated	Noted, closed.	-		-	2/11/2023	Closed
6	BM (Epic)	Rev A	8/09/2023	EXECUTIVE SUMMARY	- Paragraph 5 states "*at the time of preparation of this validation report, installation of the geotextile marker and soil capping layers in the central-western portion of the site (defined as 'Area 5') is yet to be completed*". The auditor requests that validation details for this area be included in the final version of this report. - The 3rd last paragraph states "*The portion of the site located in the north-east currently comprises JHCPB sheds/offices for the City West Link construction area. This area is proposed to be retained for use during the WHT WestConnex construction works. Landscaping works are not currently proposed in this location and future construction and site restoration within this area will be managed under the long-term environmental management plan (LTEMP).*" for Executive summary and in the report, define this area with reference to a site plan, and specify what site construction/ restoration works are required to be implemented under the LTEMP (if any, given this area is a small inaccesible landscape area between lanes of traffic). - The last paragraph states "*validation information for Area 5 will be provided as standalone addendum to this validation report on completion of installation*". As noted above, the auditor prefers that validation information for this area be included in the final version of this report.	- Information for Area 5 added. - Relevant sections of report updated re: Area 6. - Information for Area 5 added.	Noted, closed.	-		-	2/11/2023	Closed
7	BM (Epic)	Rev A	8/09/2023	1. INTRODUCTION and subsections	[General Comments] (1) Clearly state the proposed final landuses of the site (2) Include a sub-section for 'objectives'. With respect to the site, provide detail on the objectives of the remediation and validation works/ investigation undertaken by WSP, with reference to the final landuse (i.e demonstration that remediation has been undertaken and the site is suitable for the intended landuse(s)).	1) S1.1 updated and Figure 6 added. 2) S1.2 (Objectives) added.	Objective is not to achieve open land use only, but proposed land use comprised of open space, footpaths / cycleways and road reserve.	S1.2 updated.		-	21/11/2023	Closed
8	BM (Epic)	Rev A	8/09/2023	1.1 PROJECT BACKGROUND AND PURPOSE	[General comment] Please consider that this Validation Report may be read by persons external to the project (e.g. Regulatory Authorities, WorkSafe NSW). Therefore, please: (1) Include discussion to describe the overall WCX3B project and provide context for the sub-site area, 'The Crescent / Crescent Civil' (the site), in relation to the WCX3B project (2) Either amend existing figures or include figure(s) to illustrate: (i) The locality of the site in relation to the other WestConnex project areas (ii) Section 2.1 Site Identification indicates the site comprises of 6 portions of land legally described as Part of Lot 20 Deposit Plan (DP) 115746, Lots 21 and 22 DP 115746, Part of Lot 4 DP 1209992, Part of Lot 23 DP 115746, and Lot 20 DP 791554. Please illustrate the location and boundaries these land portions in relation to the site boundary	1) S1.1 updated. 2(i) Figure 1 updated. 2(i) Figure 2 updated.	Regarding 1) include in background discussion regarding Burrawan Park (reference to DSI and/ or Site Status and Hydrogeology report) as well as other unassessed road and road verge areas. It also doesn't appear that Figure 1 has been updated. Show the locality of the site in relation to the other wcx project areas (particularly Railyards)	S1.1 and Fig 1 updated.	Make Figure 1 (or Figure 2) consistent with Figure 2 of the finalised LTEMP, which JHCPB have indicated is correct. Particularly to show CWL boundary, which correqponds with the audit boundary.	Figure 1 updated accordingly. Noted closed.	27/11/2023	Closed
9	BM (Epic)	Rev A	8/09/2023	1. INTRODUCTION - New section	Include a section to make comments on and discuss the: (1) Legislative framework in relation to the State and (if relevant) Commonwealth, legislative statutory controls and triggers relevant to the remediation and validation. Include relevant planning conditions that are applicable to The Crescent subsite, exclusions for the residual land, etc. (2) Technical framework and list the technical guidelines, standards, etc.	1) S1.1 updated. 2) S1.4 added.	Noted - planning conditions included in S1.1. Noted S1.4 Regulatory Framework added, however this is not complete. Include CLM Act and POEO Act and associated Regulations and guidelines. NSW EPA (1995) is now superseded. If including the SEPP (Resilience and Hazards), then should include EP&A Act.	S1.4 updated.	Noted, closed.	-	2/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [3/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
9a	BM (Epic)	Rev A	8/09/2023	1.5 Previous reports			NEW COMMENT: This list to include: WSP (2022) 'City West Link UST - Sampling and Validation Report, Rozelle Interchange - Sub Site Area City West Link' and WSP (2023) 'Import Material Sampling and Inspection'. Also, ensure that all referenced reports are included in the References list.	S1.5 and references updated.		-	21/11/2023	Closed
10	BM (Epic)	Rev A	1/08/2023	2.1 Site Identification	Include in Site Identification details (Table 2.1): - Street address (include The Crescent and City West Link, Rozelle NSW) - Latitude/ longitude or geographic coords (for approx. centre of site) - Areas of each Lot comprising the approx. 9,500m2 site area - Current occupier (assume this is JHCPB?) - Trigger for assessment - Legal permission to access site obtained - Refer to site locality (Figure 1) and site location (Figure 2)	Table 2.1 updated. The following are not considered to be required for this validation report: - Areas of each Lot comprising the approx. 9,500m2 site area - Trigger for assessment (sufficient detail provided throughout report) - Legal permission to access site obtained	For completeness and agreement with Guidelines, include in this table Trigger for assessment and legal permission to access site obtained.	- S1.1 updated "The trigger for contaminated land investigation of the site is condition E18.1 of the infrastructure approval which requires a site contamination report which documents the outcomes of Phase 1 and Phase 2 contamination assessments of land upon which the critical state significant infrastructure (CSSI) is to be carried out.	Noted, closed.	-	21/11/2023	Closed
11	BM (Epic)	Rev A	1/08/2023	2.1 Site Identification	The site boundary as shown in Figure 2, does not appear to correspond with the audit boundary (particularly with regard to residual land area adjacent to Rozelle Bay). See attached Epic Figure F1, which is based on JHCPB advice). Either adjust Figure 2, or discuss and justify inconsistency. See attached audit boundary Figure, based on information provided by JHCPB.	Figures updated to reflect site boundary and areas of residual land based on JHCPB.	Audit/ project area to be confirmed by JHCPB, following meeting on 2/11/23. WSP Figures should distinguish residual land and area validated by this validation report (Crescent Civil). Also suggest Figure 2 to show residual land area.	Figures updated accordingly.	Refer comment 8.	Figure 1 updated accordingly. Noted, closed.	27/11/2023	Closed
12	BM (Epic)	Rev A	8/09/2023	2.3 Site setting	In accordance with the NSW EPA Guideline and ASC NEPM Field Checklist site information sheet, please include the following site condition information. Alternatively, if appropriate, reference the appropriate sections of the WSP (2021a) DSI report. - Climatic conditions and local meteorology - Surface water bodies and their distance and direction from the site, and the likely environmental receptors for stormwater discharging the site and groundwater underlying the site - Surface water drainage - Hydrogeology including: regional groundwater flow direction; aquifer types (unconfined, semi-confined, confined) and aquitards/aquicludes present; likely depth to standing water level (SWL) encountered onsite; identify recharge sources, discharge points and other hydraulic boundaries; likely potential for beneficial use of groundwater underlying the site; etc.	Comment added to S2.3 - "A summary of the site setting information is presented below. Further detail is provided in the DSI and site status report (WSP, 2021a and 2022)."	Noted, closed.	-		-	2/11/2023	Closed
13	BM (Epic)	Rev A	8/09/2023	2.3.1 Site condition	Provide more detail on current site surface covering (e.g. bare ground, asphalt, concrete, gravel etc and estimate of percentage of site occupied by buildings, landscaped areas, paved or non-paved areas) and difference (if any) between current and final site condition.	S2.3.1 updated.	Noted, closed.	-		-	2/11/2023	Closed
14	BM (Epic)	Rev A	8/09/2023	2.3.1 Site condition	Show on an existing figure (e.g. Figure 2), the location and extent of the realigned Whites Creek channel within and adjacent to the site.	Figure 5 updated.	Noted, realignment of White's Creek embankment.	-		-	2/11/2023	Closed
15	BM (Epic)	Rev A	8/09/2023	3. Summary of previous investigations	Figure 4 in Appendix A shows historical in-situ human health criteria exceedances. It is noted that: (1) Figure 4's legend currently shows sampling locations for: ADE (Oct 2019 WAC1); ADE (Jun 2020 WAC169); and ADE (May 2020 WAC170). These three ADE assessments/investigations/reports are not discussed in this Validation Report, please include a summaries of these investigations as subsections in Section 3. (2) Figure 4 shows text boxes (on the right hand side) summarising HIL-C exceedances reported at: ADE WAC1 locations TP3, TP4, & TP8; ADE WAC169 locations BH1 & BH2; and ADE WAC170 location BH5. The physical locations of these sampling locations do not appear to be shown in Figure 4. Please clarify/resolve.	1) S 3.5 added. 2) Figure 4 amended for clarity.	Noted/ closed	-		-	2/11/2023	Closed
16	BM (Epic)	Rev A	8/09/2023	3.4 WSP 2021a Detailed Site Investigation and WSP 2022 Site Status and Hydrogeology Report	[Pg 7, bullet 2] States two additional groundwater monitoring events (GMEs) were undertaken. Include commentary on: - dates the GMEs were undertaken - what were the selected groundwater COPCs to be analysed - depths to groundwater (standing water levels (SWLs)) - groundwater flow direction - whether SWLs were influenced by Rozelle Bay and tides and/or seasonal influences - groundwater quality based on infield measurement of parameters - presence/ absence of NAPLs - aquifer type	These details are presented in the WSP (2022) Site Status and Hydrogeology Report. S3.4 presents a summary of pertinent information only for this report. No changes made.	Noted/ closed	-		-	2/11/2023	Closed
17	BM (Epic)	Rev A	8/09/2023	3.4 WSP 2021a Detailed Site Investigation and WSP 2022 Site Status and Hydrogeology Report	[Pg 7, Bullet 3] States two surface water sampling events were undertaken. Provide commentary on: - Dates of two sampling events - Rationale as to why PAHs was the only necessary CoPC to be analysed - Findings of the sampling events	As above. Bullet updated for clarity - "... to determine the potential for these COPCs in groundwater to be impacting surface water quality in the bay."	Noted/ closed	-		-	2/11/2023	Closed
18	BM (Epic)	Rev A	8/09/2023	3.5.1 Potential sources and contaminants of concern	Expand this discussion to include: - whether any of the exceedances presented in Figure 4 (Appendix A) have been removed by civil or landscaping works and requirement for remediation - provide additional commentary on the description of the soil impact. Is PAH and heavy metal impact limited to fill material only? What is the form of asbestos impact? - provide description of the fill material	- Clarification added to S3.4 and 3.6.1 - "...remaining at the site following completion of civil/construction works" - Exceedances in fill material, asbestos as ACM - clarification added. - Fill material description added.	Noted/ closed	-		-	2/11/2023	Closed
19	BM (Epic)	Rev A	8/09/2023	4.1 Remediation strategy	Refers to a long-term environmental management plan (LTEMP). Note that the LTEMP is to be provided to the Auditor for review and comment.	Noted - preliminary draft now provided.	Noted/ closed	-		-	2/11/2023	Closed
20	BM (Epic)	Rev A	8/09/2023	4.1 Remediation strategy	Section 4.1 refers to Figure 5. Clarify that Figure 5 shows the extent of capping completed as of the date of this report, and: - Noted that 'Area 6' is current JHCPB sheds/ offices, but what is current surface of this area? If landscaping works are not proposed for this area, what is proposed surface completion of this area? Need to justify proposed change to capping details for this area. - Figure 5, include in Legend 'red' Area 6 area - Show on Figure 5, the extent of Area 5 (area requiring geotextile and soil capping) that is yet to be completed (and also include in Figure 5 Legend)	Footnote added for clarification - Figure 5 presents the extent of capping constructed and validated at the time or writing. - Figure 5 updated. - Area 5 completed Figure 5 updated.	Note on Figure 5 surface treatment in Area 6 (red) area. Is hardstand? Clean soil layer? Gravel?	Fig 5 updated.	Noted, closed.	-	21/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [23/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
21	BM (Epic)	Rev A	8/09/2023	4.1 Remediation strategy	[Pg.9, 2nd last paragraph] Discusses the residual land and states "*JHCPB are not responsible for the remediation of potential contamination that may be present within this portion of the site. As such, the capping for this portion of the site consists of topsoil reinstatement only (approximately 100 mm thickness) and a finished turfed surface. A geofabric layer was not installed within the area of residual land*". Note here that residual land management meets contractual requirements and/or planning consent conditions.	S4.1 updated - "It is understood that the capping of this area is compliant with JHCPB contractual requirements for residual land."	Noted/ closed	-		-	2/11/2023	Closed
22	BM (Epic)	Rev A	8/09/2023	5.2.1 Geotextile installation	In relation to Areas 1 to 4, provide: (1) Dates (or if more applicable, the date range(s)) for the installation of geotextile fabric (2) The name of the contractor company responsible for the installation (sub-contractor - if not JHCPB).	S5.2.1 updated.	Noted/ closed	-		-	2/11/2023	Closed
23	BM (Epic)	Rev A	8/09/2023	5.2.2 Hardstand construction	(1) Provide dates (or if more applicable, the date range(s)) for the installation of the concrete hardstand (pedestrian footpath and cycleway) (2) Provide the name of the contractor company responsible for the installation	S5.2.2 updated.	Noted/ closed	-		-	2/11/2023	Closed
24	BM (Epic)	Rev A	8/09/2023	5.2.3 Soil capping layer installatioin	In relation to Areas 1 to 4, provide: (1) The dates (or if more applicable, the date range(s)) for the installation of soil capping layer (2) The name of the contractor company responsible for the installation (3) Comments on the quantity/volume of soil material required to create the soil capping layer	S5.2.3 updated.	Noted/ closed	-		-	2/11/2023	Closed
25	BM (Epic)	Rev A	8/09/2023	5.2.3 Soil capping layer installation	Can state areas (m2) of the site that do not meet minimum capping thickness specification of minimum 300mm thick clean fill over geofabric marker. The auditor considers that the cap wouldkd require additional management controls to avoid erosion of cap materials (41 - 113mm thick) and exposure of marker layer. Additional management controls may include increased inspection and maintenance requirements, to maintain integrity of capping layer. WSP to speciy additional management cotnrols for these areas.	Previous calculations for Area 2 and 3 incorrect - capping thicknesses generally ≥300mm in these areas. Due to a number of utilities across Area 4, capping thicknesses were reduced in this portion of the site. Report updated accordingly. Report also updated to note that additional management controls to be documented in the LTEMP.	Noted/ closed	-		-	2/11/2023	Closed
25A	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials	NEW COMMENT		Current imported materials discussion is not consistent, noting that: - First para states 668m3 of material was imported to the site, however 588m3 topsoil and 112m3 mulch adds up to 700m3? - Table 5.1 sampled stockpiled volume is >19890m3 - so is it to be assumed that not all of this material was brought to the CWL site? - HL Landscapes volume report (first page of Appendix C indicates 700m3 brought to CWL site. To clarify. **WSP also to make clear statement within (or at the end) of this Section regarding suitability of use of imported materials used to construct landscape capping in CWL zone.**	- S5.3 updated with correct volumes. - Correct. As per Table 5.1 footnote, "Volumes represent the total volume of the stockpile sampled at the source site by WSP and do not necessarily represent the volume of the sampled material imported to the site. Sampled material from some stockpiles was also imported to WCX3B sub-sites other than the current site." - HL Landscapes volume 700m3 correct (S5.3 updated as noted above). - S5.3 updated - "Based on the contamination assessment of imported material by WSP, the materials imported to the site for capping and landscaping are considered suitable for this purpose."	Noted, however (with regard to dot point 2) paragraph above Table 5.1 says: 'A summary of the materials imported to the site and the associated soil validation samples collected by WSP is provided in Table 5.1.' Can update for clarity?	Text above Table 5.1 updated for clarity - "A summary of the materials sampled by WSP for assessment for suitability for import to the site and the associated soil validation samples collected by WSP is provided in Table 5.1. Sampling frequencies were in accordance with the import material SAQP (WSP, 2023). The stockpile volumes quoted in Table 5.1 represent the total volume of the stockpile sampled at the source site by WSP and do not necessarily represent the volume of the sampled material imported to the site. Sampled material from some stockpiles was also imported to WCX3B sub-sites other than the current site." Noted, closed.	27/11/2023	Closed
25B	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials AND Appendix C, D and E	NEW COMMENT		The Auditor strongly suggests that imported fill validation information presented in Appendices C, D and E should be combined into a concise report to report the validation activities carried out by WSP at the Greenlife Resource Recovery Facilities located in Bringelly and Marsden Park. The report may then be referenced in all subsequent validation reports. The report should auditable details, including: - Introduction and background - Scope of work - Sampling methodologies - Dates of sampling, with sample register also indexing stockpiles/ material type - results summary and tables - QA/ QC discussion and results (re results reliable?) - Concise conclusion regarding suitability of materials for use. Further, assessments conducted by JBS&G and CAE of precursor materials at other sites are considered background information and not primary auditable material with respect to imported fill.	Based on the project timing, it is not practical to provide a standalone report for all imported material (import still ongoing). Required information for material imported to the Crescent site is included in the report.	Noted, however consider for future validation reports.	-	21/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [23/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated 17/11/23 Auditor comments to be addesssed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addesssed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
25C					NEW COMMENT		Can WSP provide comment with regard to ITPs provided in Appendix C (as completed by JHCPB), regarding imported materials that they pertain to as well as consistency with WSP (2023) 'Import Material Sampling and Inspection', procedure.	S5.3 updated - "Based on information provided by JHCPB, WSP understands that each load of topsoil was inspected on unloading to the site by the landscapers and site supervisor. Regular inspections by the JHCPB environment team and engineers were also conducted to inspect the spread out topsoil during placement. Additional periodic inspections of material at the site were also conducted by WSP. JHCPB have informed WSP that, throughout all inspections, no ACM, suspect materials or other non-conformity was noted. The ITPs were completed as overarching checklists for construction quality assurance."	Noted, closed.	-	21/11/2023	Closed
26	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials	[Par.1] States "*Based on documentation provided by JHCPB, a total of 722 m3 of material was imported to the City West Link (CWL) project area (including the site)…..* ". Provide site specific information by specifying the quantities of material imported to the subject site (i.e The Crescent).	Additional information provided by JHCPB for Area 4 - quantity revised and updated to represent material imported to The Crescent (i.e. the site) only.	See comment 25A	See response 25A	Noted, closed.	-	21/11/2023	Closed
27	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials	[Par.1] (1) Please confirm that if all topsoil (approx. 591m3?, as stated in Section 5.3) was sourced from Greenlife Resources Facilities located in Bringelly and Marsden and subject to the testing protocol as approved by the auditor.	Clarification added via additional detail re: mulch source (Resource NSW) and footnote noting location of facilities. All topsoil was imported from Greenlife.	Noted/ closed	-		-	2/11/2023	Closed
28	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials (and Table 5.1)	[Par.1] Paragraph 1 states "*Based on documentation provided by JHCPB, a total of 722 m3 of material was imported to the City West Link (CWL) project area (including the site), comprising of topsoil and mulch…..* ". However, Table 5.1 indicates the total volume of imported material to the site (The Crescent) was 16,890m3. Please clarify the difference in volumes. Does the 722m3 represent the material used for landscaping purposes only, and not imported material used for 'general backfilling' or the 'capping system'?	Table 5.1 outlines the sampled stockpile volume - this does not represent the actual volume imported (noting that some stockpiles sampled for import were used for landcaping across a number of project sites). Footnote added to Table 5.1 for clarification.	Actually 20,890m3 reported in Table 5.1. Further details need to be included: - What were the source sites/ processing facilities for each material type? If possible include column for source in Table 5.1. - Confirm if materials were tested at the source site? or on site prior to placement? - Were there any site sourced materials used on the site? e.g. tunnel spoil or other site generated soils?	- Comment added above Table 5.1 - "All material was sourced from Greenlife Resource Recovery Facilities, except for mulch stockpile SP14 which from Resource NSW." - Refer Table 5.1 footnote - "All material sampled at processor/supplier site, except for SP13 which was sampled following import to site." - Table 5.1 includes all sources of material imported for the cap.	1) If not including source site in Table 5.1, include source address in first paragraph of Section 5.3 (noting that Appendix C does not provide this information). 2) First paragraph of Section 5.3 states that 112 m3 mulch was sourced from Greenlife facilities and Resources NSW. However, there is no evidence for this in Appendix C. 3) Can material type in Table 5.1 be indexed to topsoil type 1, topsoil type 2 and mulch - as these are the material types on the HL landscapes volume report.	1) Footnote on p15 updated to include address. 2) Import register in Appendix C includes topsoil and mulch. Updated version included in final report which includes a breakdown of quantity of topsoil and mulch. 3) Where topsoil was sampled (SP13 only), material type has been included (i.e. Type 1). Noted closed.	27/11/2023	Closed
29	BM (Epic)	Rev A	8/09/2023	5.3 Imported materials	[Par.3] (1) Please confirm that the '*JHCPB imported material inspection checklists*' are the '*Inspection Test Plan (ITP)*' forms that are supplied in Appendix C3 (2) Clarify if JHCPB inspected just the 722m3 of imported material (discussed in paragraph 1) or all the 16,890m3 material (detailed in Table 5.1) (3) Clarify if the six JHCPB ITP forms (as supplied in Appendix C3) relate to the 722m3 of imported material (discussed in paragraph 1), or all the 16,890m3 material (detailed in Table 5.1). It is noted that the ITPs are dated 17/05/2021 (1 form), 06/07/2022 (2 forms), and 27/08/2020 (3 forms), whilst Table 5.1 indicates WSP undertook material stockpile sampling in 2021, 2022 and 2023; thus, the dates do not correlate with each other	1) Correct - text updated. 2) Refer above. 3) Refer above re: volumes. Overarching ITP typically utilised since several packages of landscaping are generally happening at any given time with relatively small topsoil volumes. Stockpiles of topsoil & mulch are visually inspected as they arrive on site - select photographs added to App B.	Noted. Refer above	Refer above.	Notes, closed.	-	21/11/2023	Closed
30	BM (Epic)	Rev A	8/09/2023	5.3.1 Imported material details	[Par. 1] states: "Compost/pasteurised garden organics were blended at the processing site with natural sands sourced from the Green Square Town Centre development". Please clarify if the 'processing site' is referring to the Greenlife Resources Facilities located in Bringelly and Marsden	Correct - text updated for clarity.	Noted, closed.	-		-	2/11/2023	Closed
31	BM (Epic)	Rev A	8/09/2023	5.3.1 Imported materials details	Information provided in this section suggests that virgin excavated natural material (VENM) was imported to the site from the Green Square Town Centre development. It is understood that: - JBS&G conducted an in-situ assessment/characterisation of the VENM (soil and rock in 2021 which comprised of analysis of 8 samples across the site - JBS&G concluded that the natural material was consistent with the definition of VENM and recommended that inspection and further sampling be conducted to confirm the removal of the overlying fill material - WSP understands that the recommended further assessment was not conducted. Provide commentary on: (1) The volume of VENM that was imported onsite (2) It is noted that the VENM is not mentioned in Section 5.3. Clarify if this VENM: - Was, or was not, inspected by JHCPB - Was, or was not, sampled/analysed/characterised by WSP as part of Table 5.1 (3) Whether WSP considers the soil sampling frequency (total of 8 in-situ samples) is considered adequate to characterise the VENM (4) The COPCs which were analysed by JBS&G (5) With respect to adequate characterisation of the VENM that was imported to site, does WSP consider the failure to undertake the JBS&G recommendation of further assessment (i.e. inspection & further sampling+analysis) to be material and comment on the implications to the site and the WXC Project?	1) VENM was not imported directly to site. VENM was imported by and to Greenlife and subsequently blended with compost at their facilities for import as topsoil to the site. 2) As noted in S5.3, VENM referred to throughout the report as "blend material". Details regarding inspection and sampling of this material by WSP are presented in S5.3.2. 3) S5.3.1 updated - "Based on the information provided in the JBS&G (2021) and CAE (2021) reports, WSP considered that the sampling conducted during these investigations is sufficient to characterise this material, in conjunction with the supplementary inspection and sampling conducted by WSP (refer to Section 5.3.2). While the recommended sampling of the material following removal of overlying fill was not conducted, WSP consider that the subsequent inspection and sampling conducted by WSP is sufficient to characterise these materials for import to the site." 4) As above.	Noted. The auditor considers that VENM was used in blended topsoil materials prepared offsite and VENM was therefore not imported to the site. Material was validated for import as blended materials.	-		-	2/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [23/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated :17/11/23 Auditor comments to be addesssed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addesssed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
32	BM (Epic)	Rev A	8/09/2023	5.3.1 Imported material details	[Pg.13, Par.3] With respect to Coleman Adams Environmental (CAE)'s excavated natural material (ENM) assessment and their assessment report, provide comments on: (1) The material type. Was this ENM classified as compost, topsoil, mulch, etc? Which material does the ENM corre;ate to in Table 5.1? (2) The volume of ENM that was stockpiled at Greenlife Bringelly facility. Make comment on whether WSP considers the sampling frequency (total of 20 samples from the ? volume stockpile) to be adequate to characterise the material (3) The COPCs which were analysed. Were these considered appropriate?	Material sampled by CAE was the same as JBS&G above. Text updated for clarity.	So to confirm, blended ENM material was first sampled by CAE in 2021, followed by JBS&G and then WSP prior to import to site? Please identify which entry in Table 5.1 represents this material?	JBS&G conducted in-situ testing to facilitate bulk excavation works at the Green Square site. This material was subsequently excavated and transported to the Greenlife facility where the CAE ENM assessment was conducted (text added to this paragraph for clarity - "(excavated and transported from the Green Square Town Centre property)". This material comprises the blend material sampled by WSP in Table 5.1. Footnote on page 16 placed in-text (S5.3.1) for clarity - "Natural sand sampled prior to blending with compost/garden organics is referred to herein as 'blend material'."	As per comment 28 - standardise material references (i.e what is 'blend material' if not topsoil?). What is compost? Mulch or organic materials blended with ENM? Please clarify.	S5.3.2 updated for clarity - "WSP conducted due diligence inspections and sampling of material proposed to be imported to the site as the following material types: - discrete materials prior to blending to form topsoil, including: - compost/pasteurised garden organics - VENM/ENM sands (as sampled by JBS&G [2021] and CAE [2021]) - mulch (no blending required); and - topsoil (i.e. blended compost and VENM/ENM; stockpile SP13 only)." Various ratios of compost are blended with VENM/ENM to make topsoil. As such, VENM/ENM previously referred to as 'blend material' - changed to VENM/ENM sand for clarity. Mulch is not blended. Noted, closed.	27/11/2023	Closed
33	BM (Epic)	Rev A	8/09/2023	5.3.2 Imported material sampling (Table 5.1)	It is understood that Table 5.1 summarises all the inspections and sampling conducted by WSP of the material stockpiles which were imported onsite. Please clarify how the data summarised in Table 5.1 relates to the: - [Section 5.1] 591 m3 of topsoil material and 131m3 of mulch (imported to the CWL project area including the site) inspected by JHCPB on 27/08/2020, 17/05/2021, and 06/07/2022. Is this JHCPB inspected material included/ summarised in Table 5.1? Was the 591 m3 of topsoil material and 131m3 of mulch sampled by WSP? - [Section 5.3.1] Topsoil sourced from the Greenlife Resource Recovery Facilities located in Bringelly and Marsden Park - [Section 5.3.1] VENM sourced from Green Square Town Centre development - [Section 5.3.1] ENM prepared by CAE The intent of this comment is to ensure that: all material imported to the site has been tracked from the source; material has been adequately sampled/characterised to demonstrate it's suitable for recreational/open space, prior to being imported to site; and material was visually inspected by either JHCBP and/or WSP prior to being placed on the site.	- Refer above re: volumes outlined Table 5.1. - As noted in S5.3, topsoil imported to the site was sourced from Greenlife Resource Recovery Facilities located in Bringelly and Marsden Park and comprised variable blends of compost/pasteurised garden organic materials and natural sands sourced from the Green Square Town Centre development. - As above. - As above. As above re: visual inspection of material imported to site.	Noted, closed	-		-	2/11/2023	Closed
34	BM (Epic)	Rev A	8/09/2023	5.3.2 Imported material sampling (Table 5.1)	[Table 5.1], auditor suggests: (1) Include a new column to summarise the number of stockpile samples collected to characterise each stockpile. This will provide an indication of the sampling density undertaken by WSP (or others) (2) Include a column to indicate which imported material was used: within the soil capping layer; as general backfill material; and for landscaping purposes (3) Table Note 4 states "*sampled material also imported to WCX3B sub-sites other than current site*". All the table notes, excluding Note 4, relate to specific data in Table 5.1. Please clarify if Note 4 is applicable to all the data presented in Table 5.1 (4) [General comment] Information presented in Table 5.1 should be specific to the site, The Crescent.	1) Column added. Additional sentence added above Table 5.1 - "Sampling frequencies were in accordance with the import material SAQP (WSP, 2023)." 2) Column added. 3) Note 4 in error - table updated. 4) Stockpiles sampled prior to import to confirm suitability of material for open space land use. Some sampled material being imported to The Crescent as well as other sub-sites. Thus, it is not possible to discern which samples are representative of the portion of sampled material that was specifically imported to The Crescent.	Noted	-		-	2/11/2023	Closed
35	BM (Epic)	Rev A	8/09/2023	5.3.2 Imported material sampling	Include commentary on whether WSP considers the stockpile sampling frequency conducted was sufficient for the purpose of verifying the suitability of the topsoil, mulch, and blend materials, or otherwise, that sampling conforms with the auditor approved WSP Imported Material SAQP (PS124861-CLM-LTR-SAQP RevC, Oct 2022).	Text added above Table 5.1.	Noted	-		-	2/11/2023	Closed
36	BM (Epic)	Rev A	8/09/2023	5.3.2 Imported material sampling	Provide commentary to describe the stockpile sampling methodology. How and where were samples collected? What equipment was used to obtain samples? Alternatively, refer to the SAQP document, noting any deviations from the document.	SAQP document referenced in S5.3.2 para 1. No changes made.	Noted	-		-	2/11/2023	Closed
37	BM (Epic)	Rev A	8/09/2023	Table 5.1 - Summary of imported material	It is noted that Table 5.1 states that a 20m3 topsoil stockpile was sampled (SP13 / 25 May & 21 Oct 20213) by WSP. This differs from the 591m3 of imported topsoil detailed in Section 5.3. Clarify what quantity of topsoil used onsite was not tested, and provide commentary on impact on achievement of data objectives for validation.	As per Table 5.1 footnote, topsoil comprises blend of PGO and natural blend material. Topsoil was sampled as either i) compost/PGO, ii) natural blend material (i.e. VENM/ENM sand), or iii) topsoil final product (i/e/ compost/ PGO blended with VENM/ENM sand).	WSP response doesn't answer the question. S5.3 now says 588m^3 of topsoil and 112m^3 of mulch was imported to the SWL project area. However Table 5.1 records 20m3 topsoil, 5,000m3 mulch, 15,200m3 compost and unknown quantity of blend material. The auditor requires consistency and clarity around the volumes, sampling and validation of imported materials used for landscaping and capping layer construction. Either include separate entries for each of the topsoil types (i to iii) or update the volume of topsoil sampled.	Material proposed for import to the site was sampled at the source site as discrete/unblended products: - compost/PGO - natural sand (i.e. VENM/ENM described in S5.3.1.1) - mulch. The sampled compost/PGO and natural sands were then blended to the required ratios to make the topsoil. The 588m3 topsoil imported to the site refers to this blended product (i.e. blend of discrete sampled compost/PGO and natural sand). Mulch was not blended. Only 20m3 of topsoil (i.e. SP13, one	Id above comments clarified, then should be able to close.	-	21/11/2023	Closed
38	BM (Epic)	Rev A	8/09/2023	5.3.3 Quality assurance / quality control	[Table 5.3, QA samples] Include commentary on: (1) Whether sufficient numbers of intra and inter laboratory were collected and sampled (2) If relevant, why insufficient QA sampling does not affect the reliability of the data to be used	Table 5.3 updated.	refer to tabulated QA sample data, showing RPD values and exceedances?	Reference added to Table 5.3.	Noted, closed.	-	21/11/2023	Closed
39	BM (Epic)	Rev A	8/09/2023	5.3.3 Quality assurance / quality control	[Table 5.3, Blank samples] (1) Table 5.1 indicates that the following samples were also collected on: 30/04/2021 (SP08, SP09, SP10), 25/04/2021 (SP13), 26/05/2021 (SP14). Provide comment on why trip blanks and trip spike samples were not collected during these sampling events (2) Provide commentary on why trip a spike sample was not collected+analysed for the 17/06/2022 sampling event (3) Impact on assessment of data reliability (if any) relating to insufficient trip spike and trip blank sampling	Table 5.3 updated.	Refer to tabulated trip blank and trip spike data?	Already referenced in Table 5.3 - "Trip spike and trip blank results are tabulated in Appendix D."	Noted, closed.	-	21/11/2023	Closed
40	BM (Epic)	Rev A	8/09/2023	5.3.3 Quality assurance /quality control	Provide commentary on: (1) Why rinsate blank samples were not considered necessary for the stockpile sampling investigation program (2) Whether this will affect the reliability of the data to be used	Table 5.3 updated.	Noted, closed	-		-	2/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [3/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated 17/11/23 Auditor comments to be addesssed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addesssed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
41	BM (Epic)	Rev A	8/09/2023	5.3.4 Laboratory QA/QC	Provide commentary on: (1) Whether there was sufficient number of internal laboratory replicate/duplicate samples and laboratory control blanks were undertaken (2) Any laboratory outliers (3) Whether any shortcomings in the laboratory QA/QC program have affected the reliability of the data	Table 5.4 updated.	Noted, closed	-		-	2/11/2023	Closed
42	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classification	[Par.1] States "*Material was removed as part of the project construction works within the site and surrounding CWL project areas*". Clarify if the driver for removal of onsite material was to achieve the required/final proposed land forms across the site (e.g. road elevations). (1) Clarify if onsite material was exported for offsite disposal as part of site remediation due to the presence of CoPCs in soil which exceeded the adopted SAC of HIL-C (2) Clarify if validation of existing insitu soils was conducted following removal of exported material (3) Clarify if any of the soil hotspots (i.e. locations exceeding HIL-C) shown in Figure 4 were removed offsite as part of the excavation and export activities and if so, create a new figure to illustrate remaining hotspots which have been remediated with by the geotextile/soil capping or a (concrete or asphalt) hardstand capping	1) Text updated - "...to achieve project construction design requirements." Removal of material did not specifically target areas of identified soil contamination. 2) Material was not removed for the purposes of removing impacted soil - no validation following excavation for off-site disposal was conducted. 3) Figure 4 shows post civil/soil removal works concentrations. All hotspots are considered to have been addressed by the capping.	Noted, however comment on possibility that while contamination ide tidied by previous assessments (Figure 4) may have been removed by project civil works, the majority of contamination remains which has been addressed by capping.	S5.4 updated.	Noted closed	-	21/11/2023	Closed
43	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classification	[Par.1] If possible, provide dates or (if more relevant) a range of dates, when offsite disposal of The Crescent's material was exported.	S5.4 updated.	Noted, closed.	-		-	2/11/2023	Closed
44	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classification	[Bullet 6] States "*approximately 2,272 tonnes of VENM were exported from the site*". Provide rationale and commentary to explain why VENM was exported offsite rather than reused onsite, which is considered best practice (possible timing/ availability?).	JHCPB - "Generally, offsite disposal of VENM is due to the timing/quantities of material at time of excavation do not meet programme requirements and/or material available at the time of excavation does not conform to specific RMS geotechnical specifications or design requirements."	Noted. Closed.	-		-	2/11/2023	Closed
45	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classiifcation	The material export tracking registers and four maps/figures showing the locations of the waste classification areas (presented in Appendix F) relate the CWL Project and includes the site. Based on the CWL Project information and data presented in Appendix F, it is difficult to identify/cross reference/reconcile the volumes of material (from The Crescent subject site, as listed in bullets 1 to 6) and the offsite disposal facility. Please expand on the bullet point information by creating a summary table to present the site's exported material with the following headings: - material type; - offsite disposal facility(s); - volume/quantity (tonnes); - the material classification report number; and - offsite disposal dates. This summary table will provide a site specific overview.	Table 5.5 added.	Noted, however: - Include VENM entry in Table 5.5 (2,272t) - Tonnage amounts in dot points for GSW, GSW asb and EPRM do not correspond with tonnages in Table 5.5. Check and update. - For the EPRM, North-South Link (Kemps Creek) is not known to be a disposal facility. Include notation that EPRM was beneficially re-used in accordance with the NSW EPA EPRM RRO/ RRE and that all requirements of the RRO were met.	- VENM added. - Some volumes missed - Table 5.5 updated and simplified (repetition of information available in App F). - S5.4 updated - "based on the information provided by JHCPB, material removed off site as EPRM was beneficially reused as permitted by the NSW EPA The excavated public road material order 2014 and The excavated public road material exemption 2014."	Noted, closed.	-	21/11/2023	Closed
46	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classiifcation	Appendix F includes four maps/figures which show areas, both within and outside of the (the Crescent) site, where material was exported and disposed offsite. (1) In relation to the subject site, The Crescent, it is unclear if material from the entire site, the majority of the site, or portions of the site, were exported for offsite disposal. Please clarify by making a clear statement in the report text. (2) If material was exported from parts of the site (either majority or portions of the site), please include an overview site figure to show this (in relation to The Crescent only).	1) S5.4 text updated. 2) Figure in App F amended to remove CWL WAC areas that do not contain material from within the Crescent site boundary.	Noted, closed.	-		-	2/11/2023	Closed
47	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classification	[Appendix F, 1-page 'Off-site Material Tracking Register - Nov 2019 to Feb 2020', presented on page 808 of 870] This 1-page register does not provide "area ID" information, or appear to relate the 4 Maps included in Appendix F. Please clarify: (1) For each line item/row of the tracking register table, the area(s) of the site where the material was removed from. It is understood the areas should relate to the ID areas (i.e. material classification report numbers) shown on the 4 Maps in Appendix F.	WAC 6 to 9 conducted as stockpile assessments - specific source locations not documented on location figure in Appendix F. Note added to this table.	Unsure how this comment relates to the query, which also relates to the subsequent spreadsheet (disposal movements from 20/3/2020). Can area ID information be included? (or is this not feasible).	Source locations for material in this register classified under WAC4, 23 and 25 are shown on App F waste classification map. WAC6-9 were conducted as ex-situ stockpile assessments and as such the source locations were not shown on the previous App F classification map. WAC6-9 stockpile locations (ex-situ) have been added to App F map.	Noted, closed.	-	21/11/2023	Closed
48	BM (Epic)	Rev A	8/09/2023	5.4 Exported materials and waste classification	Include comment that 1) material exported offsite was removed under JHCPB tracking system and 2) waste was disposed according to it's waste classification and in accordance with NSW Waste Regulations.	S5.4 updated.	Noted, closed.	-		-	2/11/2023	Closed
49	BM (Epic)	Rev A	8/09/2023	6.1 Implementation of remedial strategy	[Para 1] As noted above, consider inclusion of Area 5 validation details in final of this report	Noted	Area 5 details included. Closed.	-		-	2/11/2023	Closed
50	BM (Epic)	Rev A	8/09/2023	6.1 Implementation of remedial strategy	[Para 2] Refers to Section 5.5. There is no Section 5.5. Include details of non-compliance on capping system design.	Section reference updated. Non-compliance details are documented in 5.2.4 (no change made).	Noted, closed.	-		-	2/11/2023	Closed
51	BM (Epic)	Rev A	8/09/2023	6.1 Implementation of remedial strategy	[Par.4] States "*No additional or major departures from the remediation strategy (WSP, 2021b) are noted*". Please clarify that the only departures of the remediation strategy comprised: - soil capping in some localised areas within Areas 2, 3, and 4 did not comply with the WSP (2021b) capping system design - remediation of Area 5 with geotextile/soil cap - future construction and site restoration of Area 6 will be managed under the LEMP	S6.1 updated.	Noted, closed.	-		-	2/11/2023	Closed
52	BM (Epic)	Rev A	8/09/2023	7 Conclusion	Update Section 7 with respect to all the above comments.	No changes to conclusions with regard to the above comments is considered to be required.	Noted, closed.	-		-	2/11/2023	Closed

Comment No.	Reviewer	Doc Rev (initial)	Review date (initial)	Reference / Report Section	Review #1 - of Draft Rev A dated 7/07/23 Auditor Comments to be Addressed [08/09/2023]	Review #1 WSP Response [31/10/2023]	Review #2 - of Draft Rev B dated 23/10/23 Auditor Comments to be Adressed [2/11/23]	Review #3 WSP Response [17/11/23]	Rev#3 of draft dated :17/11/23 Auditor comments to be addessed 21/11/23	Rev#3 of draft dated 17/11/23 Auditor comments to be addessed 21/11/24 Auditor comment 27/11/23	Date Action Closed	Comment Status (Open / Closed)
53	BM (Epic)	Rev A	8/09/2023	7 Conclusion	[General comments] In accordance with the requirements specified in the NSW EPA Guideline, please include: (1) comments on how the remediation and validation works have addressed the objectives (2) specify any data gaps, assumptions, limitations, or uncertainties (3) recommendation(s) for any required further required further assessment or analysis to address the above, in relation to site suitability.	1) The objective of this site validation is to demonstrate that the remediation strategy has been implemented and that the site is suitable for open space land use. Statement pertaining to this objective is made in final paragraph. 2) Areas 5 and 6 are only remaining data gaps. 3) No further assessment is required - as noted, the site is suitable for use (noting limitations re: Areas 5 and 6).	Explain clearly in this section what are the remaining data gaps pertaining to Areas 5 and 6? Confirm that Area 5 has been capped with geofabric + soil cap and Area 6 by concrete hardstand? If there are data gaps, then what assessment is proposed to address these data gaps (if any)?	No data gaps in Area 5 - forms part of the site and has been capped with geofab + soil (as documented in the report). No data gaps in Area 6 - as per S7, "Area 6 comprises a utility corridor which has been sealed with concrete hardstand and compacted DGB. Landscaping works are not currently proposed in Area 6. The installed hardstand surface is considered to meet the design intent of providing an impenetrable surface and as such, is considered to be suitable."	Noted, closed.	-	21/11/2023	Closed
53A	BM (Epic)	Rev A	8/09/2023	7 Conclusion	NEW COMMENT: Also include reference to Residual land in conclusion as well as previous UST removal.			S7 and Exec Summ updated.		-	2/11/2023	Closed
54	BM (Epic)	Rev A	8/09/2023	8.3 Use and reliance	Ensure that authorities, such as the NSW EPA and their representatives (e.g. Auditors), are not precluded from being able to use and rely on this report.	As per previous correspondence - no changes made.	Closed	-		-	2/11/2023	Closed
55	BM (Epic)	Rev A	8/09/2023	REFERENCES	Include references for the: (1) Three ADE reports: October 2019; June 2020; and May 2020 (2) Epic's Interim site Audit Advice #37	References updated.	Also include: WSP (2022) UST validation report.	References updated.	There are now 2 entries for 'Import Material Sampling and Inspection', - which one is it?	References amended accordingly.	27/11/2023	Closed
56	BM (Epic)	Rev A	8/09/2023	Figure 3A - Site location landscape overlay	There is an area shown as *'geotextile and soil capping remediation area'* located to the east/southeast of Area 2. This area is not labelled. Please clarify if this area is also part of Area 2, or another unlabelled area. It is noted that Figure 5 suggests this unlabelled geotextile/soil capping area may coincide with Area 6. However, Sections 4.1 and 6.1 indicated that landscaping works (i.e. geotextile/soil cap) is not proposed in Area 6. Please clarify.	This comprises part of Area 6. S4.1 and 6.1 amended for clarification - landscaping works are proposed as part of the future works in this area, but are not proposed to be completed as part of the WCX3B/current remediation works as this area will be retained for the WHT.	Noted. However if this is currently concrete / hardstand area, then colour should code to the hardstand sealed area.	Fig 3A updated.	Noted, closed.	Noted, closed.	2/11/2023	Closed

APPENDIX C CONSULTANT FIGURES, TABLES, AND LOGS

Approximate Site Boundary

Figure 1 – Site Location
Sub Site Area – Buruwan Park

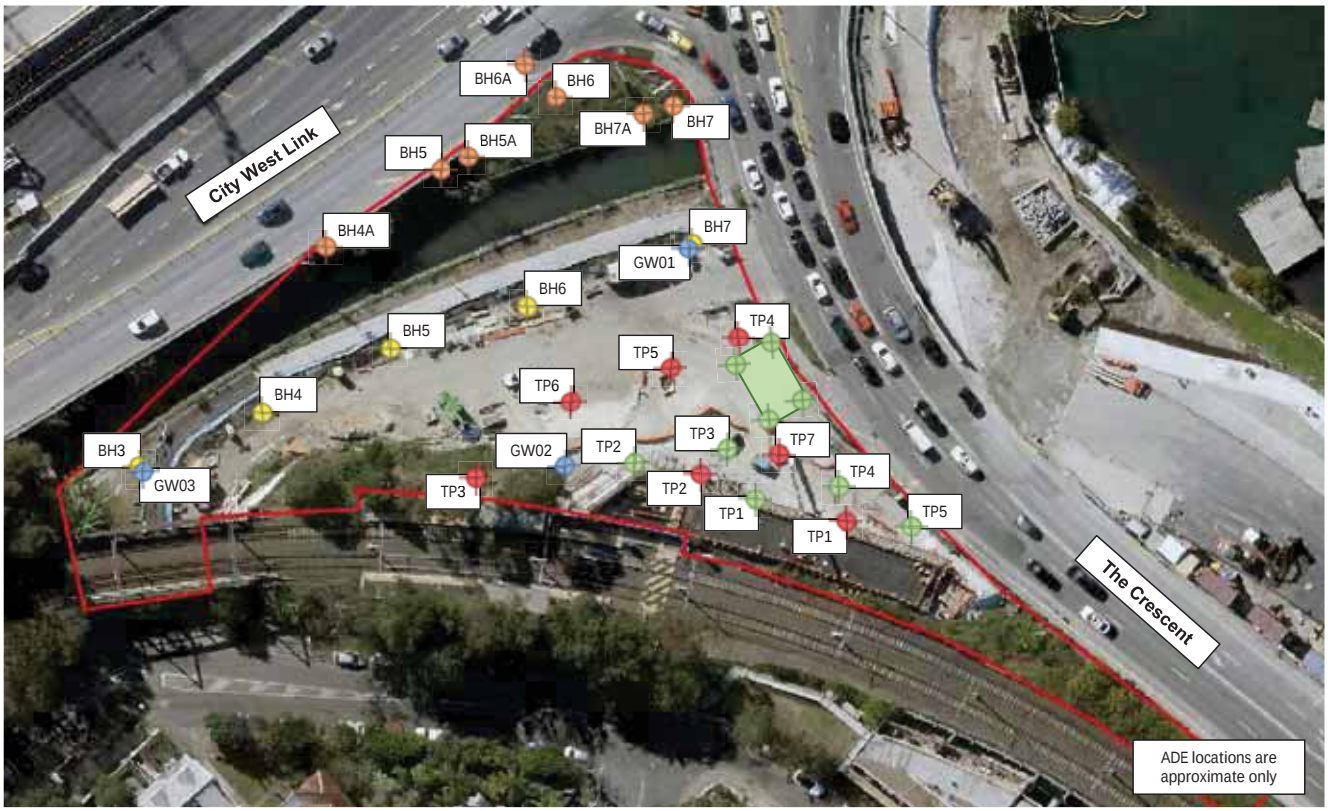
Approximate Site Boundary

AECOM (2018) Preliminary Site Investigation with Targeted Sampling

AECOM (2018) Tranche 1 and Tranche 2 Factual Contamination Assessment

WSP (2019) CLM and HRA

Figure 2 – Historical intrusive locations
Sub Site Area – Buruwan Park



Approximate Site Boundary

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (October 2020, WAC223)

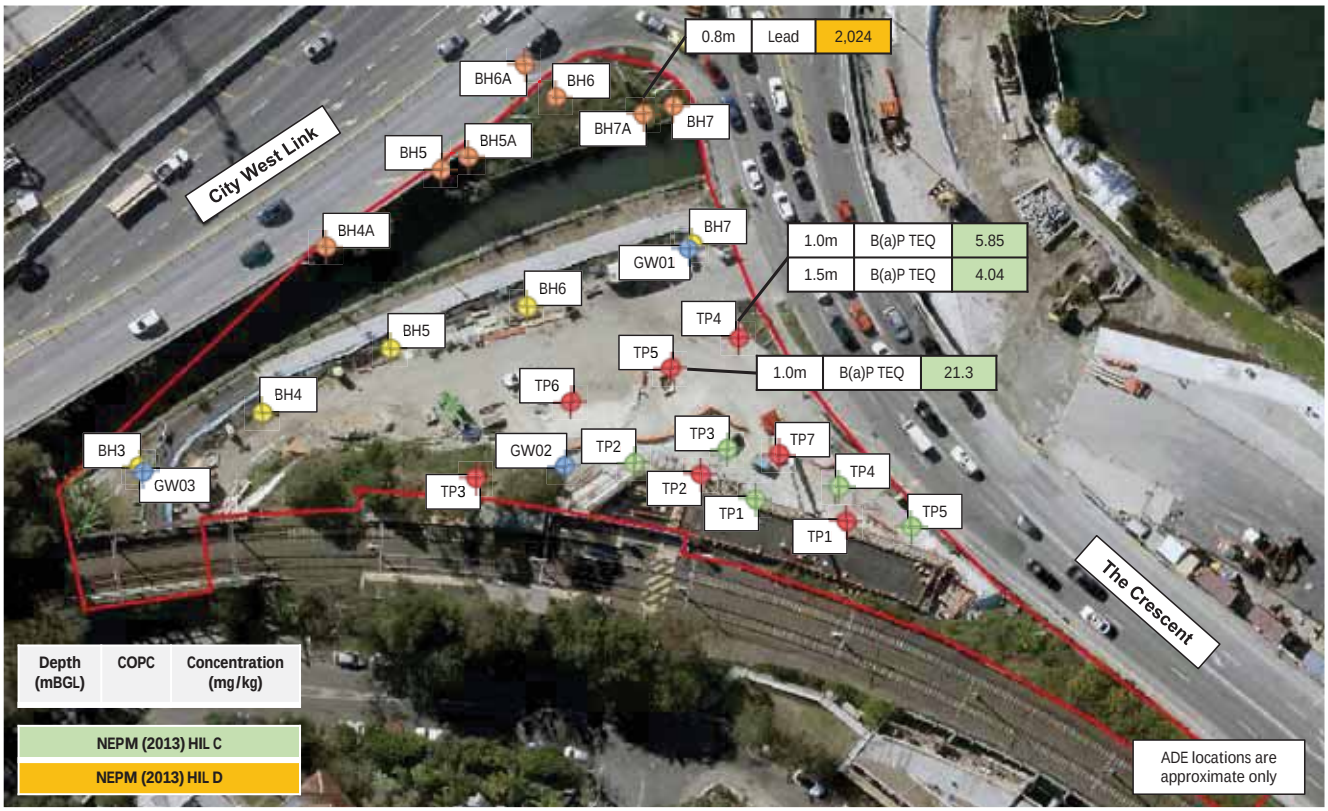
ADE Waste Classification (June 2020, WAC169)

ADE Waste Classification (September 2020, WAC208)

Groundwater monitoring well

Service trench excavation

Figure 3 – Intrusive locations
Sub Site Area – Buruwan Park



Approximate Site Boundary

ADE Waste Classification (November 2020, WAC236)

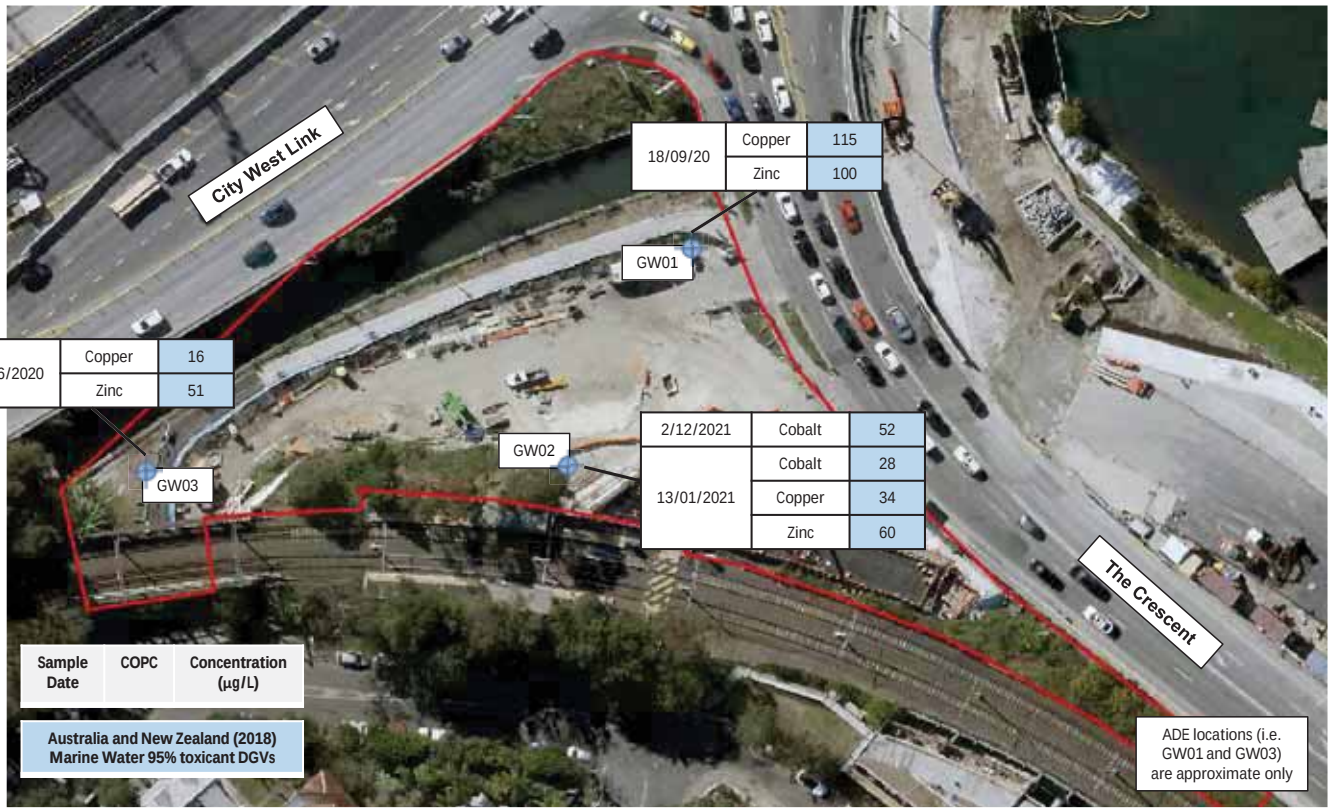
ADE Waste Classification (October 2020, WAC223)

ADE Waste Classification (June 2020, WAC169)

ADE Waste Classification (September 2020, WAC208)

Groundwater monitoring well

Figure 4 – Human health soil exceedances
Sub Site Area – Buruwan Park



Approximate Site Boundary

Groundwater monitoring well

Figure 5 – Groundwater exceedances
Sub Site Area – Buruwan Park

Figure 6 – Groundwater flow direction
Sub Site Area – Buruwan Park

Approximate Site Boundary

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

ADE Waste Classification (June 2020, WAC169)

Figure 7 – ADE Waste Classification
Sub Site Area – Buruwan Park

Approximate Site Boundary

Figure 8 – Site Layout and Design Overlay
Sub Site Area – Buruwan Park

Approximate Site Boundary

AECOM (2018) Preliminary Site Investigation with Targeted Sampling

WSP (2019) CLM and HRA

AECOM (2018) Tranche 1 and Tranche 2 Factual Contamination Assessment

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

ADE Waste Classification (June 2020, WAC169)

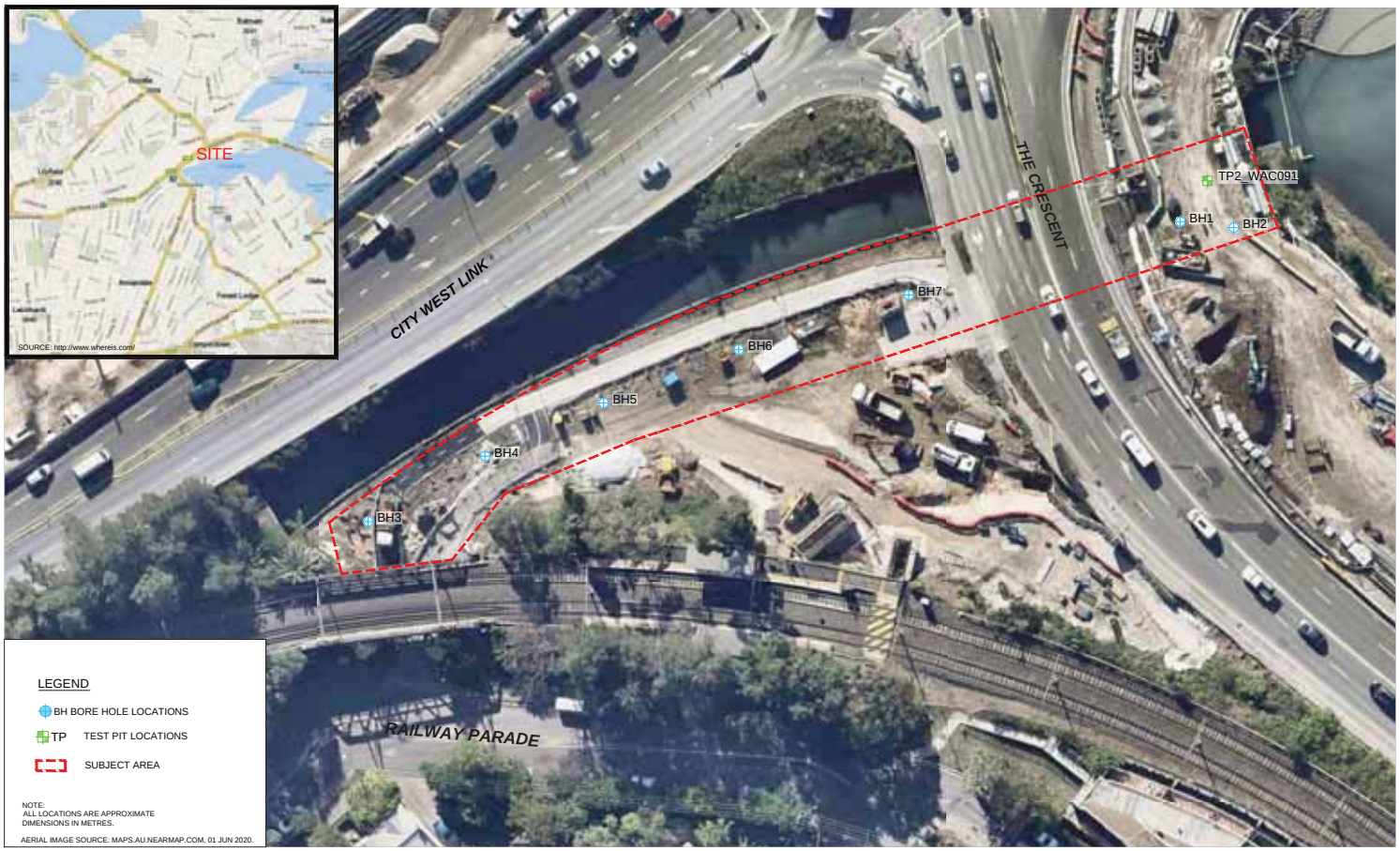
Figure 9 – Site Excavation Profile
Sub Site Area – Buruwan Park

Approximate Site Boundary

Recreational/open space criteria applied

Commercial/industrial criteria applied

Figure 10 – Site Layout and Applied Assessment Criteria
Sub Site Area – Buruwan Park



revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	EM	24/06/20

SCALE 0 5 10 15 20 25 METRES 1:500 @A3

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date	24/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC169 | drawing no: Figure 1 | rev: 0

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ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

							TRHs			BTEX				Heavy Metals																		
							C6-C9 F2 (S)	C10-C14 F3 (S)	C15-C28 F3 (S)	C29-C36 F4 (S)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Beryllium	Boron	Cadmium	Chromium (Total)	Chromium - TCLP	Cobalt	Copper	Lead	Lead - TCLP	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)*					650	10000	288	10000	1200	1200	288	-	-	-	100	-	3000	20	100	-	-	5000	100	-	1900	100	50	-	500	-	-	5000
Waste Classification Guidelines - Restricted Solid Waste CT1 (mg/kg)*					650	10000	288	10000	1200	1200	288	-	-	-	100	-	3000	20	100	-	-	5000	100	-	1900	100	50	-	500	-	-	5000
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)*					650	10000	18	518	1,680	1,680	0.88	-	-	350	-	100	1,800	-	-	-	-	1,000	-	-	80	1,000	50	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*					-	-	0.5	14.4	30	30	0.5	-	-	1	-	5	5	-	-	-	-	-	-	-	0.2	2	0.5	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*					2,600	40,000	23	2,073	6,300	7,200	2,000	-	-	400	-	400	7,400	-	-	-	-	6,000	-	-	200	4,000	200	-	-	-	-	-
Soil Vapour Sub-Slab/Bulk - Commercial					-	-	0.5	0.5	0.5	0.5	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soil Vapour Sub-Slab/Bulk - Industrial					-	-	0.5	0.5	0.5	0.5	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW Background Range - Sydney[1] (mg/kg)*					ND	ND	ND	ND	ND	ND	0.1-30	-	-	-	-	-	-	0.04-2	0.5-110	-	-	3-188	<0.25	-	-	0.001-0.5	2-250	-	-	-	-	9-180
NSW Background Range - Richmond[1] (mg/kg)*					ND	ND	ND	ND	ND	ND	0.03	160-1016	-	-	-	1	9-1000	-	-	-	1-43	2-130	3-230	-	8-53	0.02	5-400	-	-	20-310	32-1004	-	-

Consultant	Sample I.D	In-situ / Ex-situ	Depth (m AGL)	Date	Material Type																												
HORIZON A - TO - (ASNM)																																	
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	13	140	<5	205	<0.3	191	<0.2	<5	31	63	-	56	0.9	<10	<5	NT	26	96
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	69	<0.3	16	-	8	515	511	<0.2	293	0.2	<10	<5	NT	19	960
ADE	WAC1-BH1 2.2	In-Situ	2.2	20.05.2020	Silty SAND	<20	<50	295	<100	<0.5	<0.5	<1	<2	9	60	<5	84	<0.3	17	-	13	147	111	<0.2	282	0.2	11	<5	NT	10	665
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	35	<0.3	8	-	<5	28	13	-	17	<0.2	<10	<5	NT	11	67
ADE	WAC1-BH2 1.1	In-Situ	1.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	32	<5	<5	<0.3	<5	-	<5	<5	<10	-	52	<0.2	<10	<5	NT	16	10
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<20	<50	340	<100	<0.5	<0.5	<1	<2	33	100	<5	92	<0.3	22	-	<5	74	126	<0.2	171	0.3	<10	<5	NT	19	260
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	189	<100	<0.5	<0.5	<1	<2	10	50	<5	93	<0.3	17	-	8	139	160	<0.2	439	0.2	10	<5	NT	37	1160
ADE	WAC1-BH3 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	70	<5	161	<0.3	11	-	5	31	65	-	177	<0.2	30	<5	0.4	45	110
ADE	WAC1-BH3 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	70	<0.2	5	-	<5	26	23	-	83	<0.2	<10	<5	0.2	19	68
ADE	WAC1-BH3 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	36	<0.3	11	-	<5	51	101	<0.2	103	0.2	<10	<5	0.3	20	114
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<20	<50	109	2.39	<0.5	<0.5	<1	<2	7	80	<5	68	<0.3	14	-	<5	7	55	-	31	<0.2	<10	<5	0.3	23	67
ADE	WAC1-BH5 1.1	In-Situ	0.3	11.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	62	<5	54	<0.3	7	-	<5	2	15	-	60	<0.2	<10	<5	0.4	20	47
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	47	60	<5	72	<0.3	12	-	<5	31	101	-	117	<0.2	<10	<5	0.4	20	197
WSP	TP02_0.5	In-Situ	0.5	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	33	<2	<10	<0.4	12	-	<5	32	120	-	44	0.1	<5	<2	<10	28	382
WSP	TP02_0.5	In-Situ	0.5	28.11.2019	Silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.4	33	<2	<10	<0.4	<5	-	<5	16	53	-	15	<0.1	<5	<2	<10	<10	13
WSP	TP03_0.5	In-Situ	0.5	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.6	53	<2	<10	<0.4	17	-	<5	32	100	-	130	0.4	<5	<2	<10	42	72
WSP	TP04_0.5	In-Situ	0.5	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.1	31	<2	<10	<0.4	8.5	-	<5	19	63	-	64	<1	<5	<2	<10	29	35
WSP	TP05_0.5	In-Situ	0.5	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	20	<2	<10	<0.4	12	-	<5	15	50	-	52	<1	<5	<2	<10	27	27
WSP	TP06_0.6	In-Situ	0.6	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.4	67	<2	<10	<0.4	17	-	<5	31	93	-	49	<1	<5	<2	<10	45	193
	TC_BH09	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<50	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	9.3	-	NT	13	53	-	NT	0.05	2.3	NT	NT	NT	51
	TC_BH09	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<50	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	9.3	-	NT	13	53	-	NT	0.05	2.3	NT	NT	NT	51
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<20	<50	366	3.14	<0.5	<0.5	<1	<2	6	60	<5	62	<0.3	9	-	<5	15	58	-	55	0.3	<10	<5	NT	NT	66
ADE	WAC1-TP2 (0.2-0.3)	In-Situ	0.2-0.3	05.05.2020	Silty SAND	<20	<50	1040	3.14	<0.5	<0.5	<1	<2	6	60	<5	62	<0.3	9	-	<5	15	58	-	55	0.3	<10	<5	NT	NT	66
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	57	57	<0.3	8	-	57	9	57	-	57	<0.2	<10	NT	NT	57	153
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.05.2020	SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	57	57	<0.3	8	-	57	9	57	-	57	<0.2	<10	NT	NT	57	57
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	57	57	<0.3	8	-	57	122	261	<0.3	57	0.3	<10	NT	NT	NT	357
	% UCL																						64.6										
	Maximum Concentration (mg/kg)						0	0	340	274	0	0	0	0	47	0	ND	205	ND	191	-	13	147	261	ND	434	0.5	30	0	-	0	1163
HORIZON B - ASNM PASS																																	
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	<20	<50	140	<100	<0.5	<0.5	<1	<2	7	90	<5	68	<0.3	9	-	<5	80	317	-	66	0.5	<10	<5	NT	66	197
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	7	70	<5	50	<0.3	9	-	<5	52	83	-	162	0.4	<10	<5	NT	25	344
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	53	<5	32	<0.3	9	-	<5	29	63	-	111	0.2	<10	<5	NT	22	150
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	14	50	<5	46	<0.3	15	-	<5	62	63	-	129	0.2	<10	<5	NT	23	226
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	8	53	<5	7	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	NT	18	7
ADE	WAC1-BH2 2.2	In-Situ	2.2	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	53	<5	68	<0.3	10	-	<5	<5	<10	-	13	<0.2	<10	<5	0.2	12	<5
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	34	<0.3	9	-	<5	<5	<10	-	17	<0.2	<10	<5	1.3	13	64
ADE	WAC1-BH3 4.0	In-Situ	4.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	7	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<10	<5	1.5	9	<5
ADE	WAC1-BH3 5.0	In-Situ	5.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	11	<0.2	<10	<5	0.6	16	<5
ADE	WAC1-BH5 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	53	<5	81	<0.3	9	-	<5	<5	<10	-	24	<0.2	<10	<5	0.4	10	8
ADE	WAC1-BH5 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	53	<5	10	<0.3	<5	-	<5	<5	<10	-	7	<0.2	<10	<5	0.6	14	<5
ADE	WAC1-BH6 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	13	<0.3	<5	-	<5	<5	<10	-	10	<0.2	<10	<5	1.7	18	<5
ADE	WAC1-BH6 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	5	<0.2	<10	<5	0.2	<5	<5
ADE	WAC1-BH6 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	<5	<0.3	10	-	<5	5	18	-	6	0.2	<10	<5	0.8	<5	<5
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	68	<5	32	<0.3	<5	-	<5	<5	13	-	100	<0.2	<10	<5	0.6	11	32
ADE	WAC1-BH5 2.2	In-Situ	2.2	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	68	<5	45	<0.3	9	-	<5	10	71	-	142	<0.2	<10	<5	0.9	14	76
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	110	<5	20	<0.3	<5	-	<5	5	23	-	21	<0.2	<10	<5	1.8	60	67
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	<20	<50	100	274	<0.5	<0.5	<1	<2	22	50	<5	64	<0.3	9	-	<5	32	68	-	146	<0.2	<10	<5	0.6	18	96
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	10	50	<5	35	<0.3	<5	-	<5	7	35	-	71	<0.2	<10	<5	0.4	10	6
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	39	<5	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	1.1	10	<5
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	33	20	<5	110	<0.3	12	-	<5	8	21	-	21	<0.2	<10	<5	1.8	80	87
WSP	TP01_0.5	In-Situ	0.5	28.11.2019	Silty SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.1	53	<2	64	<0.3	18	-	<5	46	113	-	60	0.2	<5	<2	<10	39	163
WSP	TP02_0.5	In-Situ	0.5	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.8	43	<2	<10	<0.4	9.8	-	<5	23	71	-	31	0.1	<5	<2	<10	30	68
WSP	TP02_2.7	In-Situ	2.7	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	9.3	<10	<2	<10	<0.4	<5	-	<5	11	63	-	7.6	<1	<5	<2	<10	<10	7.3
WSP	TP03_0.5	In-Situ	0.5	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.5	28	<2	<10	<0.4	9.8	-	<5	19	61	-	15	0.1	<5	<2	<10	38	53
WSP	TP03_2.0	In-Situ	2.0	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.8	31	<2	<10	<0.4	5.3	-	<5	12	32	-	10	<1	<5	<2	<10	18	10
WSP	TP04_0.5	In-Situ	0.5	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.1	43	<2	<10	<0.4	9.5	-	<5	15	51	-	9.5	<1	<5	<2	<10	18	75
WSP	TP04_1.0	In-Situ	1	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	8.1	<10	<2	<10	<0.4	<5	-	<5	<5	5.8	-	13	<1	<5	<2	<10	<10	5.3
WSP	TP04_2.0	In-Situ	2	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.4	13	<2	<10	<0.4	<5	-	<5	<5	5	-	12	<1	<5	<2	<10	<10	7.6
WSP	TP05_2.0	In-Situ	2	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	16	<10	<2	<10	<0.4	<5	-	<5	9.8	7	-	22	<1	<5	<2	<10	14	7.6
WSP	TP06_1.0	In-Situ	1	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	10	<10	<2	<10	<0.4	5.5	-	<5	<5	7.1	-	14	<1	<5	<2	<10	<10	23
WSP	TP06_2.6	In-Situ	1.6	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.8	<10	<2	<10	<0.4	<5	-	<5	15	6.9	-	16	<1	<5	<2	<10	<10	9.9
ADE	WAC1-TP2 (3.5)	In-Situ	3.5	02.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	57	57	<0.3	<5	-	57	57	57	-	57	<0.2	<10	NT	NT	NT	57
	% UCL																																
	Maximum Concentration (mg/kg)						ND	ND	140	110	ND	ND	ND	ND	22	110	ND	110	ND	16	-	ND	80	317	ND	162	0.5	ND	ND	-	59	344
HORIZON C - NSWR																																	
ADE	WAC1-BH2 7.1	In-Situ	7.0	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	NT	<5	<5
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	NT	<5	<5
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	NT	<5	<5
ADE	WAC1-BH3 6.0	In-Situ	6.0	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	<5
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	<5
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	<5
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	7	8
ADE	WAC1-BH6 5.5	In-Situ	5.5	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	10	<5
ADE	WAC1-BH6 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	<5
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	<5
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	<0.1	<5	5
ADE	WAC1-BH7 8.5	In-Situ	8.5	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<10	<5	<0.1	<5	9
	% UCL																																
	Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	22	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DRAW																																	
ADE	WAC-BH1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<5	NT	<5	<5
ADE	WAC1-BH1	In-Situ	3	11.06.2020	Replicate of WAC1-BH3 2.0	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	NT	<5	103	<0.3	13	-	<5	13	51	-	29	<0.2	<10	<5	NT	NT	58
ADE	WAC1-BH5	In-Situ	3	11.06.2020	Replicate of WAC1-BH5 2.2	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	NT	NT	NT	<0.3	<5	-	NT	12	54	-	NT	0.2	6	NT	NT	NT	61
	% UCL																																
	Maximum Concentration (mg/kg)						ND	ND	813	274	ND	ND	ND	ND	22	NT	NT	NT	NT	NT	-	13	147	317	0	NT	0.5	30	0	-	59	344

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from Reid's Geologist's Manual, compiled by Dr A Berriman. Third Edition 1998. Publisher – The Australasian Institute of Mining & Metallurgy (Berriman, 1998)

4 - AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169							PAHs			PCBs	DCPs				Cyanide	Phenols	VOCs / BTEXN		Organotins (TBT)	PFAS	
							Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(a)pyrene TEF	Total PCBs	4,4'-Dichlorodiphenyldichloroethylene	4,4'-Dichlorodiphenyltrichloroethane	Aldrin + Dieldrin	Chlordane	Sum of DDD+DDE+DDD	Cyanide Total	Phenols Total	Sum of VOCs	Sum of BTEXN	Tributyltin (as Sn)	PFOS + PFHxS	PFOA
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)							0.8	-	-	50	<50	<50	<50	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)							3.2	-	-	200	<200	213	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)							10	-	-	200	<50	213	-	-	-	-	-	-	-	-	0.01	0.2
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)							-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	0.01	0.2
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)							23	-	-	800	<50	<50	613	-	-	-	-	-	-	-	0.1	2
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW Health Soil Investigation Guidance							1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
NSW Health Asbestos Investigation Guidance (DRAFT)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NSW Background Range - Richmond (HMC)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-situ	Depth (m AGL)	Date	Material Type																	
HORIZON A – TO – (SAND)																						
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	3.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND		3.6	4.9	<0.005	23	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.3	In-Situ	2.3	20.05.2020	Silty SAND		<0.1	0.7	-	-	0.7	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND		0.5	1	<0.005	40.2	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 3.0	In-Situ	2.0	20.05.2020	Silty SAND		2.7	3.9	<0.005	29.1	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH3 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY		0.9	1.3	-	-	6.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 2.3	In-Situ	2.3	20.05.2020	Silty SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.3	In-Situ	0.3	11.06.2020	Clayey SAND		0.7	1.2	-	-	5.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.7	In-Situ	0.7	11.06.2020	Clayey SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	<0.2
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND		0.6	1	-	-	6.1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP02_0.3	In-Situ	0.3	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	Silty CLAY		<0.5	-	-	-	<0.5	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY		0.8	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<1	<0.5	<0.5	<0.5	NT	NT
WSP	TP04_0.5	In-Situ	0.5	29.11.2019	SAND		1.6	-	-	-	17.2	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_0.5	In-Situ	0.5	29.11.2019	SAND		<0.5	-	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	<0.5	NT	NT
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.3	-	-	-	<0.5	NT	-	<0.3	<0.3	<0.3	NT	NT	NT	NT	NT	<0.3	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.4	-	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.4	-	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (0.2-0.3)	In-Situ	0.2-0.3	02.12.2020	Silty SAND		1.2	-	<0.005	320.1	ND	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.12.2020	Silty SAND		<0.2	-	-	-	2.5	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.12.2020	SAND		<0.2	-	-	-	0	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.12.2020	Silty SAND		0.3	-	-	-	2.5	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
			% UCL				0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				4.1	6	0	40.2	0	0	0	0	0	0	0	0	0	0	0	3	0	0
HORIZON B – SAND PASS																						
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY		3	4.3	<0.005	29.9	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0.6	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND		0.4	0.8	-	-	2.8	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	<0.2
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	<5	<5
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	NT	NT	NT	NT	NT
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND		0.4	1.1	-	-	6.7	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND		<0.3	0.7	-	-	0.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND		1	1.5	-	-	7.9	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.7	In-Situ	5.7	11.06.2020	Silty SAND		0.3	0.7	-	-	5.3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	11.06.2020	Silty CLAY		2	3	-	-	7.9	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND		0.3	1	-	-	3.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND		<0.3	0.7	-	-	3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP02_2.0	In-Situ	2.0	29.11.2019	Sandy CLAY		0.4	-	-	-	<0.3	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY		0.8	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.7	In-Situ	2.7	29.11.2019	SAND		<0.5	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.9	In-Situ	2.9	29.11.2019	Sandy CLAY		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.7	In-Situ	2.7	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_3.0	In-Situ	3	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_3.6	In-Situ	3.6	29.11.2019	SAND		-	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-TP-2 (3.5)	In-Situ	3.5	02.12.2020	Silty SAND		<0.2	-	ND	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	NT	NT	NT	NT	NT
			% UCL				0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				3	4.3	ND	29.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HORIZON C – SWAB																						
ADE	WAC1-BH2 7.1	In-Situ	7.1	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<3	<3	ND	ND	<0.2	NT	NT
ADE	WAC1-BH3 6.0	In-Situ	6.0	10.06.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<3	<3	ND	ND	NT	NT	NT
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 7.5	In-Situ	7.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.2	NT	NT
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.7	In-Situ	6.7	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 9.5	In-Situ	9.5	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
			Maximum Concentration (mg/kg)				ND	4.3	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADE	WAC-BH1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 2.0		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-BH5	In-Situ	2	11.06.2020	Replicate of WAC1-BH5 2.0		0.7	-	-	-	7.3	ND	ND	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT
			% UCL				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				3.4	4.3	0	29.9	0	0	0	0	0	0	0	1	0	0	0	3	0	0

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman. Third Edition 1998. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1998)

4 - AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASMP

							Acid Sulfate Soils²							Asbestos
ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169							pH (Field)	pH (Field Peroxide)	Titratable Actual Acidity (TAA) (Moles H+/t)	Net Acidity (Including Acid Base Potential) (Moles H+/t)	Net Acidity (Including Acid Base Potential) (kg H2SO4/t)	Net Acidity (mole H+)	Net Acidity (kg H2SO4/t)	Asbestos ID in soil >0.1g/kg
Waste Classification Guidelines – General Solid Waste CT1 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste CT2 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste SCC1 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste TCLP1 (mg/L)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste SCC2 (mg/kg)							-	-	-	-	-	-	-	-
Soil Texture Group							-	-	-	-	-	-	-	-
Acid Sulfate Soil Investigation Criteria⁴							4 < 5	3 < 5	18	18	1.71			
Soil Criteria Sub-Groups - Subject to Verification⁵							ND	ND	ND	ND	ND			ND
NSW Background Range - Richmond (1998)³							ND	ND	ND	ND	ND			ND
Consultant	**Sample I.D**	**In-situ / Ex-situ**	**Depth (m AGL)**	**Date**	**Material Type**									
HORIZON A – TO – (NSW)														
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH3 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	7.5	6	1	NT	NT	-	-	NAD	
ADE	WAC1-BH3 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	8.3	8.4	3	NT	NT	-	-	NAD	
ADE	WAC1-BH3 2.0	In-Situ	2.0	20.05.2020	Silty SAND	8.4	8.1	2	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.0	8.2	3	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.1	8	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	8.3	8.1	3	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Silty CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP04_0.5	In-Situ	0.5	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP05_0.5	In-Situ	0.5	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP06_0.5	In-Situ	0.5	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
-	TP_BH09	In-Situ	0.1-0.2	05.05.2014	Fill	8.3	8.4	NT	NT	NT	-	-	NT	
-	TP_BH09	In-Situ	0.1-0.2	05.05.2014	Fill	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (0.0-0.2)	In-Situ	0.0-0.2	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			N GCL											-
			Maximum Concentration (mg/kg)											N/A
HORIZON B – SSW PASS														
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	8.4	8.2	3	NT	NT	-	-	NT	
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.5	8.1	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	8.5	8.1	1	**0.17**	3	-	-	NT	
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.4	8	1	NT	NT	-	-	NT	
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	8.9	8.1	1	**197**	12	-	-	NT	
ADE	WAC1-BH2 2.2	In-Situ	2.2	10.06.2020	Silty SAND	8.2	8.4	1	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	8.5	7.9	1	**1.05**	**64**	-	-	NT	
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	8.1	8.7	3	**0.22**	**130**	-	-	NT	
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Silty SAND	8.4	8.8	1	NT	NT	-	-	NT	
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	8.4	8.3	3	**0.21**	**191**	-	-	NT	
ADE	WAC1-BH3 2.0	In-Situ	2.0	10.06.2020	Clayey SAND	8.1	8.6	3	**0.25**	**182**	-	-	NT	
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	7.9	8.3	3	**0.35**	**209**	-	-	NT	
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Clayey SAND	8.1	7.5	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	8.9	8.9	1	NT	NT	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	10.1	7.3	3	**0.22**	16	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	10.4	7.4	3	**0.15**	**19**	-	-	NAD	
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	9	6.3	3	**1.47**	**670**	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	9.5	6.7	3	**0.41**	**256**	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	8.9	8.1	3	NT	NT	-	-	NAD	
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	9	6.6	3	**<0.02**	**11**	-	-	NT	
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	10.4	7.6	3	**0.15**	**39**	-	-	NAD	
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	10	6.7	3	NT	NT	-	-	NAD	
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	9.2	6.5	3	**<0.02**	11	-	-	NAD	
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	8.6	8.2	3	**0.13**	**84**	-	-	NT	
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	8.7	8.3	2	**0.17**	**214**	-	-	NT	
WSP	TP02_0.2	In-Situ	0.2	26.11.2019	Sandy CLAY	8.2	8.4	3	NT	NT	-	-	NT	
WSP	TP02_2.2	In-Situ	2.2	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.7	In-Situ	2.2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.0	In-Situ	2.0	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_2.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_2.0	In-Situ	2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_1.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_2.2	In-Situ	2.2	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_2.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_2.0	In-Situ	2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.0	In-Situ	1	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_2.6	In-Situ	1.6	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC1-TP2 (2.5)	In-Situ	2.5	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			N GCL											-
			Maximum Concentration (mg/kg)											N/A
HORIZON C – SSWP														
ADE	WAC1-BH2 7.1	In-Situ	7.5	20.05.2020	SANDSTONE	7	6.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	7	6.4	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	6.7	6.3	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 6.0	In-Situ	6.0	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 6.5	In-Situ	7.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
			Maximum Concentration (mg/kg)											N/A
ADE	WAC-BD1	In-Situ	2.0	20.05.2020	Replicate of WAC1-BH2 7.0	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BD1	In-Situ	3	11.06.2020	Replicate of WAC1-BH5 3.0	8.6	8.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-DB5	In-Situ	3	11.06.2020	Replicate of WAC1-BH5 3.0	NT	NT	NT	NT	NT	NT	NT	NT	
			N GCL											N/A
			Maximum Concentration (mg/kg)											

All units in mg/kg unless specified otherwise

NT – Not Tested

ND – Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 – Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 – Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3– Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman. Third Edition 1998. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1998)

4 – AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 – Adopted Site Assessment Criteria as per the Site's ASSMP

Borehole Log WAC1-BH3

CLIENT: JHCPBJV
PROJECT NUMBER: WCX-08-17868
DATE STARTED: 10.06.2020
DRILLING COMPANY: ADE
EQUIPMENT: Comacchio GEO 205

PROJECT NAME: Westconnex Stage 3B
PROJECT LOCATION: Rozelle Interchange Site
COMPLETED: 10.06.2020
LOCATION: Per Figure
ELEVATION (RL) 3.301 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	3	0.5		CL	(Horizon A) Sandy CLAY: low to medium plasticity, white / orange and brown, with gravels, moist.	WAC1-BH3 0.3		Horizon A General Fill
	2.5	1				WAC1-BH3 1.0		
	2	1.5						
	1.5	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 2.2	Natural Shells and Acid Sulfate Soil Odours	Horizon B Marine Sediments / Reworked PASS
SFA	1	2.5						
	0.5	3		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH3 3.0		
	0	3.5						
	-0.5	4		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 4.0		
	-1	4.5						
Core	-1.5	5			(Horizon C) SANDSTONE: coarse grained, light yellow / white / orange, moderately graded	WAC1-BH3 5.0		Horizon C Residual Material / Bedrock
	-2	5.5						

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Borehole Log WAC1-BH3

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-2.5	6						
	-3	6.5				WAC1-BH3 6.5		
	-3.5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-4	7.5						
	-4.5	8						
	-5	8.5						
	-5.5	9						
	-6	9.5						
	-6.5	10						
	-7	10.5						
	-7.5	11						
	-8	11.5						
	-8.5	12						

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Borehole Log WAC1-BH4

CLIENT: JHCPBJV
PROJECT NUMBER: WCX-08-17868
DATE STARTED: 10.06.2020
DRILLING COMPANY: ADE
EQUIPMENT: Comacchio GEO 205

PROJECT NAME: Westconnex Stage 3B
PROJECT LOCATION: Rozelle Interchange Site
COMPLETED: 10.06.2020
LOCATION: Per Figure
ELEVATION (RL) 2.190 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	3	0.5		CL	(Horizon A) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH4 0.3		Horizon A ◆ General Fill
					(Horizon A) Ballast			
	2.5	1		SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH4 1.0	Natural Shells	Horizon B ◆ Marine Sediments / Reworked PASS
	2	1.5						
	1.5	2						
SFA	1	2.5		SC	(Horizon B) Clayey SAND: fine to medium grained, grey, moderately graded, moist to wet.	WAC1-BH4 2.2	Natural Shells and Acid Sulfate Soil Odours	
	0.5	3				WAC1-BH4 3.0		
	0	3.5						
	-0.5	4				WAC1-BH4 4.0		
	-1	4.5						
	-1.5	5				WAC1-BH4 5.0		
Core	-2							

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Borehole Log WAC1-BH4

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-2.5	6				WAC1-BH4 6.0		
	-3	6.5			Termination Depth at: 6.5 m BGL - Target Depth Reached			
	-3.5	7						
	-4	7.5						
	-4.5	8						
	-5	8.5						
	-5.5	9						
	-6	9.5						
	-6.5	10						
	-7	10.5						
	-7.5	11						
	-8	11.5						
	-8.5	12						

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Borehole Log WAC1-BH5

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 1.916 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH5 0.3		Horizon A ◆ General Fill
	1	1		SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH5 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B ◆ Marine Sediments / Reworked PASS
	0.5	1.5						
	0	2		CL	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH5 2.3		
SFA	-0.5	2.5						
	-1	3				WAC1-BH5 3.0		
	-1.5	3.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH5 3.5		Horizon C ◆ Residual Material / Bedrock
	-2	4						
	-2.5	4.5				WAC1-BH5 4.5		
	-3	5						
	-3.5	5.5				WAC1-BH5 5.5		

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Borehole Log WAC1-BH5

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-4	6						
					Termination Depth at: 6.0 m BGL - Target Depth Reached			

-4.5 6.5
-5 7
-5.5 7.5
-6 8
-6.5 8.5
-7 9
-7.5 9.5
-8 10
-8.5 10.5
-9 11
-9.5 11.5
-10 12

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Borehole Log WAC1-BH6

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 11.06.2020
COMPLETED: 11.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.068 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	2	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH6 0.3		Horizon A ◆ General Fill
	1.5	1		SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH6 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B ◆ Marine Sediments / Reworked PASS
	1	1.5						
	0.5	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH6 2.3		
SFA	0	2.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH6 3.0; WAC1-BR2; WAC1-SR2		
	-0.5	3						
	-1	3.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.			Horizon C ◆ Residual Material / Bedrock
	-1.5	4						
	-2	4.5				WAC1-BH6 4.5		
	-2.5	5						
	-3					WAC1-BH6 5.5		

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Borehole Log WAC1-BH6

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-3.5							
	-4	6						
	-4.5	6.5				WAC1-BH6 6.5		
					Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-5	7						
	-5.5	7.5						
	-6	8						
	-6.5	8.5						
	-7	9						
	-7.5	9.5						
	-8	10						
	-8.5	10.5						
	-9	11						
	-9.5	11.5						
	-10	12						

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Borehole Log WAC1-BH7

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 12.06.2020
COMPLETED: 12.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.350 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.3		Horizon A ◆ General Fill
	1	1		SC	(Horizon B) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B ◆ Marine Sediments / Reworked PASS
	0.5	1.5						
	0	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH7 2.3		
SFA	-0.5	2.5						
	-1	3				WAC1-BH7 3.0		
	-1.5	3.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.			
	-2	4				WAC1-BH7 4.0		
Core	-2.5	4.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH7 4.7		Horizon C ◆ Residual Material / Bedrock
	-3	5						
	-3.5	5.5				WAC1-BH7 5.5		

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Borehole Log WAC1-BH7

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-4	6						
	-4.5	6.5				WAC1-BH7 6.5		
	-5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-5.5	7.5						
	-6	8						
	-6.5	8.5						
	-7	9						
	-7.5	9.5						
	-8	10						
	-8.5	10.5						
	-9	11						
	-9.5	11.5						
	-10	12						

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LEGEND

TP — TEST PIT LOCATION

SUBJECT AREA - WAC223

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 26 SEP 2020.

revision no.	description	drawn	approved	date
A	FIRST ISSUE	MC	BE	04/11/20

SCALE 0 5 10 15 20 25 METRES — 1:500 @A3

drawn	MC
approved	BE
date	04/11/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS & CLASSIFICATION REPORT
WESTCONNEX STAGE 3B, ROZELLE INTERCHANGE SITE
ROZELLE, NSW

title: SUBJECT AREA AND SITE LOCATION PLAN

project no: WCX-08-18474_WAC223 | figure no: FIGURE 1 | rev: A

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Unit 6 / 7 Millennium Court, Silverwater, NSW 2128
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	Acid Sulphate Soils		Particle Size		BTEX							TRH							
	s-Net Acidity without ANCE	pH (KCl)	Clay in soils <2um	Density	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (=M&p-cresol)
	% S	-	%	g/cm3	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.01	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	50	100	100	50	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	10	288	600	-	-	1,000	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	18	518	1,080	-	-	1,800	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	40	1,152	2,400	-	-	4,000	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	72	2,073	4,320	-	-	7,200	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lab Name	**Field ID**	**Date**																	
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.02	5.7	10	2.46	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.02	6.1	10	2.45	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.02	5.7	9	2.48	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	0.02	5.8	8	2.47	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.02	6.0	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-BR**	**14/09/2020**					<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	-
SLS	**WAC223.SR**	**23/10/2020**					<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50		<100	<100	0	-
Statistics																					
Number of Results			**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**6**	**7**	**7**	**7**	**5**
Number of Detects			**1**	**5**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Minimum Concentration			**0.02**	**5.7**	**<1**	**1**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**0**	**0**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**0**	**<0.5**
Maximum Concentration			**0.02**	**6.1**	**10**	**2.48**	**<0.5**	**<0.5**	**<1**	**<2**	**<1**	**<0.5**	**<0.2**	**<35**	**<35**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1989)
Adopted Site Assessment Criteria as per the Site's ASSMP

Phenols													Amino Aliphatics				Amino Aromatics		Anilines						
2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1- naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5
8,000	40	-	-	-	-	4,000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	200
14,400	72	-	-	-	-	7,200	-	-	-	518	-	-	-	-	-	-	-	-	-	-	-	-	-	360
32,000	160	-	-	-	-	16,000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	800
57,600	288	-	-	-	-	28,800	-	-	-	2,073	-	-	-	-	-	-	-	-	-	-	-	-	-	1,440
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Chlorinated Hydrocarbons																									
1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5
600	26	24	-	14	-	-	-	10	-	-	-	-	-	10	-	-	120	-	-	-	-	-	-	-
1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-	-	-	18	-	-	126	-	-	-	-	-	-	-
2,400	104	96	-	56	-	-	-	40	-	-	-	-	-	40	-	-	480	-	-	-	-	-	-	-
4,320	187.2	172.8	-	100	-	-	-	72	-	-	-	-	-	72	-	-	864	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**

					Explosives				Halogenated Benzenes											Halogenated Hydrocarbons				
Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.5	5	5	0.5	5
10	14	-	-	4	-	2.6	-	40	-	-	86	-	150	-	-	-	2,000	-	-	-	-	-	-	-
18	25.2	-	-	7.2	-	0.13	-	72	-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-	-	-
40	56	-	-	16	-	10.4	-	160	-	-	344	-	600	-	-	-	8,000	-	-	-	-	-	-	-
72	100.8	-	-	28.8	-	18.7	-	288	-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**

Herbicides	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						Perfluo		
Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	18	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	72	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<0.5	**<0.001**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**
<0.5	**<0.001**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**

roalkyl Sulfonamides				PFAS			Inorganics										MAH								
N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER list)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	pH (Lab)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	320	-	-	-	-	-	-	-	-	60	-
-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	240	-
-	-	-	-	7.2	-	-	-	-	-	-	-	-	-	23,600	-	-	-	-	-	-	-	-	432	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND										ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND										ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	16.6	0.4	<0.1	0.1	<0.1	<0.1	0.2	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2	<0.1	0.5	0.2	<0.1	<0.1	0.8	<1	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4	0.4	0.1	<0.1	<0.1	<0.1	0.3	<1	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	17.5	<0.1	0.1	<0.1	<0.1	<0.1	0.3	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	11.5	<0.1	0.5	<0.1	<0.1	<0.1	0.7	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**4**	**2**	**0**	**0**	**5**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.0005	**<0.0005**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**8.2**	**<0.1**	**0.1**	**0.1**	**<0.1**	**<0.1**	**0.2**	**<1**	**5.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
<0.0005	**<0.0005**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**22.4**	**1.9**	**0.5**	**0.2**	**<0.1**	**<0.1**	**0.8**	**<1**	**5.6**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Metals									Nitroaromatics			Organochlorine Pesticides											
Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Uranium	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
5	0.3	2	5	5	0.1	2	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
100	20	100	-	100	4	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	100	1,900	-	1,500	50	1,050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	80	400	-	400	16	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,000	400	7,600	-	6,000	200	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	0.3	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	<0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	9	<5	<5	<0.1	<2	<0.1	12	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	-	<5	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	-	<5.0	-	-	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10
7	**7**	**7**	**7**	**7**	**7**	**7**	**5**	**7**	**5**	**5**	**5**	**7**	**7**	**7**	**6**	**7**	**6**	**7**	**7**	**7**	**7**	**7**	**6**	**7**
0	**0**	**6**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<5	**<0.3**	**3**	**<5**	**<5**	**<0.1**	**<2**	**0.1**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**
<5	**<1**	**9**	**<5**	**<10**	**<0.2**	**<10**	**0.3**	**12**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.1**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.1**

											Organophosphorous Pesticides													
Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1
60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-	-	-
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-
432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
-	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	<0.10	<0.10	<0.10	-	-	-	<0.10	-	-	<0.10

6	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**6**	**6**	**6**	**1**	**6**	**6**	**7**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.05	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.1**
<0.05	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.2**

			Other	PAH																							
Monocrotophos	Prothiofos	Ronnel	Acetophenone	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.2	0.05	0.1	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5		0.5	0.5
-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-
-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-
-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-
-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
-	-	<0.10	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	0	<0.50	<0.50

6	**6**	**1**	**5**	**7**	**7**	**7**	**7**	**7**	**1**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**1**	**7**	**7**	**6**	**1**	**1**	**1**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
<0.2	**<0.05**	**<0.1**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**0**	**<0.5**	**<0.5**
<0.2	**<0.05**	**<0.1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**0**	**<0.5**	**<0.5**

PCBs							Pesticides							Phthalates						Solvents					
Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Chlorobenzilate	Carbazole	DDE	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	7,200	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	28,800	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-
<0.50	<0.50	<0.50	<0.50	<0.50	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	**1**	**1**	**1**	**1**	**6**	**5**	**5**	**1**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**

Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils -		Acid Sulphate Soils -		Acid Sulphate Soils -		SVOCs														
- Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible sulfur	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrospyrrolidine	Phenacetin
moles H+/t	-	mole H+/t	%S	%S	mole H+/t	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
10	0.5	10	0.02	0.02	2	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
										ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
										ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<10	1.5	<10	<0.02	<0.02	2	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
14	1.5	14	0.02	<0.02	2	1	1	12	0.020	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1	**5**	**1**	**1**	**0**	**2**	**1**	**1**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<10	**1.5**	**<10**	**0.02**	**<0.02**	**2**	**1**	**1**	**<10**	**0.01**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**
14	**1.5**	**14**	**0.02**	**<0.02**	**2**	**1**	**1**	**12**	**0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**

TPH					VOCs		
C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
10	50	100	100	50	0.5	0.5	0.5
650	-	-	-	10,000	-	-	-
650	-	-	-	10,000	-	-	-
2,600	-	-	-	40,000	-	-	-
2,600	-	-	-	40,000	-	-	-
-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	-	-	-
<25	<50	<100	<100	0	-	-	-

7	**7**	**7**	**7**	**7**	**5**	**5**	**5**
0	**0**	**0**	**0**	**1**	**0**	**0**	**0**
<10	**<50**	**<100**	**<100**	**0**	**<0.5**	**<0.5**	**<0.5**
<25	**<50**	**<100**	**<100**	**<50**	**<0.5**	**<0.5**	**<0.5**

LEGEND

- TP — TEST PIT LOCATION
- SUBJECT AREA - WAC236
- AREA MEETS HSL-C, HSL-D AND HIL-D CRITERIA BUT DOES NOT MEET HIL-C
- AREA MEETS HIL-D, HIL-C AND HIL-D

SAMPLE ID	DEPTH (metres)
CHEMICAL	CONCENTRATION

- SOIL CONTAMINATION ABOVE SAC FOR HUMAN HEALTH RISK (mg/kg)

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 26 SEP 2020.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	BS	30/11/20

SCALE 1:500 @A3 METRES (0 5 10 15 20 25)

drawn	MC
approved	BS
date	30/11/2020
scale	AS SHOWN
original size	A3

client: JHCPB-JV

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
ROZELLE INTERCHANGE SITE
THE CRESCENT, ROZELLE, NSW

title: SOIL ANALYTICAL RESULTS AND SITE LOCATION PLAN

project no: WAC-08-18712_WAC236 | figure no: FIGURE 1 | rev: A

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	Acid Sulphate Soils		Particle Size								TRH						Phenols												
	Net Acidity without ANCE	pH (KCl)	Clay in soils <2um						Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (m&p-Cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenols, Total
	% S	-	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)				88	288	600			1,000									8,000	40					4,000					
NSW 2014 General Solid Waste SCC1 (with leached)				18	518	1,080			1,800									14,400	72					7,200				518	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				40	1,152	2,400			4,000									32,000	160					16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72	2,073	4,320			7,200									57,600	288					28,800				2,073	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand				3 | 3 | 3 | 3 |					230		yes | yes | yes																	
0-1m				3					230			260																	
1-2m				3								170																	
2-4m				3								630																	
>=4m				3																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																										120	40,000		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										660	240,000		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-A	**27/11/2020**	<0.02	7.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-A	**27/11/2020**	<0.02	11.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-B	**27/11/2020**	<0.02	9.1	3	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-C	**27/11/2020**	<0.02	8.8	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	129	<100	129													
WAC236-TP4-A	**27/11/2020**	0.02	11.2	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	397	<100	397													
WAC236-TP4-B	**27/11/2020**	<0.02	8.0	9	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	100	<100	100													
WAC236-TP4-C	**27/11/2020**	<0.02	9.1	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-A	**27/11/2020**	<0.02	9.4	7	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	1,266	<100	1,266													
WAC236-TP5-B	**27/11/2020**	<0.02	8.8	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-C	**27/11/2020**	<0.02	9.0	22	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-A	**27/11/2020**	<0.02	11.6	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-B	**27/11/2020**	0.03	10.9	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-C	**27/11/2020**	<0.02	9.7	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-A	**27/11/2020**	<0.02	10.7	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- BR1	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-SR-1	**27/11/2020**				<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<100	<100	<50													
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	397	0	397	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-B	**27/11/2020**	<0.02	6.4	1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP2 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP2-A	**27/11/2020**	<0.02	5.9	<1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-B	**27/11/2020**	<0.02	9.1	4	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons														
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloraniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)													200	400	40	0.5	34	0.5				10						0.5
NSW 2014 General Solid Waste SCC1 (with leached)													360	1,080	46.8	43.2	0.7					0.5						18
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)													800	2,400	104	96	56					40						40
NSW 2014 Restricted Solid Waste SCC2 (with leached)													1,440	4,320	187.2	172.8	100					72						72
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236-TP1-A	**27/11/2020**																												
WAC236- TP3 - A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236-TP3-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**																												
WAC236-TP3-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**																												
WAC236-TP3-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**																												
WAC236-TP4-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**																												
WAC236-TP4-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**																												
WAC236-TP4-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**																												
WAC236-TP5-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**																												
WAC236-TP5-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**																												
WAC236-TP5-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**																												
WAC236-TP6-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**																												
WAC236-TP6-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**																												
WAC236-TP6-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**																												
WAC236-TP7-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**																												
WAC236-SR-1	**27/11/2020**																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**																											
WAC236-TP1-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**																											
WAC236-TP2-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**																											
WAC236-TP7-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Chlorinated Hydrocarbons															Explosives				Halogenated Benzenes									
	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Methylene chloride	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4 Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			100								10	14			4		2.6		40			96		120			2,000		
NSW 2014 General Solid Waste SCC1 (with leached)			126								10	25.2			7.2		0.13		7.2			4.3		7.5			3,600		
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			480								40	56			16		10.4		160			344		600			8,000		
NSW 2014 Restricted Solid Waste SCC2 (with leached)			864								72	100.8			28.8		18.7		288			620		1,080			14,400		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																												10	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												50	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**																											<0.10	
WAC236-TP1-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - A	**27/11/2020**																											<0.10	
WAC236-TP3-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - B	**27/11/2020**																											<0.10	
WAC236-TP3-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - C	**27/11/2020**																											<0.10	
WAC236-TP3-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - A	**27/11/2020**																											<0.10	
WAC236-TP4-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - B	**27/11/2020**																											<0.10	
WAC236-TP4-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - C	**27/11/2020**																											<0.10	
WAC236-TP4-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - A	**27/11/2020**																											<0.10	
WAC236-TP5-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - B	**27/11/2020**																											<0.10	
WAC236-TP5-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - C	**27/11/2020**																											<0.10	
WAC236-TP5-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - A	**27/11/2020**																											<0.10	
WAC236-TP6-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - B	**27/11/2020**																											<0.10	
WAC236-TP6-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - C	**27/11/2020**																											<0.10	
WAC236-TP6-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - A	**27/11/2020**																											<0.10	
WAC236-TP7-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- BR1	**27/11/2020**																											<0.10	
WAC236-SR-1	**27/11/2020**																											<0.05	
	Maximum concentration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**																											<0.10	
WAC236-TP1-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP2 - A	**27/11/2020**																											<0.10	
WAC236-TP2-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - B	**27/11/2020**																											<0.10	
WAC236-TP7-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	Maximum concentration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Halogenated Hydrocarbons					Herbicides	Perfluoroalkane Carboxylic Acids										(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids					
	1,2-Dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorotridecanoic acid (PFTrDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	5	0.5	5	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NSW 2014 General Solid Waste CT1 (No Leaching)																										
NSW 2014 General Solid Waste SCC1 (with leached)											10															
NSW 2014 General Solid Waste TCLP1 (leached)																										
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																										
NSW 2014 Restricted Solid Waste SCC2 (with leached)											72															
NSW 2014 Restricted Solid Waste TCLP2 (leached)																										
Berkman (1989) Background Ranges																										
ANZECC (1992) Background Ranges																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
0-1m																										
1-2m																										
2-4m																										
>=4m																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																										
0-1m																										
1-2m																										
2-4m																										
>=4m																										
NEPM 2013 Table 1A(1) HILs Rec C Soil																										
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																									
WAC236-TP1-A	27/11/2020																									
WAC236-TP1-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - A	27/11/2020																									
WAC236-TP3-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - B	27/11/2020																									
WAC236-TP3-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP3 - C	27/11/2020																									
WAC236-TP3-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
WAC236- TP4 - A	27/11/2020																									
WAC236-TP4-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - B	27/11/2020																									
WAC236-TP4-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - C	27/11/2020																									
WAC236-TP4-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP5 - A	27/11/2020																									
WAC236-TP5-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - B	27/11/2020																									
WAC236-TP5-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - C	27/11/2020																									
WAC236-TP5-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP6 - A	27/11/2020																									
WAC236-TP6-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0011	<0.0002
WAC236- TP6 - B	27/11/2020																									
WAC236-TP6-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002
WAC236- TP6 - C	27/11/2020																									
WAC236-TP6-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - A	27/11/2020																									
WAC236-TP7-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- BR1	27/11/2020																									
WAC236-SR-1	27/11/2020																									
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																										

Horizon B - BEDROCK

Field ID	Date																									
WAC236- TP1-B	27/11/2020																									
WAC236-TP1-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP2 - A	27/11/2020																									
WAC236-TP2-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - B	27/11/2020																									
WAC236-TP7-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																										

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Perfluoroalkyl Sulfonamides							PFAS			Inorganics								MAH								
	Perfluorooctane sulfonamide (PFOSA)	N-Methyl perfluorooctane sulfonamide (NMPFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (NMPFOSAA)	N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	N-Ethyl perfluorooctane sulfonamide (EPFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EPFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EPFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	pH 1:5 soil:water	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cwealth Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-Butylbenzene	n-propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	tert-butylbenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	-	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1	-	0.1	0.1	0.1	0.1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)																			200								88	
NSW 2014 General Solid Waste SCC1 (with leached)								1.8											10								108	
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			1,280								240	
NSW 2014 Restricted Solid Waste SCC2 (with leached)								7.2											23,600								432	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**											5.9		8.5														
WAC236-TP1- A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	16.2	0.7		<0.2	<0.2	<0.2	0.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**											9.8		10.5														
WAC236-TP3-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	5.2	10.2	4.2		<0.2	0.2	0.2	4.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**											8.9		9.2														
WAC236-TP3-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	10.1	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**											9.4		8														
WAC236-TP3-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0002	0.0002	<0.2	9.9	3.1		<0.2	<0.2	<0.2	3.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**											4.8		10.2														
WAC236-TP4-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.7	4.5		<0.2	0.3	<0.2	4.8	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**											7		8.3														
WAC236-TP4-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	0.0002	0.0002	<0.2	8.9	2.5		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**											7.4		8.5														
WAC236-TP4-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	9.7	1.6		<0.2	<0.2	<0.2	1.6	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**											6.3		9.5														
WAC236-TP5-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	9.6	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**											12.4		7.9														
WAC236-TP5-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0005	0.0005	<0.2	14.4	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**											6.3		7.8														
WAC236-TP5-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	7.5	1.3		<0.2	<0.2	<0.2	1.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**											8.5		11.6														
WAC236-TP6-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0011	0.0011	0.0011	<0.2	12.2	31.9		<0.2	<0.2	<0.2	32.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**											13		11.4														
WAC236-TP6-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	0.0005	0.0005	<0.2	11.9	9.8		<0.2	<0.2	<0.2	9.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**											7.6		10.8														
WAC236-TP6-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.0	1.9		<0.2	<0.2	<0.2	1.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**											5.5		9.6														
WAC236-TP7-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	21.9	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**											5.3		8.5														
WAC236-SR-1	**27/11/2020**											5.8																
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**											1.3		8.4														
WAC236-TP1-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	2.4	0.4		<0.2	<0.2	<0.2	0.4	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**											3.6		6.1														
WAC236-TP2-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.3	4.8	0.8		<0.1	<0.1	0.1	1.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**											3.4		5.5														
WAC236-TP7-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.6	3.1	0.2		<0.1	<0.1	<0.1	0.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Metals														Nitroaromatics			Organochlorine Pesticides													
	Arsenic	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	4_4_DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	50	0.3	2	2	5	5	5	0.1	2	5	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)	100	20		20				100		4	40	20																		
NSW 2014 General Solid Waste SCC1 (with leached)	500	100		100				1,500		50	1,050	50																		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	400	80		80				400		16	160	80																		
NSW 2014 Restricted Solid Waste SCC2 (with leached)	2,000	400		400				6,000		200	4,200	200																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges	0.3-30			0.04-2	0.5-110		1-190	<5-200		0.001-0.1	2-400			2-180																
ANZECC (1992) Background Ranges	1-40				1.5-1000		2-100	2-200		0.03	5-500			10-300																
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil	300	90	20,000	90		300	17,000	600	19,000	80	1,200	700		30,000							10		70						400	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	3,000	500	300,000	900		4,000	240,000	1,500	60,000	730	6,000	10,000		400,000							45		530						3,600	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	**27/11/2020**	<5.0			<0.30	<5.0		10.7	44.1		<0.20	<10.0			35.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-A	**27/11/2020**		<1	<50			<2			43			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - A	**27/11/2020**	<5.0			<0.30	6		27.9	<10.0		<0.20	<10.0			44.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-A	**27/11/2020**		<1	<50			3			171			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - B	**27/11/2020**	<5.0			<0.30	5.2		<5.0	<10.0		<0.20	<10.0			16.7				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-B	**27/11/2020**		<1	<50			4			274			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - C	**27/11/2020**	<5.0			<0.30	7.4		20.4	53.3		0.23	<10.0			133				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-C	**27/11/2020**		<1	<50			<2			68			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - A	**27/11/2020**	<5.0			<0.30	8.3		5.7	<10.0		<0.20	<10.0			22.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-A	**27/11/2020**		<1	<50			4			266			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - B	**27/11/2020**	<5.0			<0.30	11.2		51.3	68.9		<0.20	<10.0			62				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-B	**27/11/2020**		<1	<50			<2			113			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - C	**27/11/2020**	<5.0			<0.30	9.3		36.3	33.6		<0.20	<10.0			31.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-C	**27/11/2020**		<1	<50			<2			38			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - A	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			13.3				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-A	**27/11/2020**		<1	<50			4			251			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - B	**27/11/2020**	6.1			<0.30	6.5		107.4	111.1		<0.20	<10.0			206.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-B	**27/11/2020**		<1	<50			3			175			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - C	**27/11/2020**	<5.0			<0.30	7.5		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-C	**27/11/2020**		<1	<50			<2			18			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - A	**27/11/2020**	<5.0			<0.30	6.4		11.7	18.4		<0.20	<10.0			30.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-A	**27/11/2020**		<1	<50			2			74			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - B	**27/11/2020**	<5.0			<0.30	5.9		14.7	50.9		<0.20	<10.0			62.9				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-B	**27/11/2020**		<1	<50			<2			49			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - C	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-C	**27/11/2020**		<1	<50			<2			17			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - A	**27/11/2020**	<5.0			<0.30	<5.0		13	14.8		<0.20	<10.0			32.6				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-A	**27/11/2020**		<1	<50			<2			105			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- BR1	**27/11/2020**	<5.0			<0.30	<5.0		7.6	32.9		<0.20	<10.0			26.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-SR-1	**27/11/2020**	<5			<1	5		15	44		<0.1	<2			38				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05

Maximum concentration		6.1	0	0	0	11.2	0	107.4	111.1	0	0.23	0	0	0	206.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL									67.84																					

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-B	**27/11/2020**		<1	<50			<2			21			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP2 - A	**27/11/2020**	<5.0			<0.30	5.4		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP2-A	**27/11/2020**		<1	<50			<2			16			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - B	**27/11/2020**	<5.0			<0.30	9.6		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-B	**27/11/2020**		<1	<50			<2			<5			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5

Maximum concentration		0	0	0	0	9.6	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

													Organophosphorous Pesticides																	
	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Ronnel
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1	0.2	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	90															4														
NSW 2014 General Solid Waste SCC1 (with leached)	5															7.5														
NSW 2014 General Solid Waste TCLP1 (leached)	1																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	240															16														
NSW 2014 Restricted Solid Waste SCC2 (with leached)	432															30														
NSW 2014 Restricted Solid Waste TCLP2 (leached)	4																													
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil	340				20				10		400					250														
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	2,000				100				50		2,500					2,000														

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP1-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP7-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- BR1	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-SR-1	**27/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP1-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP2 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP2-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP7-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Other	PAH																												
	4-Methylphenol	Benzo[b+k]fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylchloranthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene - TCLP	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	PAHs (Sum of positives)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	1	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3		0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	
NSW 2014 General Solid Waste CT1 (No Leaching)											0.8																	200	
NSW 2014 General Solid Waste SCC1 (with leached)											10																	200	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)											3.2																	800	
NSW 2014 Restricted Solid Waste SCC2 (with leached)											23																	800	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																									3	3	3	300	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									40	40	40	4,000	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**							<0.30	<0.30	<0.30	0.81	0.72	<0.005	1.32			0.57	1.3	0.73	<0.30	1.56	<0.30	0.56	<0.30	0.55	1.74	1.38	1.53	1.23		9.96
WAC236-TP1-A	**27/11/2020**	<0.5																												
WAC236- TP3 - A	**27/11/2020**							<0.30	<0.30	0.31	0.54	0.58		0.63			0.47	<0.30	0.55	<0.30	1.26	<0.30	0.31	<0.30	0.77	1.34	0.9	1.07	0.74		6.76
WAC236-TP3-A	**27/11/2020**	<0.5																												
WAC236- TP3 - B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP3-B	**27/11/2020**	<0.5																												
WAC236- TP3 - C	**27/11/2020**							<0.30	<0.30	<0.30	0.73	0.8		1.35			0.52	1.33	0.68	<0.30	1.26	<0.30	0.52	<0.30	0.49	1.33	1.36	1.51	1.21		9.01
WAC236-TP3-C	**27/11/2020**	<0.5																												
WAC236- TP4 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP4-A	**27/11/2020**	<0.5																												
WAC236- TP4 - B	**27/11/2020**							<0.30	<0.30	0.45	3.24	3.6	<0.005	5.68			2.31	5.6	3.06	0.5	5.46	<0.30	2.47	<0.30	1.86	6.3	5.85	5.85	5.85		40.53
WAC236-TP4-B	**27/11/2020**	<0.5																												
WAC236- TP4 - C	**27/11/2020**							<0.30	<0.30	<0.30	2.07	2.71	<0.005	3.94			1.6	3.88	1.98	0.4	3.46	<0.30	1.71	<0.30	<0.30	3.98	4.04	4.04	4.04		25.46
WAC236-TP4-C	**27/11/2020**	<0.5																												
WAC236- TP5 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP5-A	**27/11/2020**	<0.5																												
WAC236- TP5 - B	**27/11/2020**							<0.30	0.72	1.45	12.21	12.56	<0.005	20.59			8.95	20.3	9.67	1.97	19.33	<0.30	11.08	<0.30	5.26	21.93	21.13	21.13	21.13		146.02
WAC236-TP5-B	**27/11/2020**	<0.5																												
WAC236- TP5 - C	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		0.38			<0.30	0.38	<0.30	<0.30	0.44	<0.30	<0.30	<0.30	<0.30	0.5	0.41	0.74	0.08		1.7
WAC236-TP5-C	**27/11/2020**	<0.5																												
WAC236- TP6 - A	**27/11/2020**							<0.30	<0.30	<0.30	0.69	0.76		1.32			0.5	1.3	0.64	<0.30	1.23	<0.30	0.51	<0.30	<0.30	1.29	1.3	1.45	1.15		8.24
WAC236-TP6-A	**27/11/2020**	<0.5																												
WAC236- TP6 - B	**27/11/2020**							<0.30	<0.30	<0.30	0.44	0.51		<0.30			0.35	<0.30	0.39	<0.30	0.8	<0.30	0.37	<0.30	<0.30	0.94	0.78	0.96	0.6		3.8
WAC236-TP6-B	**27/11/2020**	<0.5																												
WAC236- TP6 - C	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	0.42	<0.30	<0.30	<0.30	<0.30	0.51	0.36	0.73	0		0.93
WAC236-TP6-C	**27/11/2020**	<0.5																												
WAC236- TP7 - A	**27/11/2020**							<0.30	0.3	0.56	1.67	1.8	<0.005	2.14			1.2	0.84	1.66	0.31	3.46	<0.30	1.01	<0.30	2.05	3.71	2.86	2.86	2.86		20.87
WAC236-TP7-A	**27/11/2020**	<0.5																												
WAC236- BR1	**27/11/2020**							<0.30	<0.30	<0.30	0.86	2.0	<0.005	1.43			0.59	1.41	0.81	<0.30	1.86	<0.30	0.57	<0.30	<0.30	2.01	1.49	1.64	1.34		10.44
WAC236-SR-1	**27/11/2020**							<0.5	<0.5	<0.5	1.4	1.7			1.8	1.1	1.1	0.6	1.3	<0.5	2.8	<0.5	0.8	<0.5	1.0	2.9	2.3	2.6	2.1	15.3	

Maximum concentration		0	0	0	0	0	0	0	0.72	1.45	12.21	12.56		20.59	0	8.95	20.3	9.67	1.97	19.33	0	11.08	0	5.26	21.93	21.13	21.13	21.13	0	146.02
95%UCL												5.604																		

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP1-B	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP2 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP2-A	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP7 - B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP7-B	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	ND	ND	ND	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	PCBs								Pesticides							Phthalates						Solvents						
	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	PCBs (Sum of total)	Chlordane/dia	Carbaryle	DDF	Dimetoate-S-oxo/thyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-Hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl Acetate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)								50														4,000					
NSW 2014 General Solid Waste SCC1 (with leached)								50														7,200					
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)								50														16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)								50														28,800					
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil								1																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								7																			

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10					<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236-TP1-A	**27/11/2020**									<0.5	<0.5						<0.5												
WAC236- TP3 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-C	**27/11/2020**									<0.5	1.4						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP7-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- BR1	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-SR-1	**27/11/2020**								<0.1					<0.05	<0.05	<0.2	<0.05												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP1-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP2 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP2-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP7-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		SVOCs															
	a Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	2-Acetylaminofluorene	3,3-Dichlorobenzidine	4-Dimethylaminoazobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acridonone	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine
	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	0.5	10	0.02	0.02	2	10	0.01	0.01	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
NSW 2014 General Solid Waste CT1 (No Leaching)																													
NSW 2014 General Solid Waste SCC1 (with leached)																													
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																													
NSW 2014 Restricted Solid Waste SCC2 (with leached)																													
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																													

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**																												
WAC236-TP1-A	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	121	0.60	0.19	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - A	**27/11/2020**																												
WAC236-TP3-A	**27/11/2020**	11	1.5	<10	<0.02	<0.02	<2	1,850	9.26	2.96	<1	<1	11	0.017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - B	**27/11/2020**																												
WAC236-TP3-B	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	333	1.67	0.53	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - C	**27/11/2020**																												
WAC236-TP3-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	259	1.30	0.42	<1	<1	<10	0.013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - A	**27/11/2020**																												
WAC236-TP4-A	**27/11/2020**	15	1.5	<10	<0.02	<0.02	<2	905	4.53	1.45	<1	1	15	0.024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - B	**27/11/2020**																												
WAC236-TP4-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	266	1.33	0.43	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - C	**27/11/2020**																												
WAC236-TP4-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	1,780	8.93	2.86	<1	<1	<10	0.015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - A	**27/11/2020**																												
WAC236-TP5-A	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	216	1.08	0.35	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - B	**27/11/2020**																												
WAC236-TP5-B	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	577	2.89	0.92	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - C	**27/11/2020**																												
WAC236-TP5-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	203	1.02	0.32	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - A	**27/11/2020**																												
WAC236-TP6-A	**27/11/2020**	12	1.5	<10	<0.02	<0.02	<2	1,600	8.00	2.56	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - B	**27/11/2020**																												
WAC236-TP6-B	**27/11/2020**	18	1.5	<10	<0.02	<0.02	<2	1,140	5.72	1.83	<1	1	18	0.029	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - C	**27/11/2020**																												
WAC236-TP6-C	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	3,320	16.6	5.32	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - A	**27/11/2020**																												
WAC236-TP7-A	**27/11/2020**	12	1.5	<10	<0.02	<0.02	<2	509	2.55	0.82	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- BR1	**27/11/2020**																												
WAC236-SR-1	**27/11/2020**																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**																												
WAC236-TP1-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP2 - A	**27/11/2020**																												
WAC236-TP2-A	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - B	**27/11/2020**																												
WAC236-TP7-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	100	0.50	0.16	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

		TPH					VOCs		
	Phenanthrene	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)		650				10,000			
NSW 2014 General Solid Waste SCC1 (with leached)		650				10,000			
NSW 2014 General Solid Waste TCLP1 (leached)									
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		2,600				40,000			
NSW 2014 Restricted Solid Waste SCC2 (with leached)		2,600				40,000			
NSW 2014 Restricted Solid Waste TCLP2 (leached)									
Berkman (1989) Background Ranges									
ANZECC (1992) Background Ranges									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(1) HILs Rec C Soil									
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									

Horizon A - GENERAL FILL MATERIALS

Field ID	Date								
WAC236-TP1-A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**		<25	<50	247	160	407			
WAC236-TP4-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**		<25	<50	812	433	1,245			
WAC236-TP5-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-SR-1	**27/11/2020**		<10	<50	<100	<100	<50			

Maximum concentration	0	0	0	812	433	407	0	0	0
95%UCL									

Horizon B - BEDROCK

Field ID	Date								
WAC236- TP1-B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP2-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5

Maximum concentration	0	0	0	0	0	0	0	0	0
95%UCL									

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

Site boundary

Test Pit locations

Figure 2 – Sample locations
Sub Site Area CR07

TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP01

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871781 N 151.172225**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Clayey SAND: Dark brown, medium to coarse grained, gravels of ironstone and sandstone with some rootlets.				No odours or visible contamination
		PID=8.1 ppm	J/B							TP01_0.5 QA01 QA01A
	1.00 1					Layer of ballast gravels				
	1.10					Sandy CLAY: Dark brown, moderately stiff, coarse grained with gravels of ironstone and sandstone				
		PID=7.8 ppm	J/B							TP01_1.2
	2									Water entering borehole
			J							TP01_2.2
						END OF TEST PIT AT 2.20 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP02

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871667 N 151.772358**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Silty CLAY: Very large bricks, ironstone and ballast gravels				No odours or visible contamination
	0.30					FILL: SAND: Dark yellow/brown, coarse grained, shell grit and gravels of ironstone and ballast.				
		PID=6.2 ppm	B&J							TP02_0.5
	1.00 1					Becomes more yellow with significant shells				
		PID=6.8 ppm	B&J							TP02_1.2
	2.00 2					Sandy CLAY: Dark brown/grey with gravels as above.				
			J							TP02_2.2
▽										Water entering borehole
			J							TP02_2.6
						END OF TEST PIT AT 2.60 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT NO.

TEST PIT ENVIRONMENTAL LOG

TP03

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871634 N 151.17258**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY VS S F ST VST H / FB VL L MD D VD	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Sandy CLAY: brown, high plasticity, large tree roots and boulders of ballast, ironsteone and sandstone.				No odours or visible contamination
		PID=7.9 ppm	B&J							TP03_0.5
	0.80					SAND: Brown, coarse grained, very large shells with occasional clay, some small roots.				
	1	PID=4.8 ppm	B&J							TP03_1.0
	2		J							TP03_2.0 Water entering test pit
										TP03_2.2
			J			END OF TEST PIT AT 2.30 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT NO.

TEST PIT ENVIRONMENTAL LOG

TP04

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871593 N 151.172728**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY: VS S F ST VST H / FB VL L MD D VD	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: SAND: Dark brown, coarse grained with gravels of ballast and sandstone				No odours or visible contamination
		PID=6 ppm	B&J							TP04_0.5
	1.00 1	PID=10.4 ppm	B&J			Increased shell grit				TP04_1.0
	2									
	2.20		J			Sandy CLAY: Brown/black with shell grit.				TP04_2.3
						END OF TEST PIT AT 2.30 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP05

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871566 N 151.172876**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
	0.20					FILL: TOPSOIL: Dark brown, medium grained silt				
						FILL:SAND: Brown, coarse grained, large sandstone and ballast gravels. Occasional clay.				No odours or visible contamination
		PID=18.3 ppm	B&J							TP05_0.6
	1.00 1	PID=5.5 ppm	J&B			Slightly darker brown with significant shells				TP05_1.0
			J							TP05_1.9
	2					END OF TEST PIT AT 1.90 m				Refusal at unknown, most likely boulder

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP06

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871725 N 151.172744**

Test Pit Information				Field Material Description					
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
	0.20					FILL: TOPSOIL: Brown				
						FILL: Clayey SAND: Brown/yellow, significant shell and sandstone gravel, coarse grained, medium plasticty with some roots.				No odours or visible contamination
		PID=12.1 ppm	J&B							TP06_0.6
	0.80									
	1	PID=4.5 ppm	B&J			Increasing SAND				TP06_1.0
	1.50		J			SAND: Yellow/brown, coarse grained.				TP06_1.6
						END OF TEST PIT AT 1.60 m				Refusal on rock
	2									

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		TPH					TRH							BTEX					
		C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C15 - C16	C15 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m- & p-)	Xylene (o)	Xylene (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL		20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																			
NEPM 2013 Table 1A(1) HILs Rec C Soil																			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay																			
	0-1m							310[#]		NL [#10]				4	NL [#10]	NL [#10]			NL [#10]
	1-2m							490[#]		NL [#10]				6	NL [#10]	NL [#10]			NL [#10]
	2-4m							NL [#10]		NL [#10]				9	NL [#10]	NL [#10]			NL [#10]
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Clay																			
	0-1m							NL [#10]		NL [#10]				NL [#10]	NL [#10]	NL [#10]			NL [#10]
	1-2m							NL [#10]		NL [#10]				NL [#10]	NL [#10]	NL [#10]			NL [#10]
	2-4m							NL [#10]		NL [#10]				NL [#10]	NL [#10]	NL [#10]			NL [#10]

Field ID	Date																			
TP01_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	**29/11/2019**	<20	240	930	177	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	**29/11/2019**	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics

Number of Results	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect	**ND**	**240**	**930**	**88**	**88**	**ND**	**ND**	**340**	**340**	**120**	**ND**	**120**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<20**	**240**	**930**	**88**	**1,170**	**<20**	**<20**	**340**	**340**	**810**	**<100**	**1,150**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.3**
Average Concentration *	**10**	**23**	**75**	**28**	**92**	**10**	**10**	**42**	**42**	**96**	**50**	**115**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.05**	**0.15**
95% UCL (Student's-t) *	**10**	**45.01**	**162.7**	**34.59**	**202.6**	**10**	**10**	**72.94**	**72.94**	**169.5**	**50**	**221.1**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.05**	**0.15**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK & Hill) D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#7 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#8 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Derived soil HSL exceeds soil saturation concentraiton
#11 To obtain F2 subtract naphthalene from the >C10 - C16 fraction.
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001% w/w.*Organic fibre detected.No trace asbestos detected.
#14 Organic fibres detected.
#15 No respirable fibres detected.

	PAH																			PCB								
	Acenaphthylene mg/kg	Anthracene mg/kg	Acenaphthene mg/kg	Anthracene mg/kg	Benzo(a)anthracene mg/kg	Benzo(a)pyrene mg/kg	Benzo(b&j)fluoranthene mg/kg	Benzo(g,h,i)perylene mg/kg	Benzo(k)fluoranthene mg/kg	Chrysene mg/kg	Dibenz(a,h)anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	PAHs (Sum) mg/kg	Benzo(a)pyrene TEQ (zero) mg/kg	Aroclor 1016 mg/kg	Aroclor 1232 mg/kg	Aroclor 1242 mg/kg	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Aroclor 1221 mg/kg	PCBs (Sum) mg/kg
LOL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																		4,000[#1]	40[#2]								[#15]
NEPM 2013 Table 1A(1) HILs Rec C Soil																		300[#1]	3[#2]								[#15]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																											
0-1m															NL[#16]												
1-2m															NL[#16]												
2-4m															NL[#16]												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																											
0-1m															NL[#16]												
1-2m															NL[#16]												
2-4m															NL[#16]												

Field ID	Date																											
TP01_0.5	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	0.5	0.5	0.5	0.5	2.3	3.4	3.0	1.4	2.7	2.6	0.5	4.2	0.5	1.2	0.5	1.3	5.4	-	2.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP01_2.2	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP02_2.6	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	0.5	0.5	0.5	0.5	0.8	1.2	0.8	0.5	0.9	0.9	0.5	1.5	0.5	0.5	0.5	0.5	2.0	-	2.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP03_1.0	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	0.5	0.5	1.0	1.4	1.1	1.1	1.2	1.4	0.5	2.0	0.5	1.0	0.5	0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP04_2.3	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP05_1.0	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	1.1	2.1	0.5	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																											
Number of Results	6	16	16	16	16	16	16	16	16	16	16	16	16	16	18	16	16	12	16	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	0.8	1.2	0.8	1.1	0.9	0.9	ND	0.5	ND	1	ND	0.5	0.6	1.1	1.9	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	12.4	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Average Concentration *	0.25	0.25	0.25	0.25	0.46	0.58	0.51	0.38	0.5	0.51	0.25	0.75	0.25	0.36	0.25	0.33	0.88	1.5	0.77	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.696	0.943	0.82	0.527	0.787	0.791	0.25	1.212	0.25	0.464	0.25	0.448	1.476	3.293	1.304	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Metals																										
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	10	10	2	10	2	10	10	0.4	1	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#1]		500		300,000	900	3,600[#2]	4,000	240,000		1,500[#3]	60,000	730[#7]		6,000			10,000						400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#1]		90		20,000	90	300[#2]	300	17,000		600[#3]	19,000	80[#7]		1,200			700						30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											

Field ID	Date																										
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	20	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	8,900	<10	7.1	65	<2	<10	<10	<0.4	18	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,100	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	103	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	59	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	78	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	5,500	<5	13	<0.1	<5	<5	120	490	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	17	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,820	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	8.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9

Statistics																										
Number of Results	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect	**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration	**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *	**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**8**	**18**	**45**
95% UCL (Student's-t) *	**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**587.4**	**1**	**0.1**	**55.38**	**7.74**	**23.01**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Phenols																					
	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4,6-Tribromophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3(4-methylphenyl)propan-1-ol	4-chloro-3-methylphenol	4,6-Dinitro-o-cyclohexylphenol	4-chloro-3-methylphenol	4-nitrophenol	Phenols	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	5	1	1	0.5	3.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																	660	240,000			
NEPM 2013 Table 1A(1) HILs Rec C Soil																	120	40,000			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																					
0-1m																					
1-2m																					
2-4m																					
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																					
0-1m																					
1-2m																					
2-4m																					

Field ID	Date																					
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
Average Concentration *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10
95% UCL (Student's-t) *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - <
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	OCP																							
	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	0.05	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				45		530,000				3,600						100			50		80	2,500	160	
NEPM 2013 Table 1A(1) HILs Rec C Soil				10		70,000				400						20			10		10	400	30	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																								
0-1m																								
1-2m																								
2-4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																								
0-1m																								
1-2m																								
2-4m																								

Field ID	Date																							
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1
Average Concentration *	0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.025	0.5
95% UCL (Student's-t) *	0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.025	0.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		OPP																	Asbestos	Major/minor ions				Radioactive	Explosives		
		Azinphos-methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Dioxathion	Ethion	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Profenofos	Bromel	Asbestos (Fibrous and Fibrous IA+AD)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dichlorotoluene	2,4-dinitrotoluene	Nitrobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2		5	5	5	5	10	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				2,000																							
NEPM 2013 Table 1A(1) HILs Rec C Soil				250																							
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrus																											
0-1m																											
1-2m																											
2-4m																											

Field ID	Date																										
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	2,100	530	430	120		-	-	-
TP01_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600	1,200	300	1,800		-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	12,000	170	170	190	<10	-	-	-
TP02_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,400	2,200	740	1,600	<10	-	-	-
TP03_0.5	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	59,000	410	260	600	<10	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	190	150	310	<10	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,600	470	330	120	<10	-	-	-
TP04_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	240	180	<10	<10	-	-	-
TP05_0.6	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,300	400	210	82	<10	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000	350	170	760	<10	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	33,000	200	130	200	<10	-	-	-
TP06_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	320	190	880	<10	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	11	18	18	18	18	18	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300	140	130	82	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	0	110,000	2,200	740	1,800	<10	<0.5	<0.5	<0.5
Average Concentration *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0	19,961	531	298	460	5	0.25	0.25	0.25
95% UCL (Student's-t) *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0	30,989	741.1	376.6	694.4	5	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - <
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		SPOCAS																																		
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Excessive Material	Oxidisable Sulfur Conversion Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	eNAS - Titratable Actual Acidity	Retained Acid Neutral	Titratable Actual Acidity	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-Trichlorobenzene	2-Chloronaphthalene	2-methylphenol	2-Nitrophenol	3&4-methylphenol	4-Bromophenyl phenyl ether	4-Chloroaniline	4-Chlorophenyl phenyl ether	5-Nitro-o-toluidine	7,12-Dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Aniline	Benzal chloride	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOL		0.1	0.01	-	0.005	0.1	1	10	0.02	0.003	0.02	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																																				
0-1m																																				
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0-1m																																				
1-2m																																				
2-4m																																				

Field ID	Date																																			
TP01_0.5	29/11/2019	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	100	0.53	1.5	<0.005	2.0	<10	<0.02	<0.003	0.17	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																				
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		65	0.53	1.5	0.005	1.7	2	ND	ND	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		100	3	1.5	0.005	35	2	<10	<0.02	<0.003	0.97	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *		89	1.4	1.5	0.0029	11	2	5	0.01	0.0015	0.46	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *		89.66	2.236	1.5	0.00376	22	2	5	0.01	0.0015	0.722	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

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Comments

#1 Total PAHs: Based on sum of 16 most common repor
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#14 Organic fibres detected.
#15 No respirable fibres detected.

	SVOC																													
	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Diethyl ether	Diethylphthalate	Dimethylphthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Diphenylamine	DPA	Ethoprop	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Isophorone	Methyl parathion	N-nitroso-di-n-propylamine	N-nitrosodiphenylamine	Pentachloronitrobenzene	Pentachlorophenol	Phosphamidon	Terbufos	Tributyltin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																												
0-1m																												
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																												
0-1m																												
1-2m																												
2-4m																												

Field ID	Date																													
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																														
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
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#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

| | 1,1,1-trichloroethane | 1,1,1,2-tetrachloroethane | 1,1,2-trichloroethane | 1,1,2,2-tetrachloroethane | 1,1-dichloroethane | 1,1-dichloroethene | 1,2,3-trichloropropane | 1,2,4-trimethylbenzene | 1,3,5-trimethylbenzene | 1,2-dichloroethane | 1,2-dichloropropane | 1,3-dichloropropane | 1,4-dichlorobenzene | 2-chloronaphthalene | Acenaphthene | Acenaphthylene | Acetone | Acetonitrile (MeCN) | Acrolein | Acrylonitrile | Anthracene | Benzene | Benzo(a)anthracene | Benzo(a)pyrene (BaP) | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzyl chloride | Biphenyl | Bromobenzene | Bromochloromethane | Bromodichloromethane | Bromoform | Bromomethane | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | Chloromethane | cis-1,2-dichloroethene | cis-1,3-dichloropropene | Dibromochloromethane | Dibromomethane | Dichlorodifluoromethane | Ethylbenzene | Fluoranthene | Fluorene | Hexachlorobutadiene | Indeno(1,2,3-cd)pyrene | Isopropylbenzene | Methyl ethyl ketone | Methyl isobutyl ketone | Methyl tert-butyl ether | Methylene chloride | Naphthalene | n-butylbenzene | n-propylbenzene | Phenanthrene | Pyrene | sec-butylbenzene | Styrene | tert-butylbenzene | Tetrachloroethene | Toluene | trans-1,2-dichloroethene | trans-1,3-dichloropropene | Trichloroethene | Trichlorofluoromethane | Vinyl chloride | Xylene (m & p) | Xylene (o) |
|---|---|---

	VOC																										
	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichlorodifluoromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TPH	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichlorofluoromethane	Vinyl chloride			
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
PQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										
NEPM 2013 Table 1A(1) HILs Rec C Soil																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																										
0-1m																										
1-2m																										
2-4m																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																										
0-1m																										
1-2m																										
2-4m																										

Field ID	Date																										
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																											
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		TPH					TRH							BTEX					
		>C5 - C9	>C9 - C14	>C15 - C28	>C29 - C36	>C9 - C36 (Sum)	>C5 - C10	>C5 - C10 less BTEX (F1)	>C10 - C16	>C10 - C16 less Naphthalene (F2)	>C16 - C34	>C34 - C40	>C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	m & p-Xylene	o-Xylene	Xylenes (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Public Open Space																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																			
Clay 0-2m								215[#7]	170[#4]		2,500			95	135	185			95
NEPM 2013 Table 1B(6) ESLs for Urban Res																			
Clay 0-2m								180[#7]	120[#11]		1,300	5,600		65	105	125			45
Field ID	**Date**																		
TP01_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	**29/11/2019**	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	**29/11/2019**	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
Statistics																			
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**ND**	**240**	**930**	**88**	**88**	**ND**	**ND**	**340**	**340**	**120**	**ND**	**120**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<20**	**240**	**930**	**88**	**1,170**	**<20**	**<20**	**340**	**340**	**810**	**<100**	**1,150**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.3**
Average Concentration *		**10**	**23**	**75**	**28**	**92**	**10**	**10**	**42**	**42**	**96**	**50**	**115**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**
95% UCL (Student's-t) *		**10**	**45.01**	**162.7**	**34.59**	**202.6**	**10**	**10**	**72.94**	**72.94**	**169.5**	**50**	**221.1**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#11 Moderate reliability.
#12 Nil
ND=Non detect

		PAH																		PCB								
		1-methylnaphthalene	benzo(a)fluorene	benzo(a)phenylene	benzo(a)anthracene	benzo(a)anthracene	benzo(a)pyrene	benzo(b&j)fluoranthene	benzo(b,j,k)perylene	benzo(b)fluoranthene	chrysene	dibenz(a,h)anthracene *	fluoranthene	fluorene	indeno(1,2,3-cd)pyrene	naphthalene	phenanthrene	pyrene	HAHs (Sum)	benzo(a)pyrene TEQ calc (zero)	Aroclor 1016	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																370												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																170												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																												
Clay 0-2m						1.4																						
NEPM 2013 Table 1B(6) ESLs for Urban Res																												
Clay 0-2m						0.7																						
Field ID	**Date**																											
TP01_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	*	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	2.0	*	2.8	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	<0.5	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	<0.5	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																												
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		Metals																								
		Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind				160[#1]						600		320		1,800[#2]												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ				100[#1]						360		230		1,100[#2]				480								810
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																										
Clay 0-2m																										
NEPM 2013 Table 1B(6) ESLs for Urban Res																										
Clay 0-2m																										
Field ID	**Date**																									
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<5	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<10	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																										
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Asbestos	Major/minor ions				Radioactive	Explosives			Phenols																			
	Asbestos (Fines and Fibrous AR+AF)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Nitrobenzene	2,3,4,6-tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,5-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3(4-methyl phenol (m-/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Phenols	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		5	5	5	5	10	0.5	0.5	0.5	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																														
Clay 0-2m																														
NEPM 2013 Table 1B(6) ESLs for Urban Res																														
Clay 0-2m																														
Field ID	**Date**																													
TP01_0.5	**29/11/2019**	ND	2,100	520	430	120	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	**29/11/2019**	-	6,600	1,200	300	1,800	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	ND	12,000	170	170	190	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	**29/11/2019**	-	8,400	2,200	740	1,600	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	**29/11/2019**	ND	59,000	410	260	600	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	-	16,000	190	150	310	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	ND	1,600	470	330	120	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	**29/11/2019**	-	19,000	240	180		<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	**29/11/2019**	ND	1,300	400	210	82	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	-	13,000	350	170	760	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	ND	33,000	200	130	200	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	**29/11/2019**	-	19,000	320	190	880	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																														
Number of Results		**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<1**	**<1**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.2**	**<1**	**<0.4**	**<5**	**<20**	**<1**	**<5**	**<20**	**<1**	**<0.5**	**<10**	**<1**	**<20**
Average Concentration *		**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**
95% UCL (Student's-t) *		**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		OCP																					OPP								
		4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Azinophos-methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind										640																						
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ										180																						
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																
Field ID	**Date**																															
TP01_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_2.2	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP02_2.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP03_1.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP04_2.3	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP05_1.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP06_1.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																																
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Average Concentration *		0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95% UCL (Student's-t) *		0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Phosalone	Phosmet
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind								
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind								
Clay 0-2m								
NEPM 2013 Table 1B(6) ESLs for Urban Res								
Clay 0-2m								

Field ID	Date								
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-

Statistics								
Number of Results	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
Average Concentration *	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1
95% UCL (Student's-t) *	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SPOCAS										
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Analysed Material	SO3 Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Sulfidic - Titratable Actual Acidity	Sulfidic -Acid Neutral	Titratable Actual Acidity
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t
EQL		0.1	0.01		0.005	0.1	1	10	0.02	0.003	0.02	2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind												
Clay 0-2m												
NEPM 2013 Table 1B(6) ESLs for Urban Res												
Clay 0-2m												
Field ID	**Date**											
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	SVOC																														
	1,2,3,4-tetrachlorobenzene	1,2,3,5-tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-trichlorobenzene	1-Chloronaphthalene	1-naph thylamine	1-chloronaphthalene	1-methylnaphthalene	2-naph thylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	3-(dimethylamino) propylamine	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzyl chloride	bis(2-chloroethoxy) methane	bis(2-chloroisopropyl) ether	bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz(a,j)acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																
Field ID	**Date**																															
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
Average Concentration *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Bis-(2-ethylhexyl)phthalate	Triphenylamine	HPN	Bithiocarap	Hexachlorocyclopentadiene	Hexachloroethane	Merphos (Phorbin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Phosamide	Prothiophos	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																
Clay 0-2m																
NEPM 2013 Table 1B(6) ESLs for Urban Res																
Clay 0-2m																

Field ID	Date																	
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
Average Concentration *	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25
95% UCL (Student's-t) *	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
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#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	VOC																														
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	2-chlorotoluene	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromochlorodifluoromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																

Field ID	Date																															
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
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#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Chlorobenzene	Chloroethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																		
Clay 0-2m																		
NEPM 2013 Table 1B(6) ESLs for Urban Res																		
Clay 0-2m																		

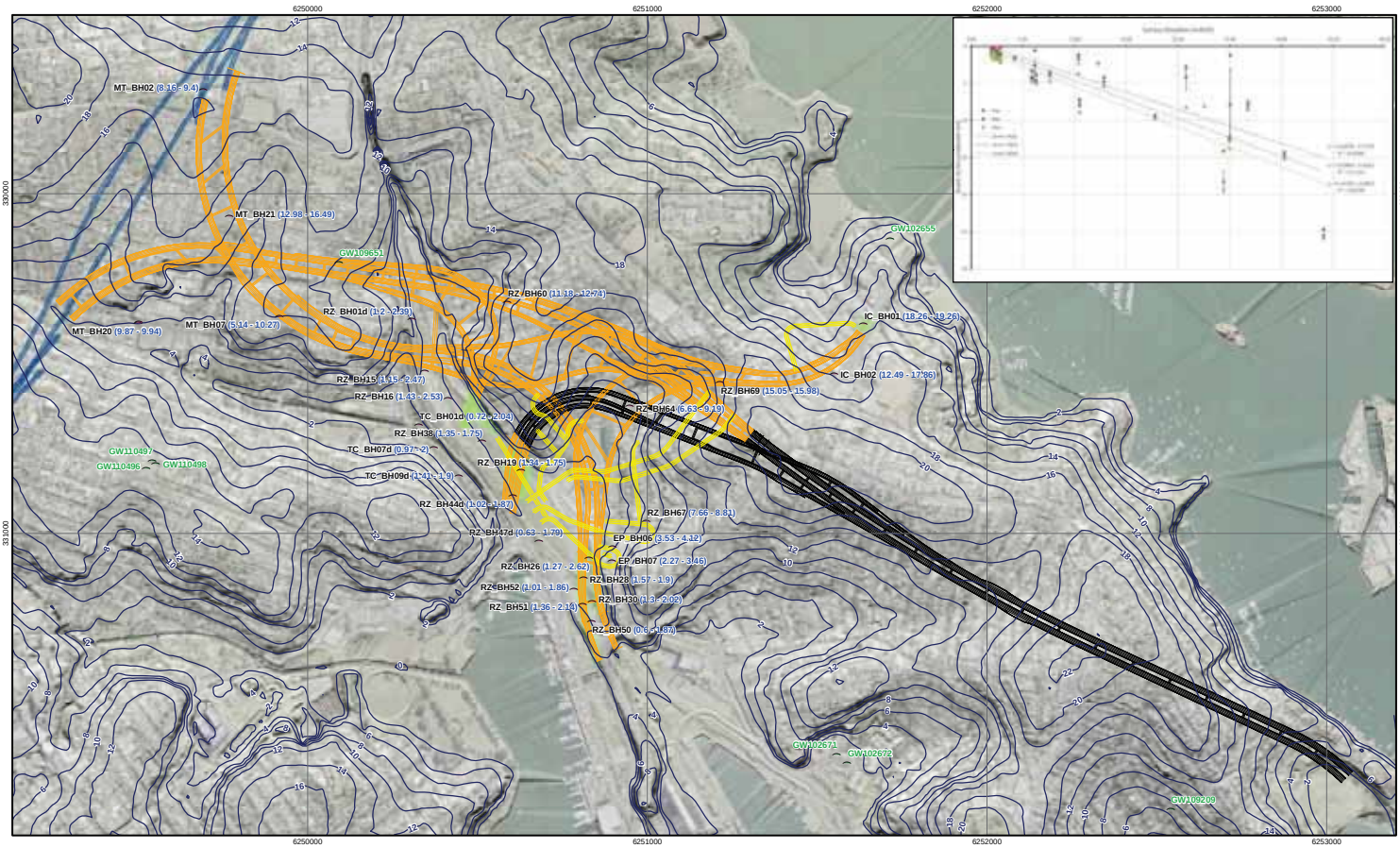
Field ID	Date																		
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																			
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

OVERVIEW

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

Rozelle Interchange & WHT Enabling Works
Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\P3M3958\gis\Grid\3_Figures\P3M3958-0228 RiseFigure 4 Project Wide Interpreted Groundwater Level Contours.mxd

Borehole Log WAC1-BH3

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION:
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 3.301 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
PH	3	0.5		CL	(Horizon A) Sandy CLAY: low to medium plasticity, white / orange and brown, with gravels, moist.	WAC1-BH3 0.3			Horizon A – General Fill
	2.5	1				WAC1-BH3 1.0			
	2	1.5							
	1.5	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 2.2	Natural Shells and Acid Sulfate Soil Odours		Horizon B – Marine Sediment / Reworke PASS
SFA	1	2.5							
	0.5	3		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH3 3.0			
	0	3.5							
	-0.5	4		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 4.0			
	-1	4.5							
Core	-1.5	5			(Horizon C) SANDSTONE: coarse grained, light yellow / white / orange, moderately graded	WAC1-BH3 5.0			Horizon C – Residual Material / Bedrock
	-2	5.5							

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC1-BH3

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
	-2	6							
	-3	6.5				WAC1-BH3 6.5			
	-3	7			Termination Depth at: 6.6 m BGL - Target Depth Reached				
	-4	7.5							
	-4	8							
	-5	8.5							
	-5	9							
	-6	9.5							
	-6	10							
	-7	10.5							
	-7	11							
	-8	11.5							
	-8	12							

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC1-BH7

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 12.06.2020
COMPLETED: 12.06.2020
DRILLING COMPANY: ADE
LOCATION:
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.350 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.3			Horizon A – General Fill
	1	1		SC	(Horizon B) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.7	Natural Shells and Acid Sulfate Soil Odours		Horizon B – Marine Sediment / Reworked PASS
	0.5	1.5							
	0	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH7 2.3			
SFA	-0	2.5							
	-1	3				WAC1-BH7 3.0			
	-1	3.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.				
	-2	4				WAC1-BH7 4.0			
Core	-2	4.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH7 4.7			Horizon C – Residual Material / Bedrock
	-3	5							
	-3	5.5				WAC1-BH7 5.5			

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC1-BH7

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
	-4	6							
	-4	6.5				WAC1-BH7 6.5			
	-5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached				
	-5	7.5							
	-6	8							
	-6	8.5							
	-7	9							
	-7	9.5							
	-8	10							
	-8	10.5							
	-9	11							
	-9	11.5							
	-1	12							

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC2-BH1

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 25.05.2020
COMPLETED: 25.05.2020
DRILLING COMPANY: ADE
LOCATION: 331046.848, 6250625.986
EQUIPMENT: Comacchio GEO 305
ELEVATION (RL) 3.600 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
SFA	3.5	0		SC	Clayey SAND: fine to medium grained, well graded, grey / brown, with gravels, moist.	BH1 0.3			Horizon A - General Fill
	3	0.5			(Horizon A) Silty SAND: fine to medium grained, yellow / grey and brown, moderately graded, some gravels, moist.	BH1 1.0			
	2.5	1							
	2	1.5				BH1 2.0			
	1.5	2							
	1	2.5				BH1 3.0			
	0.5	3							
	0	3.5				BH1 4.0			
	-0.5	4							
	-1	4.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist to wet.	BH1 5.0	Natural Shells		Horizon B - Marine Sediment / Alluvium Material
	-1.5	5							
	-2	5.5			Termination Depth at: 5.5 m BGL - Target Depth Reached				

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Nov 2020

BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW02

SHEET 1 OF 1

Client:	**John Holland|CPB Contractors Joint Venture**	Date Commenced:	**23-11-20**
Project:	**Rozelle Interchange - Buruwan Park**	Date Completed:	**23-11-20**
Borehole Location:	**Buruwan Park**	Recorded By:	**LBowe**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Stratacore - M14**	Driller:	**Stratacore**	Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	

Borehole Information | **Field Material Description**

2	3	4	5		6	7	8	9	10		11	12	13
METHOD	SUPPORT	WATER	WELL CONSTRUCTION	RL(m)	DEPTH(m)	Field PID (ppm)	SAMPLE	GRAPHIC LOG	SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST | FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Monument (0.7m stick up) and casing Backfill						Reworked natural material/sandstone fill		D		
			Bentonite seal	0.30					CONCRETE SLAB				
				0.50	2.2	B&J			SANDSTONE; recovered as Clayey SILT, orange/light brown, dry, f-m grained				WSP_CRW_GW02_0.5
			Sand						Recovered as sandy, clayey SILT, m grained, lighter orange				
			1mm uPVC slotted screen	-1	1.3	B&J							WSP_CRW_GW02_1.0 QA04/QA04A
				-2	1.2	B&J			Becoming softer, white/light orange, silty clayey SAND (larger grains) Light grey/orange mottles				WSP_CRW_GW02_2.0
				-3	1.1	B&J							WSP_CRW_GW02_3.0
				-4							M		
				-5					Slightly moist				Moist once pulled augers up, cuttings stuck to auger
			Bottom cap	6.00 -6					Target depth reached END OF BOREHOLE AT 6.00 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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			Acid Sulphate Soils - Acid Base Accounting					Acid Sulphate Soils - Acidity		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils -	
			a-Net Acidity without ANCE	s-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	TiTratable Actual Acidity (sulfur units)	TiTratable Actual Acidity	Acid Neutralising Capacity	Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity (sulfur units)	Liming Rate excluding ANC	Liming Rate	Chromium Reducible Sulfur	Chromium Reducible Sulphur (acidity units)
			moles H+/t	%w/w S	-	mole H+/t	%S	%S	mole H+/t	%CaCO3	mole H+/t	%S	kg CaCO3/t	kg CaCO3/t	%S	mole H+/t
EQL			10	0.02	0.5	10	0.02	0.02	2	0.01	10	0.01	1	1	0.005	10
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																
NEPM 2013 Table 1A(1) HILs Rec C Soil																
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																
0-1m																
1-2m																
2-4m																
>=4m																
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																
0-1m																
1-2m																
2-4m																
>=4m																
USEPA RSL May 2020 -Residentl Soil (THQ 1)																
USEPA RSL May 2020 - Industrial Soil (THQ 1)																
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																
Lab Report Number	**Field ID**	**Date**														
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	11	<0.02	1.5	<10	<0.02	<0.02	<2	2.94	587	0.94	<1	<1	0.018	11
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**11**	**ND**	**1.5**	**ND**	**ND**	**ND**	**ND**	**2.94**	**587**	**0.94**	**ND**	**ND**	**0.018**	**11**
Maximum Concentration			**11**	**<0.02**	**1.5**	**<10**	**<0.02**	**<0.02**	**<2**	**2.94**	**587**	**0.94**	**<1**	**<1**	**0.018**	**11**
Average Concentration *																

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be subtracted from the relevant fractions to obtain F1 & F2

	BTEX				TRH							Asbestos					TPH			
	Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	Asbestos (Fines and Fibrous <7mm)	Asbestos Containing Material	Asbestos Containing Material (as 15% Asbestos in A	Asbestos from FA & AF	Fibrous Asbestos >7mm	C6-C9	C10-C14	C15-C28	C29-C36
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g	g	%	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.5	0.5	0.5	10	10	50	50	100	100	50	0.0004	0.1	0.01	0.001	0.0004	10	50	100	100
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
0-1m	3	NL [#8]	NL [#8]	230		260[#9]		NL [#8]												
1-2m	3	NL [#8]	NL [#8]	NL [#8]		370[#9]		NL [#8]												
2-4m	3	NL [#8]	NL [#8]	NL [#8]		630[#9]		NL [#8]												
>=4m	3	NL [#8]	NL [#8]	NL [#8]		NL [#8]		NL [#8]												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																				
0-1m	NL [#8]	NL [#8]	NL [#8]	NL [#8]		NL [#8]		NL [#8]												
1-2m	NL [#8]	NL [#8]	NL [#8]	NL [#8]		NL [#8]		NL [#8]												
2-4m	NL [#8]	NL [#8]	NL [#8]	NL [#8]		NL [#8]		NL [#8]												
>=4m	NL [#8]	NL [#8]	NL [#8]	NL [#8]		NL [#8]		NL [#8]												
USEPA RSL May 2020 -Residentl Soil (THQ 1)																				
USEPA RSL May 2020 - Industrial Soil (THQ 1)																				
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil					700[#10]		1,000[#10]		3,500	10,000										
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil					700[#10]		1,000[#10]		2,500	10,000										
Lab Report Number	**Field ID**	**Date**																		
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_CRW_GW02_1.0	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_CRW_GW03_3.0	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	<10	<50	<100	<100
Statistics																					
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.0004**	**<0.1**	**<0.01**	**<0.001**	**<0.0004**	**<10**	**<50**	**<100**	**<100**
Average Concentration *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**	**5**	**25**	**50**	**50**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

				MAH								
			C10-C36 (Sum of total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil												
NEPM 2013 Table 1A(1) HILs Rec C Soil												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand												
0-1m												
1-2m												
2-4m												
>=4m												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand												
0-1m												
1-2m												
2-4m												
>=4m												
USEPA RSL May 2020 -Residentl Soil (THQ 1)												
USEPA RSL May 2020 - Industrial Soil (THQ 1)												
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil												
Lab Report Number	**Field ID**	**Date**										
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	<50	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	<50	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	<50	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	<50	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results			**5**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *			**25**									

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			PAH																			
			2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (WHO)	PAHs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																					40[#1]	4,000[#2]
NEPM 2013 Table 1A(1) HILs Rec C Soil																					3	300[#2]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																						
0-1m																		NL [#8]				
1-2m																		NL [#8]				
2-4m																		NL [#8]				
>=4m																		NL [#8]				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																						
0-1m																		NL [#8]				
1-2m																		NL [#8]				
2-4m																		NL [#8]				
>=4m																		NL [#8]				
USEPA RSL May 2020 -Residentl Soil (THQ 1)																						
USEPA RSL May 2020 - Industrial Soil (THQ 1)																						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																						
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																						
Lab Report Number	**Field ID**	**Date**																				
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5

Statistics

Number of Results			**1**	**1**	**1**	**1**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.6**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**0.6**	**<0.5**
Average Concentration *							**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.6**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should co
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
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			Metals														
			Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			5	10	1	50	1	2	2	5	5	5	0.1	2	5	0.1	5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#3]		500	300,000	900	3,600[#4]	4,000	240,000	1,500[#5]	60,000	730[#6]	6,000	10,000			400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#3]		90	20,000	90	300[#4]	300	17,000	600[#5]	19,000	80[#6]	1,200	700			30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																		
0-1m																		
1-2m																		
2-4m																		
>=4m																		
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																		
0-1m																		
1-2m																		
2-4m																		
>=4m																		
USEPA RSL May 2020 -Residentl Soil (THQ 1)																16		
USEPA RSL May 2020 - Industrial Soil (THQ 1)																230		
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																		
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																		
Lab Report Number	**Field ID**	**Date**																
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	<5	<10	<1	<50	<1	5	<2	<5	<5	15	<0.1	<2	<5	<0.1	9	<5
	WSP_BP_EX02_1.8	**28/04/2020**	<5	<10	<1	<50	<1	7	<2	<5	<5	7	<0.1	<2	<5	<0.1	<5	<5
	WSP_BP_EX03_1.8	**28/04/2020**	<5	<10	<1	<50	<1	13	<2	<5	<5	17	<0.1	<2	<5	0.2	23	11
	WSP_BP_EX04_1.8	**28/04/2020**	<5	<10	<1	<50	<1	3	<2	<5	<5	26	<0.1	<2	<5	<0.1	<5	12
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<5	40	<1	<50	<1	15	9	8	<5	52	<0.1	5	<5	0.2	16	18
	WSP_CRW_GW02_1.0	**23/11/2020**	<5	<10	<1	<50	<1	4	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_GW03_3.0	**23/11/2020**	<5	<10	<1	<50	<1	4	6	<5	<5	<5	<0.1	3	<5	<0.1	<5	<5
Statistics																		
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**40**	**ND**	**ND**	**ND**	**3**	**5**	**8**	**ND**	**5**	**ND**	**3**	**ND**	**0.2**	**9**	**11**
Maximum Concentration			**<5**	**40**	**<1**	**<50**	**<1**	**15**	**9**	**8**	**<5**	**52**	**<0.1**	**5**	**<5**	**0.2**	**23**	**18**
Average Concentration *			**2.5**	**10**	**0.5**	**25**	**0.5**	**6.4**	**3.4**	**3.3**	**2.5**	**17**	**0.05**	**2.1**	**2.5**	**0.093**	**8.3**	**7.3**

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Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should o
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#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Phenols											Explosives										
			3&4-Methylphenol (m &p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil													660	240,000								45		530
NEPM 2013 Table 1A(1) HILs Rec C Soil													120	40,000								10		70
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX02_1.8	28/04/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX04_1.8	28/04/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_CRW_GW02_1.0	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_CRW_GW03_3.0	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Statistics																								
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**1**	**1**	**1**	**1**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**
Average Concentration *			**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**					**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
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			Organochlorine Pesticides																	
			Chlordane (cis)	Chlordane (trans)	a-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.2
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								3,600		2,000,000				100			50		80	2,500
NEPM 2013 Table 1A(1) HILs Rec C Soil								400		340,000				20			10		10	400
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
0-1m																				
1-2m																				
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																				
Lab Report Number	**Field ID**	**Date**																		
ES2014462	WSP_BP_EX01_2.0	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX02_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX03_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX04_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_GW02_1.0	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_GW03_3.0	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2

Statistics

Number of Results	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**
Average Concentration *	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Organophosphorous Pesticides															Herbicides	Pesticides						
			Azinophos-methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil							2,000																	
NEPM 2013 Table 1A(1) HILs Rec C Soil							250																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
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USEPA RSL May 2020 -Residentl Soil (THQ 1)																								
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	WSP_BP_EX01_2.0	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX02_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX03_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX04_1.8	28/04/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW02_1.0	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW03_3.0	23/11/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
Statistics																								
Number of Results			7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	1	1	1	7	7	7	7
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
Average Concentration *			0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.1	0.1	0.025				0.025	0.025	0.1	0.025

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should o
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Halogenated Hydrocarbons					Halogenated Benzenes																		
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(1) HILs Rec C Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																									
0-1m																									
1-2m																									
2-4m																									
>=4m																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																									
0-1m																									
1-2m																									
2-4m																									
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USEPA RSL May 2020 -Residentl Soil (THQ 1)																									
USEPA RSL May 2020 - Industrial Soil (THQ 1)																									
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																									
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																									
Lab Report Number	**Field ID**	**Date**																							
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																									
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *																									

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
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#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Chlorinated Hydrocarbons																								
			1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																											
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																											
Lab Report Number	**Field ID**	**Date**																									
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																											
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
Average Concentration *																											

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
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#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
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			VOCs			Solvents						SVOCs													
			cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(4-cetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	5	5	5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																								
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Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *																								

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should o
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where !
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

						Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics				
			N-nitrosomorphidine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil											7 [#7]													
NEPM 2013 Table 1A(1) HILs Rec C Soil											1 [#7]													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
USEPA RSL May 2020 -ResidentI Soil (THQ 1)																								
USEPA RSL May 2020 - Industrial Soil (THQ 1)																								
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**7**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**
Average Concentration *											**0.05**													

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should o
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where !
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Phthalates			
			Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil						
NEPM 2013 Table 1A(1) HILs Rec C Soil						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand						
0-1m						
1-2m						
2-4m						
>=4m						
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand						
0-1m						
1-2m						
2-4m						
>=4m						
USEPA RSL May 2020 -Residentl Soil (THQ 1)						
USEPA RSL May 2020 - Industrial Soil (THQ 1)						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil						
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil						
Lab Report Number	**Field ID**	**Date**				
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-
Statistics						
Number of Results			**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *						

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where !
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment shou
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			BTEX				TRH							Asbestos					MAH									
			Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C6-C40 (Sum of total)	Asbestos Fines and Friable (FFDW)	Asbestos Containing Materials	Asbestos Containing Materials (in 1.0m³)	Asbestos from FA & AF	Fibrous Asbestos (FIBRES)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Diisopropylbenzene	n-Butylbenzene	n-Propylbenzene	Naphthalene	sec-Butylbenzene	Styrene	tert-Butylbenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g	g	%	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.2	0.5	0.5	0.5	10	10	50	50	100	100	50	0.0004	0.1	0.05	0.001	0.0004	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																												
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil			75	135	165	180		215[#3]	170		1,700	3,300																
NEPM 2013 Table 1B(8) ESLs for Urban Res, Coarse Soil			50	85	70	105		180[#3]	120[#3]		300	2,800																
Lab Report Number	**Field ID**	**Date**																										
ES2014662	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.0	28/04/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																												
Number of Results			5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.0004**	**<0.1**	**<0.01**	**<0.001**	**<0.0004**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**											
95% UCL (Student's-t) *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**											

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III, Generic ACL value from NEPM 2013 Table 1B(5) using a clay content of 1%. The ACL should be adjusted based on site-specific Clay content (when available). To calculate a site specific EIL, add the ABC to the ACL.
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific EIL, add the ABC to the ACL.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific CEC (when available). To calculate a site specific EIL, add the added background concentration (ABC) to the ACL.
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate a site specific EIL, add the ABC to the ACL.
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Moderate reliability.

			PAH																				Metals										
			1-Methylnaphthalene	2-Methylnaphthalene	3-methylcholanthrene	7,12-Dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (zero)	Total PAHs (Sum of total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	10	1	50	1	2	2	5	5	5	0.1	2	5	0.1	5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																			370					160[#1]					310[#2]		1 000[#3]	1 800[#4]			55[#5]				360[#6]
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																			170					100[#3]					190[#2]		95[#3]	1 100[#4]			30[#5]				290[#6]
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil										1.4																													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil										0.7																													
Lab Report Number	**Field ID**	**Date**																																					
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	<5	<1	50	<1	5	<5	15	15	<0.1	<5	5	<5	9	<5
	WSP_BP_EX02_1.0	28/04/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	7	<10	<1	<50	<1	7	<2	10	12	<0.1	<5	7	<5	11	12
	WSP_BP_EX03_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	<10	<1	60	<1	13	<2	45	17	<0.1	<5	17	<5	0.2	23	11
	WSP_BP_EX04_1.0	28/04/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	3					8	<2	45	26	<0.1	<5	6	<5	0.2		12
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	15	40	<1	60	<1	15	9	8	<5	52	<0.1	5	<5	0.2	16	18
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	4	<10	<1	<50	<1	4	5	8	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	4	6	<1	<50	<1	4	6	<5	<5	<5	<0.1	3	<5	<0.1	<5	<5
Statistics																																							
Number of Results			1	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	40	ND	ND	ND	3	5	8	ND	5	ND	3	ND	0.2	9	11
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	40	<1	<50	<1	15	9	8	<5	52	<0.1	5	<5	0.2	23	18
Average Concentration *							0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.6	0.25	2.5	10	0.5	25	0.5	6.4	3.4	3.3	2.5	17	0.05	2.1	2.5	0.093	8.3	7.3
95% UCL (Student's-t) *							0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.6	0.25	2.5	10.72	0.5	25	0.5	10.36	5.822	4.812	2.5	30.12	0.05	3.299	2.5	0.147	14.36	11.99

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
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#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
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#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

			Phenols												Explosives				Organochlorine Pesticides																	
			4,6-dinitro-2-methylphenol (DNCP)	2,3,5-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2,Chlorophenol	2-Methylphenol	2-Nitrophenol	4-Nitro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trichlorobenzene	2,4-Dichlorotoluene	2,4-Dinitrotoluene	Nitrobenzene	4,4-DDE	Aldrin	Alpha HCH	Beta HCH	Chlordane	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Gamma HCH (Lindane)	Heptachlor	Hexachlorobenzene	Methoxychlor	Total DDT	Total DDD+DDE+DDD	Total Dieldrin	Total Endosulfan	Total Endrin	Total Heptachlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																	640						
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																	180						
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																							
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																							
Lab Report Number	**Field ID**	**Date**																																					
612014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX02_1.0	28/04/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX04_1.8	28/04/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
612041504	WSP_CRW_GW02_0.5	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<1	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_CRW_GW02_1.0	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_CRW_GW03_3.0	23/11/2020	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
Statistics																																							
Number of Results			5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<1	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
Average Concentration *			0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25					0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.1	0.025	0.025	25	0.025	0.025	0.025
95% UCL (Student's-t) *			0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25					0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.1	0.025	0.025	25	0.025	0.025	0.025

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
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#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

										Organophosphorous Pesticides																	Herbicides	Pesticides										
			Endrin	Endrin aldehyde	Endrin (Endrin + Endrin aldehyde)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Carbophenothion	Chlorpyrifos-methyl	Chlorpyrifos	Demeton-S-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos-methyl	Fluometuron	Chlorothalonil	Cyfluthrin	Demeton-S-methyl	Hexazinone	Malathion	Pirimiphos-ethyl
			mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	50	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																						
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Lab Report Number	**Field ID**	**Date**																																				
ES2014462	WSP_BP_EX01_2.0	28/04/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX02_1.0	28/04/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX03_1.0	28/04/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX04_1.0	28/04/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW02_1.0	23/11/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW03_3.0	23/11/2020	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
Statistics																																						
Number of Results			7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	1	1	1	7	7	7	7
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
Average Concentration *			0.025	25	0.025	0.025	0.025	0.025	0.1	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.1	0.1	0.025				0.025	0.025	0.1	0.025
95% UCL (Student's-t) *			0.025	25	0.025	0.025	0.025	0.025	0.1	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.1	0.1	0.025				0.025	0.025	0.1	0.025

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
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#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

			Halogenated Hydrocarbons					Halogenated Benzenes										Chlorinated Hydrocarbons																	
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Halon-1301	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobutadiene	Naphthalene	Pentachlorobenzene	Chlorobenzene	Hexachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2-dichloropropane	1,3-dichloropropane	2,2-dibromo-3-chloropropane	2-chloroethanol	2-chlorotoluene	3-chloropropene	4-chlorotoluene	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																			
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Lab Report Number	**Field ID**	**Date**																																	
612014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
Average Concentration *																																			
95% UCL (Student's-t) *																																			

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Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
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#9 Moderate reliability.

| | | |

										Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
			Nitrobenzene	Methapyrilene	Nitronaphthalene	Nitronaphthalene	Nitronaphthalene	Piperazine																						
									4-Nitroaniline/Hydrazine	2-Nitroaniline-1-naphthylamine	N-Nitrosomethylethylamine/Nitrosodiethylamine	N-Nitrosodiphenylamine	Total PCBs (Sum of total)	1-naphthylamine	2-Nitrophenol/4-Hydroxyaniline	2-nitroaniline	3-nitroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	3-Picoline	4-aminobiphenyl	Benzidine/Nitrobenzidine	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																														
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																														
Lab Report Number	**Field ID**	**Date**																												
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results			1	1	1	1	1	1	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *													0.05																	
95% UCL (Student's-t) *													0.05																	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(3) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adju
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

TABLE 3: 2020 Results Summary - Western Portion Fill Material - Ecological Exceedances

			PAH	Metals		
			Benzo(a) pyrene	Lead	Nickel	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	2	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind				1,800	55	360
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space				1,100	30	230
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil			1.4			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil			0.7			
Lab Report Number	Field ID	Date				
ADE WCX-08-17868.WAC169169	BH3_0.3	10.6.20	0.8	85	18	110
	BH3_1.0	10.6.20	<0.3	36	<10	48
	BH4_0.3	10.6.20	<0.3	121	<10	114
	BH5_0.3	11.06.20	0.7	30	<10	37
	BH6_0.3	11.06.20	<0.3	55	<10	47
ADE WCX-08-18311.WAC208	BH4A_0.8	4.9.20	<0.5	-	-	-
	BH4A_0.8	11.9.20	<0.3	10.3	18.7	31.9
ADE WCX-08-18712.WAC236	TP3-A	27.11.20	0.58	<10	<10	44.2
	TP3-B	27.11.20	<0.3	<10	<10	16.7
	TP3-C	27.11.20	0.8	53.3	<10	133
	TP6-A	27.11.20	0.76	18.4	<10	30.5
	TP6-B	27.11.20	0.51	50.9	<10	62.9
	TP6-C	27.11.20	<0.3	<10	<10	<5
WSP ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<5	3	18
		UCL	0.592	-	-	-

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.19/02/2021 11:19:31 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

B(a)P

General Statistics

Total Number of Observations	14	Number of Distinct Observations	7
		Number of Missing Observations	0
Minimum	0.3	Mean	0.496
Maximum	0.8	Median	0.5
SD	0.203	Std. Error of Mean	0.0542
Coefficient of Variation	0.408	Skewness	0.408

Normal GOF Test

Shapiro Wilk Test Statistic	0.825	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.262	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.592	95% Adjusted-CLT UCL (Chen-1995)	0.592
		95% Modified-t UCL (Johnson-1978)	0.593

Gamma GOF Test

A-D Test Statistic	1.064	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.737	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.282	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.229	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	6.519	k star (bias corrected MLE)	5.17
Theta hat (MLE)	0.0762	Theta star (bias corrected MLE)	0.096
nu hat (MLE)	182.5	nu star (bias corrected)	144.8
MLE Mean (bias corrected)	0.496	MLE Sd (bias corrected)	0.218
		Approximate Chi Square Value (0.05)	117.9
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	114.7

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.609	95% Adjusted Gamma UCL (use when n<50)	0.626

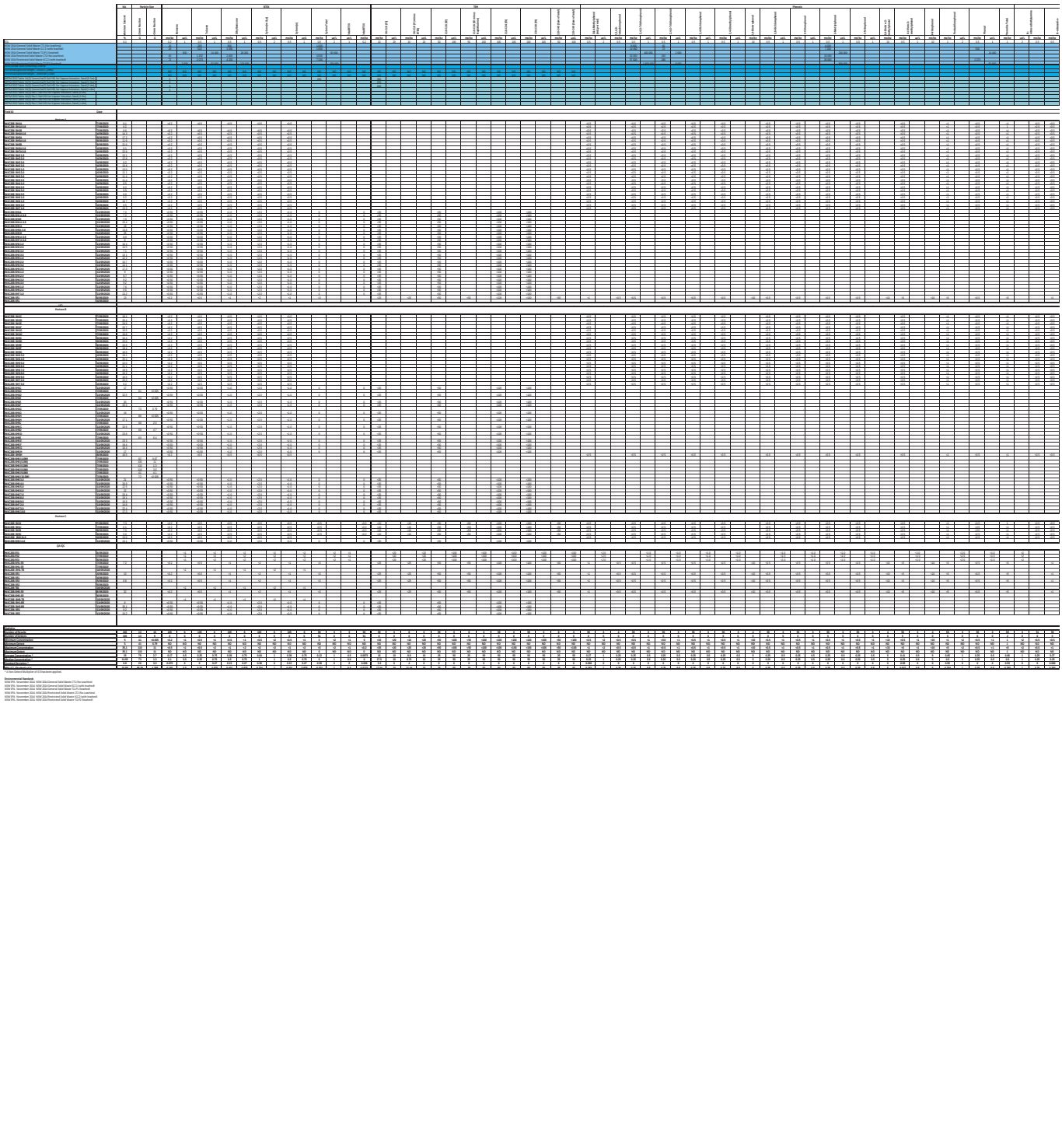
Lognormal GOF Test

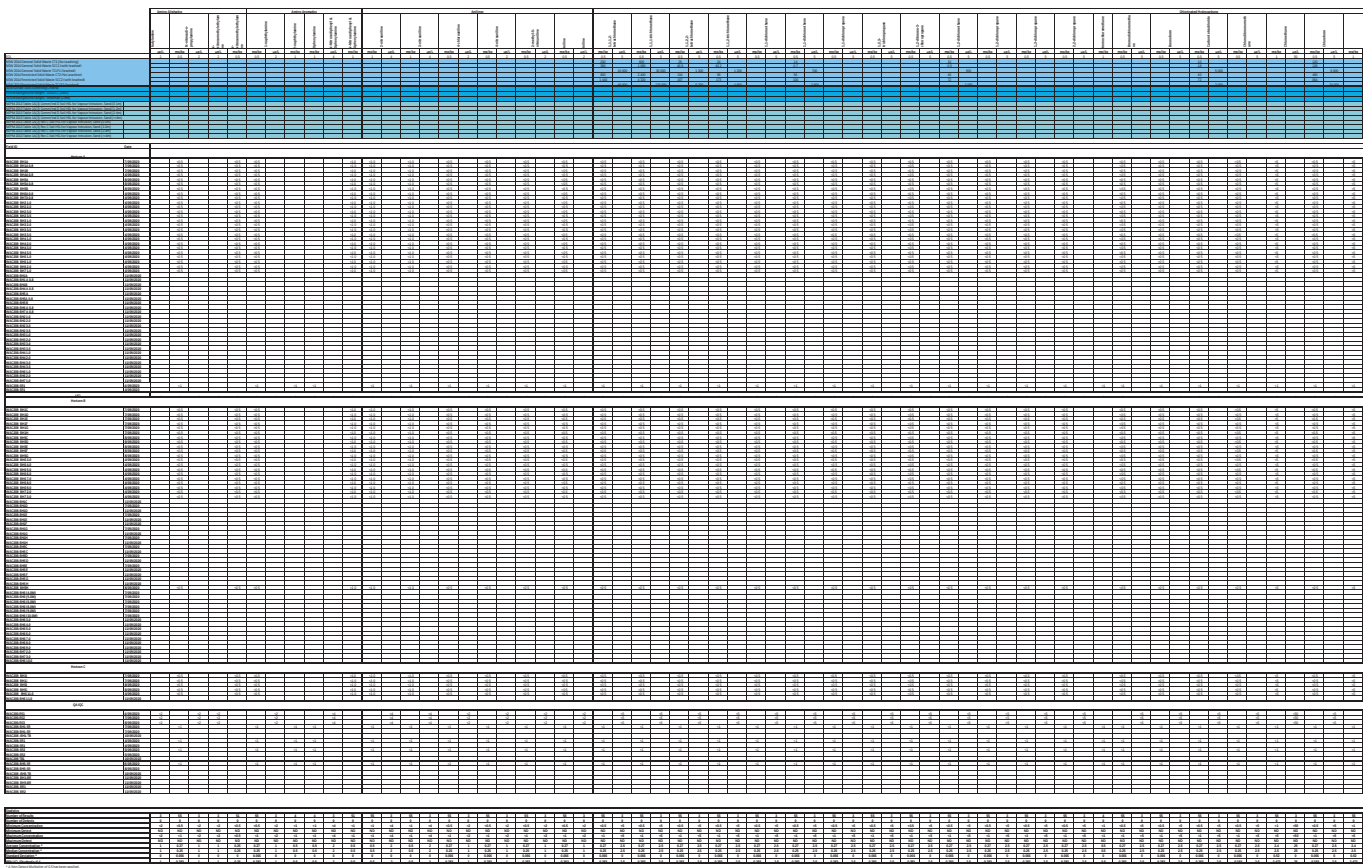
Shapiro Wilk Test Statistic	0.813	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.277	**Lilliefors Lognormal GOF Test**

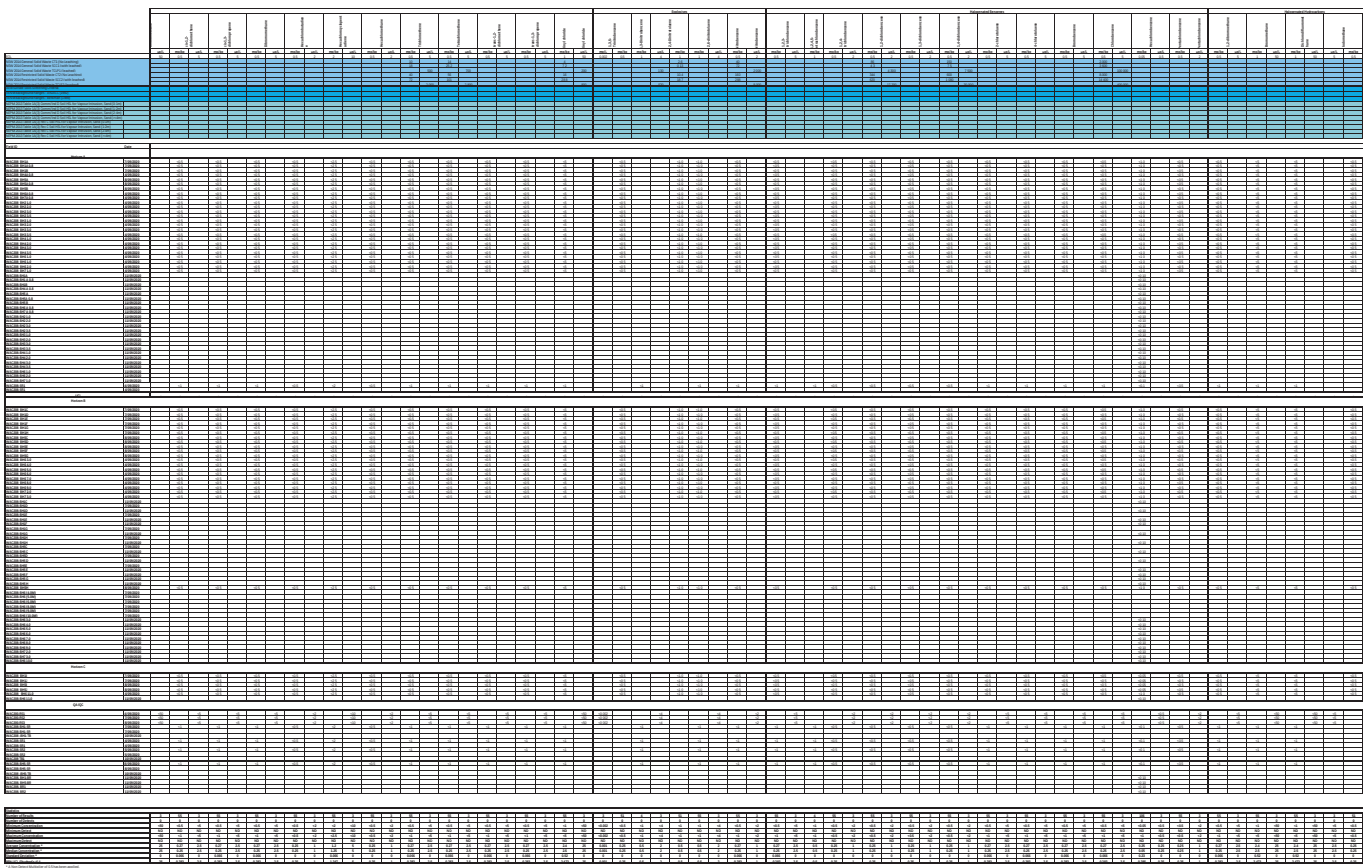
55	5% Lilliefors Critical Value					0.226	Data Not Lognormal at 5% Significance Level					
56	**Data Not Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					-1.204	Mean of logged Data					-0.779
60	Maximum of Logged Data					-0.223	SD of logged Data					0.413
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					0.628	90% Chebyshev (MVUE) UCL					0.664
64	95% Chebyshev (MVUE) UCL					0.74	97.5% Chebyshev (MVUE) UCL					0.845
65	99% Chebyshev (MVUE) UCL					1.052						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data do not follow a Discernible Distribution (0.05)**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					0.586	95% Jackknife UCL					0.592
72	95% Standard Bootstrap UCL					0.583	95% Bootstrap-t UCL					0.603
73	95% Hall's Bootstrap UCL					0.583	95% Percentile Bootstrap UCL					0.586
74	95% BCA Bootstrap UCL					0.585						
75	90% Chebyshev(Mean, Sd) UCL					0.659	95% Chebyshev(Mean, Sd) UCL					0.733
76	97.5% Chebyshev(Mean, Sd) UCL					0.835	99% Chebyshev(Mean, Sd) UCL					1.035
77												
78	**Suggested UCL to Use**											
79	95% Student's-t UCL					0.592	or 95% Modified-t UCL					0.593
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

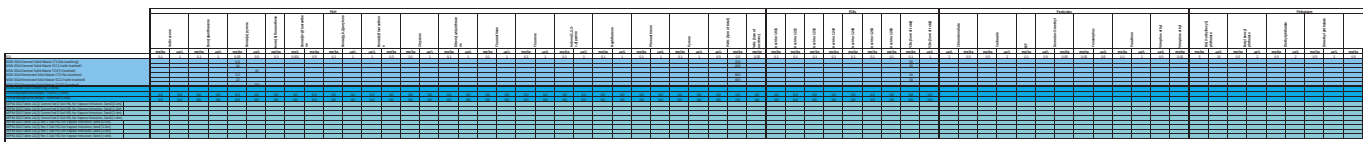
ADE - Westconmex Stage 3B, Rozelle Interchange: WCX-08-17068 / WAC389

| | | |









| | | |

	Acid Sulphate Soils		Particle Size		BTEX							TRH							Phenols												
	Net Acidity without ASC	pH(KCl)	Clay in soils <2 um	Density	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2) minus Naphthalene (F2)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	>C10-C40 Fraction (Sum)	2a,4,6-Tribromophenol (4&6-pentol)	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol	Pentachlorophenol
	%		%	g/cm3	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.01	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	10	288	600	-	-	1,000	-	-	-	-	-	-	-	-	-	8,000	40	-	-	-	-	4,000	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	18	518	1,080	-	-	1,800	-	-	-	-	-	-	-	-	-	14,400	72	-	-	-	-	7,200	-	-	-	-	518	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	40	1,152	2,400	-	-	4,000	-	-	-	-	-	-	-	-	-	32,000	160	-	-	-	-	16,000	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	72	2,072	4,320	-	-	7,200	-	-	-	-	-	-	-	-	-	57,600	288	-	-	-	-	28,800	-	-	-	-	2,073	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	3	-	-	-	-	230	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	3	-	-	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	3	-	-	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																															
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.02	5.7	10	2.46	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.02	6.1	10	2.45	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.02	5.7	9	2.48	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP4	14/09/2020	0.02	5.8	8	2.47	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.02	6.0	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-SR	14/09/2020					<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	WAC223_SR	23/10/2020					<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50		<100	<100	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																	
Number of Results	5	5	5	5	7	7	7	7	7	7	7	7	7	7	6	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects	1	5	4	5	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.02	5.7	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	0	0	<10	<10	<50	<50	<100	<100	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum Concentration	0.02	6.1	10	2.48	<0.5	<0.5	<1	<2	<1	<0.5	<0.2	<35	<35	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1989)
Adopted Site Assessment Criteria as per the Site's ASSMP

	Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons																		
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosomethylethylamine	1-naphthylamine	Nitrobenzene & 2-phenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-1-nitroaniline	Aniline	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	200	600	28	24	-	14	-	-	-	10	-	-	-	-	-	10	-	-	120	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	-	-	-	-	-	-	360	1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-	-	-	18	-	-	126	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	800	2,400	104	96	-	56	-	-	-	40	-	-	-	-	-	40	-	-	480	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	-	-	-	-	-	-	1,440	4,320	187.2	172.8	-	100	-	-	-	72	-	-	-	-	-	72	-	-	864	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	WAC223-SR	14/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	WAC223_SR	23/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																
Number of Results	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

| | | |

	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						Perfluoroalkyl Sulfonamides							PFAS			
	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic Acid (PFPeA)	Perfluorohexanoic Acid (PFHxA)	Perfluoroheptanoic Acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic Acid (PFNA)	Perfluorodecanoic Acid (PFDA)	Perfluoroundecanoic Acid (PFUnA)	Perfluorododecanoic Acid (PFDoA)	Perfluorotridecanoic Acid (PFTrDA)	Perfluorotetradecanoic Acid (PFTeDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (NMeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-ETHyl perfluorooctane sulfonamidoacetic Acid (NEtFOSAA)	Perfluorooctane sulfonamide perfluorooctane sulfonamidoethanol (SAMPLE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%
EQL	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	18	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	72	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
VENM Background Ranges - Berkman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 HIL-C (Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	16.6
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	17.5
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	11.5
ALSE-Sydney	WAC223-SR	14/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	WAC223_SR	23/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																
Number of Results	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Minimum Concentration	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2
Maximum Concentration	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, Novembar 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Guologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Inorganics								MAH								Metals								Nitroaromatics					
	Moisture Content	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	pH (Lab)	2,4,6-Tribromophenol	1,1,1,2-Tetrachloroethane	Isopropylbenzene	Naphthalene	n-propylbenzene	n-propylToluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic	Cadmium	Chromium(III+VI)	Copper	Lead	Mercury	Nickel	Selenium	Zinc	2-Picoline	4-aminobiphenyl	Naphthylamine mix	4,4-DDE	alpha-HCH	Aldrin
	%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.3	2	5	5	0.1	2	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	320	-	-	-	-	-	-	-	-	60	-	100	20	100	-	100	4	40	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-	500	100	1,900	-	1,500	50	1,050	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	240	-	400	80	400	-	400	16	160	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	64	-	-	-	-	-	-	-	-	432	-	2,000	400	7,600	-	6,000	200	4,200	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	WAC223-TP1	14/09/2020	0.4	<0.1	0.1	<0.1	<0.1	0.2	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.1	0.5	0.2	<0.1	<0.1	0.8	<1	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.3	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	WAC223-TP3	14/09/2020	0.4	0.1	<0.1	<0.1	<0.1	0.3	<1	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	<0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.1	0.1	<0.1	<0.1	<0.1	0.3	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.1	0.5	<0.1	<0.1	<0.1	0.7	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	9	<5	<5	<0.1	<2	<0.1	12	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	WAC223-SR	14/09/2020	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<1	3	<5	<5	<0.1	<2	-	<5	-	-	-	<0.05	<0.05	<0.05
SLS	WAC223_SR	23/10/2020	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	-	<5.0	-	-	-	<0.10	<0.10	<0.10

Statistics																																
Number of Results	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7	7	7	7	7	7	7	5	7	5	5	5	7	7	7
Number of Detects	3	4	2	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	3	1	0	0	0	0	0	0
Minimum Concentration	<0.1	0.1	0.1	<0.1	<0.1	0.2	<1	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.3	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
Maximum Concentration	1.9	0.5	0.2	<0.1	<0.1	0.8	<1	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	9	<5	<10	<0.2	<10	0.3	12	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Organochlorine Pesticides																					Organophosphorous Pesticides											
	Aldrin + Dieldrin	BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	HCBC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenamiphos
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																															
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	**WAC223-SR**	**14/09/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
SLS	**WAC223.SR**	**23/10/2020**		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10			<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10							<0.10

Statistics																																	
Number of Results	6	7	6	7	7	7	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	7	6	6	6	6	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**
Maximum Concentration	**<0.05**	**<0.1**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.1**	**<0.05**	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

								Other	PAH																			PCBs					
	Xylenes	Malathion	Methyl parathion	Monocrotophos	Phorate	Phenol	Styrene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[b&j]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAHs (Sum of total)	PAHs (Sum of positive)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.1	0.2	0.05	0.1	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5		0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
ALSE-Sydney	**WAC223-SR**	**14/09/2020**	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
SLS	**WAC223_SR**	**23/10/2020**			<0.10			<0.10	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Statistics																																
Number of Results	6	6	7	6	6	1	5	7	7	7	7	7	1	6	7	7	7	7	7	7	7	1	7	7	6	1	1	1	1	1	1	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Minimum Concentration	**<0.05**	**<0.05**	**<0.1**	**<0.2**	**<0.05**	**<0.1**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration	**<0.05**	**<0.05**	**<0.2**	**<0.2**	**<0.05**	**<0.1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, Novembar 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

			Pesticides							Phthalates						Solvents						Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils -		Acid Sulphate Soils -		Acid Sulphate Soils -	
	Aroclor 1260	PCB (Sum of total)	Chlorpyrifos	Chlorpyrifos-methyl	DDT	Fenitrothion-5-methyl	Fenvalerate/esfenvalerate	Malathion	Pirimiphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethylphthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl ethyl ketone	Trichloroethene (TCE)	Methyl-2-pentanone	Carbon disulfide	Naphthalene	Vinyl acetate	Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (sulfidic units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfuric units)	Titratable Actual Acidity	Retained Acidity	Chromium Reducible Sulfur (acidity units)	Chromium Reducible Sulfur
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S
EQL	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5	10	0.5	10	0.02	0.02	2	1	1	10	0.005
NSW 2014 General Solid Waste CT1 (No Leaching)	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	28,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - Berkman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	2	<1	<1	<10	0.011
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.012
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	14	1.5	14	0.02	<0.02	2	1	1	12	0.020
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010
ALSE-Sydney	**WAC223-SR**	**14/09/2020**	-	<0.1	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	**WAC223_SR**	**23/10/2020**	<0.50	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																															
Number of Results	**1**	**6**	**5**	**5**	**1**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**1**	**0**	**2**	**1**	**1**	**1**	**1**	**5**
Minimum Concentration	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**<10**	**1.5**	**<10**	**0.02**	**<0.02**	**2**	**1**	**1**	**<10**	**0.01**
Maximum Concentration	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**14**	**1.5**	**14**	**0.02**	**<0.02**	**2**	**1**	**1**	**12**	**0.02**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

			SVOCs															TPH					VOCs		
			1,2-Dichlorobenzene	4-Methylphenol (p-cresol)	4-Bromophenyl phenyl ether	4-Chlorophenyl phenyl ether	4-Nitrophenol (4-nitrophenol)	Acenaphthene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Diethylphthalate	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Isophorone	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Chloroform
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	650	-	-	-	10,000	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	650	-	-	-	10,000	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,600	-	-	-	40,000	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,600	-	-	-	40,000	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HIL-D (Commercial/Industrial)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																							
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WAC223-SR**	**14/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50	-	-	-
SLS	**WAC223_SR**	**23/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	<50	<100	<100	0	-	-	-
Statistics																									
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**5**	**5**	**5**
Number of Detects			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
Minimum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<10**	**<50**	**<100**	**<100**	**0**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<25**	**<50**	**<100**	**<100**	**<50**	**<0.5**	**<0.5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessi
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Acid Sulphate Soils		Particle Size								TRH						Phenols												
	Net Acidity without ANCE	pH (KCl)	Clay in soils <2um						Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (m&p-Cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenols, Total
	% S	-	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)				88	288	600			1,000									8,000	40					4,000					
NSW 2014 General Solid Waste SCC1 (with leached)				18	518	1,080			1,800									14,400	72					7,200				518	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				40	1,152	2,400			4,000									32,000	160					16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72	2,073	4,320			7,200									57,600	288					28,800				2,073	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand				3 | 3 | 3 | 3 |					230		yes | yes | yes																	
0-1m				3					230			260																	
1-2m				3								170																	
2-4m				3								630																	
>=4m				3																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																										120	40,000		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										660	240,000		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-A	**27/11/2020**	<0.02	7.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-A	**27/11/2020**	<0.02	11.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-B	**27/11/2020**	<0.02	9.1	3	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-C	**27/11/2020**	<0.02	8.8	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	129	<100	129													
WAC236-TP4-A	**27/11/2020**	0.02	11.2	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	397	<100	397													
WAC236-TP4-B	**27/11/2020**	<0.02	8.0	9	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	100	<100	100													
WAC236-TP4-C	**27/11/2020**	<0.02	9.1	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-A	**27/11/2020**	<0.02	9.4	7	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	1,266	<100	1,266													
WAC236-TP5-B	**27/11/2020**	<0.02	8.8	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-C	**27/11/2020**	<0.02	9.0	22	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-A	**27/11/2020**	<0.02	11.6	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-B	**27/11/2020**	0.03	10.9	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - C	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-C	**27/11/2020**	<0.02	9.7	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-A	**27/11/2020**	<0.02	10.7	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- BR1	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-SR-1	**27/11/2020**				<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<100	<100	<50													
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	397	0	397	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-B	**27/11/2020**	<0.02	6.4	1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP2 - A	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP2-A	**27/11/2020**	<0.02	5.9	<1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - B	**27/11/2020**				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-B	**27/11/2020**	<0.02	9.1	4	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons														
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloraniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)													200	400	40	0.5	34	0.5				10						0.5
NSW 2014 General Solid Waste SCC1 (with leached)													360	1,080	46.8	43.2	0.7					0.5						18
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)													800	2,400	104	96	56					40						40
NSW 2014 Restricted Solid Waste SCC2 (with leached)													1,440	4,320	187.2	172.8	100					72						72
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236-TP1-A	**27/11/2020**																												
WAC236- TP3 - A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236-TP3-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**																												
WAC236-TP3-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**																												
WAC236-TP3-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**																												
WAC236-TP4-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**																												
WAC236-TP4-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**																												
WAC236-TP4-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**																												
WAC236-TP5-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**																												
WAC236-TP5-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**																												
WAC236-TP5-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**																												
WAC236-TP6-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**																												
WAC236-TP6-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**																												
WAC236-TP6-C	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**																												
WAC236-TP7-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**																												
WAC236-SR-1	**27/11/2020**																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**																											
WAC236-TP1-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**																											
WAC236-TP2-A	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**																											
WAC236-TP7-B	**27/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Chlorinated Hydrocarbons															Explosives				Halogenated Benzenes									
	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Methylene chloride	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4 Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			100								10	14			4		2.6		40			96		120			2,000		
NSW 2014 General Solid Waste SCC1 (with leached)			126								10	25.2			7.2		0.13		7.2			4.3		7.5			3,600		
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			480								40	56			16		10.4		160			344		600			8,000		
NSW 2014 Restricted Solid Waste SCC2 (with leached)			864								72	100.8			28.8		18.7		288			620		1,080			14,400		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																												10	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												50	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**																											<0.10	
WAC236-TP1-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - A	**27/11/2020**																											<0.10	
WAC236-TP3-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - B	**27/11/2020**																											<0.10	
WAC236-TP3-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - C	**27/11/2020**																											<0.10	
WAC236-TP3-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - A	**27/11/2020**																											<0.10	
WAC236-TP4-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - B	**27/11/2020**																											<0.10	
WAC236-TP4-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - C	**27/11/2020**																											<0.10	
WAC236-TP4-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - A	**27/11/2020**																											<0.10	
WAC236-TP5-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - B	**27/11/2020**																											<0.10	
WAC236-TP5-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - C	**27/11/2020**																											<0.10	
WAC236-TP5-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - A	**27/11/2020**																											<0.10	
WAC236-TP6-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - B	**27/11/2020**																											<0.10	
WAC236-TP6-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - C	**27/11/2020**																											<0.10	
WAC236-TP6-C	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - A	**27/11/2020**																											<0.10	
WAC236-TP7-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- BR1	**27/11/2020**																											<0.10	
WAC236-SR-1	**27/11/2020**																											<0.05	
	Maximum concentration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**																											<0.10	
WAC236-TP1-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP2 - A	**27/11/2020**																											<0.10	
WAC236-TP2-A	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - B	**27/11/2020**																											<0.10	
WAC236-TP7-B	**27/11/2020**	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	Maximum concentration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Halogenated Hydrocarbons					Herbicides	Perfluoroalkane Carboxylic Acids										(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids					
	1,2-Dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorotridecanoic acid (PFTrDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	5	0.5	5	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NSW 2014 General Solid Waste CT1 (No Leaching)																										
NSW 2014 General Solid Waste SCC1 (with leached)											10															
NSW 2014 General Solid Waste TCLP1 (leached)																										
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																										
NSW 2014 Restricted Solid Waste SCC2 (with leached)											72															
NSW 2014 Restricted Solid Waste TCLP2 (leached)																										
Berkman (1989) Background Ranges																										
ANZECC (1992) Background Ranges																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
0-1m																										
1-2m																										
2-4m																										
>=4m																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																										
0-1m																										
1-2m																										
2-4m																										
>=4m																										
NEPM 2013 Table 1A(1) HILs Rec C Soil																										
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																									
WAC236-TP1-A	27/11/2020																									
WAC236-TP1-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - A	27/11/2020																									
WAC236-TP3-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - B	27/11/2020																									
WAC236-TP3-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP3 - C	27/11/2020																									
WAC236-TP3-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
WAC236- TP4 - A	27/11/2020																									
WAC236-TP4-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - B	27/11/2020																									
WAC236-TP4-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - C	27/11/2020																									
WAC236-TP4-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP5 - A	27/11/2020																									
WAC236-TP5-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - B	27/11/2020																									
WAC236-TP5-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - C	27/11/2020																									
WAC236-TP5-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP6 - A	27/11/2020																									
WAC236-TP6-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0011	<0.0002
WAC236- TP6 - B	27/11/2020																									
WAC236-TP6-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002
WAC236- TP6 - C	27/11/2020																									
WAC236-TP6-C	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - A	27/11/2020																									
WAC236-TP7-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- BR1	27/11/2020																									
WAC236-SR-1	27/11/2020																									
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																										

Horizon B - BEDROCK

Field ID	Date																									
WAC236- TP1-B	27/11/2020																									
WAC236-TP1-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP2 - A	27/11/2020																									
WAC236-TP2-A	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - B	27/11/2020																									
WAC236-TP7-B	27/11/2020	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																										

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Perfluoroalkyl Sulfonamides							PFAS			Inorganics								MAH								
	Perfluorooctane sulfonamide (PFOSA)	N-Methyl perfluorooctane sulfonamide (NMPFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (NMPFOSAA)	N-ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	N-Ethyl perfluorooctane sulfonamide (EPFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EPFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EPFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	pH 1:5 soil:water	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cwealth Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-Butylbenzene	n-propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	tert-butylbenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	-	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1	-	0.1	0.1	0.1	0.1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)																			200								88	
NSW 2014 General Solid Waste SCC1 (with leached)								1.8											10								108	
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			1,280								240	
NSW 2014 Restricted Solid Waste SCC2 (with leached)								7.2											23,600								432	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**											5.9		8.5														
WAC236-TP1- A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	16.2	0.7		<0.2	<0.2	<0.2	0.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**											9.8		10.5														
WAC236-TP3-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	5.2	10.2	4.2		<0.2	0.2	0.2	4.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**											8.9		9.2														
WAC236-TP3-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	10.1	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**											9.4		8														
WAC236-TP3-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0002	0.0002	<0.2	9.9	3.1		<0.2	<0.2	<0.2	3.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**											4.8		10.2														
WAC236-TP4-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.7	4.5		<0.2	0.3	<0.2	4.8	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**											7		8.3														
WAC236-TP4-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	0.0002	0.0002	<0.2	8.9	2.5		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**											7.4		8.5														
WAC236-TP4-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	9.7	1.6		<0.2	<0.2	<0.2	1.6	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**											6.3		9.5														
WAC236-TP5-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	9.6	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**											12.4		7.9														
WAC236-TP5-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0005	0.0005	<0.2	14.4	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**											6.3		7.8														
WAC236-TP5-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	7.5	1.3		<0.2	<0.2	<0.2	1.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**											8.5		11.6														
WAC236-TP6-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0011	0.0011	0.0011	<0.2	12.2	31.9		<0.2	<0.2	<0.2	32.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**											13		11.4														
WAC236-TP6-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	0.0005	0.0005	<0.2	11.9	9.8		<0.2	<0.2	<0.2	9.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**											7.6		10.8														
WAC236-TP6-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.0	1.9		<0.2	<0.2	<0.2	1.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**											5.5		9.6														
WAC236-TP7-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	21.9	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**											5.3		8.5														
WAC236-SR-1	**27/11/2020**											5.8																
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**											1.3		8.4														
WAC236-TP1-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	2.4	0.4		<0.2	<0.2	<0.2	0.4	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**											3.6		6.1														
WAC236-TP2-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.3	4.8	0.8		<0.1	<0.1	0.1	1.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**											3.4		5.5														
WAC236-TP7-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.6	3.1	0.2		<0.1	<0.1	<0.1	0.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Metals														Nitroaromatics			Organochlorine Pesticides													
	Arsenic	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	4_4_DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	50	0.3	2	2	5	5	5	0.1	2	5	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)	100	20		20				100		4	40	20																		
NSW 2014 General Solid Waste SCC1 (with leached)	500	100		100				1,500		50	1,050	50																		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	400	80		80				400		16	160	80																		
NSW 2014 Restricted Solid Waste SCC2 (with leached)	2,000	400		400				6,000		200	4,200	200																		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges	0.3-30			0.04-2	0.5-110		1-190	<5-200		0.001-0.1	2-400			2-180																
ANZECC (1992) Background Ranges	1-40				1.5-1000		2-100	2-200		0.03	5-500			10-300																
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil	300	90	20,000	90		300	17,000	600	19,000	80	1,200	700		30,000							10		70						400	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	3,000	500	300,000	900		4,000	240,000	1,500	60,000	730	6,000	10,000		400,000							45		530						3,600	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	**27/11/2020**	<5.0			<0.30	<5.0		10.7	44.1		<0.20	<10.0			35.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-A	**27/11/2020**		<1	<50			<2			43			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - A	**27/11/2020**	<5.0			<0.30	6		27.9	<10.0		<0.20	<10.0			44.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-A	**27/11/2020**		<1	<50			3			171			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - B	**27/11/2020**	<5.0			<0.30	5.2		<5.0	<10.0		<0.20	<10.0			16.7				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-B	**27/11/2020**		<1	<50			4			274			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - C	**27/11/2020**	<5.0			<0.30	7.4		20.4	53.3		0.23	<10.0			133				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-C	**27/11/2020**		<1	<50			<2			68			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - A	**27/11/2020**	<5.0			<0.30	8.3		5.7	<10.0		<0.20	<10.0			22.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-A	**27/11/2020**		<1	<50			4			266			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - B	**27/11/2020**	<5.0			<0.30	11.2		51.3	68.9		<0.20	<10.0			62				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-B	**27/11/2020**		<1	<50			<2			113			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - C	**27/11/2020**	<5.0			<0.30	9.3		36.3	33.6		<0.20	<10.0			31.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-C	**27/11/2020**		<1	<50			<2			38			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - A	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			13.3				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-A	**27/11/2020**		<1	<50			4			251			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - B	**27/11/2020**	6.1			<0.30	6.5		107.4	111.1		<0.20	<10.0			206.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-B	**27/11/2020**		<1	<50			3			175			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - C	**27/11/2020**	<5.0			<0.30	7.5		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-C	**27/11/2020**		<1	<50			<2			18			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - A	**27/11/2020**	<5.0			<0.30	6.4		11.7	18.4		<0.20	<10.0			30.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-A	**27/11/2020**		<1	<50			2			74			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - B	**27/11/2020**	<5.0			<0.30	5.9		14.7	50.9		<0.20	<10.0			62.9				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-B	**27/11/2020**		<1	<50			<2			49			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - C	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-C	**27/11/2020**		<1	<50			<2			17			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - A	**27/11/2020**	<5.0			<0.30	<5.0		13	14.8		<0.20	<10.0			32.6				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-A	**27/11/2020**		<1	<50			<2			105			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- BR1	**27/11/2020**	<5.0			<0.30	<5.0		7.6	32.9		<0.20	<10.0			26.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-SR-1	**27/11/2020**	<5			<1	5		15	44		<0.1	<2			38				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05

Maximum concentration		6.1	0	0	0	11.2	0	107.4	111.1	0	0.23	0	0	0	206.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL									67.84																					

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-B	**27/11/2020**		<1	<50			<2			21			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP2 - A	**27/11/2020**	<5.0			<0.30	5.4		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP2-A	**27/11/2020**		<1	<50			<2			16			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - B	**27/11/2020**	<5.0			<0.30	9.6		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-B	**27/11/2020**		<1	<50			<2			<5			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5

Maximum concentration		0	0	0	0	9.6	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

													Organophosphorous Pesticides																	
	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Ronnel
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1	0.2	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	90															4														
NSW 2014 General Solid Waste SCC1 (with leached)	5															7.5														
NSW 2014 General Solid Waste TCLP1 (leached)	1																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	240															16														
NSW 2014 Restricted Solid Waste SCC2 (with leached)	432															30														
NSW 2014 Restricted Solid Waste TCLP2 (leached)	4																													
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil	340				20				10		400					250														
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	2,000				100				50		2,500					2,000														

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP1-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP3-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP4-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP5-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP6-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP7-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- BR1	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-SR-1	**27/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP1-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP2 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP2-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						<0.10	<0.10	<0.10					<0.10			<0.10			<0.10
WAC236-TP7-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Other	PAH																												
	4-Methylphenol	Benzo[b+k]fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylchloranthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene - TCLP	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	PAHs (Sum of positives)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	1	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3		0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	
NSW 2014 General Solid Waste CT1 (No Leaching)											0.8																	200	
NSW 2014 General Solid Waste SCC1 (with leached)											10																	200	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)											3.2																	800	
NSW 2014 Restricted Solid Waste SCC2 (with leached)											23																	800	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																									3	3	3	300	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									40	40	40	4,000	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**							<0.30	<0.30	<0.30	0.81	0.72	<0.005	1.32			0.57	1.3	0.73	<0.30	1.56	<0.30	0.56	<0.30	0.55	1.74	1.38	1.53	1.23		9.96
WAC236-TP1-A	**27/11/2020**	<0.5																												
WAC236- TP3 - A	**27/11/2020**							<0.30	<0.30	0.31	0.54	0.58		0.63			0.47	<0.30	0.55	<0.30	1.26	<0.30	0.31	<0.30	0.77	1.34	0.9	1.07	0.74		6.76
WAC236-TP3-A	**27/11/2020**	<0.5																												
WAC236- TP3 - B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP3-B	**27/11/2020**	<0.5																												
WAC236- TP3 - C	**27/11/2020**							<0.30	<0.30	<0.30	0.73	0.8		1.35			0.52	1.33	0.68	<0.30	1.26	<0.30	0.52	<0.30	0.49	1.33	1.36	1.51	1.21		9.01
WAC236-TP3-C	**27/11/2020**	<0.5																												
WAC236- TP4 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP4-A	**27/11/2020**	<0.5																												
WAC236- TP4 - B	**27/11/2020**							<0.30	<0.30	0.45	3.24	3.6	<0.005	5.68			2.31	5.6	3.06	0.5	5.46	<0.30	2.47	<0.30	1.86	6.3	5.85	5.85	5.85		40.53
WAC236-TP4-B	**27/11/2020**	<0.5																												
WAC236- TP4 - C	**27/11/2020**							<0.30	<0.30	<0.30	2.07	2.71	<0.005	3.94			1.6	3.88	1.98	0.4	3.46	<0.30	1.71	<0.30	<0.30	3.98	4.04	4.04	4.04		25.46
WAC236-TP4-C	**27/11/2020**	<0.5																												
WAC236- TP5 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP5-A	**27/11/2020**	<0.5																												
WAC236- TP5 - B	**27/11/2020**							<0.30	0.72	1.45	12.21	12.56	<0.005	20.59			8.95	20.3	9.67	1.97	19.33	<0.30	11.08	<0.30	5.26	21.93	21.13	21.13	21.13		146.02
WAC236-TP5-B	**27/11/2020**	<0.5																												
WAC236- TP5 - C	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		0.38			<0.30	0.38	<0.30	<0.30	0.44	<0.30	<0.30	<0.30	<0.30	0.5	0.41	0.74	0.08		1.7
WAC236-TP5-C	**27/11/2020**	<0.5																												
WAC236- TP6 - A	**27/11/2020**							<0.30	<0.30	<0.30	0.69	0.76		1.32			0.5	1.3	0.64	<0.30	1.23	<0.30	0.51	<0.30	<0.30	1.29	1.3	1.45	1.15		8.24
WAC236-TP6-A	**27/11/2020**	<0.5																												
WAC236- TP6 - B	**27/11/2020**							<0.30	<0.30	<0.30	0.44	0.51		<0.30			0.35	<0.30	0.39	<0.30	0.8	<0.30	0.37	<0.30	<0.30	0.94	0.78	0.96	0.6		3.8
WAC236-TP6-B	**27/11/2020**	<0.5																												
WAC236- TP6 - C	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30			<0.30	<0.30	<0.30	<0.30	0.42	<0.30	<0.30	<0.30	<0.30	0.51	0.36	0.73	0		0.93
WAC236-TP6-C	**27/11/2020**	<0.5																												
WAC236- TP7 - A	**27/11/2020**							<0.30	0.3	0.56	1.67	1.8	<0.005	2.14			1.2	0.84	1.66	0.31	3.46	<0.30	1.01	<0.30	2.05	3.71	2.86	2.86	2.86		20.87
WAC236-TP7-A	**27/11/2020**	<0.5																												
WAC236- BR1	**27/11/2020**							<0.30	<0.30	<0.30	0.86	2.0	<0.005	1.43			0.59	1.41	0.81	<0.30	1.86	<0.30	0.57	<0.30	<0.30	2.01	1.49	1.64	1.34		10.44
WAC236-SR-1	**27/11/2020**							<0.5	<0.5	<0.5	1.4	1.7			1.8	1.1	1.1	0.6	1.3	<0.5	2.8	<0.5	0.8	<0.5	1.0	2.9	2.3	2.6	2.1	15.3	

Maximum concentration		0	0	0	0	0	0	0	0.72	1.45	12.21	12.56		20.59	0	8.95	20.3	9.67	1.97	19.33	0	11.08	0	5.26	21.93	21.13	21.13	21.13	0	146.02
95%UCL												5.604																		

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP1-B	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP2 - A	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP2-A	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP7 - B	**27/11/2020**							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP7-B	**27/11/2020**	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	ND	ND	ND	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	PCBs								Pesticides							Phthalates						Solvents						
	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	PCBs (Sum of total)	Chlordane/dia	Carbaryle	DDF	Dimetoate-S-oxo/thyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-Hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl Acetate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)								50														4,000					
NSW 2014 General Solid Waste SCC1 (with leached)								50														7,200					
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)								50														16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)								50														28,800					
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil								1																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								7																			

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10					<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236-TP1-A	**27/11/2020**									<0.5	<0.5						<0.5												
WAC236- TP3 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP3-C	**27/11/2020**									<0.5	1.4						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP4-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP5-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - C	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP6-C	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP7-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- BR1	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-SR-1	**27/11/2020**								<0.1					<0.05	<0.05	<0.2	<0.05												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP1-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP2 - A	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP2-A	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - B	**27/11/2020**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50					<0.10																
WAC236-TP7-B	**27/11/2020**									<0.5	<0.5						<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		SVOCs															
	a Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	2-Acetylaminofluorene	3,3-Dichlorobenzidine	4-Dimethylaminoazobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acridonone	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine
	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	0.5	10	0.02	0.02	2	10	0.01	0.01	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
NSW 2014 General Solid Waste CT1 (No Leaching)																													
NSW 2014 General Solid Waste SCC1 (with leached)																													
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																													
NSW 2014 Restricted Solid Waste SCC2 (with leached)																													
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																													

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**																												
WAC236-TP1-A	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	121	0.60	0.19	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - A	**27/11/2020**																												
WAC236-TP3-A	**27/11/2020**	11	1.5	<10	<0.02	<0.02	<2	1,850	9.26	2.96	<1	<1	11	0.017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - B	**27/11/2020**																												
WAC236-TP3-B	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	333	1.67	0.53	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - C	**27/11/2020**																												
WAC236-TP3-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	259	1.30	0.42	<1	<1	<10	0.013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - A	**27/11/2020**																												
WAC236-TP4-A	**27/11/2020**	15	1.5	<10	<0.02	<0.02	<2	905	4.53	1.45	<1	1	15	0.024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - B	**27/11/2020**																												
WAC236-TP4-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	266	1.33	0.43	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - C	**27/11/2020**																												
WAC236-TP4-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	1,780	8.93	2.86	<1	<1	<10	0.015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - A	**27/11/2020**																												
WAC236-TP5-A	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	216	1.08	0.35	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - B	**27/11/2020**																												
WAC236-TP5-B	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	577	2.89	0.92	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - C	**27/11/2020**																												
WAC236-TP5-C	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	203	1.02	0.32	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - A	**27/11/2020**																												
WAC236-TP6-A	**27/11/2020**	12	1.5	<10	<0.02	<0.02	<2	1,600	8.00	2.56	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - B	**27/11/2020**																												
WAC236-TP6-B	**27/11/2020**	18	1.5	<10	<0.02	<0.02	<2	1,140	5.72	1.83	<1	1	18	0.029	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - C	**27/11/2020**																												
WAC236-TP6-C	**27/11/2020**	10	1.5	<10	<0.02	<0.02	<2	3,320	16.6	5.32	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - A	**27/11/2020**																												
WAC236-TP7-A	**27/11/2020**	12	1.5	<10	<0.02	<0.02	<2	509	2.55	0.82	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- BR1	**27/11/2020**																												
WAC236-SR-1	**27/11/2020**																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**																												
WAC236-TP1-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP2 - A	**27/11/2020**																												
WAC236-TP2-A	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - B	**27/11/2020**																												
WAC236-TP7-B	**27/11/2020**	<10	1.5	<10	<0.02	<0.02	<2	100	0.50	0.16	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

		TPH					VOCs		
	Phenanthrene	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)		650				10,000			
NSW 2014 General Solid Waste SCC1 (with leached)		650				10,000			
NSW 2014 General Solid Waste TCLP1 (leached)									
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		2,600				40,000			
NSW 2014 Restricted Solid Waste SCC2 (with leached)		2,600				40,000			
NSW 2014 Restricted Solid Waste TCLP2 (leached)									
Berkman (1989) Background Ranges									
ANZECC (1992) Background Ranges									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(1) HILs Rec C Soil									
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									

Horizon A - GENERAL FILL MATERIALS

Field ID	Date								
WAC236-TP1-A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**		<25	<50	247	160	407			
WAC236-TP4-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**		<25	<50	812	433	1,245			
WAC236-TP5-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-SR-1	**27/11/2020**		<10	<50	<100	<100	<50			

Maximum concentration	0	0	0	812	433	407	0	0	0
95%UCL									

Horizon B - BEDROCK

Field ID	Date								
WAC236- TP1-B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP2-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5

Maximum concentration	0	0	0	0	0	0	0	0	0
95%UCL									

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	TPH					TRH							BTEX					
	C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C15 - C16	C15 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m- & p-)	Xylene (o)	Xylene (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																		
NEPM 2013 Table 1A(1) HILs Rec C Soil																		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay																		
0-1m							310[#8]		NL [#10]				4	NL [#13]	NL [#10]			NL [#10]
1-2m							490[#8]		NL [#10]				6	NL [#13]	NL [#10]			NL [#10]
2-4m							NL [#10]		NL [#10]				9	NL [#13]	NL [#10]			NL [#10]
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Clay																		
0-1m							NL [#10]		NL [#10]				NL [#10]	NL [#13]	NL [#10]			NL [#10]
1-2m							NL [#10]		NL [#10]				NL [#10]	NL [#13]	NL [#10]			NL [#10]
2-4m							NL [#10]		NL [#10]				NL [#10]	NL [#13]	NL [#10]			NL [#10]

Field ID	Date																		
TP01_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	**29/11/2019**	<20	240	930	177	1,170	<20	220	340	340	810	<100	1,150	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	**29/11/2019**	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics																		
Number of Results	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect	**ND**	**240**	**930**	**88**	**88**	**ND**	**ND**	**340**	**340**	**120**	**ND**	**120**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<20**	**240**	**930**	**88**	**1,170**	**<20**	**<20**	**340**	**340**	**810**	**<100**	**1,150**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.3**
Average Concentration *	**10**	**23**	**75**	**28**	**92**	**10**	**10**	**42**	**42**	**96**	**50**	**115**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**
95% UCL (Student's-t) *	**10**	**45.01**	**162.7**	**34.59**	**202.6**	**10**	**10**	**72.94**	**72.94**	**169.5**	**50**	**221.1**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#2 Carcinogenic PAHs: HIL based on B:carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK & Hill) D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#7 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#8 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Derived soil HSL exceeds soil saturation concentration
#11 To obtain F2 subtract naphthalene from the >C10 - C16 fraction.
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001% w/w.*Organic fibre detected.No trace asbestos detected.
#14 Organic fibres detected.
#15 No respirable fibres detected.

		PAH																			PCB								
		Acenaphthylene	Anthracene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene	Benzo(ghi)perylene	PAH (Sum)	Benzo(a)pyrene TEQ (zero)	Aroclor 1016	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1221	Aroclor 1268	PCB (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																		4,000[1]	40[2]									7[15]
NEPM 2013 Table 1A(1) HILs Rec C Soil																		300[1]	3[2]									1[15]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																												
0-1m																	NL[#3]											
1-2m																	NL[#3]											
2-4m																	NL[#3]											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																												
0-1m																	NL[#3]											
1-2m																	NL[#3]											
2-4m																	NL[#3]											
Field ID	**Date**																											
TP01_0.5	**29/11/2019**	-	0.1	0.1	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	0.5	0.5	0.5	0.5	2.3	3.4	3.0	1.4	2.7	2.6	0.5	4.2	0.5	1.2	0.5	1.3	5.4	-	2.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP01_2.2	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP02_2.6	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	0.5	0.5	0.5	0.5	0.8	1.2	0.8	0.5	0.9	0.9	0.5	1.5	0.5	0.5	0.5	0.5	2.0	-	2.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP03_1.0	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	0.5	0.5	0.5	1.0	1.4	1.1	1.1	1.2	1.4	0.5	2.0	0.5	1.0	0.5	0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP04_2.3	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP05_1.0	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	1.1	2.1	0.5	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																													
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Metals																										
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	10	10	2	10	2	10	10	0.4	1	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#4]		500		300,000	900	3,600[#5]	4,000	240,000		1,500[#6]	60,000	730[#7]		6,000			10,000						400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#4]		90		20,000	90	300[#5]	300	17,000		600[#6]	19,000	80[#7]		1,200			700						30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											

Field ID	Date																										
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	20	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	8,900	<10	7.1	65	<2	<10	<10	<0.4	18	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<1	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<2	<2	<10	<10	<0.4	<1	<5	11	3,100	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	103	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	59	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	78	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<2	<2	<10	<10	<0.4	<1	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<2	<2	<10	<10	<0.4	<1	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<2	<2	<10	<10	<0.4	<1	<5	<5	5,500	<5	13	<0.1	<5	<5	120	490	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<2	<2	<10	<10	<0.4	<1	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	17	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<2	<2	<10	<10	<0.4	<1	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,820	<10	4.4	<2	<2	<10	<10	<0.4	<1	<5	<5	9,700	8.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9

Statistics																										
Number of Results	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect	**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration	**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *	**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**8**	**18**	**45**
95% UCL (Student's-t) *	**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**587.4**	**1**	**0.1**	**55.38**	**7.74**	**23.01**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Phenols																					
	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4,6-Tribromophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3(4-methylphenyl)propan-1-ol	4-chloro-3-methylphenol	4,6-Dinitro-o-cyclohexylphenol	4-chloro-3-methylphenol	4-nitrophenol	Phenols	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	5	1	1	0.5	3.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																	660	240,000			
NEPM 2013 Table 1A(1) HILs Rec C Soil																	120	40,000			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																					
0-1m																					
1-2m																					
2-4m																					
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																					
0-1m																					
1-2m																					
2-4m																					

Field ID	Date																					
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<5	<5	<5	<10	<10	<5	<0.5	<0.5	<0.2	<5	<0.4	<5	<20	<5	<5	<20	<5	<0.5	<10	<5	<20
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
Average Concentration *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10
95% UCL (Student's-t) *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - <
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	OCP																							
	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	0.05	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				45		530,000				3,600						100			50		80	2,500	160	
NEPM 2013 Table 1A(1) HILs Rec C Soil				10		70,000				400						20			10		10	400	30	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapo																								
0-1m																								
1-2m																								
2-4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																								
0-1m																								
1-2m																								
2-4m																								

Field ID	Date																							
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1
Average Concentration *	0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.025	0.5
95% UCL (Student's-t) *	0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.025	0.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	OPP																		Asbestos	Major/minor ions				Radioactive	Explosives		
	Azinphos-methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Dioxathion	Ethion	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimphos-ethyl	Prothiofos	Bromacil		Asbestos (Fibrous and Fibrous IA+AD)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dichlorotoluene	2,6-Dinitrotoluene	Nitrobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2			5	5	5	5	10	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			2,000																								
NEPM 2013 Table 1A(1) HILs Rec C Soil			250																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																											
0-1m																											
1-2m																											
2-4m																											

Field ID	Date																										
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	2,100	530	430	120		-	-	-
TP01_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600	1,200	300	1,800	<10	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	12,000	170	170	190	<10	-	-	-
TP02_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,400	2,200	740	1,600	<10	-	-	-
TP03_0.5	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	59,000	410	260	600	<10	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18,000	190	150	310	<10	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,600	470	330	120	<10	-	-	-
TP04_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	240	180	77	<10	-	-	-
TP05_0.6	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,300	400	210	82	<10	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000	350	170	760	<10	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	33,000	200	130	200	<10	-	-	-
TP06_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	320	190	880	<10	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	11	18	18	18	18	18	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300	140	130	82	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	0	110,000	2,200	740	1,800	<10	<0.5	<0.5	<0.5
Average Concentration *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0	19,961	531	298	460	5	0.25	0.25	0.25
95% UCL (Student's-t) *	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0	30,989	741.1	376.6	694.4	5	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - <
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		SPOCAS																																		
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Fluorescence Material	Oxidisable Sulfur Conversion Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Sulfide - Titratable Actual Acidity	Titratable Actual Acidity	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-Trichlorobenzene	2-Chloronaphthalene	2-methylxylene	2-Nitrotoluene	3-methylxylene	4-Bromophenyl phenyl ether	4-Chloroaniline	4-Chlorophenyl phenyl ether	5,6-dimethylbenzo(a)anthracene	Acenaphthene	Acenaphthylene	Aniline	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzyl chloride
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR		0.1	0.01	-	0.005	0.1	1	10	0.02	0.003	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																																				
0-1m																																				
1-2m																																				
2-4m																																				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																																				
0-1m																																				
1-2m																																				
2-4m																																				

Field ID	Date																																			
TP01_0.5	29/11/2019	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	100	0.53	1.5	<0.005	2.0	<10	<0.02	<0.003	0.17	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																				
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		65	0.53	1.5	0.005	1.7	2	ND	ND	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		100	3	1.5	0.005	35	2	<10	<0.02	<0.003	0.97	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *		89	1.4	1.5	0.0029	11	2	5	0.01	0.0015	0.46	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *		89.66	2.236	1.5	0.00376	22	2	5	0.01	0.0015	0.722	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentratio
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	SVOC																													
	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumarin	Dibenzofuran	Dibenzo-p-Dioxin	Chrysene(benzo[a]anthracene	Diisooctyl ether	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Diphenylamine	DPA	Ethoprop	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Morpholine (Thiodrin)	Phenol (Tolerant)	Tetrahydrofuran (Tetramethylene oxide)	Tetrahydrothiophene (Thiophane)	Thiophene	Tributyl phosphate	Triethylamine	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																												
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1-2m																												
2-4m																												

Field ID	Date																													
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																														
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.1	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.1	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chloronaphthalene	2-chlorotoluene	4-chlorotoluene	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzene	Benzo(a)anthracene	Benzo(a)pyrene (BaP)	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Carbon disulfide	Chlorobenzene	Chloroform	Chrysene	Dibenz(a,h)anthracene	Dibromochloromethane	Dibromomethane	Ethylbenzene	Fluoranthene	Fluorene	Hexachlorobutadiene	Indeno(1,2,3-cd)pyrene	Isopropylbenzene	Methyl acetate	Methyl tert-butyl ether (MTBE)	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	Phenanthrene	Sec-butylbenzene	Styrene	Tert-butylbenzene	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride
PQL	0.5	0.5	0.5

	VC																									
	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dichloromethane	Dichlorodifluoromethane	Hexachlorobutadiene	Isobutylbenzene	Naphthalene	n-propylbenzene	Styrene	TPH C6 - C10	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichlorofluoromethane	Vinyl chloride	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
PQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																										
NEPM 2013 Table 1A(1) HILs Rec C Soil																										
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion																										
0-1m																										
1-2m																										
2-4m																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion																										
0-1m																										
1-2m																										
2-4m																										

Field ID	Date																									
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
**95% UCL (Student's-t) * **	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental r
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 - (
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		TPH					TRH							BTEX					
		>C5 - C9	>C9 - C14	>C15 - C28	>C29 - C36	>C9 - C36 (Sum)	>C5 - C10	>C5 - C10 less BTEX (F1)	>C10 - C16	>C10 - C16 less Naphthalene (F2)	>C16 - C34	>C34 - C40	>C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	m & p-Xylene	o-Xylene	Xylenes (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Public Open Space																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																			
Clay 0-2m								215[#7]	170[#4]		2,500			95	135	185			95
NEPM 2013 Table 1B(6) ESLs for Urban Res																			
Clay 0-2m								180[#7]	120[#11]		1,300	5,600		65	105	125			45
Field ID	**Date**																		
TP01_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	**29/11/2019**	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	**29/11/2019**	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	**29/11/2019**	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
Statistics																			
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**ND**	**240**	**930**	**88**	**88**	**ND**	**ND**	**340**	**340**	**120**	**ND**	**120**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<20**	**240**	**930**	**88**	**1,170**	**<20**	**<20**	**340**	**340**	**810**	**<100**	**1,150**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.1**	**<0.3**
Average Concentration *		**10**	**23**	**75**	**28**	**92**	**10**	**10**	**42**	**42**	**96**	**50**	**115**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**
95% UCL (Student's-t) *		**10**	**45.01**	**162.7**	**34.59**	**202.6**	**10**	**10**	**72.94**	**72.94**	**169.5**	**50**	**221.1**	**0.05**	**0.05**	**0.05**	**0.1**	**0.05**	**0.15**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#11 Moderate reliability.
#12 Nil
ND=Non detect

		PAH																		PCB								
		1-methylnaphthalene	benzo(a)fluorene	benzo(a)phenylene	benzo(a)anthracene	benzo(a)anthracene	benzo(a)pyrene	benzo(b&j)fluoranthene	benzo(b,j,k)perylene	benzo(b)fluoranthene	chrysene	dibenz(a,h)anthracene *	fluoranthene	fluorene	indeno(1,2,3-cd)pyrene	naphthalene	phenanthrene	pyrene	HAHs (Sum)	benzo(a)pyrene TEQ calc (zero)	Aroclor 1016	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																370												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																170												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																												
Clay 0-2m						1.4																						
NEPM 2013 Table 1B(6) ESLs for Urban Res																												
Clay 0-2m						0.7																						
Field ID	**Date**																											
TP01_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	*	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	2.0	*	2.8	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	*	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	<0.5	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	<0.5	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	<0.5	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																												
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		Metals																								
		Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind				160[#1]						600		320		1,800[#2]												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ				100[#1]						360		230		1,100[#2]				480								810
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																										
Clay 0-2m																										
NEPM 2013 Table 1B(6) ESLs for Urban Res																										
Clay 0-2m																										
Field ID	**Date**																									
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<5	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<10	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																										
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Asbestos	Major/minor ions				Radioactive	Explosives			Phenols																			
	Asbestos (Fines and Fibrous AR+AF)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Nitrobenzene	2,3,4,6-tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,5-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3(4-methyl phenol (m-/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Phenols	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		5	5	5	5	10	0.5	0.5	0.5	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																														
Clay 0-2m																														
NEPM 2013 Table 1B(6) ESLs for Urban Res																														
Clay 0-2m																														
Field ID	**Date**																													
TP01_0.5	**29/11/2019**	ND	2,100	520	430	120	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	**29/11/2019**	-	6,600	1,200	300	1,800	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	ND	12,000	170	170	190	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	**29/11/2019**	-	8,400	2,200	740	1,600	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	**29/11/2019**	ND	59,000	410	260	600	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	-	16,000	190	150	310	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	ND	1,600	470	330	120	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	**29/11/2019**	-	19,000	240	180		<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	**29/11/2019**	ND	1,300	400	210	82	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	-	13,000	350	170	760	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	ND	33,000	200	130	200	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	**29/11/2019**	-	19,000	320	190	880	<10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																														
Number of Results		**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<1**	**<1**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.2**	**<1**	**<0.4**	**<5**	**<20**	**<1**	**<5**	**<20**	**<1**	**<0.5**	**<10**	**<1**	**<20**
Average Concentration *		**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**
95% UCL (Student's-t) *		**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		OCP																					OPP								
		4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Azinophos-methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind										640																						
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ										180																						
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																
Field ID	**Date**																															
TP01_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_2.2	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP02_2.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP03_1.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP03_2.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_0.5	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP04_2.3	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP05_1.0	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP05_1.9	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_0.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP06_1.6	**29/11/2019**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Statistics																																
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Average Concentration *		0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95% UCL (Student's-t) *		0.025	0.025	0.025	0.025	0.025	50	0.025	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	25	0.025	0.025	0.025	0.025	0.025	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Phosalone	Phosmet
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind								
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind								
Clay 0-2m								
NEPM 2013 Table 1B(6) ESLs for Urban Res								
Clay 0-2m								

Field ID	Date								
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-

Statistics								
Number of Results	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
Average Concentration *	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1
95% UCL (Student's-t) *	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SPOCAS										
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Analysed Material	SO3 Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Sulfidic - Titratable Actual Acidity	Sulfidic -Acid Neutral	Titratable Actual Acidity
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t
EQL		0.1	0.01		0.005	0.1	1	10	0.02	0.003	0.02	2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind												
Clay 0-2m												
NEPM 2013 Table 1B(6) ESLs for Urban Res												
Clay 0-2m												
Field ID	**Date**											
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	SVOC																														
	1,2,3,4-tetrachlorobenzene	1,2,3,5-tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-trichlorobenzene	1-Chloronaphthalene	1-naph thylamine	1-chloronaphthalene	1-methylnaphthalene	2-naph thylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	3-(dimethylamino) propylamine	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzyl chloride	bis(2-chloroethoxy) methane	bis(2-chloroisopropyl) ether	bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz(a,j)acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																
Field ID	**Date**																															
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5
Average Concentration *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Bis-(2-ethylhexyl)phthalate	Triphenylamine	HPN	Bithiocarap	Hexachlorocyclopentadiene	Hexachloroethane	Merphos (Phorbin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Phosamide	Prothiophos	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																
Clay 0-2m																
NEPM 2013 Table 1B(6) ESLs for Urban Res																
Clay 0-2m																

Field ID	Date																	
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
Average Concentration *	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25
95% UCL (Student's-t) *	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	VOC																														
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	2-chlorotoluene	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Benzene	Bromobenzene	Bromochloromethane	Bromochlorodifluoromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																
Clay 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res																																
Clay 0-2m																																

Field ID	Date																															
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Chlorobenzene	Chloroethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																		
Clay 0-2m																		
NEPM 2013 Table 1B(6) ESLs for Urban Res																		
Clay 0-2m																		

Field ID	Date																		
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																			
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g.
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentratio
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Inorganics	BTEX				TRH							MAH								
	Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10	C6-C10 minus BTEX (F1)	C10-C16	C10-C36 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	1,2,4- trimethylbenzene	1,3,5- trimethylbenzene	Isopropylbenzene	n- butylbenzene	n- propylbenzene	n- butylcyclohexane	sec-butylbenzene	Styrene	tert-butylbenzene
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.001	1	2	2	2	20	20	100	100	100	100	100	5	5	5	5	5	5	5	5	5
10 x ADWG 2011 (May 2019 Update) - Recreational Water	0.8	10	8000	3000	6000															300	
ANZG (2018) Marine water 95% toxicant DGVs		700[#1]																			
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																					
2-4m		5,000	NL	NL	NL		6,000[#2]		NL[#9]												
4-8m		5,000	NL	NL	NL		6,000[#2]		NL[#9]												
RIVM Table 2 Target Values for Groundwater																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m		NL	NL	NL	NL		NL		NL												
4-8m		NL	NL	NL	NL		NL		NL												
Lab Report Number	**Field ID**	**Date**																			
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	*	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_GW03	**26/06/2020**	*	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_GW03	**18/09/2020**	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	*	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_GW03	**2/12/2020**	*	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	*	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
Statistics																					
Number of Results			**2**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.001**	**<1**	**<2**	**<2**	**<2**	**<20**	**<20**	**<100**	**<100**	**<100**	**<100**	**<100**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**
Average Concentration *			**0.0005**	**0.5**	**1**	**1**	**1**	**10**	**10**	**50**	**50**	**50**	**50**	**50**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#3 High reliability
#4 Very high reliability
#5 Low reliability (should only be used as an indicative interim working level)
#6 Moderate reliability
#7 Very Low reliability
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	PAH																		
	2-chloronaphthalene	2-methylnaphthalene	2-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b+j)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	0.5
10 x ADWG 2011 (May 2019 Update) - Recreational Water									0.1										
ANZG (2018) Marine water 95% toxicant DGVs							0.4[#6]		0.2[#5]				1.4[#6]			70[#6]	2[#5]		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																			
2-4m																NL			
4-8m																NL			
PFAS NEMP 2020 Table 1 Health Recreational Water																			
PFAS NEMP 2020 Table 5 Interim marine 95%																			
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																			
2-4m																NL			
4-8m																NL			

Lab Report Number	Field ID	Date																		
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_GW03	26/06/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2033039	WSP_BWP_GW01	18/09/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_GW03	18/09/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_GW03	2/12/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2101011	WSP_BWP_GW02	13/01/2021	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5

Statistics

Number of Results	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<2**	**<2**	**<2**	**<2**	**<1**	**<1**	**<1**	**<1**	**<0.5**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<0.5**
Average Concentration *	**1**	**1**	**1**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.25**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to s
#3 High reliability
#4 Very high reliability
#5 Low reliability (should only be used as an indicative interim working level)
#6 Moderate reliability
#7 Very Low reliability
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Metals																Phenols												Explo	
	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)	2,4,6-tribromophenol (HAS-backup)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (o-cresol)	3-Methylphenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trimethylbenzene	1,2,4-Dimethylbenzene
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	10	5	2	1	1	1	1	1	1	1	1	1	2	1	2	4
10 x ADWG 2011 (May 2019 Update) - Recreational Water	100	20,000	600	40,000	20		-	20,000	100	500	10	200	100	170					200	2,000			3,000				100			
ANZG (2018) Marine water 95% toxicant DGVs					5.5[#5]		1[#3]	1.3[#3]	4.4[#3]		0.4[#3]	70[#3]			100[#3]	15[#3]											22	400[#5]		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																														
2-4m																														
4-8m																														
PFAS NEMP 2020 Table 5 Health Recreational Water																														
PFAS NEMP 2020 Table 5 Interim marine 95%																														
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																														
2-4m																														
4-8m																														

Lab Report Number	Field ID	Date																												
ES2022315	WSP_CR07_GW01	26/06/2020	3	138	<1	1,010	<0.1	<1	52	16	<1	230	<0.1	2	<10	3	<10	6	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_CR07_GW03	26/06/2020	$<10^{#1}$	82	$<10^{#1}$	2,360	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	16	$<10^{#1}$	117	<0.1	$<2^{#1}$	$<100^{#1}$	$<10^{#1}$	$<100^{#1}$	53	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2033039	WSP_BWP_GW01	18/09/2020	2	50	<1	1,040	<0.1	<1	<1	115	<1	86	<0.1	9	<10	1	<10	100	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_BWP_GW03	18/09/2020	$<10^{#1}$	81	$<10^{#1}$	3,130	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	24	<0.1	$<10^{#1}$	$<100^{#1}$	$<10^{#1}$	$<100^{#1}$	$<50^{#1}$	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2042721	WSP_BWP_GW02	2/12/2020	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<10	<1	<10	24	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_BWP_GW03	2/12/2020	$<10^{#1}$	59	$<10^{#1}$	3,800	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	$<10^{#1}$	16	<0.1	$<10^{#1}$	$<100^{#1}$	$<10^{#1}$	$<100^{#1}$	$<50^{#1}$	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2101011	WSP_BWP_GW02	13/01/2021	<1	42	<1	100	0.1	2	28	34	3	58	<0.1	30	<10	<1	<10	60	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4

Statistics

Number of Results	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect	2	42	ND	100	0.1	2	28	16	3	16	ND	2	ND	1	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<10	138	<10	3,800	<1	<10	52	115	<10	295	<0.1	45	<100	<10	<100	100	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<4
Average Concentration *	3	74	2.4	1,671	0.25	2.6	14	25	2.8	118	0.05	14	24	2.9	24	42	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	2

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refer
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to c
#3 High reliability
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#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	sives		Organochlorine Pesticides																						
	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water						3		20					90								100	3			
ANZG (2018) Marine water 95% toxicant DGVs																			0.008[#4]						
NEPM 2013 Table 1A(4) Comm/ind HSL D GW for Vapour Intrusion, Sand																									
0-4m																									
4-8m																									
ANZ NEMP 2020 Table 1 Health Recreational Water																									
PFAS NEMP 2020 Table 5 Interim marine 95%																									
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																									
2-4m																									
4-8m																									

Lab Report Number	Field ID	Date																							
ES2022315	WSP_CR07_GW01	26/06/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	WSP_CR07_GW03	26/06/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
ES2033039	WSP_BWP_GW01	18/09/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	WSP_BWP_GW03	18/09/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
ES2042721	WSP_BWP_GW02	2/12/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	WSP_BWP_GW03	2/12/2020	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
ES2101011	WSP_BWP_GW02	13/01/2021	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2

Statistics

Number of Results	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	**<4**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**
Average Concentration *	**2**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refer
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#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides														Herbicides
	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos methyl	Azinophos-ethyl	Dalaphenthion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water							300	100	5	20	100		40	50	70	40	70	700	7	20		700
ANZG (2018) Marine water 95% toxicant DGVs											0.009[#1]											
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																						
2-4m																						
4-8m																						
PFAS NEMP 2020 Table 5 Health Recreational Water																						
PFAS NEMP 2020 Table 5 Interim marine 95%					0.13[#2]																	
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																						
2-4m																						
4-8m																						
Lab Report Number	**Field ID**	**Date**																				
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_CR07_GW03	**26/06/2020**	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	0.02	<0.02	0.05	<0.02	0.06	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_BWP_GW03	**18/09/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_BWP_GW03	**2/12/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
Statistics																							
Number of Results			**4**	**4**	**4**	**4**	**4**	**4**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**0.02**	**ND**	**0.05**	**ND**	**0.06**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**0.02**	**<0.02**	**0.05**	**<0.02**	**0.06**	**<0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<2**	**<0.5**	**<2**
Average Concentration *			**0.012**	**0.01**	**0.02**	**0.01**	**0.019**	**0.01**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**1**	**0.25**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refer
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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Pesticides						Halogenated Hydrocarbons					PFAS		Halogenated Benzenes								
	Chlorobenzilate	Clobazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimiphos-ethyl	1,2-Dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Sum of PFAS and PFOS	Sum of PFAS	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	2	2	0.5	0.5	2	0.5	5	50	50	5	50	0.01	0.01	5	2	2	2	2	5	5	5	5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water				5	200	5	10	10				0.7				15,000		400				3,000	
ANZG (2018) Marine water 95% toxicant DGVs															80[#4]								
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							
PFAS NEMP 2020 Table 5 Health Recreational Water												2[#5]											
PFAS NEMP 2020 Table 5 Interim marine 95%																							
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							

Lab Report Number	Field ID	Date																					
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_CR07_GW03	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2033039	WSP_BWP_GW01	18/09/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	0.11	0.22	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_GW03	18/09/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_GW03	2/12/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2101011	WSP_BWP_GW02	13/01/2021	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2

Statistics

Number of Results	7	7	7	7	7	7	7	7	7	7	7	4	4	7	7	7	7	7	7	7	7	7	7
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<2	<2	<0.5	<0.5	<2	<0.5	<5	<50	<50	<5	<50	0.11	0.22	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
Average Concentration *	1	1	0.25	0.25	1	0.25	2.5	25	25	2.5	25	0.031	0.059	2.5	1	1	1	1	2.5	2.5	2.5	2.5	1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refle
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#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Chlorinated Hydrocarbons																														
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Tetrachloroethylene/tetrachloroethene	Tetrachloromethane	trichloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50
10 x ADWG 2011 (May 2019 Update) - Recreational Water						300				30							30								7				500			3
ANZG (2018) Marine water 95% toxicant DGVs				1,900[#1]																												
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																															
0-4m																															
4-8m																															
NEPM 2013 Table 1 Health Recreational Water																															
PFAS NEMP 2020 Table 5 Interim marine 95%																															
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																															
2-4m																															
4-8m																															
Lab Report Number	**Field ID**	**Date**																														
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_CR07_GW03	**26/06/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_GW03	**18/09/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_GW03	**2/12/2020**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
Statistics																																
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<50**	**<5**	**<50**	**<5**	**<5**	**<5**	**<2**	**<10**	**<2**	**<5**	**<5**	**<5**	**<50**
Average Concentration *			**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**25**	**2.5**	**25**	**2.5**	**2.5**	**2.5**	**1**	**5**	**1**	**2.5**	**2.5**	**2.5**	**2.5**	**25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refle
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to
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#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Perfluoroalkane Carboxylic Acids	VOCs			Solvents						SVOCs																
	Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	4-Chlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	bis(2-chloroethoxy) methane	bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	5	5	5	50	50	50	5	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water	5.6																										
ANZG (2018) Marine water 95% toxicant DGVs																											
NEPM 2013 Table 1A(4) Commrtiial HSL D GW for Vapour Intrusion, Sand																											
2-4m																											
4-8m																											
PFAS NEMP 2020 Table 1 Health Recreational Water	10[#10]																										
PFAS NEMP 2020 Table 5 Interim marine 95%	220[#11]																										
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																											
2-4m																											
4-8m																											

Lab Report Number	Field ID	Date																									
ES2022315	WSP_CR07_GW01	26/06/2020	*	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_CR07_GW03	26/06/2020	*	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2033039	WSP_BWP_GW01	18/09/2020	0.02	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_GW03	18/09/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2042721	WSP_BWP_GW02	2/12/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_GW03	2/12/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2101011	WSP_BWP_GW02	13/01/2021	*	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2

Statistics

Number of Results	**4**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect	**0.02**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**0.02**	**<5**	**<5**	**<5**	**<50**	**<50**	**<50**	**<5**	**<2**	**<50**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<4**	**<2**
Average Concentration *	**0.0088**	**2.5**	**2.5**	**2.5**	**25**	**25**	**25**	**2.5**	**1**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates						Organotins
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2,6-Picoline	4-aminodiphenyl	Hexachlorobenzene	Bis(2-ethylhexyl) phthalate	n-butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Tributyltin as SN
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mgSn/L
EQL	2	2	2	2	1	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2	
10 x ADWG 2011 (May 2019 Update) - Recreational Water																300	100						
ANZG (2018) Marine water 95% toxicant DGVs																							
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							
PFAS NEMP 2020 Table 5 Health Recreational Water																							
PFAS NEMP 2020 Table 5 Interim marine 95%																							
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							
Lab Report Number	**Field ID**	**Date**																					
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
	WSP_CR07_GW03	**26/06/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
	WSP_BWP_GW03	**18/09/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
	WSP_BWP_GW03	**2/12/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	*
Statistics																							
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**2**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<2**	**<2**	**<2**	**<1**	**<2**	**<4**	**<4**	**<4**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<10**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**
Average Concentration *			**1**	**1**	**1**	**1**	**0.5**	**1**	**2**	**2**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**1**	**1**	**1**	**1**

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Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

					Lab Screening	Acidity and Liming Rate															
					pH_{KCl}	Actual Acidity (TAA)		Sulfidic Acidity (S_{Cr})		Snas	Retained Acidity (S_{RAA})		s-ANC bt	Acid Neutralising Capacity (ANC)		Net Acidity Without ANC [3]		Liming Rate With ANC [4]	Liming Rate WIthout ANC [4]	Comments
					pH Units	mol H+/t	kg H_2SO_4/t [2]	mol H+/t	kg H_2SO_4/t [2]	%s	mol H+/t	kg H_2SO_4/t [2]	%S	mol H+/t	kg H_2SO_4/t [2]	mol H+/t	kg H_2SO_4/t [2]	kg $CaCO_3$/t	kg $CaCO_3$/t	
Action Criteria								62								62				
	Strata																			
Depth	description	Colour	Material type	Borehole																
0.5	Weathered sandstone	Orange/light brown	Reworked natural	WSP_CRW_GW02	-	<2	-	11.00	-	**0.018**			n/a	587	n/a	11.00	n/a	<1	<1	Likely Not ASS

	PAH																BTEX			
	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(b) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylene Total
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.3
Lab Report Number	**Field ID**	**Date**																		
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.2	<0.2	<0.6
717043	**QA01**	**28/04/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.2	<0.2	<0.6
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.2	<0.2	<0.6
	WSP_CRW_QA04	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.2	<0.2	<0.6
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.2	<0.2	<0.6
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.1	<0.1	<0.1	<0.3
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

			TRH							Metals																	
			C6-C10	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (hexavalent)	Chromium (III+VI)	Chromium (Trivalent)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	10	50	50	100	100	50	2	10	1	10	0.4	1	2	5	2	5	5	5	0.1	2	2	0.1	5	5
Lab Report Number	**Field ID**	**Date**																									
ES2014462	WSP_BP_EX04_1.8	28/04/2020	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<10	<0.4	-	3	-	<2	<5	<5	26	<0.1	<2	<5	<0.1	<5	12
717043	QA01	28/04/2020	<20	<20	<50	<50	<100	<100	<100	<5	<20	<2	<20	<0.8	-	<5	-	<5	<5	<5	6.7	<0.1	<5	<5	-	<10	14
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	118	0	0	0	-	0	15
ES2041504	WSP_CRW_GW02_1.0	23/11/2020	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<10	<0.4	-	4	-	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_QA04	23/11/2020	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<10	<0.4	-	4	-	4	<5	<5	<5	<0.1	<5	<5	<0.1	<5	<5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	22	0	0	0	0	40	0	0	0	0
ES2041504	WSP_CRW_GW02_1.0	23/11/2020	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<10	<0.4	-	4	-	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
759374	WSP_CRW_QA04A	23/11/2020	<20	<20	<50	<50	<100	<100	<100	<5	<10	<2	<10	<0.4	<2*	<5	<5	<5	<5	<5	<5	0.2	<5	-	<1	<10	<5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	67	0	-	0	0	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Phenols																	
			3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexylphenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol	Phenols (To tal Halogenated)	Phenols (To tal Non Halogenated)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.4	0.5	0.5	0.5	0.5	5	0.5	0.5	0.2	0.5	5	20	0.5	5	1	0.5	1	20
Lab Report Number	**Field ID**	**Date**																		
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-
717043	**QA01**	**28/04/2020**	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5	<1	<0.5	<1	<20
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
	WSP_CRW_QA04	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5	<1	<0.5	<1	<20
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Organochlorine Pesticides																						
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.2
Lab Report Number	**Field ID**	**Date**																								
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
717043	**QA01**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_QA04	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Organophosphorous Pesticides														Herbicides	Pesticides				PCBs							
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Dinoseb	Demeton-S-methyl	Fenamiphos	Pirimiphos-ethyl	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	20	0.05	0.05	0.2	0.05	0.5	0.1	0.5	0.5	0.5	0.5	0.5	0.1
Lab Report Number	**Field ID**	**Date**																												
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
717043	**QA01**	**28/04/2020**	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	-	<20	-	-	<0.2	-	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD			0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-	-	-	-	-	-	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
	WSP_CRW_QA04	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	-	-	-	-	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	-	<20	-	-	<0.2	-	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD			0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-	-	-	-	-	-	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Inorganics	BTEX				TRH							MAH									
			Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	2,2,4-Trimethylpentane	2,3,5-Trimethylhexane	Isopropylbenzene	n-butylbenzene	n-propylbenzene	n-propylcyclohexane	Sec-butylbenzene	Styrene	tert-butylbenzene	
			mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL			0.001	1	1	1	2	20	20	50	50	100	100	100	1	1	1	1	5	5	5	1	1	
Lab Report Number	Field ID	Date																						
ES2022315	WSP_CR07_GW01	26/06/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
	WSP_CR07_QA01A	26/06/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2022315	WSP_CR07_GW01	26/06/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
	WSP_CR07_QA01	26/06/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
	WSP_BWP_QA01	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
745423	WSP_BWP_QA01A	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	-	-	-	-	-	-	-
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
	WSP_BWP_QA03	2/12/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1
761419	WSP_BWP_QA03A	2/12/2020	-	<1	<2	<2	<2	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	-	-	-	-	-	-	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL)**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

			PAH																				
			2-Chloronaphthalene	1-chloronaphthalene	2-methylnaphthalene	1-methylnaphthalene	2,6-dimethylnaphthalene	Acenaphthene	Acenaphthylene	Acridine	Anthracene	Benz(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzo(a)pyrene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAHs (Sum of total)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	0.5
Lab Report Number	Field ID	Date																						
652022315	WSP_CR07_GW01	26/06/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_QA01A	26/06/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
652022315	WSP_CR07_GW01	26/06/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_QA01	26/06/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
652033039	WSP_BWP_GW03	18/09/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_QA01	18/09/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
652033039	WSP_BWP_GW03	18/09/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
745423	WSP_BWP_QA01A	18/09/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
652042721	WSP_BWP_GW02	2/12/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_QA03	2/12/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
652042721	WSP_BWP_GW02	2/12/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
761419	WSP_BWP_QA03A	2/12/2020	<	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

***RPDs have only been considered where a concentration is greater than 1 times th**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for**
*****Interlab Duplicates are matched on a per compound basis as methods vary betv**

			Metals																Explosives			
			Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	50	0.1	1	1	1	1	1	0.1	1	1	1	5	5	2	4	4	2
Lab Report Number	**Field ID**	**Date**																				
E52022315	**WSP_CR07_GW01**	**26/06/2020**	3	138	<1	1,010	<0.1	<1	<1	2	<1	230	<0.1	2	<10	3	<10	6	<2	<4	<4	<2
	WSP_CR07_QA01A	**26/06/2020**	3	139	<1	1,110	<0.1	<1	1	4	<1	232	<0.1	7	<10	3	<10	41	<2	<4	<4	<2
RPD			0	1	0	9	0	0	0	120	0	1	0	**111**	0	0	0	**149**	0	0	0	0
E52022315	**WSP_CR07_GW01**	**26/06/2020**	3	138	<1	1,010	<0.1	<1	<1	<1	<1	230	<0.1	2	<10	3	<10	6	<2	<4	<4	<2
	WSP_CR07_QA01	**26/06/2020**	3	140	<1	1,160	<0.1	<1	<1	2	<1	229	<0.1	5	<10	3	<10	21	<2	<4	<4	<2
RPD			0	1	0	14	0	0	0	67	0	0	0	86	0	0	0	**111**	0	0	0	0
E52033039	**WSP_BWP_GW03**	**18/09/2020**	<25	81	<25	3,130	<2.5	<25	<25	<25	<25	24	<0.1	<25	<250	<25	<250	<25	<2	<4	<4	<2
	WSP_BWP_QA01	**18/09/2020**	<25	76	<25	2,940	<2.5	<25	<25	42	<25	25	<0.1	<25	<250	<25	<250	<25	<2	<4	<4	<2
RPD			0	6	0	6	0	0	0	123	0	4	0	0	0	0	0	0	0	0	0	0
E52033039	**WSP_BWP_GW03**	**18/09/2020**	<25	81	<25	3,130	<2.5	<25	<25	<25	<25	24	<0.1	<25	<250	<25	<250	<25	<2	<4	<4	<2
745423	**WSP_BWP_QA01A**	**18/09/2020**	<1	80	<1	3,700	<0.1	<1	<1	52	1	33	<0.1	7	<1	-	<1	75	-	<1	<1	<0.5
RPD			0	1	0	17	0	0	0	135	0	32	0	0	0	-	0	40	-	0	0	0
E52042721	**WSP_BWP_GW02**	**2/12/2020**	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<1	<1	<1	24	<2	<4	<4	<2
	WSP_BWP_QAC03	**2/12/2020**	<1	65	<1	280	<0.1	<1	57	4	<1	278	<0.1	49	<10	<1	<10	29	<2	<4	<4	<2
RPD			0	2	0	7	0	0	9	120	0	6	0	9	0	0	0	19	0	0	0	0
E52042721	**WSP_BWP_GW02**	**2/12/2020**	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<1	<1	<1	24	<2	<4	<4	<2
761419	**WSP_BWP_QA03A**	**2/12/2020**	1	60	<1	300	<0.1	<1	58	2	<1	290	<0.1	51	<1	<1	6	27	-	<1	<1	<0.5
RPD			0	6	0	14	0	0	11	67	0	2	0	12	0	0	0	12	-	0	0	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

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*****Interlab Duplicates are matched on a per compound basis as methods vary bet**

			Phenols																	
			4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	2,4,6-Tribromophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3+4-Methylphenols (sum)	3,3'-Dichlorobenzidine	3,4-Dichloro-α-cyclohexyl phenol	3-Nitrophenol	4-Nitrophenol	4-tert-butylphenol	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR			2	2	1	1	1	1	50	1	1	1	1	30	100	1	50	2	1	10	100	
Lab Report Number	**Field ID**	**Date**																				
ES2022315	WSP_CR07_GW01	26/06/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_CR07_QA01A	26/06/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2022315	WSP_CR07_GW01	26/06/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_CR07_QA01	26/06/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2033039	WSP_BWP_GW03	18/09/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_BWP_QA01	18/09/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2033039	WSP_BWP_GW03	18/09/2020	<2.0	<2	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<1.0	<1.0	<1.0	<30	<100	<1.0	<50	<2.0	<1.0	<10	<100
745-623	WSP_BWP_QA01A	18/09/2020	<2.0	<2	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<1.0	<1.0	<1.0	<30	<100	<1.0	<50	<2.0	<1.0	<10	<100
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_BWP_QA03	2/12/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
761-619	WSP_BWP_QA03A	2/12/2020	<2	<2	<50	<50	<50	<50	<50	<50	<50	<50	<50	<30	<100	<50	<50	<50	<50	<10	<100
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-

Comments
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			Organochlorine Pesticides																						
			p,p-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Lab Report Number	**Field ID**	**Date**																							
512022315	WSP_CR07_GW01	26/06/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	WSP_CR07_QA01A	26/06/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512022315	WSP_CR07_GW01	26/06/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	WSP_CR07_QA01	26/06/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512033039	WSP_BWP_GW03	18/09/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	WSP_BWP_QA01	18/09/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512033039	WSP_BWP_GW03	18/09/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
745623	WSP_BWP_QA01A	18/09/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512042721	WSP_BWP_GW02	2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	WSP_BWP_QA03	2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512042721	WSP_BWP_GW02	2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
761419	WSP_BWP_QA03A	2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
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			Perfluoroalkane Sulfonic Acids							Organophosphorous Pesticides													Herbicides		
			Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	1H-Perfluorohexane sulfonic acid (PFHxS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinphos-methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Dicamba	Fenoxaprop	Flamprop
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	100	2	5
Lab Report Number	Field ID	Date																									
E52022315	WSP_CR07_GW01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_CR07_QA01A	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E52022315	WSP_CR07_GW01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_CR07_QA01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E52033039	WSP_BWP_GW03	18/09/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_BWP_QA01	18/09/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E52033039	WSP_BWP_GW03	18/09/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
745423	WSP_BWP_QA01A	18/09/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<2	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<100	<2	<5
RPD			-	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E52042721	WSP_BWP_GW02	2/12/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_BWP_QAO3	2/12/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E52042721	WSP_BWP_GW02	2/12/2020	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
761419	WSP_BWP_QA03A	2/12/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<2	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<100	<2	<5
RPD			-	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

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***Interlab Duplicates are matched on a per compound basis as methods vary betn

			Pesticides						Halogenated Hydrocarbons					Halogenated Benzenes														
			Atrazine total	Simazine	Bromacil-5-methyl	Hexazinone	Prometon	Prometryne	1,2-dibromoethane	Dibromomethane	Dichlorodifluoromethane (CFC-12)	Chloromethane	Trichlorofluoromethane (CFC-11)	1,2,3,4-tetrachlorobenzene	1,2,3,5-tetrachlorobenzene	1,2,3-trichlorobenzene	1,2,4,5-tetrachlorobenzene	1,2,4-trichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	1,2,5-trichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Bromomethane	Dibromomethane
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	0.5	0.5	2	0.5	1	1	1	1	1	5	5	5	5	2	1	5	1	1	5	1	1	1	1	2
Lab Report Number	Field ID	Date																										
E52022315	WSP_CR07_GW01	26/06/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
	WSP_CR07_QA01A	26/06/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0	0
E52022315	WSP_CR07_GW01	26/06/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
	WSP_CR07_QA01	26/06/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0	0
E52033039	WSP_BWP_GW03	18/09/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
	WSP_BWP_QA01	18/09/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0	0
E52033039	WSP_BWP_GW03	18/09/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
765423	WSP_BWP_QA01A	18/09/2020	-	-	-	-	<2	-	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<2	<5	<2	<1	<5	<1	<1	<1	<1	<2
RPD			-	-	-	-	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0	0
E52042721	WSP_BWP_GW02	2/12/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
	WSP_BWP_QAO3	2/12/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0	0
E52042721	WSP_BWP_GW02	2/12/2020	<2	<2	<0.5	<0.5	<2	<0.5	<1	<1	<1	<1	<1	-	-	<5	-	<5	<2	-	<2	<1	<5	<1	<1	<1	<1	<2
765419	WSP_BWP_QA03A	2/12/2020	-	-	-	-	<2	-	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<2	<5	<2	<1	<5	<1	<1	<1	<1	<2
RPD			-	-	-	-	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0	0

Comments
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			Chlorinated Hydrocarbons																																							
			Sum of hydrocarbons EPA VOC	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Benzyl chloride	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Isopropylbenzene	Methane	Methylene chloride	Naphthalene	n-Propylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichloroethene	Vinyl chloride
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.005	1	1	1	1	1	1	5	1	5	1	1	1	5	5	1	1	1	1	1	5	1	1	1	1	1	1	2	4	2	1	1	1	1	1	1	1	1	1
Lab Report Number	**Field ID**	**Date**																																								
652022315	WSP_CR07_GW01	26/06/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_QA01A	26/06/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
652022315	WSP_CR07_GW01	26/06/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_QA01	26/06/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
652033039	WSP_BWP_GW03	18/09/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_QA01	18/09/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
652033039	WSP_BWP_GW03	18/09/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	765423	WSP_BWP_QA01A	18/09/2020	<0.005	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<0.4	<2	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
652042721	WSP_BWP_GW02	2/12/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_QA03	2/12/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
652042721	WSP_BWP_GW02	2/12/2020	-	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<25	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	761419	WSP_BWP_QA03A	2/12/2020	<0.005	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<0.4	<2	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
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			Perfluoroalkane Carboxylic Acids	VOCs				Solvents								SVOCs																
			Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Dibromofluoromethane	Dichlorodifluoromethane	Methyl ethyl ketone	Hexanone (MIBK)	4-Methyl-2-pentanone	Acetone	Vinyl chloride	Carbon disulfide	Acrylonitrile	Vinyl acetate	Acrylamide	1,3-Dichlorobenzidine	4-Dimethylaminoazobenzene	4-Bromophenyl phenyl ether	4-Chlorophenyl phenyl ether	4,6-Dinitro-2-methylphenol	Acenaphthylene	Acetophenone	Aniline	bis(2-chloroethoxy) methane	bis(2-chloroethyl)ether	bis(2-chloroisopropyl) ether	Carbazole	Dibenzofuran	Diethylphthalate	Dimethylphthalate	Diphenylamine	Hexachlorobenzene	Hexachlorobutadiene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	5	5	5	5	1	50	1	1	1	1	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
Lab Report Number	**Field ID**	**Date**																														
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	WSP_CR07_QA01A	**26/06/2020**	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
RPD			-	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	WSP_CR07_QA01	**26/06/2020**	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
RPD			-	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	WSP_BWP_QA01	**18/09/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
RPD			0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
745423	**WSP_BWP_QA01A**	**18/09/2020**	<0.01	-	-	<5	-	<50	-	<50	<1	-	<5	-	-	-	-	<2	-	<2	-	<2	-	<2	-	-	<2	-	<2	-	<2	-	-
RPD			0	-	-	-	-	0	-	0	-	-	0	-	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
	WSP_BWP_QAO3	**2/12/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
RPD			0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<5	<50	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
761419	**WSP_BWP_QA03A**	**2/12/2020**	<0.01	-	-	<5	-	<50	-	<50	<1	-	<5	-	-	-	-	<2	-	<2	-	<2	-	<2	-	-	<2	-	<2	-	<2	-	-
RPD			0	-	-	-	-	0	-	0	-	-	0	-	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-

Comments
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***Interlab Duplicates are matched on a per compound basis as methods vary betn

			Amine Aliphatics				PCBs								Amino Aromatics				Anilines						Nitroaromatics			Phthalates						Organotins
			N-Nitrosodiethylamine	N-Nitrosodi-n-propylamine	N-Nitrosodi-n-propylamine	N-Nitrosomethylethylamine	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Sum of total)	1-naphthylamine	2-naphthylamine	3-phenylamine	4,4'-Methylenebis(2-chloroaniline)	2-nitroaniline	3-nitroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Nitrotoluene	4-nitrobiphenyl	1-methoxy-2-nitrobenzene	bis(2-ethylhexyl) phthalate	butyl benzyl phthalate	Diethylphthalate	Dimethylphthalate	Di-n-octyl phthalate	Di-n-octyl phthalate	Triphenyltin as Sn
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/SedL
LOR			2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	5	2	2	2	2	2	
Lab Report Number	Field ID	Date																																
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_CR07_QA01A	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_CR07_QA01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
	WSP_BWP_QA01	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
745423	WSP_BWP_QA01A	18/09/2020	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			-	0	0	-	-	-	-	-	-	-	-	0	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_BWP_QA03	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
761419	WSP_BWP_QA03A	2/12/2020	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			-	0	0	-	-	-	-	-	-	-	-	0	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

***RPDs have only been considered where a concentration is greater than 1 times th**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for**
*****Interlab Duplicates are matched on a per compound basis as methods vary bet**

				BTEX								TRH								MAH									
				Benzene		Toluene		Ethylbenzene		Xylenes - m,p	Xylenes - o	C6-C10		C6-C10 minus BTEX (F1)		C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)		1,2,4-trimethylbenzene	1,3,5-trimethylbenzene		isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	
				mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.2	1	0.5	2	0.5	2	0.5	2	10	20	10	20	100	100	100	100	100	1	1	1	1	1	1	1	1	1	1
Lab Report Number	**Field ID**	**Investigation**	**Date**																											
E12514462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12022315	RINSATE	GWE1	26/05/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYDS_Trip Blank		26/05/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12033939	Trip Blank	GWE 2	18/09/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	-	-	-	-	-	-	-	-	-	-
E12041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	-	-	-	-	-	-	-	-	-	-
E12042721	WSP_BWP_RB03	GWE 2	3/12/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	WSP_BWP_TB03		1/12/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results				2	7	2	7	2	7	2	7	2	7	2	7	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<10	<20	<10	<20	<100	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Average Concentration *				0.1	0.5	0.25	1	0.25	1	0.25	1	5	10	5	10	50	50	50	50	50										

* A Non Detect Multiplier of 0.5 has been applied.

				PAH																				Metals															
				2-chloronaphthalene	2-methylnaphthalene	2-methylnaphthalene trace	7,12-Dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b+j)pyrene	Benz(e)pyrene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	50	0.1	1	1	1	1	0.1	1	10	1	10	5
Lab Report Number	Field ID	Investigation	Date																																				
E22014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12022315	RINGATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYSB_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BMP_RINGATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12041504	WSP_CRW_rinsate4	Soil GWR2	23/11/2020	-	-	-	-	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	-	11.5	11.5	11.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TS4		23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12042721	WSP_BMP_RB03	GME 2	2/12/2020	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	-	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
	WSP_BMP_TB03		2/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																							
Number of Results				1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<0.5	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
Average Concentration *								0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.9	0.5	0.5	0.25																	

* A Non Detect Multiplier of 0.5 has been applied.

				Phenols												Explosives				Organochlorine Pesticides																							
				2,4-Dimethylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	1	1	1	1	1	1	1	1	1	1	1	2	4	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Investigation**	**Date**																																							
E12014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYSB_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BMP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12041504	WSP_CRW_rinsate4	Soil GWR2	23/11/2020	<2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	-	-	-	-	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CRW_TS4		23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12042721	WSP_BMP_RB03	GME 2	2/12/2020	<2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_BMP_TB03		2/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																									
Number of Results				2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *				1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5					0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

						Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides																Herbicides	Pesticides						Halogenated Hydrocarbons					
						Hupoafefne expoxide	Hexachlorobenzene	Methoxychlor	Perfluorooctane sulfonic acid (PFHS)	Perfluorooctanoic acid (PFOA)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorohexanoic acid (PFHxA)	Perfluorooctane sulfonic acid (PFOS)	Perfluorobutane sulfonic acid (PFBS)	Azinphos-methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos-ethyl	Propanil	Chlorothalonil	Cyfluthrin	Dimethoxy-2-methyl	Fenvalerate	Permethrin	Pirimiphos-ethyl	1,1,2-trichloroethane	Bromomethane	Dichlorodifluoromethane	Hexachloroethane	Tetrachloroethylene
						µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL						0.5	0.5	2	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	2	2	0.5	0.5	2	0.5	5	50	50	5	50
Lab Report Number	Field ID	Investigation	Date																																				
E12014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYSS_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BMP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12041504	WSP_CRW_rinsate4	Soil GWR2	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TS4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12042721	WSP_BMP_RB03	GME 2	2/12/2020	<0.5	<0.5	<2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<2	<0.5	<0.5	<2	<0.5	<5	<50	<50	<5	<50
	WSP_BMP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																						
Number of Results				2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.5	<0.5	<2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<2	<0.5	<0.5	<2	<0.5	<5	<50	<50	<5	<50
Average Concentration *				0.25	0.25	1							0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25	0.25	0.25	1	0.25					

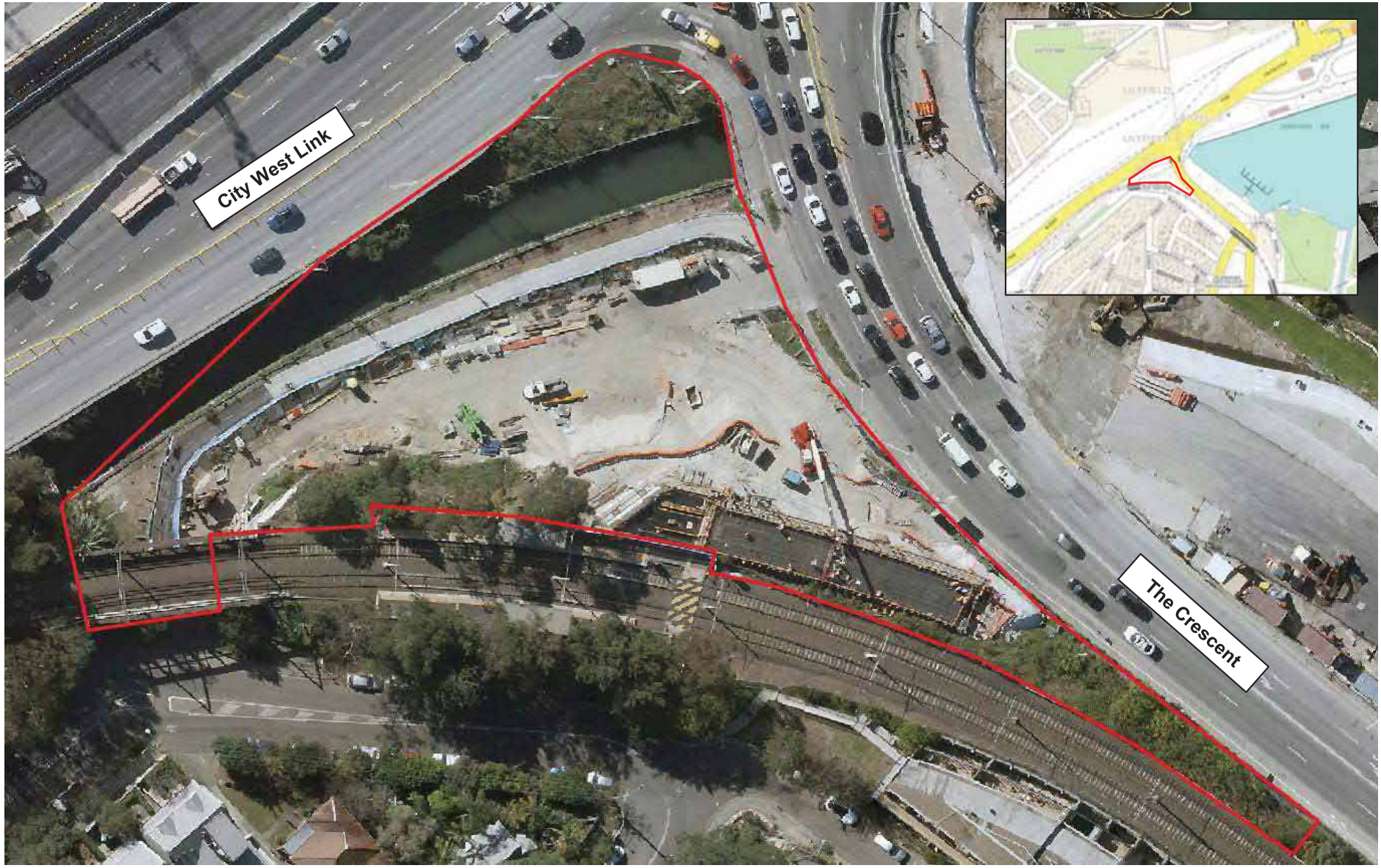
* A Non Detect Multiplier of 0.5 has been applied.

| | | | | Halogenated Benzenes | | | | | | | | | | Chlorinated Hydrocarbons | | | | | | | | | |

| | | |

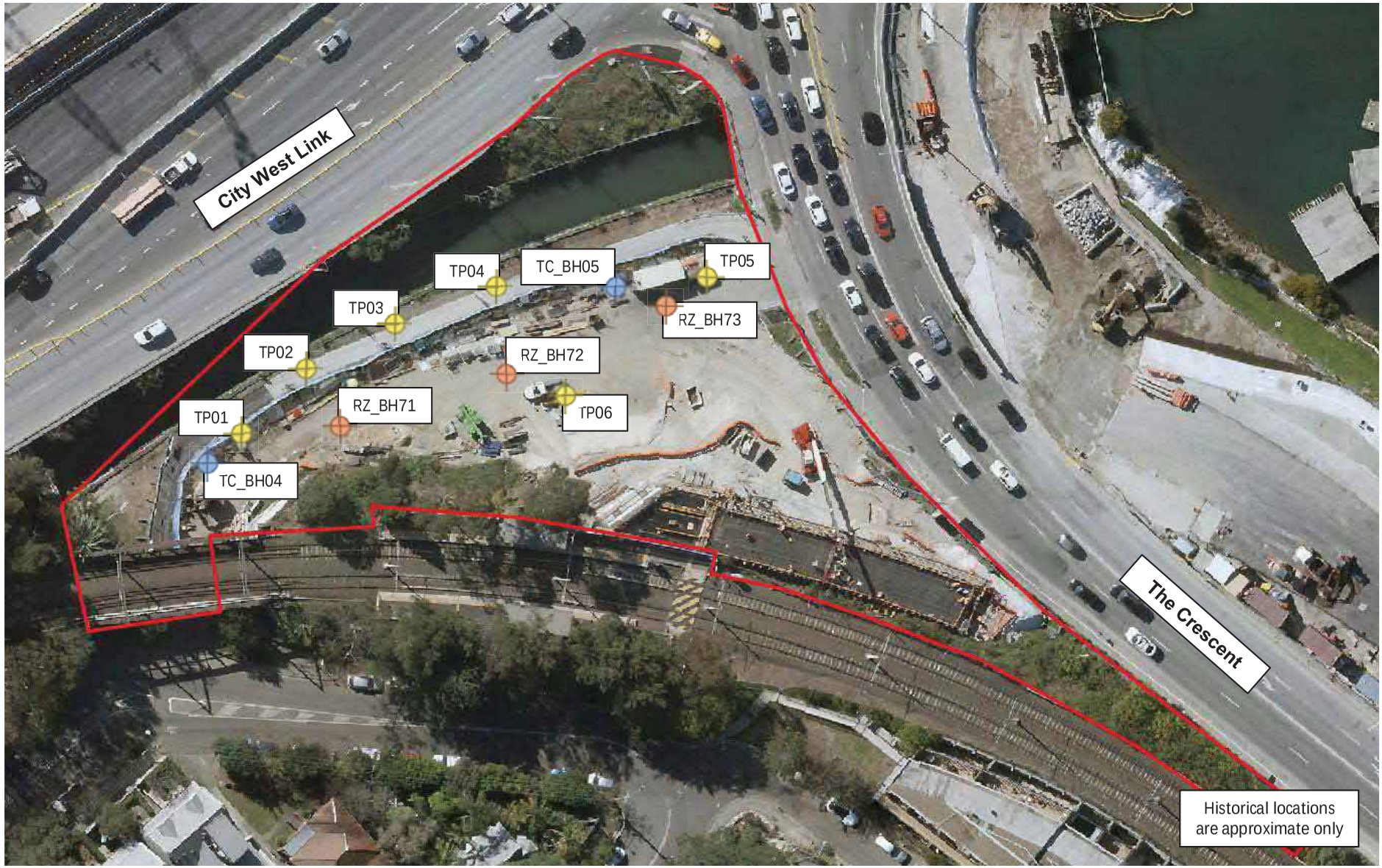
				PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
				PCBs (Sum of total)	1-naphthylamine	N-nitroso-Di(phenyl)-N-(Diphenyl)amine	2,4-dimethylaniline	2,6-dimethylaniline	4-nitroaniline	4-methylaniline	2-methyl-5-nitroaniline	4-chloroaniline	2,4-Dinitrotoluene	4-nitrodiphenylamine	Nitrobenzene-d5 (surrogate)	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethylphthalate	Di-n-octyl phthalate	Di-n-butyl phthalate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				1	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2
Lab Report Number	Field ID	Investigation	Date																		
E2514482	WSP_EP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E2922315	RINSATE	GWE1	26/05/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYIS_Trip Blank		26/05/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E2933029	Trip Blank	GWE 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E2941504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E2942721	WSP_BWP_RB03	GWE 2	3/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																					
Number of Results				2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	<2	<2	<2	<2	<2
Maximum Concentration				<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Average Concentration *				0.5																	

* A Non Detect Multiplier of 0.5 has been applied.



Approximate Site Boundary

Figure 1 – Site Location
Sub Site Area – Buruwan Park



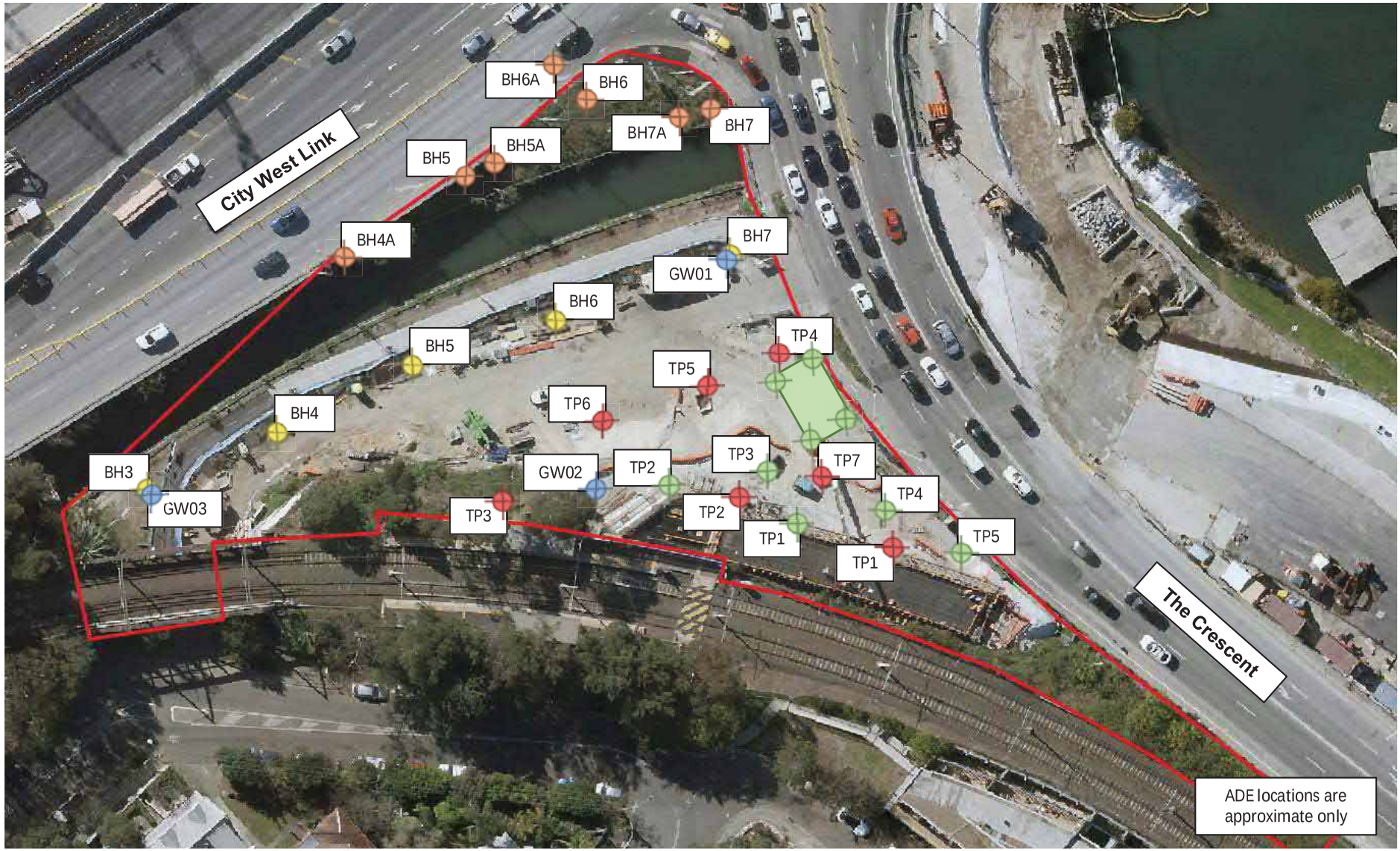
Approximate Site Boundary

AECOM (2018) Preliminary Site Investigation with Targeted Sampling

AECOM (2018) Tranche 1 and Tranche 2 Factual Contamination Assessment

WSP (2019) CLM and HRA

Figure 2 – Historical intrusive locations
Sub Site Area – Buruwan Park



Approximate Site Boundary

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

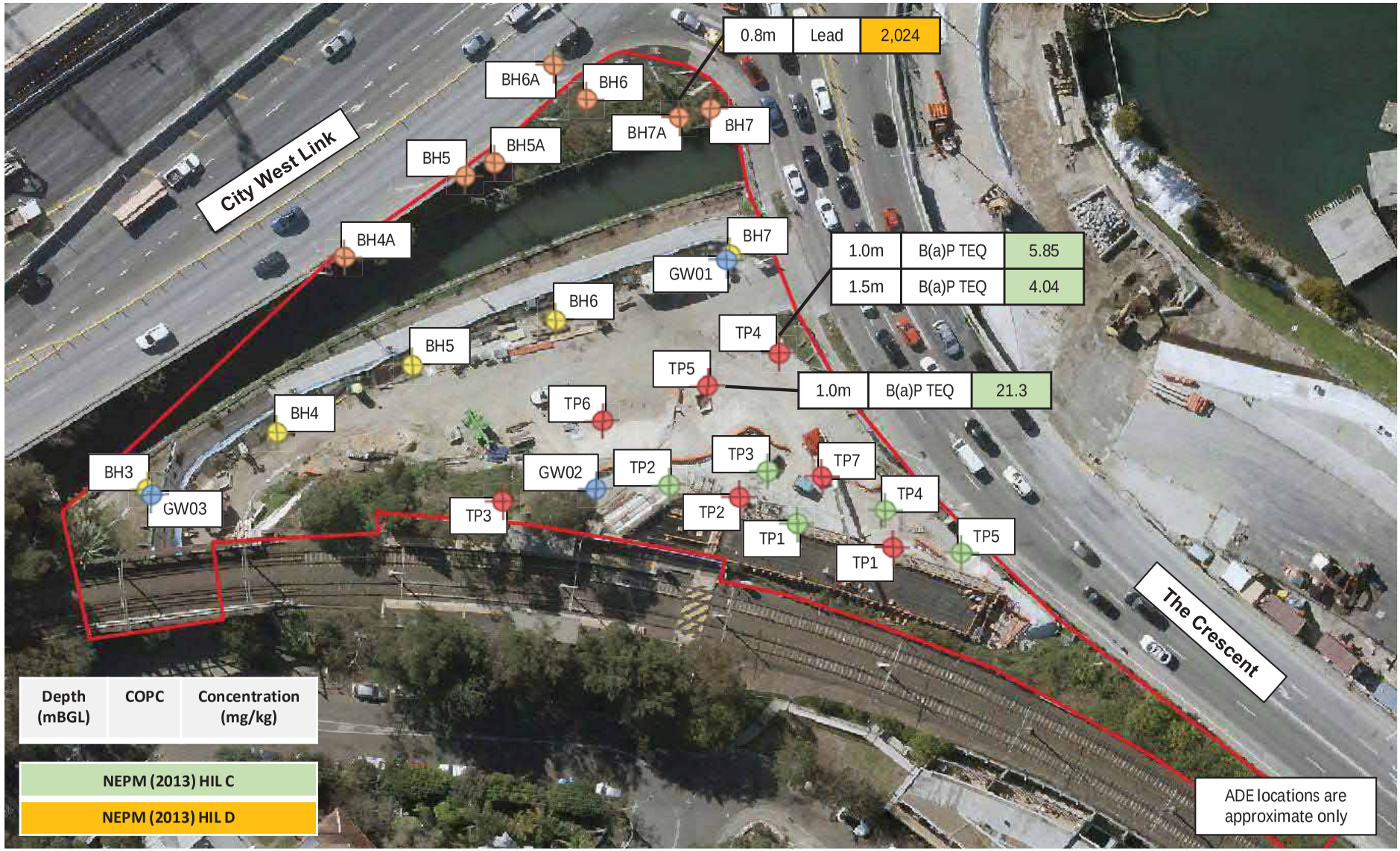
ADE Waste Classification (October 2020, WAC223)

Groundwater monitoring well

ADE Waste Classification (June 2020, WAC169)

Service trench excavation

Figure 3 – Intrusive locations
Sub Site Area – Buruwan Park



Approximate Site Boundary

ADE Waste Classification (November 2020, WAC236)

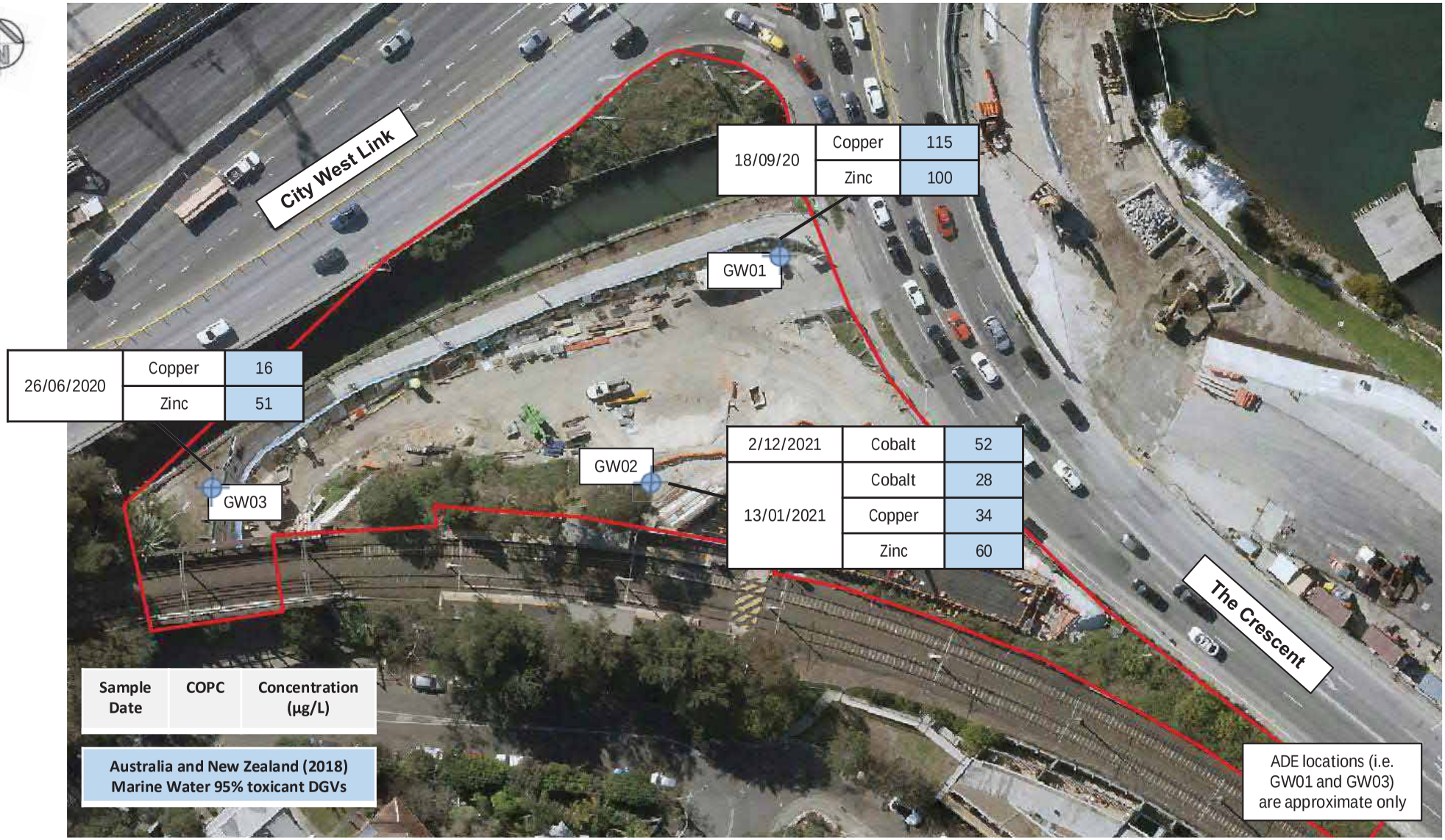
ADE Waste Classification (October 2020, WAC223)

ADE Waste Classification (June 2020, WAC169)

ADE Waste Classification (September 2020, WAC208)

Groundwater monitoring well

Figure 4 – Human health soil exceedances
Sub Site Area – Buruwan Park



Approximate Site Boundary

Groundwater monitoring well

Figure 5 – Groundwater exceedances
Sub Site Area – Buruwan Park

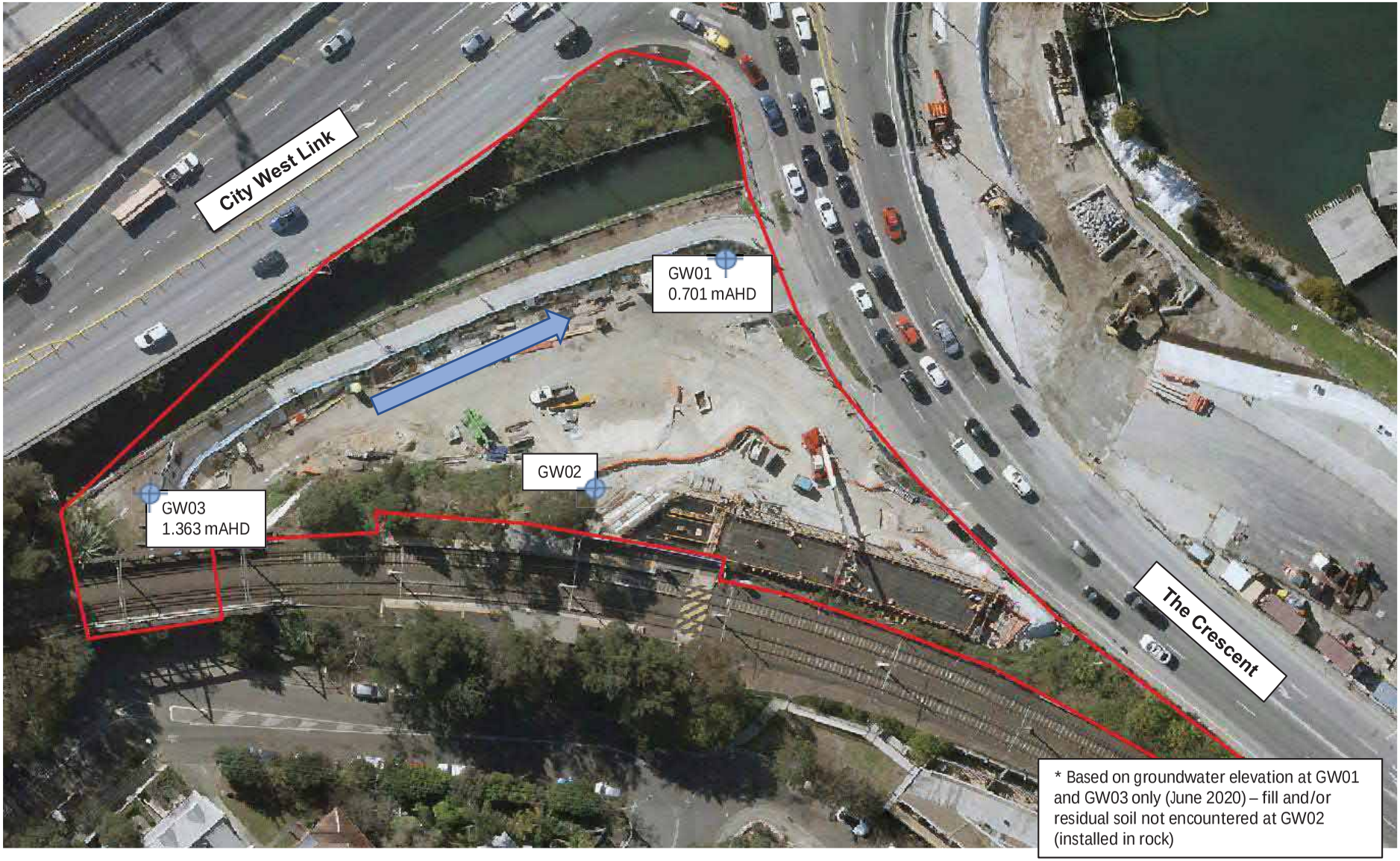


Figure 6 – Groundwater flow direction
Sub Site Area – Buruwan Park

Approximate Site Boundary

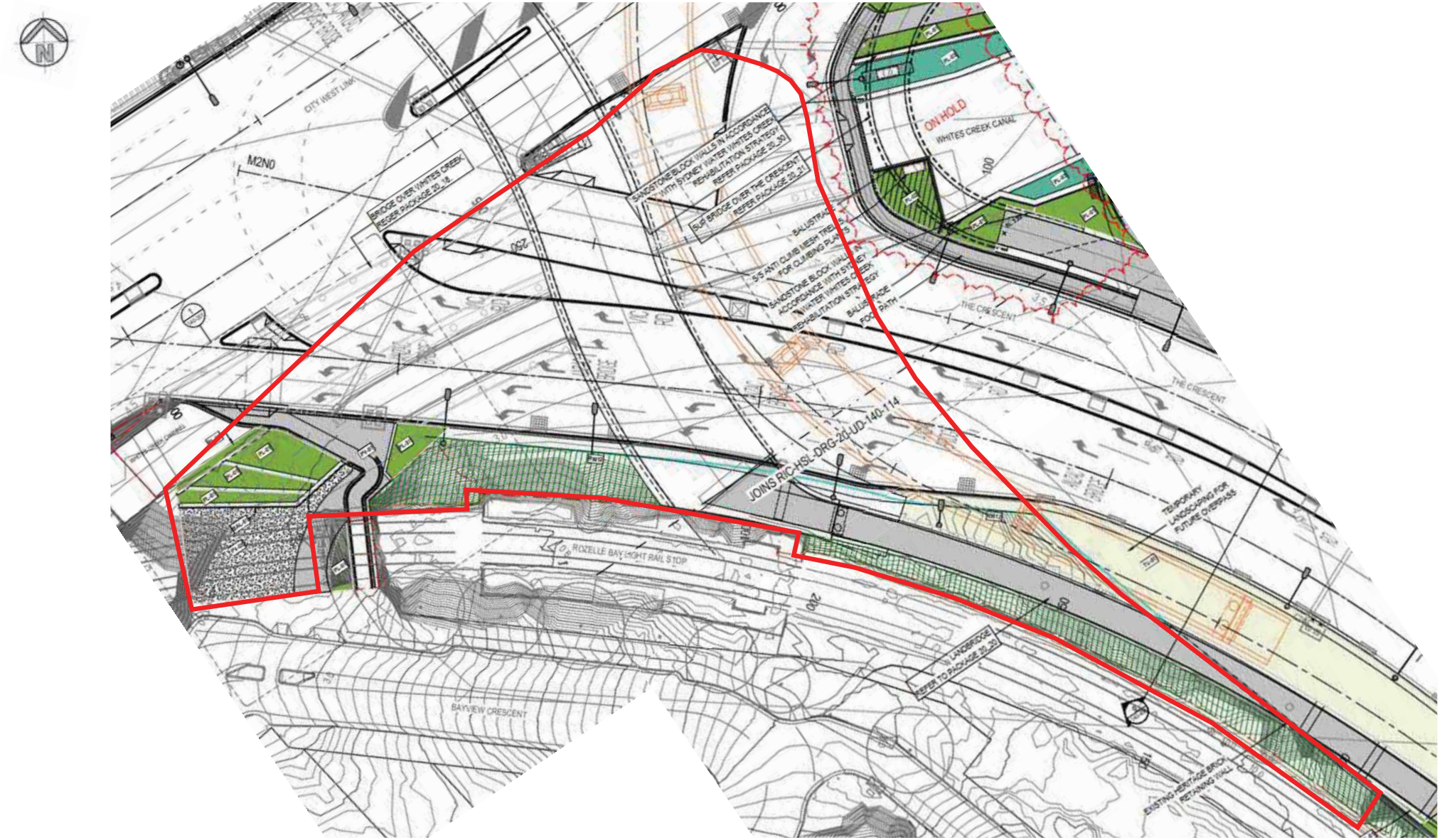
ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

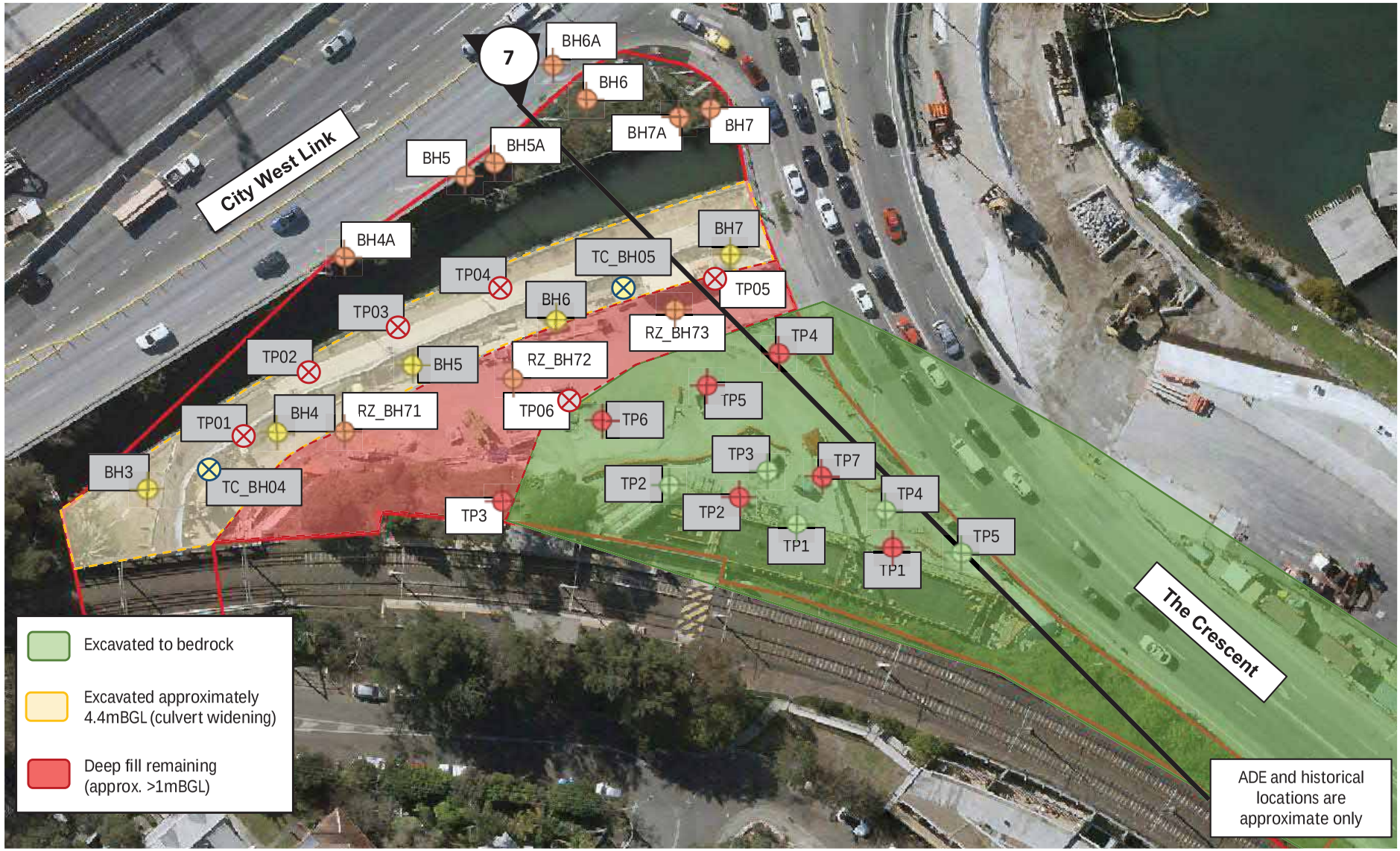
ADE Waste Classification (June 2020, WAC169)

Figure 7 – ADE Waste Classification
Sub Site Area – Buruwan Park



Approximate Site Boundary

Figure 8 – Site Layout and Design Overlay
Sub Site Area – Buruwan Park



Approximate Site Boundary

AECOM (2018) Preliminary Site Investigation with Targeted Sampling

WSP (2019) CLM and HRA

AECOM (2018) Tranche 1 and Tranche 2 Factual Contamination Assessment

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

ADE Waste Classification (June 2020, WAC169)

Figure 9 – Site Excavation Profile
Sub Site Area – Buruwan Park

Approximate Site Boundary

Recreational/open space criteria applied

Commercial/industrial criteria applied

Figure 10 – Site Layout and Applied Assessment Criteria
Sub Site Area – Buruwan Park

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	EM	24/06/20

0 5 10 15 20 25
SCALE 1:500 @A3 METRES

drawn	MC
approved	MT
date	24/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC169 drawing no: Figure 1 rev: 0

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PLOT DATE: 10/7/2020 5:07:44 PM DWG FILE: C:\USERS\JIA.LIU\DESKTOP\SANTO CAD\GTF-04-1714B_DIL_DILKHUSHA SUP-DRAFT DRAWING RKC.DWG

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						TRHs				BTEX				Heavy Metals																					
						TPH C6-C10 (F1)	TPH C10-C16 (F2)	TPH C16-C34 (F3)	TPH C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (Total)	Chromium - TCLP	Cobalt	Copper	Lead	Lead - TCLP	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						65.0		10,000		10	288	600	1,000	100	-	20	-	20	100		-	-	100	-	-	4	40	20		-	-	
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						2,600		40,000		40	1,152	2,400	4,000	400	-	80	-	80	400		-	-	400	-	-	16	160	80		-	-	
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						650		10,000		18	518	1,080	1,800	500	-	100	-	100	1,900		-	-	1,500	-	-	50	1,050	500		-	-	
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-		-		0.5	14.4	30	50	5	-	1	-	1	5		-	-	-	5	-	0.2	2	1		-	-	
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						2,600		40,000		23	2,073	4,320	7,200	2,000	-	400	-	400	7,600		-	-	6,000	-	-	200	4,200	200		-	-	
Acid Sulfate Soils Screening Criteria[2]						-		-		0.01	0.07	0.03	0.1	20	-	3	-	1	50		-	-	300	1	-	5	20	5		-	-	
Acid Sulfate Soils Screening Criteria[2]						-		-		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-		-	-	
VENM Background Ranges - ANZECC (1992)[3]						ND		ND		N D	N D	N D	N D	0.3-10	-	-	-	0.04-2	0.5 -110		-	1-190	<2 -200	-	-	0.001-0.1	2-400	-		-	2-180	
VENM Background Ranges - Northern (1995)[4]						ND		ND		N D	N D	N D	N D	1 -52	100-3000	-	-	1	5-1000		1-40	2-100	2-200	-	8-90	0.03	5-500	-		-	20-500	10-300
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type																														
HORIZON A - FILL (GSW)																																			
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	13	140	<5	205	<0.3	101	<0.2	<5	31	83	-	98	0.5	<1.0	<5	NT	26	96
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	69	<0.3	16	-	6	115	111	<0.5	290	0.2	<1.0	<5	NT	19	900
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<35	<50	385	<100	<0.5	<0.5	<1	<2	8	60	<5	99	<0.3	17	-	13	147	131	<0.5	282	0.2	33	<5	NT	10	845
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	35	<0.3	8	-	<5	39	29	-	107	<0.2	<1.0	<5	NT	11	97
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	<5	<0.3	<5	-	<5	<5	<10	-	52	<0.2	<1.0	<5	NT	15	10
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<35	<50	340	<100	<0.5	<0.5	<1	<2	10	100	<5	50	<0.3	22	-	<5	74	126	<0.5	171	0.3	<1.0	<5	NT	33	380
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<35	<50	186	<100	<0.5	<0.5	<1	<2	10	90	<5	93	<0.3	17	-	8	136	190	<0.5	439	0.2	10	<5	NT	37	1163
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	70	<5	18 1	<0.3	11	-	5	31	85	-	177	<0.2	18	<5	0.4	45	110
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	70	<0.3	5	-	<5	26	36	-	93	<0.2	<1.0	<5	0.2	10	48
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	38	<0.3	11	-	<5	31	121	<0.5	100	0.2	<1.0	<5	0.3	20	114
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<35	<50	109	239	<0.5	<0.5	<1	<2	7	80	<5	88	<0.3	14	-	<5	7	30	-	31	<0.2	<1.0	<5	0.3	23	37
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	54	<0.3	7	-	<5	7	55	-	60	<0.2	<1.0	<5	0.3	16	47
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	47	60	<5	72	<0.3	12	-	<5	31	121	-	117	<0.2	<1.0	<5	0.4	20	247
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.1	84	<2	<1.0	<0.4	11	-	<5	22	100	-	64	0.1	<5	<2	<10	23	94
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.4	10	<2	<1.0	<0.4	<5	-	<5	-	15	-	15	<1	<5	<2	<10	<10	11
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	<20	<20	120	<100	<0.1	<0.1	<0.1	<0.2	7.5	90	<2	<1.0	<0.4	17	-	<5	34	140	-	130	0.2	<5	<2	<10	42	72
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.1	41	<2	<1.0	<0.4	9.5	-	<5	20	55	-	64	<1	<5	<2	<10	28	35
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	41	<2	<1.0	<0.4	10	-	<5	21	39	-	52	<1	<5	<2	<10	27	27
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.4	47	<2	<1.0	<0.4	17	-	<5	21	60	-	49	<1	<5	<2	<10	40	240
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	0.3	13	-	NT	19	55	-	NT	0.16	4.8	NT	NT	NT	74
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	8.3	-	NT	13	59	-	NT	0.05	2.5	NT	NT	NT	51
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill			-						5	NT	NT	NT	<0.3	9.3	-	NT	15	40	-	NT	0.08	1.9	NT	NT	NT	28
ADE	WAC3L-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	<35	<50	566	114	<0.5	<0.5	<1	<2	5	NT	NT	NT	<0.3	6	-	NT	35	58	-	NT	0.3	<1.0	NT	NT	NT	56
ADE	WAC3(1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	8	-	NT	8	12	-	NT	<0.2	<1.0	NT	NT	NT	103
ADE	WAC3(1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	5	-	NT	<5	<10	-	NT	<0.2	<1.0	NT	NT	NT	17
ADE	WAC3(1-TP2 (3.0)	In-Situ	3.0	03.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	9	-	NT	12.2	201	<0.5	NT	0.3	<1.0	NT	NT	NT	307
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	93.8	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					0	0	340	274	0	0	0	0	47	0	ND	205	ND	101		13	147	201	ND	439	0.5	33	0		0	1163
HORIZON B - GSW PASS																																			
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	<35	<50	140	<100	<0.5	<0.5	<1	<2	7	90	<5	58	<0.3	9	-	<5	80	197	-	66	0.5	<1.0	<5	NT	55	287
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	20	<5	50	<0.3	9	-	<5	52	83	-	162	0.2	<1.0	<5	NT	25	344
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	10	<5	32	<0.3	9	-	<5	29	33	-	111	0.2	<1.0	<5	NT	22	150
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	14	20	<5	48	<0.3	15	-	<5	40	65	-	128	0.2	<1.0	<5	NT	23	226
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	10	<5	7	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	14	7
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	10	<5	48	<0.3	10	-	<5	<5	<10	-	13	<0.2	<1.0	<5	0.2	12	<5
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	34	<0.3	5	-	<5	<5	<10	-	17	<0.2	<1.0	<5	1.3	18	14
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	7	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<1.0	<5	1.5	9	<5
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	1.10	<5	<5	<0.3	<5	-	<5	33	<10	-	11	<0.2	<1.0	<5	0.8	96	<5
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	9	10	<5	35	<0.3	5	-	<5	<5	<10	-	24	<0.2	<1.0	<5	0.4	10	8
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	<1.0	<5	10	<0.3	<5	-	<5	<5	<10	-	7	<0.2	<1.0	<5	5.6	14	<5
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	13	<0.3	<5	-	<5	<5	<10	-	30	<0.2	<1.0	<5	1.7	18	<5
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	5	<0.2	<1.0	<5	0.2	<5	<5
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<5	<5	<0.3	10	-	<5	6	18	-	6	0.2	<1.0	<5	0.8	<5	<5
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	32	<0.3	<5	-	<5	7	11	-	104	<0.2	<1.0	<5	0.5	11	32
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	46	<0.3	9	-	<5	10	15	-	142	<0.2	<1.0	<5	0.5	14	75
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	20	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	0.9	7	<5
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<35	<50	<100	130	<0.5	<0.5	<1	<2	<5	50	<5	62	<0.3	9	-	<5	11	38	-	84	<0.2	<1.0	<5	0.3	20	39
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	0.8	9	<5
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	10	20	<5	103	<0.3	12	-	<5	9	21	-	21	<0.2	<1.0	<5	1.8	40	47
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	<35	<50	100	274	<0.5	<0.5	<1	<2	22	90	<5	64	<0.3	9	-	<5	32	48	-	146	<0.2	<1.0	<5	0.6	19	95
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	30	<0.3	<5	-	<5	<5	<10	-	71	<0.2	<1.0	<5	0.4	10	6
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	1.1	16	<5
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	46	<0.3	8	-	<5	5	<10	-	86	<0.2	<1.0	<5	1.6	17	18
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.1	65	<2	<1.0	<0.4	16	-	<5	27	110	-	63	0.2	<5	<2	<10	35	160
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.5	20	<2	<1.0	<0.4	5.4	-	<5	10	21	-	67	<1	5.7	<2	<10	14	32
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	<1.0	<2	<1.0	<0.4	<5	-	<5	11	18	-	7.6	<1	<5	<2	<10	<10	7.8
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	<20	340	810	<100	<0.1	<0.1	<0.1	<0.2	15	39	<2	20	<0.4	16	-	<5	16	42	-	35	0.2	<5	<2	<10	38	63
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.9	11	<2	<1.0	<0.4	6.5	-	<5	11	12	-	43	<1	<5	<2	<10	19	10
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	9.1	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	9.5	<1	<5	<2	<10	<10	<5
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	9.1	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	5.8	-	13	<1	<5	<2	<10	<10	5.8
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.4	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	13	<1	<5	<2	<10	<10	<5
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	1.8	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	6.6	-	22	<1	<5	<2	<10	14	7.4
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.5	10	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	8.2	<1	<5	<2	<10	<10	<5
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	1.0	20	<2	<1.0	<0.4	5.1	-	<5	<5	22	-	24	<1	<5	<2	<10	16	24
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.4	<1.0	<2	<1.0	<0.4	<5	-	<5	15	8.2	-	16	<1	<5	<2	<10	<10	6.9
ADE	WAC3(1-TP2 (3.5)	In-Situ	3.5	03.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	<5	NT	NT	<5	<10	NT	NT	<0.2	<1.0	NT	NT	NT	10
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					ND	ND	140	130	ND	ND	ND	ND	14	1.10	ND	103	ND	15		ND	80	197	ND	162	0.5	ND	ND		56	344
HORIZON C - VENM																																			
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	7	8
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	10	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	18	<5
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	7	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	10
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	15
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<1.0	<5	<0.1	<5	9
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	22	1.10	ND	103	ND	16		0	80	197	NT	162	ND	ND	ND		56	344
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	NT	<5
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	NT	<5	103	<0.3	13	-	<5	13	31	-	26	<0.2	<1.0	<5	NT	NT	58
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<1.0	<50	<1.00	<100	<0.2	<0.5	<0.5	<0.5	1.6	NT	NT	NT	<1	1.2	-	NT	1.2	7.0	-	NT	0.2	4	NT	NT	NT	102
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					ND	ND	81.0	274	ND	ND	ND	ND	22				0	16		0		197	0		0.5	5.7				344	

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Beerman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						PAHs				PCBs	OCPs					Cyanide	Phenols	VOCs / SVOCs		Organotins (TBT)	PFAS	
						Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(a)pyrene - TCLP	Total PAHs (Total)	Total PCBs	Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Cyanide Total	Phenols Total	Sum of + VOCs	Sum of + SVOCs	Tributyltin (ug/kg)	PFOS + PFHxS	PFOA
ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169																						
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						0.8	-	-	200	<50	<5.0	6.0	-	-	-	-	-	-	-	10	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						3.2	-	-	800	<50	<5.0	240	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						10	-	-	200	<50	<5.0	1.08	-	-	-	-	-	-	-	-	0.05	0.2
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	0.04	-	-	-	3	-	-	-	-	-	-	-	-	-	7.2
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						23	-	-	800	<50	<5.0	432	-	-	-	-	-	-	-	-	0.5	2
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	0.16	-	-	-	10	-	-	-	-	-	-	-	-	-	30
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)[3]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Ikerfman (1989)[3]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-situ	Depth (m BGL)	Date	Material Type																	
HORIZON A - FILL/SOIL																						
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<0.3	0.7	-	3.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	3.4	4.8	<0.005	33	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.5	NT	NT
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<0.3	0.7	-	0.7	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.0	NT	NT
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.0	NT	NT
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	4.1	6	<0.005	40.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	2.7	3.8	<0.005	29.1	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<3.5	NT	NT
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	0.8	1.3	-	6.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	0.7	1.2	-	5.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	0.4	1	-	4.1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	<0.5	-	-	<0.5	<0.1	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	1.2	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	1.4	-	-	12.4	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	0.1	-	-	<0.8	NT	-	<0.2	<0.2	<0.1	<0.3	NT	NT	NT	NT	NT	NT	NT
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	0.4	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill	0.4	-	-	4	NT	-	<0.2	<0.2	<0.1	<0.3	NT	NT	NT	NT	NT	NT	NT
ADE	WAC3IL-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	14.3	-	<0.005	185.1	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	<0.3	-	-	2.5	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(2.0)	In-Situ	2.0	02.03.2020	SAND	<0.3	-	-	0	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(3.0)	In-Situ	3.0	03.03.2020	Silty SAND	0.3	-	-	2.9	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
			% UCL			3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			4.1	6	0	40.2	0	0	0	0	0	0	0	0	0	0	0	0	0
HORIZON B - GSW PASS																						
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	3	4.3	<0.005	29.9	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0.6	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	0.4	0.8	-	2.8	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.6	<5	<5
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.5	NT	NT
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	<5	<5
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	0.6	1.1	-	4.7	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<0.3	0.7	-	0.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	0.5	1	-	7.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	0.3	0.7	-	1.3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	0.3	1	-	3.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<0.3	0.7	-	1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	3.4	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	<0.5	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(3.5))	In-Situ	3.5	03.03.2020	Silty SAND	<0.3	-	-	ND	ND	-	<0.2	<0.1	<0.1	<0.1	<1	<1	NT	NT	NT	NT	NT
			% UCL			0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			3	4.3	ND	29.9	0	0	0	0	0	0	0	1	0	0	0	0	0
HORIZON C - VENM																						
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
			Maximum Concentration (mg/kg)			ND	4.3	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<0.3	0.7	-	ND	MD	ND	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	0.7	-	-	7.1	ND	ND	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT
			% UCL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			3.4	4.3	0	29.9	0	0	0	0	0	0	0	1	0	0	0	0	0

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Ikerfman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Ikerkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						Acid Sulfate Soils[4]								Asbestos
						pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[5]	Net Acidity (Excluding Acid Neutralising Capacity) (%S)	Net Acidity (Excluding Acid Neutralising Capacity) (moles H+/t)	Net Acidity (mole H+/t)	Net Acidity (%S)		Asbestos (g/kg)[4]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-				-
Acid Sulfate Soils Screening Criteria[5]						<5.5	≤4.5	-	0.05	36				-
VENM Background Ranges - ANZECC (1992)[3]						ND	ND	ND	ND	ND				ND
VENM Background Ranges - Ilerbman (1989)[3]						ND	ND	ND	ND	ND				ND
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type									
HORIZON A - FILL (GSW)														
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	7.9	6	2	NT	NT	-	-	NAD	
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	8.3	6.1	1	NT	NT	-	-	NAD	
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	8.4	6.1	3	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.7	6.2	1	NT	NT	-	-	NAD	
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.5	6	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	9.3	6.1	2	NT	NT	-	-	NAD	
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	6.3	7.4	0	NT	NT	-	-	NT	
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	NT	NT	NT	NT	NT	-	-	NT	
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC3L-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3 (1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3 (1-TP2 (3.0)	In-Situ	3.0	03.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			% UCL			-	-	-	-	-	-	-	-	
			Maximum Concentration (mg/kg)							NA				
HORIZON B - GSW PASS														
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	8.4	6.2	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.5	6.1	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	8.5	6.1	1	**0.17**	8	-	-	NT	
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.4	6	1	NT	NT	-	-	NT	
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	8.9	6.1	1	**1.87**	14	-	-	NT	
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND	9.2	6.4	1	NT	NT	-	-	NAD	
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	8.5	2.3	4	**1.06**	**664**	-	-	NT	
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	8.1	5.7	3	**0.22**	**138**	-	-	NT	
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	8.4	6.4	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	8.4	5.3	3	**0.31**	**191**	-	-	NT	
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	8.1	1.9	3	**0.29**	**182**	-	-	NT	
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	7.9	5.9	3	**0.34**	**209**	-	-	NT	
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	6.7	3.3	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	6.9	3.9	1	NT	NT	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	10.3	7.1	3	0.03	18	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	10.6	7.5	2	**0.03**	**19**	-	-	NAD	
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	9	6.3	2	**0.41**	**256**	-	-	NT	
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	8.6	6.1	1	NT	NT	-	-	NAD	
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	9	6.5	1	**<0.02**	**13**	-	-	NT	
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	8.5	4.9	2	**1.07**	**670**	-	-	NT	
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	10	6.7	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	9.4	6.4	1	<0.02	11	-	-	NAD	
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	9.1	6.2	1	**0.13**	**84**	-	-	NT	
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	9.7	5.5	2	**0.57**	**354**	-	-	NT	
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC3 (1-TP2 (3.5)	In-Situ	3.5	03.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			% UCL			-	-	-	-	-	-	-	-	
			Maximum Concentration (mg/kg)							NA				
HORIZON C - VENM														
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	7	5.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	7	5.4	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	6.7	5.3	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
			Maximum Concentration (mg/kg)							NA				
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	8.6	3.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	NT	NT	NT	NT	NT	NT	NT	NT	
			% UCL											
			Maximum Concentration (mg/kg)							NA				

All units in mg/kg unless specified otherwise

NT - Not Tested

NO - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Ilerbman, Third Edition 1989. Published – The Australasian Institute of Mining & Metallurgy.* (Ilerbman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

Borehole Log WAC1-BH3

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 3.301 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	3	0.5		CL	(Horizon A) Sandy CLAY: low to medium plasticity, white / orange and brown, with gravels, moist.	WAC1-BH3 0.3		Horizon A General Fill
	2.5	1				WAC1-BH3 1.0		
	2	1.5						
	1.5	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 2.2	Natural Shells and Acid Sulfate Soil Odours	Horizon B Marine Sediments / Reworked PASS
SFA	1	2.5						
	0.5	3		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH3 3.0		
	0	3.5						
	-0.5	4		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 4.0		
	-1	4.5						
Core	-1.5	5			(Horizon C) SANDSTONE: coarse grained, light yellow / white / orange, moderately graded	WAC1-BH3 5.0		Horizon C Residual Material / Bedrock
	-2	5.5						

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Borehole Log WAC1-BH3

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-2.5	6						
	-3	6.5				WAC1-BH3 6.5		
	-3.5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-4	7.5						
	-4.5	8						
	-5	8.5						
	-5.5	9						
	-6	9.5						
	-6.5	10						
	-7	10.5						
	-7.5	11						
	-8	11.5						
	-8.5	12						

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Borehole Log WAC1-BH4

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.190 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	3	0		CL	(Horizon A) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH4 0.3		Horizon A ◆ General Fill
		0.5			(Horizon A) Ballast			
	2.5			SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH4 1.0	Natural Shells	Horizon B ◆ Marine Sediments / Reworked PASS
	2	1						
		1.5						
	1.5							
SFA		2		SC	(Horizon B) Clayey SAND: fine to medium grained, grey, moderately graded, moist to wet.	WAC1-BH4 2.2	Natural Shells and Acid Sulfate Soil Odours	
	1	2.5						
	0.5					WAC1-BH4 3.0		
		3						
	0							
		3.5						
	-0.5					WAC1-BH4 4.0		
		4						
	-1							
		4.5						
	-1.5							
Core		5				WAC1-BH4 5.0		
	-2							

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Borehole Log WAC1-BH4

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-2.5	6				WAC1-BH4 6.0		
	-3	6.5			Termination Depth at: 6.5 m BGL - Target Depth Reached			
	-3.5	7						
	-4	7.5						
	-4.5	8						
	-5	8.5						
	-5.5	9						
	-6	9.5						
	-6.5	10						
	-7	10.5						
	-7.5	11						
	-8	11.5						
	-8.5	12						

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Borehole Log WAC1-BH5

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 1.916 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH5 0.3		Horizon A – General Fill
	1	1		SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH5 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B – Marine Sediments / Reworked PASS
	0.5	1.5						
	0	2		CL	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH5 2.3		
SFA	-0.5	2.5						
	-1	3				WAC1-BH5 3.0		
	-1.5	3.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH5 3.5		Horizon C – Residual Material / Bedrock
	-2	4						
	-2.5	4.5				WAC1-BH5 4.5		
	-3	5						
	-3.5	5.5				WAC1-BH5 5.5		

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Borehole Log WAC1-BH5

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-4	6						
	-4.5	6.5			Termination Depth at: 6.0 m BGL - Target Depth Reached			
	-5	7						
	-5.5	7.5						
	-6	8						
	-6.5	8.5						
	-7	9						
	-7.5	9.5						
	-8	10						
	-8.5	10.5						
	-9	11						
	-9.5	11.5						
	-10	12						

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 01 Jul 2020

Borehole Log WAC1-BH6

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 11.06.2020
COMPLETED: 11.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.068 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	2	0		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH6 0.3		Horizon A – General Fill
	1.5	0.5		SM	(Horizon B) Silty SAND: medium grained, brown / yellow, well graded, moist.	WAC1-BH6 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B – Marine Sediments / Reworked PASS
	1	1						
	0.5	1.5						
SFA	0	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH6 2.3		
	-0.5	2.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH6 3.0; WAC1-BR2; WAC1-SR2		
	-1	3						
	-1.5	3.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.			Horizon C – Residual Material / Bedrock
	-2	4						
	-2.5	4.5				WAC1-BH6 4.5		
	-3	5						
						WAC1-BH6 5.5		

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produced by ESlog.ESdat.net on 01 Jul 2020

Borehole Log WAC1-BH6

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-3.5							
	-4	6						
	-4.5	6.5				WAC1-BH6 6.5		
					Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-5	7						
	-5.5	7.5						
	-6	8						
	-6.5	8.5						
	-7	9						
	-7.5	9.5						
	-8	10						
	-8.5	10.5						
	-9	11						
	-9.5	11.5						
	-10	12						

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 01 Jul 2020

Borehole Log WAC1-BH7

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 12.06.2020
COMPLETED: 12.06.2020
DRILLING COMPANY: ADE
LOCATION: Per Figure
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.350 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.3		Horizon A ◆ General Fill
	1	1		SC	(Horizon B) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.7	Natural Shells and Acid Sulfate Soil Odours	Horizon B ◆ Marine Sediments / Reworked PASS
	0.5	1.5						
	0	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH7 2.3		
SFA	-0.5	2.5						
	-1	3				WAC1-BH7 3.0		
	-1.5	3.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.			
	-2	4				WAC1-BH7 4.0		
Core	-2.5	4.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH7 4.7		Horizon C ◆ Residual Material / Bedrock
	-3	5						
	-3.5	5.5				WAC1-BH7 5.5		

Disclaimer This bore log is intended for environmental not geotechnical purposes.

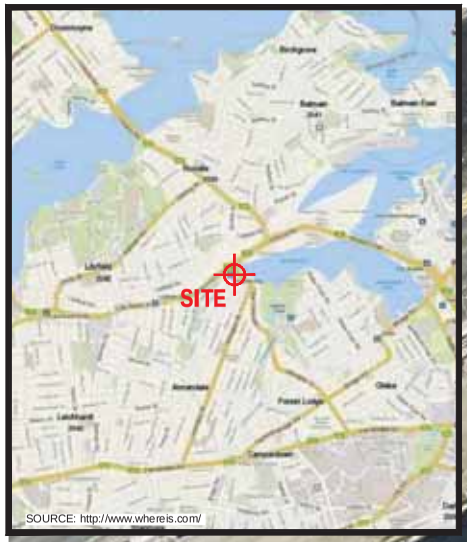
produced by ESlog.ESdat.net on 01 Jul 2020

Borehole Log WAC1-BH7

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Horizons
	-4	6						
	-4.5	6.5				WAC1-BH7 6.5		
	-5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached			
	-5.5	7.5						
	-6	8						
	-6.5	8.5						
	-7	9						
	-7.5	9.5						
	-8	10						
	-8.5	10.5						
	-9	11						
	-9.5	11.5						
	-10	12						

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 01 Jul 2020



CITY WEST LINK

THE CRESCENT

BAYVIEW CRESCENT

TP1
TP2
TP3
TP4
TP5

LEGEND

TP TEST PIT LOCATION

SUBJECT AREA - WAC223

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 26 SEP 2020.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	BE	04/11/20

0 5 10 15 20 25

SCALE 1:500 @A3 METRES

drawn	MC
approved	BE
date	04/11/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS & CLASSIFICATION REPORT
WESTCONNEX STAGE 3B, ROZELLE INTERCHANGE SITE
ROZELLE, NSW

title: SUBJECT AREA AND SITE LOCATION PLAN

project no: WCX-08-18474_WAC223 figure no: FIGURE 1 rev: A

ADE CONSULTING GROUP
Sydney Office
ADE Consulting Group Pty Ltd
Unit 6 / 7 Millennium Court, Silverwater, NSW 2128
www.ADE.group | info@ade.group | 1300 976 922

PLOT DATE: 4/11/2020 3:51:16 PM DWG FILE: W:\WCX - RLJV WEST CONNEX\WCX-08 WESTCONNEX 3B (ROZELLE) - ENVIRO WORKS\WCX-08-18474 WAC ASB (THE CRESCENT) 23.09.2020 BE\1-WORKING DOCUMENTS\4-CAD (MC)\WCX-08-18474_WAC223.DWG

			Acid Sulphate Soils		Particle Size		BTEX							TRH							
			s-Net Acidity without ANCE	pH (KCl)	Clay in soils <2um	Density	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (m&p-cresol)
			% S	-	%	g/cm3	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.02	0.1	1	0.01	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	50	100	100	50	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	10	288	600	-	-	1,000	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	18	518	1,080	-	-	1,800	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	40	1,152	2,400	-	-	4,000	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	72	2,073	4,320	-	-	7,200	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berkman (1989)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lab Name	**Field ID**	**Date**																			
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.02	5.7	10	2.46	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.02	6.1	10	2.45	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.02	5.7	9	2.48	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	0.02	5.8	8	2.47	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.02	6.0	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5
ALSE-Sydney	**WAC223-BR**	**14/09/2020**					<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	-
SLS	**WAC223.SR**	**23/10/2020**					<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50		<100	<100	0	-
Statistics																					
Number of Results			**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**6**	**7**	**7**	**7**	**5**
Number of Detects			**1**	**5**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Minimum Concentration			**0.02**	**5.7**	**<1**	**1**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**0**	**0**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**0**	**<0.5**
Maximum Concentration			**0.02**	**6.1**	**10**	**2.48**	**<0.5**	**<0.5**	**<1**	**<2**	**<1**	**<0.5**	**<0.2**	**<35**	**<35**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1989)
Adopted Site Assessment Criteria as per the Site's ASSMP

Phenols												Amino Aliphatics				Amino Aromatics		Anilines						
2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5
8,000	40	-	-	-	-	4,000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	200
14,400	72	-	-	-	-	7,200	-	-	-	518	-	-	-	-	-	-	-	-	-	-	-	-	-	360
32,000	160	-	-	-	-	16,000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	800
57,600	288	-	-	-	-	28,800	-	-	-	2,073	-	-	-	-	-	-	-	-	-	-	-	-	-	1,440
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Chlorinated Hydrocarbons																								
1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5
600	26	24	-	14	-	-	-	10	-	-	-	-	-	10	-	-	120	-	-	-	-	-	-	-
1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-	-	-	18	-	-	126	-	-	-	-	-	-	-
2,400	104	96	-	56	-	-	-	40	-	-	-	-	-	40	-	-	480	-	-	-	-	-	-	-
4,320	187.2	172.8	-	100	-	-	-	72	-	-	-	-	-	72	-	-	864	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**

					Explosives				Halogenated Benzenes											Halogenated Hydrocarbons				
Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.5	5	5	0.5	5
10	14	-	-	4	-	2.6	-	40	-	-	86	-	150	-	-	-	2,000	-	-	-	-	-	-	-
18	25.2	-	-	7.2	-	0.13	-	72	-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-	-	-
40	56	-	-	16	-	10.4	-	160	-	-	344	-	600	-	-	-	8,000	-	-	-	-	-	-	-
72	100.8	-	-	28.8	-	18.7	-	288	-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-
5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**

Herbicides	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						Perfluo		
Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	18	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	72	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.001**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**
<0.5	**<0.001**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0005**	**<0.0002**

roalkyl Sulfonamides				PFAS			Inorganics									MAH								
N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	pH (Lab)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	320	-	-	-	-	-	-	-	-	60	-
-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	240	-
-	-	-	-	7.2	-	-	-	-	-	-	-	-	-	23,600	-	-	-	-	-	-	-	-	432	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND										ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND										ND	ND	ND	ND	ND	ND	ND	ND	ND
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	16.6	0.4	<0.1	0.1	<0.1	<0.1	0.2	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2	<0.1	0.5	0.2	<0.1	<0.1	0.8	<1	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4	0.4	0.1	<0.1	<0.1	<0.1	0.3	<1	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	17.5	<0.1	0.1	<0.1	<0.1	<0.1	0.3	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	11.5	<0.1	0.5	<0.1	<0.1	<0.1	0.7	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**4**	**2**	**0**	**0**	**5**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.0005	**<0.0005**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**8.2**	**<0.1**	**0.1**	**0.1**	**<0.1**	**<0.1**	**0.2**	**<1**	**5.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
<0.0005	**<0.0005**	**<0.0002**	**<0.0005**	**<0.0002**	**<0.0002**	**<0.0002**	**22.4**	**1.9**	**0.5**	**0.2**	**<0.1**	**<0.1**	**0.8**	**<1**	**5.6**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Metals									Nitroaromatics			Organochlorine Pesticides												
Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Uranium	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
5	0.3	2	5	5	0.1	2	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
100	20	100	-	100	4	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	100	1,900	-	1,500	50	1,050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	80	400	-	400	16	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,000	400	7,600	-	6,000	200	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	0.3	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	<0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	9	<5	<5	<0.1	<2	<0.1	12	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5	<1	3	<5	<5	<0.1	<2	-	<5	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05
<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	-	<5.0	-	-	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10
7	**7**	**7**	**7**	**7**	**7**	**7**	**5**	**7**	**5**	**5**	**5**	**7**	**7**	**7**	**6**	**7**	**6**	**7**	**7**	**7**	**7**	**7**	**6**	**7**
0	**0**	**6**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<5	**<0.3**	**3**	**<5**	**<5**	**<0.1**	**<2**	**0.1**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**
<5	**<1**	**9**	**<5**	**<10**	**<0.2**	**<10**	**0.3**	**12**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.1**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.1**

											Organophosphorous Pesticides													
Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1
60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-	-	-
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-
432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2
-	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	<0.10	<0.10	<0.10	-	-	-	<0.10	-	-	<0.10

6	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**6**	**6**	**6**	**1**	**6**	**6**	**7**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.05	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.1**
<0.05	**<0.2**	**<0.2**	**<0.1**	**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.05**	**<0.05**	**<0.1**	**<0.05**	**<0.05**	**<0.2**

			Other	PAH																					
Monocrotophos	Prothiofos	Ronnel	Acetophenone	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.2	0.05	0.1	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5		0.5	0.5
-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-
-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-
-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-
-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
<0.2	<0.05	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-
-	-	<0.10	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	0	<0.50	<0.50

6	**6**	**1**	**5**	**7**	**7**	**7**	**7**	**7**	**1**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**1**	**7**	**7**	**6**	**1**	**1**	**1**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
<0.2	**<0.05**	**<0.1**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.3**	**<0.5**	**0**	**<0.5**	**<0.5**
<0.2	**<0.05**	**<0.1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.3**	**<0.5**	**<0.5**	**<0.5**	**0**	**<0.5**	**<0.5**

PCBs						Pesticides							Phthalates						Solvents					
Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Chlorobenzilate	Carbazole	DEF	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	7,200	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	-	-	-	-	-
-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	28,800	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
-	-	-	-	-	<0.1	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-
<0.50	<0.50	<0.50	<0.50	<0.50	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1	**1**	**1**	**1**	**1**	**6**	**5**	**5**	**1**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**
<0.5	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**

Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils -		Acid Sulphate Soils -		Acid Sulphate Soils -		SVOCs														
a-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
moles H+/t	-	mole H+/t	%S	%S	mole H+/t	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
10	0.5	10	0.02	0.02	2	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
										ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
										ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

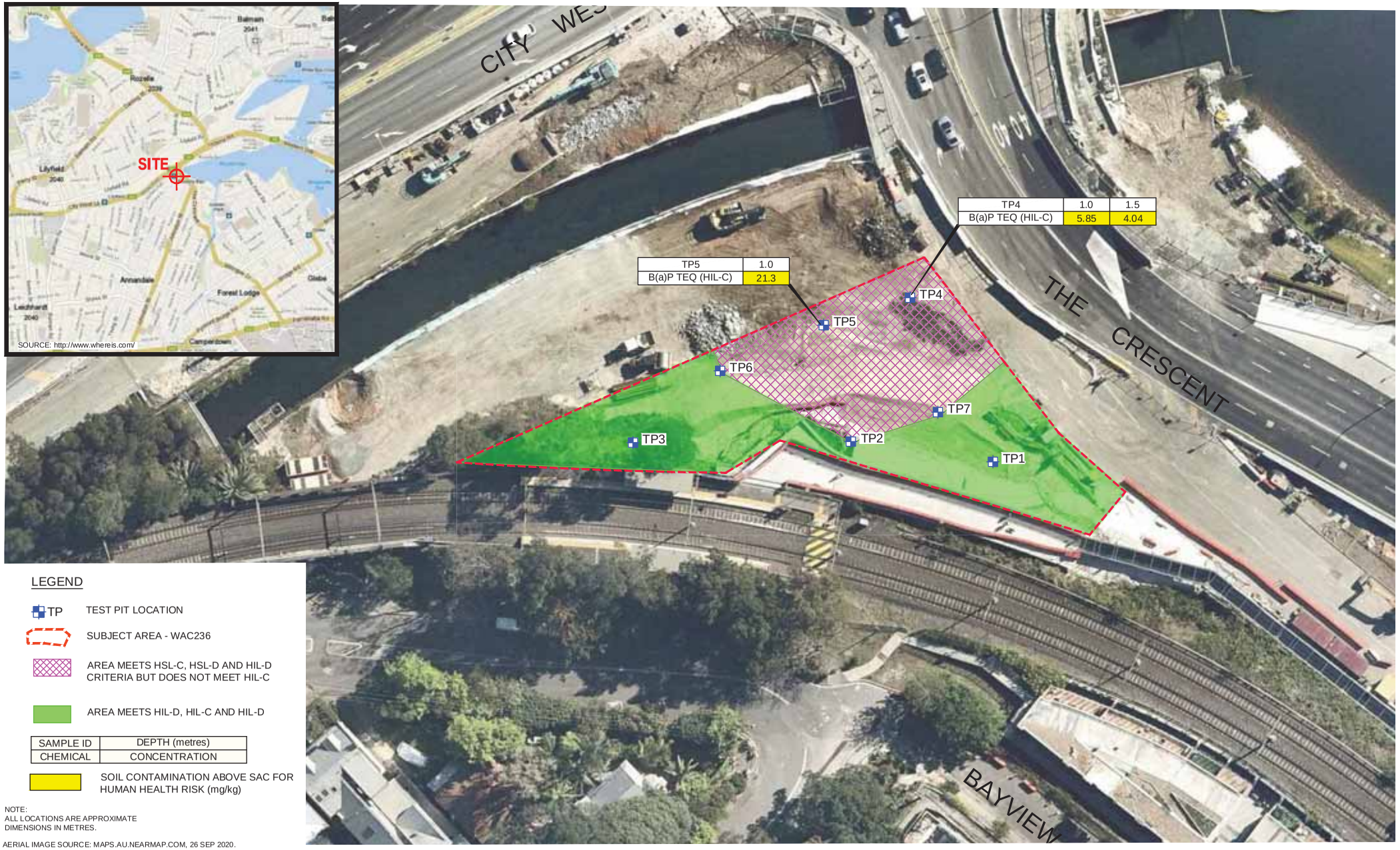
<10	1.5	<10	<0.02	<0.02	2	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
14	1.5	14	0.02	<0.02	2	1	1	12	0.020	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
1	**5**	**1**	**1**	**0**	**2**	**1**	**1**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
<10	**1.5**	**<10**	**0.02**	**<0.02**	**2**	**1**	**1**	**<10**	**0.01**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**
14	**1.5**	**14**	**0.02**	**<0.02**	**2**	**1**	**1**	**12**	**0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**

TPH					VOCs		
C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
10	50	100	100	50	0.5	0.5	0.5
650	-	-	-	10,000	-	-	-
650	-	-	-	10,000	-	-	-
2,600	-	-	-	40,000	-	-	-
2,600	-	-	-	40,000	-	-	-
-	-	-	-	-	-	-	-
ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND

<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
<10	<50	<100	<100	<50	-	-	-
<25	<50	<100	<100	0	-	-	-

7	**7**	**7**	**7**	**7**	**5**	**5**	**5**
0	**0**	**0**	**0**	**1**	**0**	**0**	**0**
<10	**<50**	**<100**	**<100**	**0**	**<0.5**	**<0.5**	**<0.5**
<25	**<50**	**<100**	**<100**	**<50**	**<0.5**	**<0.5**	**<0.5**



LEGEND

- TP — TEST PIT LOCATION
- SUBJECT AREA - WAC236
- AREA MEETS HSL-C, HSL-D AND HIL-D CRITERIA BUT DOES NOT MEET HIL-C
- AREA MEETS HIL-D, HIL-C AND HIL-D

SAMPLE ID	DEPTH (metres)
CHEMICAL	CONCENTRATION

- SOIL CONTAMINATION ABOVE SAC FOR HUMAN HEALTH RISK (mg/kg)

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 26 SEP 2020.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	BS	30/11/20

0 5 10 15 20 25
SCALE 1:500 @A3 METRES

drawn	MC
approved	BS
date	30/11/2020
scale	AS SHOWN
original size	A3

client: JHCPB-JV

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
ROZELLE INTERCHANGE SITE
THE CRESCENT, ROZELLE, NSW

title: SOIL ANALYTICAL RESULTS AND SITE LOCATION PLAN

project no: WAC-08-18712_WAC236 figure no: FIGURE 1 rev: A

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PLOT DATE: 14/12/2020 9:42:31 AM DWG FILE: W:\WCX_RLJV WEST CONNEX\WCX 08 WESTCONNEX 3B (ROZELLE)- ENVIRO WORKS\WCX-08-18712 WAC ASB (THE CRESCENT) 24.11.2020 BE\1-WORKING DOCUMENTS\4-CAD (MC)\WCX-08-18712_WAC236.DWG

	Acid Sulphate Soils		Particle Size								TRH						Phenols												
	%-Net Acidity without ANCE	pH (KCl)	Clay in soils <2um	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total
	% S	-	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)				100	288	600			1,000									3,000	40					4,000					
NSW 2014 General Solid Waste SCC1 (with leached)				18	518	1,080			1,800									14,400	72					7,200				518	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				400	1,152	2,400			4,000									32,000	160					16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72	2,073	4,320			7,200									57,600	288					28,800				2,073	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand				3 | 3 | 3 | 3					230			260 | 370 | 630																	
0-1m				3					230			260																	
1-2m				3								370																	
2-4m				3								630																	
>=4m				3																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																											120	40,000	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											660	240,000	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-A	27/11/2020	<0.02	7.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-A	27/11/2020	<0.02	11.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-B	27/11/2020	<0.02	9.1	3	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-C	27/11/2020	<0.02	8.8	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	129	<100	129													
WAC236-TP4-A	27/11/2020	0.02	11.2	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	397	<100	397													
WAC236-TP4-B	27/11/2020	<0.02	8.0	9	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	100	<100	100													
WAC236-TP4-C	27/11/2020	<0.02	9.1	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-A	27/11/2020	<0.02	9.4	7	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	1,266	<100	1,266													
WAC236-TP5-B	27/11/2020	<0.02	8.8	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-C	27/11/2020	<0.02	9.0	22	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-A	27/11/2020	<0.02	11.6	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-B	27/11/2020	0.03	10.9	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-C	27/11/2020	<0.02	9.7	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-A	27/11/2020	<0.02	10.7	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- BR1	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-SR-1	27/11/2020				<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<100	<100	<50													
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	397	0	397	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-B	27/11/2020	<0.02	6.4	1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP2 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP2-A	27/11/2020	<0.02	5.9	<1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-B	27/11/2020	<0.02	9.1	4	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons															
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)													200	600	26	24		14				10						10
NSW 2014 General Solid Waste SCC1 (with leached)													360	1,080	46.8	43.2		0.7				0.5						18
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)													800	2,400	104	96		56				40						40
NSW 2014 Restricted Solid Waste SCC2 (with leached)													1,440	4,320	187.2	172.8		100				72						72
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	27/11/2020																												
WAC236-TP1-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	27/11/2020																												
WAC236-TP3-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	27/11/2020																												
WAC236-TP3-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	27/11/2020																												
WAC236-TP3-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	27/11/2020																												
WAC236-TP4-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	27/11/2020																												
WAC236-TP4-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	27/11/2020																												
WAC236-TP4-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	27/11/2020																												
WAC236-TP5-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	27/11/2020																												
WAC236-TP5-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	27/11/2020																												
WAC236-TP5-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	27/11/2020																												
WAC236-TP6-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	27/11/2020																												
WAC236-TP6-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	27/11/2020																												
WAC236-TP6-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	27/11/2020																												
WAC236-TP7-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	27/11/2020																												
WAC236-SR-1	27/11/2020																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	27/11/2020																												
WAC236-TP1-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	27/11/2020																												
WAC236-TP2-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	27/11/2020																												
WAC236-TP7-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
lew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Chlorinated Hydrocarbons															Explosives				Halogenated Benzenes									
	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			120								10	14			4		2.6		40			36		150				2,000		
NSW 2014 General Solid Waste SCC1 (with leached)			126								18	25.2			7.2		0.13		72			4.3		7.5				3,600		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			480								40	56			16		10.4		160			344		600				8,000		
NSW 2014 Restricted Solid Waste SCC2 (with leached)			864								72	100.8			28.8		18.7		288			620		1,080				14,400		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																												10		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												80		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	27/11/2020																												<0.10	
WAC236-TP1-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - A	27/11/2020																												<0.10	
WAC236-TP3-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - B	27/11/2020																												<0.10	
WAC236-TP3-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - C	27/11/2020																												<0.10	
WAC236-TP3-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - A	27/11/2020																												<0.10	
WAC236-TP4-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - B	27/11/2020																												<0.10	
WAC236-TP4-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - C	27/11/2020																												<0.10	
WAC236-TP4-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - A	27/11/2020																												<0.10	
WAC236-TP5-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - B	27/11/2020																												<0.10	
WAC236-TP5-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - C	27/11/2020																												<0.10	
WAC236-TP5-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - A	27/11/2020																												<0.10	
WAC236-TP6-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - B	27/11/2020																												<0.10	
WAC236-TP6-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - C	27/11/2020																												<0.10	
WAC236-TP6-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - A	27/11/2020																												<0.10	
WAC236-TP7-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- BR1	27/11/2020																												<0.10	
WAC236-SR-1	27/11/2020																												<0.05	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	27/11/2020																												<0.10	
WAC236-TP1-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP2 - A	27/11/2020																												<0.10	
WAC236-TP2-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - B	27/11/2020																												<0.10	
WAC236-TP7-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Halogenated Hydrocarbons					Herbicides	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						
	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	5	0.5	5	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NSW 2014 General Solid Waste CT1 (No Leaching)																											
NSW 2014 General Solid Waste SCC1 (with leached)											18																
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																											
NSW 2014 Restricted Solid Waste SCC2 (with leached)											72																
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil																											
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																										
WAC236-TP1-A	**27/11/2020**																										
WAC236-TP1-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - A	**27/11/2020**																										
WAC236-TP3-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - B	**27/11/2020**																										
WAC236-TP3-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP3 - C	**27/11/2020**																										
WAC236-TP3-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
WAC236- TP4 - A	**27/11/2020**																										
WAC236-TP4-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - B	**27/11/2020**																										
WAC236-TP4-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - C	**27/11/2020**																										
WAC236-TP4-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP5 - A	**27/11/2020**																										
WAC236-TP5-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - B	**27/11/2020**																										
WAC236-TP5-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - C	**27/11/2020**																										
WAC236-TP5-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP6 - A	**27/11/2020**																										
WAC236-TP6-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0011	<0.0002
WAC236- TP6 - B	**27/11/2020**																										
WAC236-TP6-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002
WAC236- TP6 - C	**27/11/2020**																										
WAC236-TP6-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - A	**27/11/2020**																										
WAC236-TP7-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- BR1	**27/11/2020**																										
WAC236-SR-1	**27/11/2020**																										
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

Horizon B - BEDROCK

Field ID	Date																										
WAC236- TP1-B	**27/11/2020**																										
WAC236-TP1-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP2 - A	**27/11/2020**																										
WAC236-TP2-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - B	**27/11/2020**																										
WAC236-TP7-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Perfluoroalkyl Sulfonamides							PFAS			Inorganics									MAH									
	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	pH 1:5 soil:water	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	-	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1		0.1	0.1	0.1	0.1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)																			320								40		
NSW 2014 General Solid Waste SCC1 (with leached)								1.8											16								108		
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			1,280								240		
NSW 2014 Restricted Solid Waste SCC2 (with leached)								7.2											23,600								432		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																													

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**											5.9		8.5															
WAC236-TP1-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	16.2	0.7		<0.2	<0.2	<0.2	0.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**											9.8		10.5															
WAC236-TP3-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	5.2	10.2	4.2		<0.2	0.2	0.2	4.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**											8.9		9.2															
WAC236-TP3-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	10.1	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**											9.4		8															
WAC236-TP3-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0002	0.0002	<0.2	9.9	3.1		<0.2	<0.2	<0.2	3.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**											4.8		10.2															
WAC236-TP4-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.7	4.5		<0.2	0.3	<0.2	4.8	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**											7		8.3															
WAC236-TP4-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	0.0002	0.0002	<0.2	8.9	2.5		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**											7.4		8.5															
WAC236-TP4-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	9.7	1.6		<0.2	<0.2	<0.2	1.6	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**											6.3		9.5															
WAC236-TP5-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	9.6	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**											12.4		7.9															
WAC236-TP5-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0005	0.0005	<0.2	14.4	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**											6.3		7.8															
WAC236-TP5-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	7.5	1.3		<0.2	<0.2	<0.2	1.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**											8.5		11.6															
WAC236-TP6-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0011	0.0011	0.0011	<0.2	12.2	31.9		<0.2	<0.2	<0.2	32.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**											13		11.4															
WAC236-TP6-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	0.0005	0.0005	<0.2	11.9	9.8		<0.2	<0.2	<0.2	9.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**											7.6		10.8															
WAC236-TP6-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.0	1.9		<0.2	<0.2	<0.2	1.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**											5.5		9.6															
WAC236-TP7-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	21.9	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**											5.3		8.5															
WAC236-SR-1	**27/11/2020**											5.8																	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**											1.3		8.4															
WAC236-TP1-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	2.4	0.4		<0.2	<0.2	<0.2	0.4	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**											3.6		6.1															
WAC236-TP2-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.3	4.8	0.8		<0.1	<0.1	0.1	1.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**											3.4		5.5															
WAC236-TP7-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.6	3.1	0.2		<0.1	<0.1	<0.1	0.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Metals														Nitroaromatics			Organochlorine Pesticides														
	Arsenic	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Zinc	2-Picolline	4-aminobiphenyl	Pentachloronitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	50	0.3	2	2	5	5	5	0.1	2	5	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)	100	20		20				100		4	40	20																			
NSW 2014 General Solid Waste SCC1 (with leached)	500	100		100				1,500		50	1,050	50																			
NSW 2014 General Solid Waste TCLP1 (leached)																															
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	400	80		80				400		16	160	80																			
NSW 2014 Restricted Solid Waste SCC2 (with leached)	2,000	400		400				6,000		200	4,200	200																			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																															
Berkman (1989) Background Ranges	0.3-30			0.04-2	0.5-110		1-190	<2-200		0.001-0.1	2-400			2-180																	
ANZECC (1992) Background Ranges	1-40				1 5-1000		2-100	2-200		0.03	5-500			10-300																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																															
0-1m																															
1-2m																															
2-4m																															
>=4m																															
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																															
0-1m																															
1-2m																															
2-4m																															
>=4m																															
NEPM 2013 Table 1A(1) HILs Rec C Soil	300	90	20,000	90		300	17,000	600	19,000	80	1,200	700		30,000							10		70						400	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	3,000	500	300,000	900		4,000	240,000	1,500	60,000	730	6,000	10,000		400,000							45		530						3,600	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																														
WAC236-TP1-A	27/11/2020	<5.0			<0.30	<5.0		10.7	44.1		<0.20	<10.0			35.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-A	27/11/2020		<1	<50			<2			43			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - A	27/11/2020	<5.0			<0.30	6		27.9	<10.0		<0.20	<10.0			44.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-A	27/11/2020		<1	<50			3			171			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - B	27/11/2020	<5.0			<0.30	5.2		<5.0	<10.0		<0.20	<10.0			16.7				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-B	27/11/2020		<1	<50			4			274			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - C	27/11/2020	<5.0			<0.30	7.4		20.4	53.3		0.23	<10.0			133				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-C	27/11/2020		<1	<50			<2			68			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - A	27/11/2020	<5.0			<0.30	8.3		5.7	<10.0		<0.20	<10.0			22.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-A	27/11/2020		<1	<50			4			266			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - B	27/11/2020	<5.0			<0.30	11.2		51.3	68.9		<0.20	<10.0			62				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-B	27/11/2020		<1	<50			<2			113			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - C	27/11/2020	<5.0			<0.30	9.3		36.3	33.6		<0.20	<10.0			31.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-C	27/11/2020		<1	<50			<2			38			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - A	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			13.3				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-A	27/11/2020		<1	<50			4			251			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - B	27/11/2020	6.1			<0.30	6.5		107.4	111.1		<0.20	<10.0			206.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-B	27/11/2020		<1	<50			3			175			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - C	27/11/2020	<5.0			<0.30	7.5		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-C	27/11/2020		<1	<50			<2			18			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - A	27/11/2020	<5.0			<0.30	6.4		11.7	18.4		<0.20	<10.0			30.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-A	27/11/2020		<1	<50			2			74			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - B	27/11/2020	<5.0			<0.30	5.9		14.7	50.9		<0.20	<10.0			62.9				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-B	27/11/2020		<1	<50			<2			49			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - C	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-C	27/11/2020		<1	<50			<2			17			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - A	27/11/2020	<5.0			<0.30	<5.0		13	14.8		<0.20	<10.0			32.6				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-A	27/11/2020		<1	<50			<2			105			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- BR1	27/11/2020	<5.0			<0.30	<5.0		7.6	32.9		<0.20	<10.0			26.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-SR-1	27/11/2020	<5			<1	5		15	44		<0.1	<2			38				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05

Maximum concentration		6.1	0	0	0	11.2	0	107.4	111.1	0	0.23	0	0	0	206.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL									67.84																						

Horizon B - BEDROCK

Field ID	Date																														
WAC236- TP1-B	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-B	27/11/2020		<1	<50			<2			21			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP2 - A	27/11/2020	<5.0			<0.30	5.4		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP2-A	27/11/2020		<1	<50			<2			16			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - B	27/11/2020	<5.0			<0.30	9.6		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-B	27/11/2020		<1	<50			<2			<5			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5

Maximum concentration		0	0	0	0	9.6	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																															

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
lew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

													Organophosphorous Pesticides																		
		Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	b-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Ronnel	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1	0.2	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)		80															4													
NSW 2014 General Solid Waste SCC1 (with leached)		3															7.5													
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		240															16													
NSW 2014 Restricted Solid Waste SCC2 (with leached)		432															30													
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil		340				20				10		400					250													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil		2,000				100				50		2,500					2,000													
Horizon A - GENERAL FILL MATERIALS																														
Field ID	**Date**																													
WAC236-TP1-A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP1-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP7-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- BR1	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-SR-1	**27/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.2	<0.2	<0.05	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														
Horizon B - BEDROCK																														
Field ID	**Date**																													
WAC236- TP1-B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP1-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP2 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP2-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP7-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Other	PAH																														
	Acetophenone	Benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(a) pyrene - TCLP	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	PAHs (Sum of positives)	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL	0.5	1	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3		0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5		
NSW 2014 General Solid Waste CT1 (No Leaching)											0.8																	200		
NSW 2014 General Solid Waste SCC1 (with leached)											10																	200		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)											3.2																	800		
NSW 2014 Restricted Solid Waste SCC2 (with leached)											23																	800		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																									3	3	3	300		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									40	40	40	4,000		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	27/11/2020							<0.30	<0.30	<0.30	0.81	0.82	<0.005	1.32		0.57	1.3	0.73	<0.30	1.56	<0.30	0.56	<0.30	0.55	1.74	1.38	1.53	1.23		9.96
WAC236-TP1-A	27/11/2020	<0.5																												
WAC236- TP3 - A	27/11/2020							<0.30	<0.30	0.31	0.54	0.58		0.63		0.47	<0.30	0.55	<0.30	1.26	<0.30	0.31	<0.30	0.77	1.34	0.9	1.07	0.74		6.76
WAC236-TP3-A	27/11/2020	<0.5																												
WAC236- TP3 - B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<030	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP3-B	27/11/2020	<0.5																												
WAC236- TP3 - C	27/11/2020							<0.30	<0.30	<0.30	0.73	0.8		1.35		0.52	1.33	0.68	<0.30	1.26	<0.30	0.52	<0.30	0.49	1.33	1.36	1.51	1.21		9.01
WAC236-TP3-C	27/11/2020	<0.5																												
WAC236- TP4 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP4-A	27/11/2020	<0.5																												
WAC236- TP4 - B	27/11/2020							<0.30	<0.30	0.45	3.24	3.6	<0.005	5.68		2.31	5.6	3.06	0.5	5.46	<0.30	2.47	<0.30	1.86	6.3	5.85	5.85	5.85		40.53
WAC236-TP4-B	27/11/2020	<0.5																												
WAC236- TP4 - C	27/11/2020							<0.30	<0.30	<0.30	2.07	2.44	<0.005	3.94		1.6	3.88	1.98	0.4	3.46	<0.30	1.71	<0.30	<0.30	3.98	4.04	4.04	4.04		25.46
WAC236-TP4-C	27/11/2020	<0.5																												
WAC236- TP5 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP5-A	27/11/2020	<0.5																												
WAC236- TP5 - B	27/11/2020							<0.30	0.72	1.45	12.21	12.56	<0.005	20.59		8.95	20.3	9.67	1.97	19.33	<0.30	11.08	<0.30	5.26	21.93	21.13	21.13	21.13		146.02
WAC236-TP5-B	27/11/2020	<0.5																												
WAC236- TP5 - C	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		0.38		<0.30	0.38	<0.30	<0.30	0.44	<0.30	<030	<0.30	<0.30	0.5	0.41	0.74	0.08		1.7
WAC236-TP5-C	27/11/2020	<0.5																												
WAC236- TP6 - A	27/11/2020							<0.30	<0.30	<0.30	0.69	0.76		1.32		0.5	1.3	0.64	<0.30	1.23	<0.30	0.51	<0.30	<0.30	1.29	1.3	1.45	1.15		8.24
WAC236-TP6-A	27/11/2020	<0.5																												
WAC236- TP6 - B	27/11/2020							<0.30	<0.30	<0.30	0.44	0.51		<0.30		0.35	<0.30	0.39	<0.30	0.8	<0.30	0.37	<0.30	<0.30	0.94	0.78	0.96	0.6		3.8
WAC236-TP6-B	27/11/2020	<0.5																												
WAC236- TP6 - C	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	0.42	<0.30	<030	<0.30	<0.30	0.51	0.36	0.73	0		0.93
WAC236-TP6-C	27/11/2020	<0.5																												
WAC236- TP7 - A	27/11/2020							<0.30	0.3	0.56	1.67	1.96	<0.005	2.14		1.2	0.84	1.66	0.31	3.46	<0.30	1.01	<0.30	2.05	3.71	2.86	2.86	2.86		20.87
WAC236-TP7-A	27/11/2020	<0.5																												
WAC236- BR1	27/11/2020							<0.30	<0.30	<0.30	0.86	0.9	<0.005	1.43		0.59	1.41	0.81	<0.30	1.86	<0.30	0.57	<0.30	<0.30	2.01	1.49	1.64	1.34		10.44
WAC236-SR-1	27/11/2020							<0.5	<0.5	<0.5	1.4	1.6			1.8	1.1	0.6	1.3	<0.5	2.8	<0.5	0.8	<0.5	1.0	2.9	2.3	2.6	2.1	15.3	

Maximum concentration		0	0	0	0	0	0	0	0.72	1.45	12.21	12.56		20.59	0	8.95	20.3	9.67	1.97	19.33	0	11.08	0	5.26	21.93	21.13	21.13	21.13	0	146.02
95%UCL												5.604																		

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP1-B	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP2 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP2-A	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP7 - B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP7-B	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	ND	ND	ND	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	PCBs								Pesticides							Phthalates						Solvents					
	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Chlorobenzilate	Carbazole	DDF	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)								50														4,000					
NSW 2014 General Solid Waste SCC1 (with leached)								50														7,200					
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)								50														16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)								50														28,800					
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil								1																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								1																			

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																										
WAC236-TP1-A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP1-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-C	27/11/2020								<0.5	1.4					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP7-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- BR1	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-SR-1	27/11/2020								<0.1				<0.05	<0.05	<0.2	<0.05											
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

Horizon B - BEDROCK

Field ID	Date																										
WAC236- TP1-B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP1-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP2 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP2-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP7-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
ew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		SVOCs														
	a-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	2-(dacetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine
	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	0.5	10	0.02	0.02	2	10	0.01	0.01	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)																												
NSW 2014 General Solid Waste SCC1 (with leached)																												
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																												
NSW 2014 Restricted Solid Waste SCC2 (with leached)																												
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	27/11/2020																											
WAC236-TP1-A	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	121	0.60	0.19	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - A	27/11/2020																											
WAC236-TP3-A	27/11/2020	11	1.5	<10	<0.02	<0.02	<2	1,850	9.26	2.96	<1	<1	11	0.017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - B	27/11/2020																											
WAC236-TP3-B	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	333	1.67	0.53	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - C	27/11/2020																											
WAC236-TP3-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	259	1.30	0.42	<1	<1	<10	0.013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - A	27/11/2020																											
WAC236-TP4-A	27/11/2020	15	1.5	<10	<0.02	<0.02	<2	905	4.53	1.45	<1	1	15	0.024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - B	27/11/2020																											
WAC236-TP4-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	266	1.33	0.43	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - C	27/11/2020																											
WAC236-TP4-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	1,780	8.93	2.86	<1	<1	<10	0.015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - A	27/11/2020																											
WAC236-TP5-A	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	216	1.08	0.35	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - B	27/11/2020																											
WAC236-TP5-B	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	577	2.89	0.92	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - C	27/11/2020																											
WAC236-TP5-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	203	1.02	0.32	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - A	27/11/2020																											
WAC236-TP6-A	27/11/2020	12	1.5	<10	<0.02	<0.02	<2	1,600	8.00	2.56	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - B	27/11/2020																											
WAC236-TP6-B	27/11/2020	18	1.5	<10	<0.02	<0.02	<2	1,140	5.72	1.83	<1	1	18	0.029	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - C	27/11/2020																											
WAC236-TP6-C	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	3,320	16.6	5.32	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - A	27/11/2020																											
WAC236-TP7-A	27/11/2020	12	1.5	<10	<0.02	<0.02	<2	509	2.55	0.82	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- BR1	27/11/2020																											
WAC236-SR-1	27/11/2020																											
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	27/11/2020																											
WAC236-TP1-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP2 - A	27/11/2020																											
WAC236-TP2-A	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - B	27/11/2020																											
WAC236-TP7-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	100	0.50	0.16	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
iew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
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		TPH					VOCs		
	Phenacetin	C5-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)		650				10,000			
NSW 2014 General Solid Waste SCC1 (with leached)		650				10,000			
NSW 2014 General Solid Waste TCLP1 (leached)									
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		2,600				40,000			
NSW 2014 Restricted Solid Waste SCC2 (with leached)		2,600				40,000			
NSW 2014 Restricted Solid Waste TCLP2 (leached)									
Berkman (1989) Background Ranges									
ANZECC (1992) Background Ranges									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(1) HILs Rec C Soil									
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									

Horizion A - GENERAL FILL MATERIALS

Field ID	Date									
WAC236-TP1-A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**		<25	<50	247	160	407			
WAC236-TP4-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**		<25	<50	812	433	1,245			
WAC236-TP5-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-SR-1	**27/11/2020**		<10	<50	<100	<100	<50			
Maximum concentration		0	0	0	812	433	407	0	0	0
95%UCL										

Horizon B - BEDROCK

Field ID	Date									
WAC236- TP1-B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP2-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0
95%UCL										

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
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2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

Site boundary

Test Pit locations

Figure 2 – Sample locations
Sub Site Area CR07

TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP01

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871781 N 151.172225**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H; FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Clayey SAND: Dark brown, medium to coarse grained, gravels of ironstone and sandstone with some rootlets.				No odours or visible contamination
		PID=8.1 ppm	J/B							TP01_0.5 QA01 QA01A
	1.00 1					Layer of ballast gravels				
	1.10					Sandy CLAY: Dark brown, moderately stiff, coarse grained with gravels of ironstone and sandstone				
		PID=7.8 ppm	J/B							TP01_1.2
	2									Water entering borehole
			J							TP01_2.2
						END OF TEST PIT AT 2.20 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT NO.

TEST PIT ENVIRONMENTAL LOG

TP02

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871667 N 151.772358**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY: VS S F ST VST H / FB VL L MD D VD	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Silty CLAY: Very large bricks, ironstone and ballast gravels				No odours or visible contamination
	0.30					FILL: SAND: Dark yellow/brown, coarse grained, shell grit and gravels of ironstone and ballast.				
		PID=6.2 ppm	B&J							TP02_0.5
	1.00 1					Becomes more yellow with significant shells				
		PID=6.8 ppm	B&J							TP02_1.2
	2.00 2					Sandy CLAY: Dark brown/grey with gravels as above.				
			J							TP02_2.2
										Water entering borehole
			J							TP02_2.6
						END OF TEST PIT AT 2.60 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO. TP03

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871634 N 151.17258**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY: VS S F ST VST H / FB VL L MD D VD	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: Sandy CLAY: brown, high plasticity, large tree roots and boulders of ballast, ironsteone and sandstone.				No odours or visible contamination
		PID=7.9 ppm	B&J							TP03_0.5
	0.80					SAND: Brown, coarse grained, very large shells with occasional clay, some small roots.				
	1	PID=4.8 ppm	B&J							TP03_1.0
	2		J							TP03_2.0 Water entering test pit
			J							TP03_2.2
						END OF TEST PIT AT 2.30 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO. **TP04**

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871593 N 151.172728**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY: VS S F ST VST H / FB VL L MD D VD	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
						FILL: SAND: Dark brown, coarse grained with gravels of ballast and sandstone				No odours or visible contamination
		PID=6 ppm	B&J							TP04_0.5
	1.00 1	PID=10.4 ppm	B&J			Increased shell grit				TP04_1.0
	2									
	2.20		J			Sandy CLAY: Brown/black with shell grit.				TP04_2.3
						END OF TEST PIT AT 2.30 m				EOH due to vac-truck suction and collapse of hole

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO.

TP05

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871566 N 151.172876**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H; FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
	0.20					FILL: TOPSOIL: Dark brown, medium grained silt				
						FILL:SAND: Brown, coarse grained, large sandstone and ballast gravels. Occasional clay.				No odours or visible contamination
		PID=18.3 ppm	B&J							TP05_0.6
	1.00 1	PID=5.5 ppm	J&B			Slightly darker brown with significant shells				TP05_1.0
			J							TP05_1.9
	2					END OF TEST PIT AT 1.90 m				Refusal at unknown, most likely boulder

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TEST PIT ENVIRONMENTAL LOG

TEST PIT NO. **TP06**

SHEET 1 OF 1

Client:	**John Holland**	Date Commenced:	**29/11/19**
Project:	**WestConnex Stage 3b - Rozelle Interchange**	Date Completed:	**29/11/19**
Test Pit Location:	**CR07**	Recorded By:	**AW**
Project Number:	**PS117368**	Log Checked By:	

Excavation Method:

Surface RL:

Co-ords: **E -33.871725 N 151.172744**

Test Pit Information				Field Material Description						
1	2	3	4	5	6	7	8	9	10	11
WATER	RL(m) / DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION (SOIL NAME; plasticity/grain size, colour, particle shape, secondary components, minor constituents, moisture, relative density/consistency) (ROCK NAME; grain size, colour, weathering, strength, minor constituents)	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H; FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS (Defects - depth, type, orientation, spacing, planarity, roughness, thickness, coating)
	0.20					FILL: TOPSOIL: Brown				
						FILL: Clayey SAND: Brown/yellow, significant shell and sandstone gravel, coarse grained, medium plasticty with some roots.				No odours or visible contamination
		PID=12.1 ppm	J&B							TP06_0.6
	0.80									
	1	PID=4.5 ppm	B&J			Increasing SAND				TP06_1.0
	1.50		J			SAND: Yellow/brown, coarse grained.				TP06_1.6
						END OF TEST PIT AT 1.60 m				Refusal on rock
	2									

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	TPH					TRH							BTEX					
	C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C10 - C16	C10 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																		
NEPM 2013 Table 1A(1) HILs Rec C Soil																		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay																		
0-1m							310 #9		NL #10				4	NL #10	NL #10			NL #10
1-2m							480 #9		NL #10				6	NL #10	NL #10			NL #10
2-4m							NL #10		NL #10				9	NL #10	NL #10			NL #10
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Clay																		
0-1m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10
1-2m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10
2-4m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10

Field ID	Date																		
TP01_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	29/11/2019	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	29/11/2019	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics

Number of Results	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Minimum Detect	ND	240	930	88	88	ND	ND	340	340	120	ND	120	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<20	240	930	88	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	
Average Concentration *	10	23	75	28	92	10	10	42	42	96	50	115	0.05	0.05	0.05	0.1	0.05	0.15	
95% UCL (Student's-t) *	10	45.01	162.7	34.59	202.6	10	10	72.94	72.94	169.5	50	221.1	0.05	0.05	0.05	0.1	0.05	0.15	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK & HILD on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#7 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#8 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Derived soil HSL exceeds soil saturation concentration
#11 To obtain F2 subtract naphthalene from the >C10 - C16 fraction.
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001% w/w. *Organic fibre detected.No trace asbestos detected.
#14 Organic fibres detected.
#15 No respirable fibres detected.

		PAH																			PCB								
		2-Methylchlo lanthrene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum)	Benzo(a)pyrene TEQ calc (Zero)	Arochlor 1016	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																			4,000[#1]	40[#2]								7[#3]
NEPM 2013 Table 1A(1) HILs Rec C Soil																			300[#1]	3[#2]								1[#3]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																												
0-1m																NL[#10]												
1-2m																NL[#10]												
2-4m																NL[#10]												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																												
0-1m																NL[#10]												
1-2m																NL[#10]												
2-4m																NL[#10]												
Field ID	**Date**																												
TP01_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	-	2.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	0.5	2.0	-	2.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																												
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental I
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Metals																								
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#4]		500		300,000	900	3,600[#5]	4,000	240,000		1,500[#6]	60,000	730[#7]		6,000			10,000					400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#4]		90		20,000	90	300[#5]	300	17,000		600[#6]	19,000	80[#7]		1,200			700					30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																									
0-1m																									
1-2m																									
2-4m																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									
Field ID	**Date**																								
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<5	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																									
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Phenols																				
	2,3,4,6-tetrachlorophenol	2,4,5-trichlorophenol	2,4,6-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3/4-methyl phenol (m/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Dinoseb	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																	660	240,000			
NEPM 2013 Table 1A(1) HILs Rec C Soil																	120	40,000			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																					
0-1m																					
1-2m																					
2-4m																					
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																					
0-1m																					
1-2m																					
2-4m																					

Field ID	Date																					
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20	
Average Concentration *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10	
95% UCL (Student's-t) *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental I
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	OCP																							
	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				45		530,000				3,600						100			50		80	2,500	160
NEPM 2013 Table 1A(1) HILs Rec C Soil				10		70,000				400						20			10		10	400	30
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																							
0-1m																							
1-2m																							
2-4m																							
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																							
0-1m																							
1-2m																							
2-4m																							

Field ID	Date																							
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<100**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<1**
Average Concentration *	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**
95% UCL (Student's-t) *	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		OPP																	Asbestos	Major/minor ions				Radioactive	Explosives		
		Azinophos methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Parathion	Phorate	Ronnel	Asbestos [Fines and fibrous FA+AF]	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/Kg	% (w/w)	mg/kg	mg/Kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg
EQL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2		5	5	5	5	10	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				2,000																							
NEPM 2013 Table 1A(1) HILs Rec C Soil				250																							
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																											
0-1m																											
1-2m																											
2-4m																											
Field ID	**Date**																										
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	2,100	520	430	120	<10	-	-	-
TP01_1.2	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600	1,200	300	1,800	<10	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	12,000	170	170	190	<10	-	-	-
TP02_1.2	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,400	2,200	740	1,600	<10	-	-	-
TP03_0.5	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	59,000	410	260	600	<10	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	190	150	310	<10	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,600	470	330	120	<10	-	-	-
TP04_1.0	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	240	180	-	<10	-	-	-
TP05_0.6	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,300	400	210	82	<10	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000	350	170	760	<10	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	33,000	200	130	200	<10	-	-	-
TP06_1.0	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	320	190	880	<10	-	-	-
Statistics																											
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental I
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		SPOCAS																																		
		% Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Net Extraneous Material	MCl Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	sulfidic - Titratable Actual Acidity	Sulfidic-Acid Neutral	Titratable Actual Acidity	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-Trichlorobenzene	1-Chloronaphthalene	1-naphthylamine	2-chloronaphthalene	2-methylnaphthalene	2-naphthylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzoyl chloride
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.01		0.005	0.1	1	10	0.02	0.003	0.02	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapo																																				
0-1m																																				
1-2m																																				
2-4m																																				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																																				
0-1m																																				
1-2m																																				
2-4m																																				
Field ID	**Date**																																			
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																				
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	SVOC																													
	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz[a,j]acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Diphenylamine	EPN	Ethoprop	Fensulfothion	Hexachlorocyclopentadiene	Hexachloroethane	Mevinphos (Phosdrin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Phronamide	Trichloronate	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																														
0-1m																														
1-2m																														
2-4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																														
0-1m																														
1-2m																														
2-4m																														

Field ID	Date																													
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	
Average Concentration *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25	
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.25	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
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#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	2-chlorotoluene	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Bromobenzene	Bromochloromethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(1) HILs Rec C Soil																									
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0-1m																									
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									

Field ID	Date																									
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
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#15 No respirable fibres detected.

OC

	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chlorobenzene	Chloromethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(1) HILs Rec C Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																									
0-1m																									
1-2m																									
2-4m																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									

Field ID	Date																									
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	TPH					TRH							BTEX					
	C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C10 - C16	C10 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Public Open Space																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																		
Clay 0-2m							215[#7]	170[#8]		2,500			95	135	185			95
NEPM 2013 Table 1B(6) ESLs for Urban Res																		
Clay 0-2m							180[#7]	120[#11]		1,300	5,600		65	105	125			45

Field ID	Date																		
TP01_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	29/11/2019	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	29/11/2019	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics

Number of Results	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Minimum Detect	ND	240	930	88	88	ND	ND	340	340	120	ND	120	ND	ND	ND	ND	ND	ND
Maximum Concentration	<20	240	930	88	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
Average Concentration *	10	23	75	28	92	10	10	42	42	96	50	115	0.05	0.05	0.05	0.1	0.05	0.15
95% UCL (Student's-t) *	10	45.01	162.7	34.59	202.6	10	10	72.94	72.94	169.5	50	221.1	0.05	0.05	0.05	0.1	0.05	0.15

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#11 Moderate reliability.
#12 Nil
ND=Non detect

		PAH																				PCB								
		3-methylcholanthrene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a) pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum)	Benzo(a)pyrene TEQ calc (Zero)	Arochlor 1016	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1221	Arochlor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																370													
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																170													
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m							1.4																						
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m							0.7																						
Field ID	**Date**																												
TP01_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	-	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	0.5	2.0	-	2.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																													
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Metals																										
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind			160[#1]						600		320		1,800[#4]												1200
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ			100[#1]						360		230		1,100[#4]				480								810
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																									
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																									
Field ID	**Date**																										
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<5	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																											
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Asbestos	Major/minor ions				Radioactive	Explosives			Phenols																				
	Asbestos (Fines and Fibrous FA+AF)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	2,3,4,6-tetrachlorophenol	2,4,5-trichlorophenol	2,4,6-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3/4-methyl phenol (m/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Dinoseb	Pentachlorophenol	Phenol	tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		5	5	5	5	10	0.5	0.5	0.5	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																														
Clay 0-2m																														
NEPM 2013 Table 1B(6) ESLs for Urban Res																														
Clay 0-2m																														
Field ID	**Date**																													
TP01_0.5	**29/11/2019**	ND	2,100	520	430	120	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	**29/11/2019**	-	6,600	1,200	300	1,800	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	ND	12,000	170	170	190	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	**29/11/2019**	-	8,400	2,200	740	1,600	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	**29/11/2019**	ND	59,000	410	260	600	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	16,000	190	150	310	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	ND	1,600	470	330	120	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	**29/11/2019**	-	19,000	240	180	<5	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	**29/11/2019**	ND	1,300	400	210	82	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	13,000	350	170	760	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	ND	33,000	200	130	200	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	**29/11/2019**	-	19,000	320	190	880	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results		**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<1**	**<1**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.2**	**<1**	**<0.4**	**<5**	**<20**	**<1**	**<5**	**<20**	**<1**	**<0.5**	**<10**	**<1**	**<20**
Average Concentration *		**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**
95% UCL (Student's-t) *		**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		OCP																							OPP								
		4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Azinophos methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind										640																							
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ										180																							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																																	
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																																	
Field ID	**Date**																																
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<100**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<1**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**
Average Concentration *		**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
95% UCL (Student's-t) *		**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Parathion	Phorate	Ronnel
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind								
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m								
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m								
Field ID **Date**								
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-
Statistics								
Number of Results	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**
Average Concentration *	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**
95% UCL (Student's-t) *	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SPOCAS											
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Extraneous Material	HCl Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Sulfidic - Titratable Actual Acidity	Sulfidic-Acid Neutral	Titratable Actual Acidity
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t
EQL		0.1	0.01		0.005	0.1	1	10	0.02	0.003	0.02	2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind												
Clay 0-2m												
NEPM 2013 Table 1B(6) ESLs for Urban Res												
Clay 0-2m												
Field ID	**Date**											
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SVOC																																	
		1,2,3,4-Tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	1,3,5-Trichlorobenzene	1-Chloronaphthalene	1-naphthylamine	2-chloronaphthalene	2-methylnaphthalene	2-naphthylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz(a,j)acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																																			
Field ID	**Date**																																		
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Di-n-octyl phthalate	Diphenylamine	EPN	Ethoprop	Fensulfothion	Hexachlorocyclopentadiene	Hexachloroethane	Mevinphos (Phosdrin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Pronamide	Trichloronate	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																	
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																	
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																	
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																	
Field ID **Date**																	
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																	
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.5**
Average Concentration *	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**
95% UCL (Student's-t) *	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		VOC																																	
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	4-chlorotoluene	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																			
Clay 0-2m																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res																																			
Clay 0-2m																																			
Field ID	**Date**																																		
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

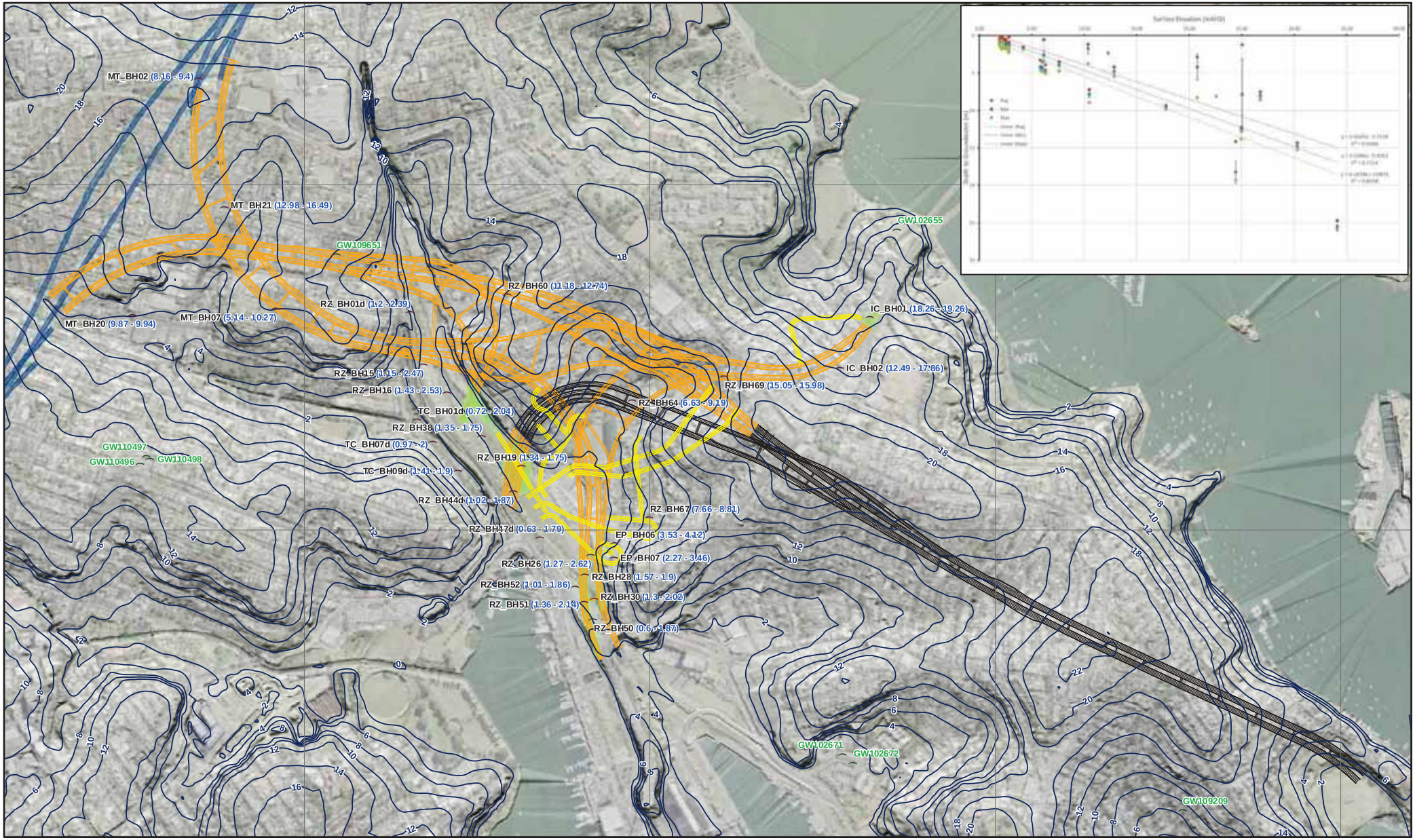
#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Chlorobenzene	Chloromethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																		
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																		
Field ID **Date**																		
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																		
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

P S M

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

Rozelle Interchange & WHT Enabling Works Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\PSM3696\Eng\GIS\03_Figures\PSM3696-022R Final\Figure 4 Project Wide Interpreted Groundwater Level Contours.mxd

Borehole Log WAC1-BH3

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 10.06.2020
COMPLETED: 10.06.2020
DRILLING COMPANY: ADE
LOCATION:
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 3.301 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
PH	3	0.5		CL	(Horizon A) Sandy CLAY: low to medium plasticity, white / orange and brown, with gravels, moist.	WAC1-BH3 0.3			Horizon A – General Fill
	2.5	1				WAC1-BH3 1.0			
	2	1.5							
	1.5	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 2.2	Natural Shells and Acid Sulfate Soil Odours		Horizon B – Marine Sediment / Reworke PASS
SFA	1	2.5							
	0.5	3		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.	WAC1-BH3 3.0			
	0	3.5							
	-0.5	4		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH3 4.0			
	-1	4.5							
Core	-1.5	5			(Horizon C) SANDSTONE: coarse grained, light yellow / white / orange, moderately graded	WAC1-BH3 5.0			Horizon C – Residual Material / Bedrock
	-2	5.5							

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC1-BH3

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
	-2	6							
	-3	6.5				WAC1-BH3 6.5			
	-3	7			Termination Depth at: 6.6 m BGL - Target Depth Reached				
	-4	7.5							
	-4	8							
	-5	8.5							
	-5	9							
	-6	9.5							
	-6	10							
	-7	10.5							
	-7	11							
	-8	11.5							
	-8	12							

Disclaimer This bore log is intended for environmental not geotechnical purposes.

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Borehole Log WAC1-BH7

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 12.06.2020
COMPLETED: 12.06.2020
DRILLING COMPANY: ADE
LOCATION:
EQUIPMENT: Comacchio GEO 205
ELEVATION (RL) 2.350 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
PH	1.5	0.5		SC	(Horizon A) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.3			Horizon A – General Fill
	1	1		SC	(Horizon B) Clayey SAND: fine to medium grained, brown, well graded, moist.	WAC1-BH7 0.7	Natural Shells and Acid Sulfate Soil Odours		Horizon B – Marine Sediment / Reworked PASS
	0.5	1.5							
	0	2		SM	(Horizon B) Silty SAND: fine to medium grained, brown / grey, moderately graded, wet.	WAC1-BH7 2.3			
SFA	-0	2.5							
	-1	3				WAC1-BH7 3.0			
	-1	3.5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist.				
	-2	4				WAC1-BH7 4.0			
Core	-2	4.5			(Horizon C) SANDSTONE: fine to medium grained, light grey / yellow / red, moderately graded.	WAC1-BH7 4.7			Horizon C – Residual Material / Bedrock
	-3	5							
	-3	5.5				WAC1-BH7 5.5			

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Borehole Log WAC1-BH7

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
	-4	6							
	-4	6.5				WAC1-BH7 6.5			
	-5	7			Termination Depth at: 6.6 m BGL - Target Depth Reached				
	-5	7.5							
	-6	8							
	-6	8.5							
	-7	9							
	-7	9.5							
	-8	10							
	-8	10.5							
	-9	11							
	-9	11.5							
	-1	12							

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

Borehole Log WAC2-BH1

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 25.05.2020
COMPLETED: 25.05.2020
DRILLING COMPANY: ADE
LOCATION: 331046.848, 6250625.986
EQUIPMENT: Comacchio GEO 305
ELEVATION (RL) 3.600 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
SFA	3.5	0.5		SC	Clayey SAND: fine to medium grained, well graded, grey / brown, with gravels, moist.	BH1 0.3			Horizon A - General Fill
	3	1			(Horizon A) Silty SAND: fine to medium grained, yellow / grey and brown, moderately graded, some gravels, moist.	BH1 1.0			
	2.5	1.5							
	2	2				BH1 2.0			
	1.5	2.5							
	1	3				BH1 3.0			
	0.5	3.5							
	0	4				BH1 4.0			
	-0.5	4.5							
	-1	5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist to wet.	BH1 5.0	Natural Shells		Horizon B - Marine Sediment / Alluvium Material
	-1.5	5.5							
	-2				Termination Depth at: 5.5 m BGL - Target Depth Reached				

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Nov 2020

BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW02

SHEET 1 OF 1

Client:	**John Holland|CPB Contractors Joint Venture**	Date Commenced:	**23-11-20**
Project:	**Rozelle Interchange - Buruwan Park**	Date Completed:	**23-11-20**
Borehole Location:	**Buruwan Park**	Recorded By:	**LBowe**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Stratacore - M14**	Driller:	**Stratacore**	Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 10 SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Monument (0.7m stick up) and casing Backfill						Reworked natural material/sandstone fill		D		
			Bentonite seal		0.30				CONCRETE SLAB				
					0.50	2.2	B&J		SANDSTONE; recovered as Clayey SILT, orange/light brown, dry, f-m grained				WSP_CRW_GW02_0.5
			Sand						Recovered as sandy, clayey SILT, m grained, lighter orange				
			1mm uPVC slotted screen		-1	1.3	B&J						WSP_CRW_GW02_1.0 QA04/QA04A
					-2	1.2	B&J		Becoming softer, white/light orange, silty clayey SAND (larger grains) Light grey/orange mottles				WSP_CRW_GW02_2.0
					-3	1.1	B&J						WSP_CRW_GW02_3.0
					-4								
		▼									M		
					-5				Slightly moist				Moist once pulled augers up, cuttings stuck to auger
			Bottom cap		6.00 -6				Target depth reached END OF BOREHOLE AT 6.00 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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			Acid Sulphate Soils - Acid Base Accounting					Acid Sulphate Soils - Acidity		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils -	
			a-Net Acidity without ANCE	s-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity	Acid Neutralising Capacity (acidity units)_	Acid Neutralising Capacity (sulfur units)	Liming Rate excluding ANC_	Liming Rate	Chromium Reducible Sulfur	Chromium Reducible Sulphur (acidity units)
			moles H+/t	%w/w S	-	mole H+/t	%S	%S	mole H+/t	%CaCO3	mole H+/t	%S	kg CaCO3/t	kg CaCO3/t	%S	mole H+/t
EQL			10	0.02	0.5	10	0.02	0.02	2	0.01	10	0.01	1	1	0.005	10
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																
NEPM 2013 Table 1A(1) HILs Rec C Soil																
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																
0-1m																
1-2m																
2-4m																
>=4m																
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																
0-1m																
1-2m																
2-4m																
>=4m																
USEPA RSL May 2020 -Residentl Soil (THQ 1)																
USEPA RSL May 2020 - Industrial Soil (THQ 1)																
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																
Lab Report Number	**Field ID**	**Date**														
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	11	<0.02	1.5	<10	<0.02	<0.02	<2	2.94	587	0.94	<1	<1	0.018	11
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**11**	**ND**	**1.5**	**ND**	**ND**	**ND**	**ND**	**2.94**	**587**	**0.94**	**ND**	**ND**	**0.018**	**11**
Maximum Concentration			**11**	**<0.02**	**1.5**	**<10**	**<0.02**	**<0.02**	**<2**	**2.94**	**587**	**0.94**	**<1**	**<1**	**0.018**	**11**
Average Concentration *																

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be subtracted from the relevant fractions to obtain F1 & F2

			BTEX				TRH							Asbestos					TPH			
			Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	Asbestos (Fines and Fibrous <7mm)	Asbestos Containing Material	Asbestos Containing Material (as 15% Asbestos in A	Asbestos from FA & AF	Fibrous Asbestos >7mm	C6-C9	C10-C14	C15-C28	C29-C36
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g	g	%	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.2	0.5	0.5	0.5	10	10	50	50	100	100	50	0.0004	0.1	0.01	0.001	0.0004	10	50	100	100
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																						
NEPM 2013 Table 1A(1) HILs Rec C Soil																						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																						
0-1m			3	NL #8	NL #8	230		260 #9		NL #8												
1-2m			3	NL #8	NL #8	NL #8		370 #9		NL #8												
2-4m			3	NL #8	NL #8	NL #8		630 #9		NL #8												
>=4m			3	NL #8	NL #8	NL #8		NL #8		NL #8												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																						
0-1m			NL #8	NL #8	NL #8	NL #8		NL #8		NL #8												
1-2m			NL #8	NL #8	NL #8	NL #8		NL #8		NL #8												
2-4m			NL #8	NL #8	NL #8	NL #8		NL #8		NL #8												
>=4m			NL #8	NL #8	NL #8	NL #8		NL #8		NL #8												
USEPA RSL May 2020 -Residentl Soil (THQ 1)																						
USEPA RSL May 2020 - Industrial Soil (THQ 1)																						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil							700 #10		1,000 #10		3,500	10,000										
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil							700 #10		1,000 #10		2,500	10,000										
Lab Report Number	**Field ID**	**Date**																				
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_CRW_GW02_1.0	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100
	WSP_CRW_GW03_3.0	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	<10	<50	<100	<100
Statistics																						
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.0004**	**<0.1**	**<0.01**	**<0.001**	**<0.0004**	**<10**	**<50**	**<100**	**<100**
Average Concentration *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**	**5**	**25**	**50**	**50**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

				MAH								
			C10-C36 (Sum of total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil												
NEPM 2013 Table 1A(1) HILs Rec C Soil												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand												
0-1m												
1-2m												
2-4m												
>=4m												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand												
0-1m												
1-2m												
2-4m												
>=4m												
USEPA RSL May 2020 -Residentl Soil (THQ 1)												
USEPA RSL May 2020 - Industrial Soil (THQ 1)												
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil												
Lab Report Number	**Field ID**	**Date**										
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	<50	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	<50	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	<50	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	<50	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results			**5**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *			**25**									

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			PAH																			
			2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																					40[#1]	4,000[#2]
NEPM 2013 Table 1A(1) HILs Rec C Soil																					3	300[#2]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																						
0-1m																		NL [#8]				
1-2m																		NL [#8]				
2-4m																		NL [#8]				
>=4m																		NL [#8]				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																						
0-1m																		NL [#8]				
1-2m																		NL [#8]				
2-4m																		NL [#8]				
>=4m																		NL [#8]				
USEPA RSL May 2020 -Residentl Soil (THQ 1)																						
USEPA RSL May 2020 - Industrial Soil (THQ 1)																						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																						
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																						
Lab Report Number	**Field ID**	**Date**																				
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
Statistics																						
Number of Results			**1**	**1**	**1**	**1**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.6**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**0.6**	**<0.5**
Average Concentration *							**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.6**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Metals															
			Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			5	10	1	50	1	2	2	5	5	5	0.1	2	5	0.1	5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#3]		500	300,000	900	3,600[#4]	4,000	240,000	1,500[#5]	60,000	730[#6]	6,000	10,000			400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#3]		90	20,000	90	300[#4]	300	17,000	600[#5]	19,000	80[#6]	1,200	700			30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																		
0-1m																		
1-2m																		
2-4m																		
>=4m																		
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																		
0-1m																		
1-2m																		
2-4m																		
>=4m																		
USEPA RSL May 2020 -Residentl Soil (THQ 1)																16		
USEPA RSL May 2020 - Industrial Soil (THQ 1)																230		
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																		
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																		
Lab Report Number	**Field ID**	**Date**																
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	<5	<10	<1	<50	<1	5	<2	<5	<5	15	<0.1	<2	<5	<0.1	9	<5
	WSP_BP_EX02_1.8	**28/04/2020**	<5	<10	<1	<50	<1	<2	<2	<5	<5	<5	<0.1	<2	<5	<0.1	<5	<5
	WSP_BP_EX03_1.8	**28/04/2020**	<5	<10	<1	<50	<1	13	<2	<5	<5	17	<0.1	<2	<5	0.2	23	11
	WSP_BP_EX04_1.8	**28/04/2020**	<5	<10	<1	<50	<1	3	<2	<5	<5	26	<0.1	<2	<5	<0.1	<5	12
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<5	40	<1	<50	<1	15	9	8	<5	52	<0.1	5	<5	0.2	16	18
	WSP_CRW_GW02_1.0	**23/11/2020**	<5	<10	<1	<50	<1	4	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_GW03_3.0	**23/11/2020**	<5	<10	<1	<50	<1	4	6	<5	<5	<5	<0.1	3	<5	<0.1	<5	<5
Statistics																		
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**40**	**ND**	**ND**	**ND**	**3**	**5**	**8**	**ND**	**5**	**ND**	**3**	**ND**	**0.2**	**9**	**11**
Maximum Concentration			**<5**	**40**	**<1**	**<50**	**<1**	**15**	**9**	**8**	**<5**	**52**	**<0.1**	**5**	**<5**	**0.2**	**23**	**18**
Average Concentration *			**2.5**	**10**	**0.5**	**25**	**0.5**	**6.4**	**3.4**	**3.3**	**2.5**	**17**	**0.05**	**2.1**	**2.5**	**0.093**	**8.3**	**7.3**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
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#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Phenols												Explosives											
			3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil													660	240,000								45		530
NEPM 2013 Table 1A(1) HILs Rec C Soil													120	40,000								10		70
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX02_1.8	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_BP_EX04_1.8	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_CRW_GW02_1.0	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	WSP_CRW_GW03_3.0	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Statistics																								
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**1**	**1**	**1**	**1**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**
Average Concentration *			**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**					**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Organochlorine Pesticides																	
			Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.2
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								3,600		2,000,000				100			50		80	2,500
NEPM 2013 Table 1A(1) HILs Rec C Soil								400		340,000				20			10		10	400
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
0-1m																				
1-2m																				
2-4m																				
>=4m																				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																				
0-1m																				
1-2m																				
2-4m																				
>=4m																				
USEPA RSL May 2020 -Residentl Soil (THQ 1)																				
USEPA RSL May 2020 - Industrial Soil (THQ 1)																				
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																				
Lab Report Number	**Field ID**	**Date**																		
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX02_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX03_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_BP_EX04_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_GW02_1.0	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_GW03_3.0	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2

Statistics

Number of Results	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**
Average Concentration *	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Organophosphorous Pesticides														Herbicides	Pesticides						
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil							2,000																	
NEPM 2013 Table 1A(1) HILs Rec C Soil							250																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
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USEPA RSL May 2020 -Residentl Soil (THQ 1)																								
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX02_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX03_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX04_1.8	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW02_1.0	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW03_3.0	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
Statistics																								
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**1**	**1**	**1**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.2**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.05**	**<0.2**	**<0.05**
Average Concentration *			**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.1**	**0.025**				**0.025**	**0.025**	**0.1**	**0.025**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Halogenated Hydrocarbons					Halogenated Benzenes																
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																								
NEPM 2013 Table 1A(1) HILs Rec C Soil																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
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USEPA RSL May 2020 -Residentl Soil (THQ 1)																								
USEPA RSL May 2020 - Industrial Soil (THQ 1)																								
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *																								

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
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#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Chlorinated Hydrocarbons																								
			1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											
NEPM 2013 Table 1A(1) HILs Rec C Soil																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
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2-4m																											
>=4m																											
USEPA RSL May 2020 -Residentl Soil (THQ 1)																											
USEPA RSL May 2020 - Industrial Soil (THQ 1)																											
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																											
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																											
Lab Report Number	**Field ID**	**Date**																									
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																											
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**
Average Concentration *																											

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			VOCs			Solvents						SVOCs												
			cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	5	5	5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																								
NEPM 2013 Table 1A(1) HILs Rec C Soil																								
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
1-2m																								
2-4m																								
>=4m																								
USEPA RSL May 2020 -Residentl Soil (THQ 1)																								
USEPA RSL May 2020 - Industrial Soil (THQ 1)																								
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *																								

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important a
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#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment sho
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a
#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

						Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics				
			N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil											7[#7]													
NEPM 2013 Table 1A(1) HILs Rec C Soil											1[#7]													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																								
0-1m																								
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NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Lab Report Number	**Field ID**	**Date**																						
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**7**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**
Average Concentration *											**0.05**													

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should c
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#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			Phthalates			
			Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil						
NEPM 2013 Table 1A(1) HILs Rec C Soil						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand						
0-1m						
1-2m						
2-4m						
>=4m						
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand						
0-1m						
1-2m						
2-4m						
>=4m						
USEPA RSL May 2020 -Residentl Soil (THQ 1)						
USEPA RSL May 2020 - Industrial Soil (THQ 1)						
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil						
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil						
Lab Report Number	**Field ID**	**Date**				
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-
Statistics						
Number of Results			**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *						

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TE
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#8 Derived soil HSL exceeds soil saturation concentraiton
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Separate management limits for BTEX & napthalene are not available hence should not be

			BTEX				TRH							Asbestos					MAH								
			Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	Asbestos (Fines and Fibrous <7mm)	Asbestos Containing Material	Asbestos Containing Material (as 15% Asbestos in A	Asbestos from FA & AF	Fibrous Asbestos >7mm	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g	g	%	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.2	0.5	0.5	0.5	10	10	50	50	100	100	50	0.0004	0.1	0.01	0.001	0.0004	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																											
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																											
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil			75	135	165	180		215[#7]	170		1,700	3,300															
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil			50	85	70	105		180[#8]	120[#9]		300	2,800															
Lab Report Number	**Field ID**	**Date**																									
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<0.0004	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	<0.2	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																											
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	**6**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**<50**	**<0.0004**	**<0.1**	**<0.01**	**<0.001**	**<0.0004**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**										
95% UCL (Student's-t) *			**0.1**	**0.25**	**0.25**	**0.25**	**5**	**5**	**25**	**25**	**50**	**50**	**25**	**0.0002**	**0.05**	**0.005**	**0.0005**	**0.0002**										

* A Non Detect Muiltiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The ACL should be adjusted based on site-specific Clay content (when available). To calculate a site specific EIL, add the ABC to the ACL.
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific EIL, add the ABC to the ACL.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific CEC (when available). To calculate a site specific EIL, add the added background concentration (ABC) to the ACL.
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate a site specific EIL, add the ABC to the ACL.
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Moderate reliability.

			PAH																				Metals																	
			1-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz[a]anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a] pyrene	Benzo[a,h,i]perylene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene TEQ calc (Half)	PAHs (Sum of total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	10	1	50	1	2	2	5	5	5	0.1	2	5	0.1	5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																		370					160[#1]					310[#2]		140#3	1,800[#4]			55[#5]				360[#6]
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																		170					100[#1]					190[#2]		95[#3]	1,100[#4]			30[#5]				230[#6]
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil											1.4																												
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil											0.7																												
Lab Report Number	**Field ID**	**Date**																																					
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	5	<2	<5	<5	15	<0.1	<2	<5	<0.1	9	<5
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	<10	<1	<50	<1	<2	<2	<5	<5	<5	<0.1	<2	<5	<0.1	<5	<5
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	13	<2	<5	<5	17	<0.1	<2	<5	0.2	23	11
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	<10	<1	<50	<1	3	<2	<5	<5	26	<0.1	<2	<5	<0.1	<5	12
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	40	<1	<50	<1	15	9	8	<5	52	<0.1	5	<5	0.2	16	18
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	<10	<1	<50	<1	4	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<5	<10	<1	<50	<1	4	6	<5	<5	<5	<0.1	3	<5	<0.1	<5	<5
Statistics																																							
Number of Results			**1**	**1**	**1**	**1**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.6**	**ND**	**ND**	**40**	**ND**	**ND**	**ND**	**3**	**5**	**8**	**ND**	**5**	**ND**	**3**	**ND**	**0.2**	**9**	**11**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**0.6**	**<0.5**	**<5**	**40**	**<1**	**<50**	**<1**	**15**	**9**	**8**	**<5**	**52**	**<0.1**	**5**	**<5**	**0.2**	**23**	**18**
Average Concentration *							**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.6**	**0.25**	**2.5**	**10**	**0.5**	**25**	**0.5**	**6.4**	**3.4**	**3.3**	**2.5**	**17**	**0.05**	**2.1**	**2.5**	**0.093**	**8.3**	**7.3**
95% UCL (Student's-t) *							**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.6**	**0.25**	**2.5**	**19.72**	**0.5**	**25**	**0.5**	**10.36**	**5.822**	**4.812**	**2.5**	**30.12**	**0.05**	**3.299**	**2.5**	**0.147**	**14.36**	**11.95**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adju
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

			Phenols												Explosives				Organochlorine Pesticides																		
			3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																													640							
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																													180							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																				
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																				
Lab Report Number	**Field ID**	**Date**																																		
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX02_1.8	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_BP_EX04_1.8	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_CRW_GW02_1.0	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
	WSP_CRW_GW03_3.0	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05
Statistics																																				
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**1**	**1**	**1**	**1**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**
Average Concentration *			**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**					**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**
95% UCL (Student's-t) *			**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**					**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adju
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

									Organophosphorous Pesticides															Herbicides	Pesticides						
			Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	50	0.05	0.05	0.05	0.05	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																															
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																															
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																															
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																															
Lab Report Number	**Field ID**	**Date**																													
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX02_1.8	**28/04/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX03_1.8	**28/04/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_BP_EX04_1.8	**28/04/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW02_1.0	**23/11/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CRW_GW03_3.0	**23/11/2020**	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
Statistics																															
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**1**	**1**	**1**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.2**	**<0.2**	**<0.05**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.05**	**<0.2**	**<0.05**
Average Concentration *			**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.1**	**0.025**				**0.025**	**0.025**	**0.1**	**0.025**
95% UCL (Student's-t) *			**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.1**	**0.1**	**0.025**				**0.025**	**0.025**	**0.1**	**0.025**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adju
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fract
#9 Moderate reliability.

			Halogenated Hydrocarbons					Halogenated Benzenes										Chlorinated Hydrocarbons																					
			1,2-dibromomethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																							
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																							
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																							
Lab Report Number	**Field ID**	**Date**																																					
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																							
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
Average Concentration *																																							
95% UCL (Student's-t) *																																							

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adju
#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

																VOCs			Solvents						SVOCs										
			Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	5	5	5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																			
Lab Report Number	**Field ID**	**Date**																																	
ES2014462	**WSP_BP_EX01_2.0**	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	**28/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_GW02_0.5**	**23/11/2020**	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
Average Concentration *																																			
95% UCL (Student's-t) *																																			

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 yea
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
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#6 ACL value from NEPM 2013 Table 1B(1) using a soil pH of 6.0 and a CEC of 5 meq/100g. To calculate
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

			Amino Aliphatics						PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
			Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N,Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																														
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																														
Lab Report Number	**Field ID**	**Date**																												
ES2014462	WSP_BP_EX01_2.0	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX02_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX03_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BP_EX04_1.8	28/04/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_GW02_1.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_GW03_3.0	23/11/2020	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results			1	1	1	1	1	1	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *													0.05																	
95% UCL (Student's-t) *													0.05																	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 ye
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The AC
#3 ACL value from NEPM 2013 Table 1B(2) using a soil pH of 6 and CEC of 5. To calculate a site specific
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added back
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#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fracti
#9 Moderate reliability.

TABLE 3: 2020 Results Summary - Western Portion Fill Material - Ecological Exceedances

			PAH	Metals		
			Benzo(a) pyrene	Lead	Nickel	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	2	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind				1,800	55	360
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space				1,100	30	230
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil			1.4			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil			0.7			
Lab Report Number	**Field ID**	**Date**				
ADE WCX-08-17868.WAC169169	BH3_0.3	10.6.20	0.8	85	18	110
	BH3_1.0	10.6.20	<0.3	36	<10	48
	BH4_0.3	10.6.20	<0.3	121	<10	114
	BH5_0.3	11.06.20	0.7	30	<10	37
	BH6_0.3	11.06.20	<0.3	55	<10	47
ADE WCX-08-18311.WAC208	BH4A_0.8	4.9.20	<0.5	-	-	-
	BH4A_0.8	11.9.20	<0.3	10.3	18.7	31.9
ADE WCX-08-18712.WAC236	TP3-A	27.11.20	0.58	<10	<10	44.2
	TP3-B	27.11.20	<0.3	<10	<10	16.7
	TP3-C	27.11.20	0.8	53.3	<10	133
	TP6-A	27.11.20	0.76	18.4	<10	30.5
	TP6-B	27.11.20	0.51	50.9	<10	62.9
	TP6-C	27.11.20	<0.3	<10	<10	<5
WSP ES2041504	WSP_CRW_GW02_0.5	23/11/2020	<0.5	<5	3	18
		UCL	**0.592**	**-**	**-**	**-**

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.19/02/2021 11:19:31 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

B(a)P

General Statistics

Total Number of Observations	14	Number of Distinct Observations	7
		Number of Missing Observations	0
Minimum	0.3	Mean	0.496
Maximum	0.8	Median	0.5
SD	0.203	Std. Error of Mean	0.0542
Coefficient of Variation	0.408	Skewness	0.408

Normal GOF Test

Shapiro Wilk Test Statistic	0.825	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.262	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.592	95% Adjusted-CLT UCL (Chen-1995)	0.592
		95% Modified-t UCL (Johnson-1978)	0.593

Gamma GOF Test

A-D Test Statistic	1.064	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.737	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.282	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.229	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	6.519	k star (bias corrected MLE)	5.17
Theta hat (MLE)	0.0762	Theta star (bias corrected MLE)	0.096
nu hat (MLE)	182.5	nu star (bias corrected)	144.8
MLE Mean (bias corrected)	0.496	MLE Sd (bias corrected)	0.218
		Approximate Chi Square Value (0.05)	117.9
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	114.7

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.609	95% Adjusted Gamma UCL (use when n<50)	0.626

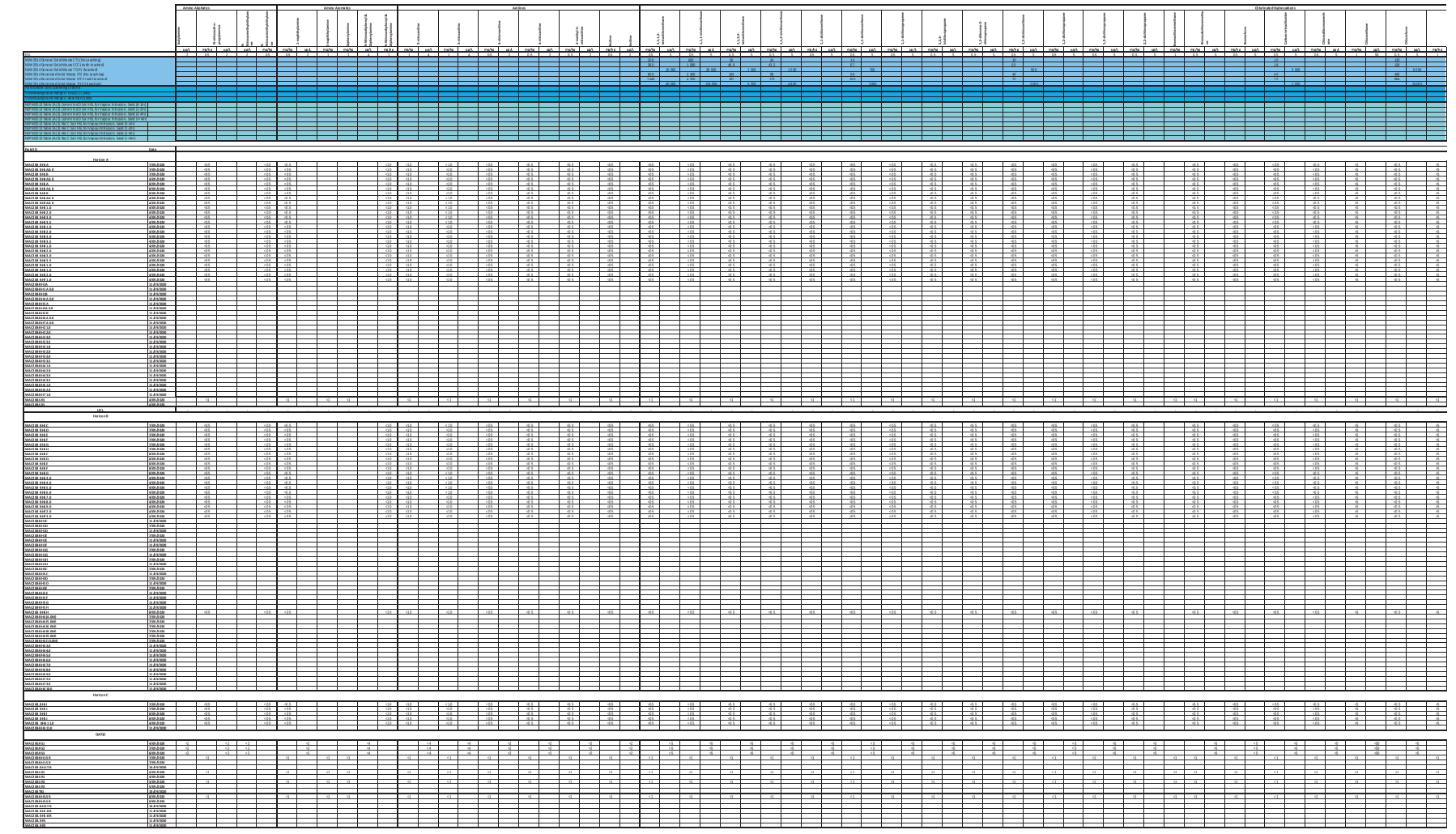
Lognormal GOF Test

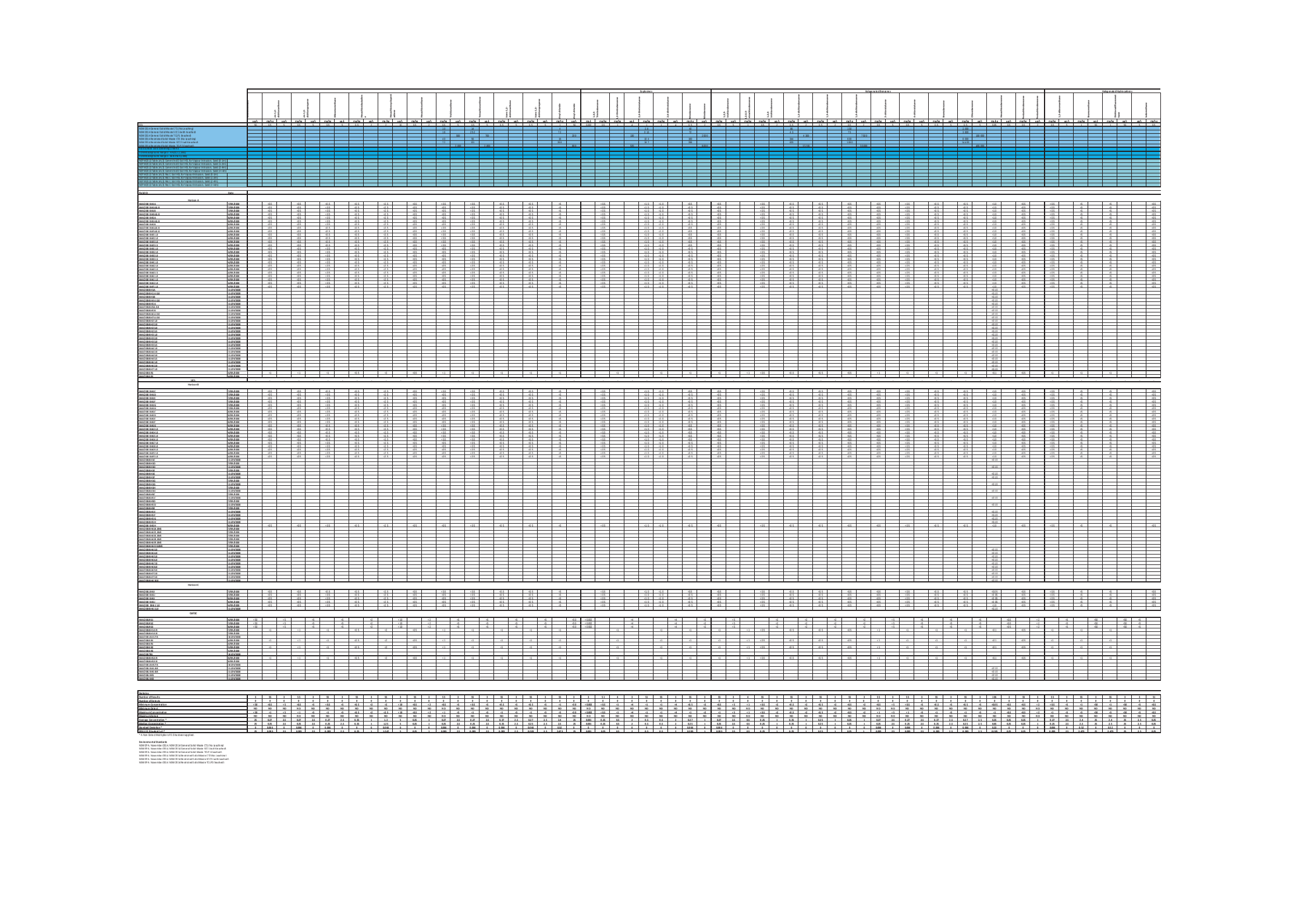
Shapiro Wilk Test Statistic	0.813	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.277	**Lilliefors Lognormal GOF Test**

55	5% Lilliefors Critical Value					0.226	Data Not Lognormal at 5% Significance Level					
56	**Data Not Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					-1.204	Mean of logged Data					-0.779
60	Maximum of Logged Data					-0.223	SD of logged Data					0.413
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					0.628	90% Chebyshev (MVUE) UCL					0.664
64	95% Chebyshev (MVUE) UCL					0.74	97.5% Chebyshev (MVUE) UCL					0.845
65	99% Chebyshev (MVUE) UCL					1.052						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data do not follow a Discernible Distribution (0.05)**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					0.586	95% Jackknife UCL					0.592
72	95% Standard Bootstrap UCL					0.583	95% Bootstrap-t UCL					0.603
73	95% Hall's Bootstrap UCL					0.583	95% Percentile Bootstrap UCL					0.586
74	95% BCA Bootstrap UCL					0.585						
75	90% Chebyshev(Mean, Sd) UCL					0.659	95% Chebyshev(Mean, Sd) UCL					0.733
76	97.5% Chebyshev(Mean, Sd) UCL					0.835	99% Chebyshev(Mean, Sd) UCL					1.035
77												
78	**Suggested UCL to Use**											
79	95% Student's-t UCL					0.592	or 95% Modified-t UCL					0.593
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

ADE - Westconne x Stage 3B, Rozelle Interchange: WCK-08-17868 / WAC169

| | | |





	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (FOSA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluoropentanoic acid (PFPeA)	10:2 Fluorotelomer Sulfonic acids	Perfluoroundecanoic acid (PFUnA)	Perfluorododecanoic acid (PFDoA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	Sum of PFAS total	Sum of PFAS (WA DWR)	Chromium (Hexavalent)	Manganese (Dissolved)	Moisture Content	Aluminium (Dissolved)	Antimony (Dissolved)	Arsenic (Dissolved)	Barium (Dissolved)	Beryllium (Dissolved)	Boron (Dissolved)	Cadmium (Dissolved)	Chromium (Dissolved)	Cobalt (Dissolved)	Copper (Dissolved)	Iron (Dissolved)	Lead (Dissolved)	Lithium (Dissolved)	Molybdenum (Dissolved)	Nickel (Dissolved)	Selenium (Dissolved)	Silver (Dissolved)	Thallium (Dissolved)	Tin (Dissolved)	Uranium (Dissolved)	Vanadium (Dissolved)	Zinc (Dissolved)	Mercury (Dissolved)	Sulfate	Sulfide	Cyanide
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	1	10	1	2	10	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.1	0.1	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NSW 202-4 General Solid Waste (CT1) Receiving																																																	
NSW 202-4 General Solid Waste (CT1) Leaching							10									10																																	
NSW 202-4 Restricted Solid Waste (CT2) Receiving																																																
NSW 202-4 Restricted Solid Waste (CT2) Leaching							10									10																																	
NSW 202-4 Hazardous Waste (CT3) Receiving																																																
NSW 202-4 Hazardous Waste (CT3) Leaching							50									50																																	
Ecotoxicological Human Health Risk Assessment																																																
Ecotoxicological Environmental Risk Assessment																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (D-1pm)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (1-2m)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (2-4m)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (4-8m)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (8-16m)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (16-40m)																																																
NEPM 2013 (B) Table 1A(1) Commercial and Industrial Sites Soil Vapour Investigation Levels, Sand (>40m)																																																

Pad ID Date

Horizon A

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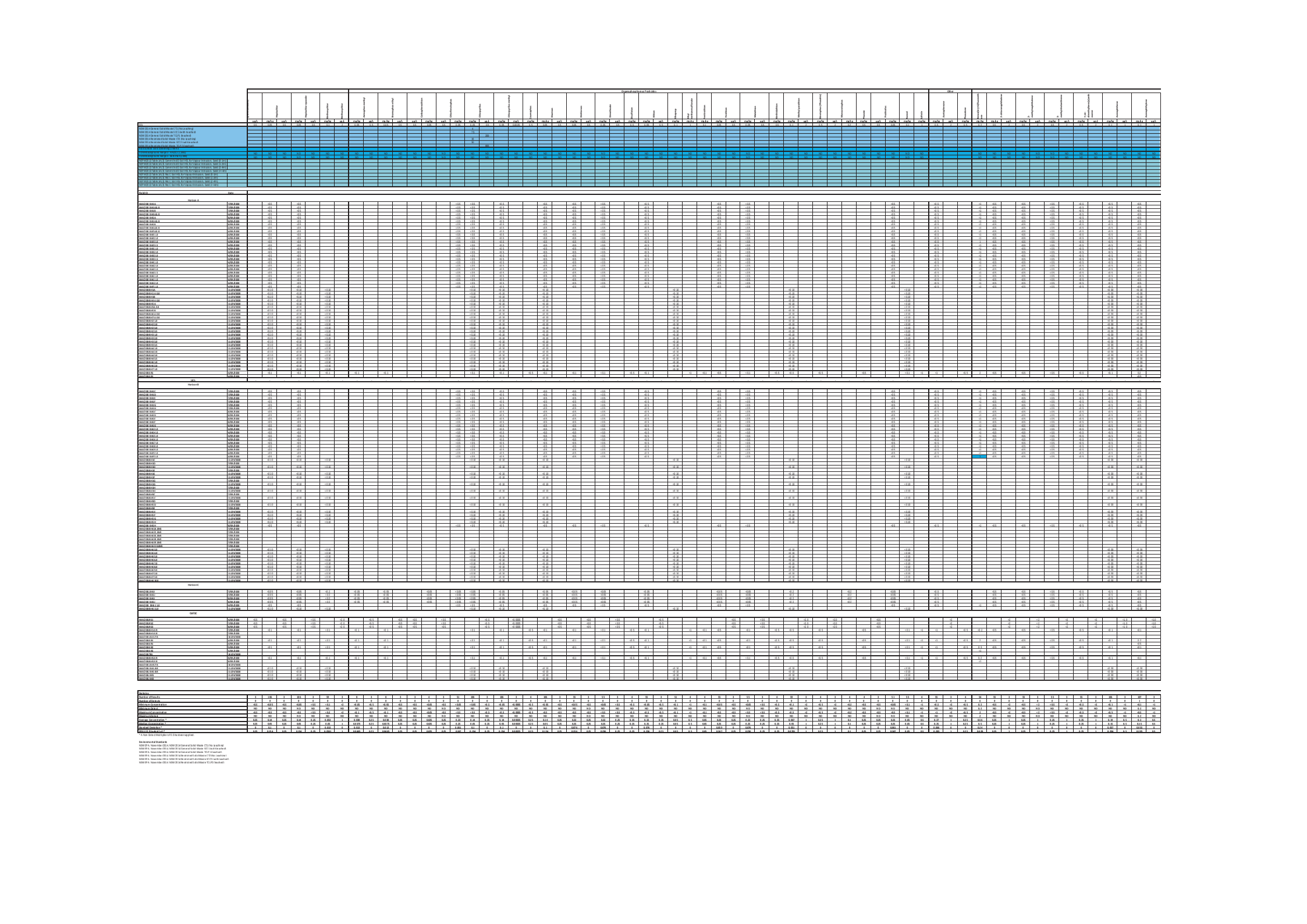
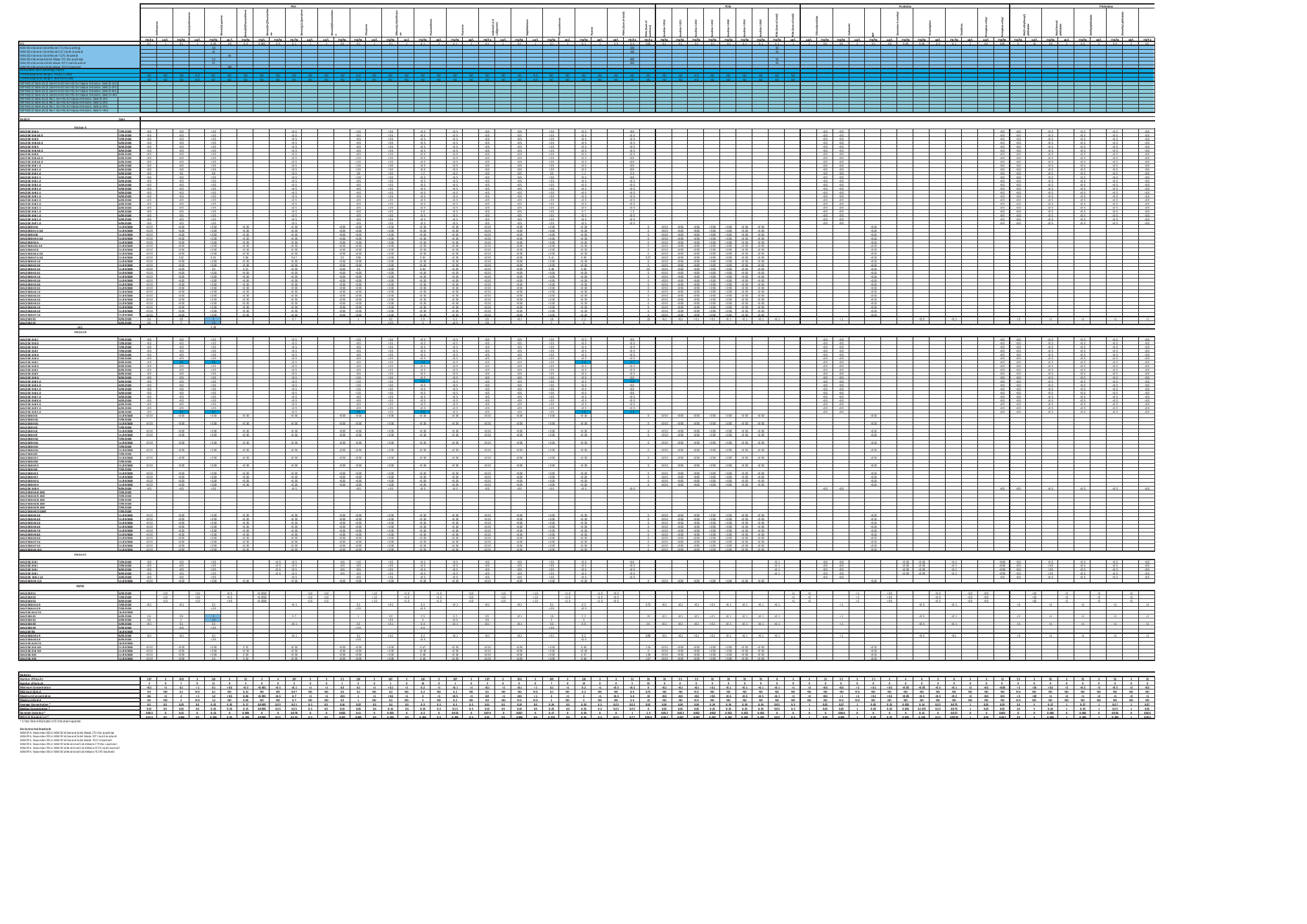
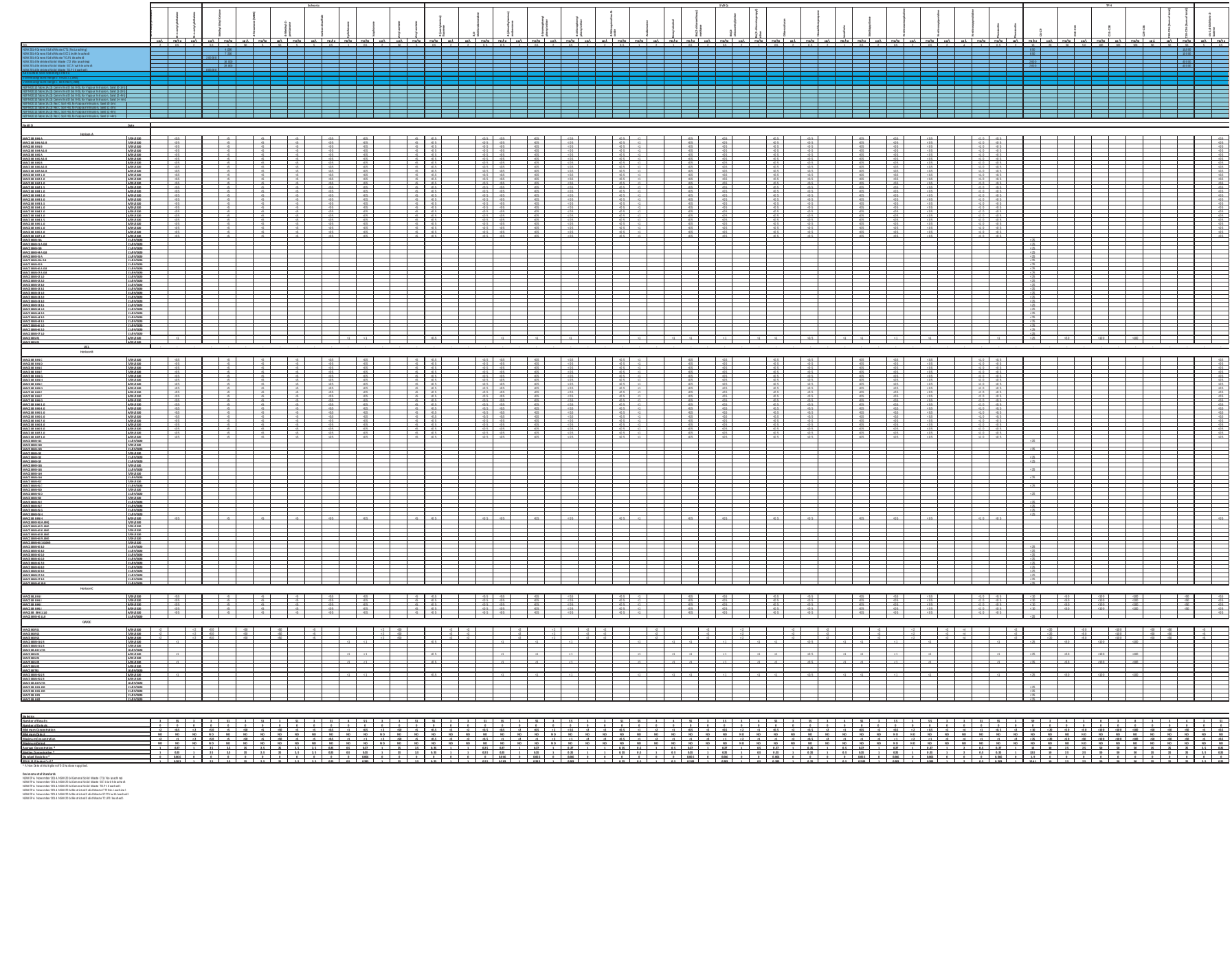
| | Metals | | |







	VOCs			
	Acetone, 2-Butanone, Benzene	Ethylbenzene, Toluene	m,p-Xylene, o-Xylene	Xylenes, Total
Units	ug/L	ug/L	ug/L	ug/L
	1	1	2	1
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Non-urban Borings				
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Non-urban Borings				
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Borehole 01				
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Borehole 02				
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Borehole 03				
NSW 2021 4 Kennedy Street Kennedy VIC 3173 Borehole

			Acid Sulphate Soils		Particle Size		BTEX							TRH							Phenols											
			s-Net Acidity without ANCE	pH (KCl)	Clay in soils <2um	Density	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	>C6-C10 Fraction (F1)	>C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	2&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total
			% S	-	%	g/cm3	mg/ kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/ kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/ kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.02	0.1	1	0.01	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	10	288	600	-	-	1,000	-	-	-	-	-	-	-	-	-	8,000	40	-	-	-	-	4,000	-	-	-		-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	18	518	1,080	-	-	1,800	-	-	-	-	-	-	-	-	-	14,400	72	-	-	-	-	7,200	-	-	-	518	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	40	1,152	2,400	-	-	4,000	-	-	-	-	-	-	-	-	-	32,000	160	-	-	-	-	16,000	-	-	-		-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	72	2,073	4,320	-	-	7,200	-	-	-	-	-	-	-	-	-	57,600	288	-	-	-	-	28,800	-	-	-	2,073	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C Public Open Space)			-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	3	-	-	-	-	230	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	3	-	-	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	3	-	-	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																															
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.02	5.7	10	2.46	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.02	6.1	10	2.45	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.02	5.7	9	2.48	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP4	14/09/2020	0.02	5.8	8	2.47	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.02	6.0	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
ALSE-Sydney	WAC223-BR	14/09/2020					<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	WAC223,SR	23/10/2020					<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50		<100	<100	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results			5	5	5	5	7	7	7	7	7	7	7	7	7	7	6	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects			1	5	4	5	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration			0.02	5.7	<1	1	<0.2	<0.5	<0.5	<0.5	<0.5	0	0	<10	<10	<50	<50	<100	<100	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum Concentration			0.02	6.1	10	2.48	<0.5	<0.5	<1	<2	<1	<0.5	<0.2	<35	<35	<50	<50	<100	<100	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1989)
Adopted Site Assessment Criteria as per the Site's ASSMP

			Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons																			
			N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	5-methyl-2-nitroaniline	Aniline	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloroethane	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	200	600	26	24	-	14	-	-	-	10	-	-	-	-	-	10	-	-	120	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	360	1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-	-	-	18	-	-	126	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	800	2,400	104	96	-	56	-	-	-	40	-	-	-	-	-	40	-	-	480	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	1,440	4,320	187.2	172.8	-	100	-	-	-	72	-	-	-	-	-	72	-	-	864	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																																
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5
ALSE-Sydney	**WAC223-BR**	**14/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	**WAC223,SR**	**23/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																		
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Number of Detects			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

																	Explosives				Halogenated Benzenes														Halogenated Hydrocarbons					Herbicides
			cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Bromamide
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.5	5	5	0.5	5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	-	-	10	14	-	-	4	-	2.6	-	40	-	-	86	-	150	-	-	-	2,000	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	-	-	18	25.2	-	-	7.2	-	0.13	-	72	-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	-	-	40	56	-	-	16	-	10.4	-	160	-	-	344	-	600	-	-	-	8,000	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	-	-	72	100.8	-	-	28.8	-	18.7	-	288	-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																																						
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5	<0.5
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5	<0.5
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5	<0.5
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5	<0.5
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<5	<5	<0.5	<5	<0.5
ALSE-Sydney	**WAC223-BR**	**14/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-
SLS	**WAC223,SR**	**23/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	-
Statistics																																							
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Number of Detects			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**	**<0.5**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<5**	**<5**	**<0.5**	**<5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						Perfluoroalkyl Sulfonamides							PFAS			
	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoi c acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	2:2 Fluorotelomer sulfonic acid (4:2 FTS)	2:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane Sulfonic acid (PFBS)	Perfluoropentane Sulfonic acid (PFPeS)	Perfluorohexane Sulfonic acid (PFHxS)	Perfluoroheptane Sulfonic acid (PFHpS)	Perfluorooctane Sulfonic acid (PFOS)	Perfluorodecane Sulfonic acid (PFDS)	Perfluorooctane Sulfonamide (FOSA)	N-Methyl Perfluorooctane Sulfonamide (MeFOSA)	N-Ethyl Perfluorooctane Sulfonamide (EtFOSA)	N-methyl Perfluorooctane Sulfonamidoethanol (MeFOSE)	N-Ethyl Perfluorooctane Sulfonamide (EtFOSA)	N-Ethyl Perfluorooctane Sulfonamidoacetic acid (EtFOSAA)	N-Ethyl Perfluorooctane Sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%
EQL	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
VENM Background Ranges - Berliman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 HIL-C Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	16.6
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	17.5
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	11.5
ALSE-Sydney	WAC223-BR	14/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	WAC223,SR	23/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																
Number of Results			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Minimum Concentration			<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	8.2
Maximum Concentration			<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	22.4

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

			Inorganics								MAH									Metals									Nitroaromatics					
			Moisture Content	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	pH (Lab)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Uranium	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	4,4-DDE	a-BHC	Aldrin
			%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.3	2	5	5	0.1	2	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	-	-	320	-	-	-	-	-	-	-	-	6.0	-	100	20	100	-	100	4	40	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-	500	100	1,900	-	1,500	50	1,050	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	2.40	-	400	80	400	-	400	16	160	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	-	-	23,600	-	-	-	-	-	-	-	-	432	-	2,000	400	7,600	-	6,000	200	4,200	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)			-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400		2-180	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C Public Open Space)			-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	1-50	1.00	5-1000	2-100	2-200	0.03	5-500		10-300	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																																
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	0.4	<0.1	0.1	<0.1	<0.1	0.2	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	<0.1	0.5	0.2	<0.1	<0.1	0.8	<1	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.3	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	0.4	0.1	<0.1	<0.1	<0.1	0.3	<1	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	<0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	<0.1	0.1	<0.1	<0.1	<0.1	0.3	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	3	<5	<5	<0.1	<2	0.1	<5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	<0.1	0.5	<0.1	<0.1	<0.1	0.7	<1	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	9	<5	<5	<0.1	<2	<0.1	12	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05
ALSE-Sydney	**WAC223-BR**	**14/09/2020**	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	<1	3	<5	<5	<0.1	<2	-	<5	-	-	-	<0.05	<0.05	<0.05
SLS	**WAC223,SR**	**23/10/2020**	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	-	<5.0	-	-	-	<0.10	<0.10	<0.10
Statistics																																		
Number of Results			**7**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**5**	**7**	**5**	**5**	**5**	**7**	**7**	**7**
Number of Detects			**3**	**4**	**2**	**0**	**0**	**5**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration			**<0.1**	**0.1**	**0.1**	**<0.1**	**<0.1**	**0.2**	**<1**	**5.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.3**	**3**	**<5**	**<5**	**<0.1**	**<2**	**0.1**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.05**	**<0.05**	**<0.05**
Maximum Concentration			**1.9**	**0.5**	**0.2**	**<0.1**	**<0.1**	**0.8**	**<1**	**5.6**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<1**	**9**	**<5**	**<10**	**<0.2**	**<10**	**0.3**	**12**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.1**	**<0.1**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Organochlorine Pesticides																						Organophosphorous Pesticides									
	Aldrin + Dieldrin	a-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	g-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																														
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
ALSE-Sydney	WAC223-BR	14/09/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
SLS	WAC223,SR	23/10/2020	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	<0.10	-	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-	-	<0.10	<0.10	<0.10	-	-	-	<0.10

Statistics																																
Number of Results	6	7	6	7	7	7	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	7	6	6	6	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
Maximum Concentration	<0.05	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.2	<0.05	<0.1	<0.05	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.1

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

								Other	PAH																				PCBs					
	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Tonnel	Acetophenone	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	PAHs (Sum of positives)	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.1	0.2	0.05	0.1	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5		0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	-	-	-	-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C Public Open Space)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lab Name	Field ID	Date																																
ALSE-Sydney	WAC223-TP1	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
ALSE-Sydney	WAC223-TP2	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
ALSE-Sydney	WAC223-TP3	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
ALSE-Sydney	WAC223-TP4	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
ALSE-Sydney	WAC223-TP5	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
ALSE-Sydney	WAC223-BR	14/09/2020	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-
SLS	WAC223,SR	23/10/2020	-	-	<0.10	-	-	<0.10	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	-	0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Statistics																																		
Number of Results			6	6	7	6	6	1	5	7	7	7	7	7	1	6	7	7	7	7	7	7	1	7	7	6	1	1	1	1	1	1	1	1
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Minimum Concentration			<0.05	<0.05	<0.1	<0.2	<0.05	<0.1	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.5	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum Concentration			<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

			Pesticides							Phthalates						Solvents						Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils -		Acid Sulphate Soils -		Acid Sulphate Soils -	
			Aroclor 1260	PCBs (Sum of total)	Chlorobenzilate	Carbazole	HCB	Demeton-S-methyl	Fenamiphos	Parathion	Pirimiphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	+Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur
			mg/kg	mg/kg	mg/kg	mg/kg	mg/ kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/ kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/ kg	mg/kg	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S
EQL			0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5	10	0.5	10	0.02	0.02	2	1	1	10	0.005
NSW 2014 General Solid Waste CT1 (No Leaching)			-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	28,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - Berliman (1989)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C Public Open Space)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																															
ALSE-Sydney	**WAC223-TP1**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	2	<1	<1	<10	0.011
ALSE-Sydney	**WAC223-TP2**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.012
ALSE-Sydney	**WAC223-TP3**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010
ALSE-Sydney	**WAC223-TP4**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	14	1.5	14	0.02	<0.02	2	1	1	12	0.020
ALSE-Sydney	**WAC223-TP5**	**14/09/2020**	-	<0.1	<0.5	<0.5	-	<0.05	<0.05	<0.2	<0.05	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	<10	1.5	<10	<0.02	<0.02	<2	<1	<1	<10	0.010
ALSE-Sydney	**WAC223-BR**	**14/09/2020**	-	<0.1	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLS	**WAC223LSR**	**23/10/2020**	<0.50	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results			**1**	**6**	**5**	**5**	**1**	**6**	**6**	**6**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Number of Detects			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**1**	**0**	**2**	**1**	**1**	**1**	**5**
Minimum Concentration			**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**<10**	**1.5**	**<10**	**0.02**	**<0.02**	**2**	**1**	**1**	**<10**	**0.01**
Maximum Concentration			**<0.5**	**<0.1**	**<0.5**	**<0.5**	**<0.1**	**<0.05**	**<0.05**	**<0.2**	**<0.05**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<5**	**<5**	**<0.5**	**<0.5**	**<5**	**14**	**1.5**	**14**	**0.02**	**<0.02**	**2**	**1**	**1**	**12**	**0.02**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

			SVOCs															TPH					VOCs		
			1,3-Dichlorobenzidine	1-(dimethylamino) naphthalene	1-bromophenyl phenyl ether	1-chlorophenyl phenyl ether	1-Nitroquinoline-N-oxide	1-phenylnaphthylamine	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-Ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole	Chlorobenzilate	Chrysene	Dibenz(a,h)anthracene	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	1,1-Dichloroethene	1,2-Dichloroethane	Acrylonitrile
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	650	-	-	-	10,000	-	-	-
NSW 2014 General Solid Waste SCC1 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	650	-	-	-	10,000	-	-	-
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,600	-	-	-	40,000	-	-	-
NSW 2014 Restricted Solid Waste SCC2 (with leached)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,600	-	-	-	40,000	-	-	-
Acid Sulfate Soils Screening Criteria			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Berliman (1989)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-D & HSL-D (Commercial /Industrial)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 HIL-C (Public Open Space)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (0-1m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (1-2m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (2-4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand (>=4m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (0-1 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (1-2 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (2-4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand (>=4 m)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab Name	**Field ID**	**Date**																							
ALSE-Sydney	**WACZ23-TP1**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WACZ23-TP2**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WACZ23-TP3**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WACZ23-TP4**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WACZ23-TP5**	**14/09/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5	<0.5
ALSE-Sydney	**WACZ23-BR**	**14/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50	-	-	-
SLS	**WACZ23.SR**	**23/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<25	<50	<100	<100	0	-	-	-
Statistics																									
Number of Results			**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**7**	**7**	**7**	**7**	**5**	**5**	**5**
Number of Detects			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
Minimum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<10**	**<50**	**<100**	**<100**	**0**	**<0.5**	**<0.5**	**<0.5**
Maximum Concentration			**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.5**	**<25**	**<50**	**<100**	**<100**	**<50**	**<0.5**	**<0.5**	**<0.5**

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessr
Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman, Third
Adopted Site Assessment Criteria as per the Site's ASSMP

	Acid Sulphate Soils		Particle Size								TRH						Phenols												
	%-Net Acidity without ANCE	pH (KCl)	Clay in soils <2um	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total
	% S	-	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.02	0.1	1	0.2	0.5	0.5	0.5	0.5	0.5	0.2	10	10	50	100	100	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)				100	288	600			1,000									3,000	40					4,000					
NSW 2014 General Solid Waste SCC1 (with leached)				18	518	1,080			1,800									14,400	72					7,200				518	
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				400	1,152	2,400			4,000									32,000	160					16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72	2,073	4,320			7,200									57,600	288					28,800				2,073	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand				3 | 3 | 3 | 3					230			260 | 370 | 630																	
0-1m				3					230			260																	
1-2m				3								370																	
2-4m				3								630																	
>=4m				3																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																											120	40,000	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											660	240,000	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-A	27/11/2020	<0.02	7.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-A	27/11/2020	<0.02	11.5	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-B	27/11/2020	<0.02	9.1	3	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP3 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP3-C	27/11/2020	<0.02	8.8	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	129	<100	129													
WAC236-TP4-A	27/11/2020	0.02	11.2	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	397	<100	397													
WAC236-TP4-B	27/11/2020	<0.02	8.0	9	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP4 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	100	<100	100													
WAC236-TP4-C	27/11/2020	<0.02	9.1	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-A	27/11/2020	<0.02	9.4	7	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	1,266	<100	1,266													
WAC236-TP5-B	27/11/2020	<0.02	8.8	5	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP5 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP5-C	27/11/2020	<0.02	9.0	22	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-A	27/11/2020	<0.02	11.6	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-B	27/11/2020	0.03	10.9	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP6 - C	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP6-C	27/11/2020	<0.02	9.7	8	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-A	27/11/2020	<0.02	10.7	6	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- BR1	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-SR-1	27/11/2020				<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<100	<100	<50													
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	397	0	397	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP1-B	27/11/2020	<0.02	6.4	1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP2 - A	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP2-A	27/11/2020	<0.02	5.9	<1	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
WAC236- TP7 - B	27/11/2020				<0.50	<0.50	<1.0	<2.0	<1.0	0	0	<35	<35	<50	<100	<100	0													
WAC236-TP7-B	27/11/2020	<0.02	9.1	4	<0.2	<0.5	<0.5	<0.5	<0.5									<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1
Maximum concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Amino Aliphatics				Amino Aromatics		Anilines						Chlorinated Hydrocarbons															
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)													200	600	26	24		14				10						10
NSW 2014 General Solid Waste SCC1 (with leached)													360	1,080	46.8	43.2		0.7				0.5						18
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)													800	2,400	104	96		56				40						40
NSW 2014 Restricted Solid Waste SCC2 (with leached)													1,440	4,320	187.2	172.8		100				72						72
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
0-1m																												
1-2m																												
2-4m																												
>=4m																												
NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	27/11/2020																												
WAC236-TP1-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	27/11/2020																												
WAC236-TP3-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	27/11/2020																												
WAC236-TP3-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	27/11/2020																												
WAC236-TP3-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	27/11/2020																												
WAC236-TP4-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	27/11/2020																												
WAC236-TP4-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	27/11/2020																												
WAC236-TP4-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	27/11/2020																												
WAC236-TP5-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	27/11/2020																												
WAC236-TP5-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	27/11/2020																												
WAC236-TP5-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	27/11/2020																												
WAC236-TP6-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	27/11/2020																												
WAC236-TP6-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	27/11/2020																												
WAC236-TP6-C	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	27/11/2020																												
WAC236-TP7-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	27/11/2020																												
WAC236-SR-1	27/11/2020																												
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	27/11/2020																												
WAC236-TP1-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	27/11/2020																												
WAC236-TP2-A	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	27/11/2020																												
WAC236-TP7-B	27/11/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
lew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Chlorinated Hydrocarbons															Explosives				Halogenated Benzenes									
	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5	0.5	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)			120								10	14			4		2.6		40			36		150				2,000		
NSW 2014 General Solid Waste SCC1 (with leached)			126								18	25.2			7.2		0.13		72			4.3		7.5				3,600		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			480								40	56			16		10.4		160			344		600				8,000		
NSW 2014 Restricted Solid Waste SCC2 (with leached)			864								72	100.8			28.8		18.7		288			620		1,080				14,400		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																												10		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												80		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	27/11/2020																												<0.10	
WAC236-TP1-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - A	27/11/2020																												<0.10	
WAC236-TP3-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - B	27/11/2020																												<0.10	
WAC236-TP3-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP3 - C	27/11/2020																												<0.10	
WAC236-TP3-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - A	27/11/2020																												<0.10	
WAC236-TP4-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - B	27/11/2020																												<0.10	
WAC236-TP4-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP4 - C	27/11/2020																												<0.10	
WAC236-TP4-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - A	27/11/2020																												<0.10	
WAC236-TP5-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - B	27/11/2020																												<0.10	
WAC236-TP5-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP5 - C	27/11/2020																												<0.10	
WAC236-TP5-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - A	27/11/2020																												<0.10	
WAC236-TP6-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - B	27/11/2020																												<0.10	
WAC236-TP6-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP6 - C	27/11/2020																												<0.10	
WAC236-TP6-C	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - A	27/11/2020																												<0.10	
WAC236-TP7-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- BR1	27/11/2020																												<0.10	
WAC236-SR-1	27/11/2020																												<0.05	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	27/11/2020																												<0.10	
WAC236-TP1-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP2 - A	27/11/2020																												<0.10	
WAC236-TP2-A	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
WAC236- TP7 - B	27/11/2020																												<0.10	
WAC236-TP7-B	27/11/2020	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Halogenated Hydrocarbons					Herbicides	Perfluoroalkane Carboxylic Acids											(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						
	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Pronamide	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	5	5	0.5	5	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NSW 2014 General Solid Waste CT1 (No Leaching)																											
NSW 2014 General Solid Waste SCC1 (with leached)											18																
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																											
NSW 2014 Restricted Solid Waste SCC2 (with leached)											72																
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil																											
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																										
WAC236-TP1-A	**27/11/2020**																										
WAC236-TP1-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - A	**27/11/2020**																										
WAC236-TP3-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP3 - B	**27/11/2020**																										
WAC236-TP3-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP3 - C	**27/11/2020**																										
WAC236-TP3-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
WAC236- TP4 - A	**27/11/2020**																										
WAC236-TP4-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - B	**27/11/2020**																										
WAC236-TP4-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP4 - C	**27/11/2020**																										
WAC236-TP4-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
WAC236- TP5 - A	**27/11/2020**																										
WAC236-TP5-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - B	**27/11/2020**																										
WAC236-TP5-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP5 - C	**27/11/2020**																										
WAC236-TP5-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP6 - A	**27/11/2020**																										
WAC236-TP6-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0011	<0.0002
WAC236- TP6 - B	**27/11/2020**																										
WAC236-TP6-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002
WAC236- TP6 - C	**27/11/2020**																										
WAC236-TP6-C	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - A	**27/11/2020**																										
WAC236-TP7-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- BR1	**27/11/2020**																										
WAC236-SR-1	**27/11/2020**																										
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

Horizon B - BEDROCK

Field ID	Date																										
WAC236- TP1-B	**27/11/2020**																										
WAC236-TP1-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP2 - A	**27/11/2020**																										
WAC236-TP2-A	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC236- TP7 - B	**27/11/2020**																										
WAC236-TP7-B	**27/11/2020**	<0.5	<5	<5	<0.5	<5	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Perfluoroalkyl Sulfonamides							PFAS			Inorganics									MAH									
	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Exchangeable Sodium Percent	Moisture Content	Exchangeable Calcium	pH 1:5 soil:water	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	meq/100g	-	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0002	0.1	0.1	0.1		0.1	0.1	0.1	0.1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)																			320								40		
NSW 2014 General Solid Waste SCC1 (with leached)								1.8											16								108		
NSW 2014 General Solid Waste TCLP1 (leached)																													
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																			1,280								240		
NSW 2014 Restricted Solid Waste SCC2 (with leached)								7.2											23,600								432		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																													
Berkman (1989) Background Ranges																													
ANZECC (1992) Background Ranges																													
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																													
0-1m																													
1-2m																													
2-4m																													
>=4m																													
NEPM 2013 Table 1A(1) HILs Rec C Soil																													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																													

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																												
WAC236-TP1-A	**27/11/2020**											5.9		8.5															
WAC236-TP1-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	16.2	0.7		<0.2	<0.2	<0.2	0.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**											9.8		10.5															
WAC236-TP3-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	5.2	10.2	4.2		<0.2	0.2	0.2	4.7	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**											8.9		9.2															
WAC236-TP3-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	10.1	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**											9.4		8															
WAC236-TP3-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0002	0.0002	<0.2	9.9	3.1		<0.2	<0.2	<0.2	3.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**											4.8		10.2															
WAC236-TP4-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.7	4.5		<0.2	0.3	<0.2	4.8	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**											7		8.3															
WAC236-TP4-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	0.0002	0.0002	<0.2	8.9	2.5		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**											7.4		8.5															
WAC236-TP4-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	0.0003	0.0003	<0.2	9.7	1.6		<0.2	<0.2	<0.2	1.6	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**											6.3		9.5															
WAC236-TP5-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	9.6	1.5		0.5	<0.2	<0.2	2.2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**											12.4		7.9															
WAC236-TP5-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	0.0005	0.0005	<0.2	14.4	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**											6.3		7.8															
WAC236-TP5-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	7.5	1.3		<0.2	<0.2	<0.2	1.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**											8.5		11.6															
WAC236-TP6-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0011	0.0011	0.0011	<0.2	12.2	31.9		<0.2	<0.2	<0.2	32.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**											13		11.4															
WAC236-TP6-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	0.0005	0.0005	<0.2	11.9	9.8		<0.2	<0.2	<0.2	9.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**											7.6		10.8															
WAC236-TP6-C	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	6.0	1.9		<0.2	<0.2	<0.2	1.9	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**											5.5		9.6															
WAC236-TP7-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	21.9	2.4		<0.2	<0.2	<0.2	2.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**											5.3		8.5															
WAC236-SR-1	**27/11/2020**											5.8																	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

Horizon B - BEDROCK

Field ID	Date																												
WAC236- TP1-B	**27/11/2020**											1.3		8.4															
WAC236-TP1-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.2	2.4	0.4		<0.2	<0.2	<0.2	0.4	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**											3.6		6.1															
WAC236-TP2-A	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.3	4.8	0.8		<0.1	<0.1	0.1	1.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**											3.4		5.5															
WAC236-TP7-B	**27/11/2020**	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	12.6	3.1	0.2		<0.1	<0.1	<0.1	0.3	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	13	0	11.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																													

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Metals														Nitroaromatics			Organochlorine Pesticides														
	Arsenic	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Zinc	2-Picolline	4-aminobiphenyl	Pentachloronitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	50	0.3	2	2	5	5	5	0.1	2	5	0.1	5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05
NSW 2014 General Solid Waste CT1 (No Leaching)	100	20		20				100		4	40	20																			
NSW 2014 General Solid Waste SCC1 (with leached)	500	100		100				1,500		50	1,050	50																			
NSW 2014 General Solid Waste TCLP1 (leached)																															
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	400	80		80				400		16	160	80																			
NSW 2014 Restricted Solid Waste SCC2 (with leached)	2,000	400		400				6,000		200	4,200	200																			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																															
Berkman (1989) Background Ranges	0.3-30			0.04-2	0.5-110		1-190	<2-200		0.001-0.1	2-400			2-180																	
ANZECC (1992) Background Ranges	1-40				1 5-1000		2-100	2-200		0.03	5-500			10-300																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																															
0-1m																															
1-2m																															
2-4m																															
>=4m																															
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																															
0-1m																															
1-2m																															
2-4m																															
>=4m																															
NEPM 2013 Table 1A(1) HILs Rec C Soil	300	90	20,000	90		300	17,000	600	19,000	80	1,200	700		30,000							10		70						400	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	3,000	500	300,000	900		4,000	240,000	1,500	60,000	730	6,000	10,000		400,000							45		530						3,600	

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																														
WAC236-TP1-A	27/11/2020	<5.0			<0.30	<5.0		10.7	44.1		<0.20	<10.0			35.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-A	27/11/2020		<1	<50			<2			43			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - A	27/11/2020	<5.0			<0.30	6		27.9	<10.0		<0.20	<10.0			44.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-A	27/11/2020		<1	<50			3			171			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - B	27/11/2020	<5.0			<0.30	5.2		<5.0	<10.0		<0.20	<10.0			16.7				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-B	27/11/2020		<1	<50			4			274			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP3 - C	27/11/2020	<5.0			<0.30	7.4		20.4	53.3		0.23	<10.0			133				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP3-C	27/11/2020		<1	<50			<2			68			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - A	27/11/2020	<5.0			<0.30	8.3		5.7	<10.0		<0.20	<10.0			22.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-A	27/11/2020		<1	<50			4			266			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - B	27/11/2020	<5.0			<0.30	11.2		51.3	68.9		<0.20	<10.0			62				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-B	27/11/2020		<1	<50			<2			113			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP4 - C	27/11/2020	<5.0			<0.30	9.3		36.3	33.6		<0.20	<10.0			31.2				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP4-C	27/11/2020		<1	<50			<2			38			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - A	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			13.3				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-A	27/11/2020		<1	<50			4			251			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - B	27/11/2020	6.1			<0.30	6.5		107.4	111.1		<0.20	<10.0			206.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-B	27/11/2020		<1	<50			3			175			<5	0.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP5 - C	27/11/2020	<5.0			<0.30	7.5		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP5-C	27/11/2020		<1	<50			<2			18			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - A	27/11/2020	<5.0			<0.30	6.4		11.7	18.4		<0.20	<10.0			30.5				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-A	27/11/2020		<1	<50			2			74			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - B	27/11/2020	<5.0			<0.30	5.9		14.7	50.9		<0.20	<10.0			62.9				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-B	27/11/2020		<1	<50			<2			49			<5	0.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP6 - C	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP6-C	27/11/2020		<1	<50			<2			17			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - A	27/11/2020	<5.0			<0.30	<5.0		13	14.8		<0.20	<10.0			32.6				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-A	27/11/2020		<1	<50			<2			105			<5	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- BR1	27/11/2020	<5.0			<0.30	<5.0		7.6	32.9		<0.20	<10.0			26.1				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-SR-1	27/11/2020	<5			<1	5		15	44		<0.1	<2			38				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05

Maximum concentration		6.1	0	0	0	11.2	0	107.4	111.1	0	0.23	0	0	0	206.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL									67.84																						

Horizon B - BEDROCK

Field ID	Date																														
WAC236- TP1-B	27/11/2020	<5.0			<0.30	<5.0		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP1-B	27/11/2020		<1	<50			<2			21			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP2 - A	27/11/2020	<5.0			<0.30	5.4		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP2-A	27/11/2020		<1	<50			<2			16			<5	0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5
WAC236- TP7 - B	27/11/2020	<5.0			<0.30	9.6		<5.0	<10.0		<0.20	<10.0			<5.0				<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10
WAC236-TP7-B	27/11/2020		<1	<50			<2			<5			<5	<0.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5			<0.5	<0.5	<1.0		<0.5

Maximum concentration		0	0	0	0	9.6	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																															

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
lew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

													Organophosphorous Pesticides																		
		Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	b-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Ethoprop	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Ronnel	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.1	0.2	0.05	0.1
NSW 2014 General Solid Waste CT1 (No Leaching)		80															4													
NSW 2014 General Solid Waste SCC1 (with leached)		3															7.5													
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		240															16													
NSW 2014 Restricted Solid Waste SCC2 (with leached)		432															30													
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil		340				20				10		400					250													
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil		2,000				100				50		2,500					2,000													
Horizon A - GENERAL FILL MATERIALS																														
Field ID	**Date**																													
WAC236-TP1-A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP1-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP3 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP3-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP4 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP4-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP5 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP5-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP6 - C	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP6-C	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP7-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- BR1	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-SR-1	**27/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.2	<0.2	<0.05	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														
Horizon B - BEDROCK																														
Field ID	**Date**																													
WAC236- TP1-B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP1-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP2 - A	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP2-A	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
WAC236- TP7 - B	**27/11/2020**		<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10					<0.10	<0.10	<0.10				<0.10			<0.10			<0.10
WAC236-TP7-B	**27/11/2020**		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5			<0.5	
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Other	PAH																														
	Acetophenone	Benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(a) pyrene - TCLP	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	PAHs (Sum of positives)	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL	0.5	1	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3		0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5		
NSW 2014 General Solid Waste CT1 (No Leaching)											0.8																	200		
NSW 2014 General Solid Waste SCC1 (with leached)											10																	200		
NSW 2014 General Solid Waste TCLP1 (leached)																														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)											3.2																	800		
NSW 2014 Restricted Solid Waste SCC2 (with leached)											23																	800		
NSW 2014 Restricted Solid Waste TCLP2 (leached)																														
Berkman (1989) Background Ranges																														
ANZECC (1992) Background Ranges																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
0-1m																														
1-2m																														
2-4m																														
>=4m																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																									3	3	3	300		
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									40	40	40	4,000		

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																													
WAC236-TP1-A	27/11/2020							<0.30	<0.30	<0.30	0.81	0.82	<0.005	1.32		0.57	1.3	0.73	<0.30	1.56	<0.30	0.56	<0.30	0.55	1.74	1.38	1.53	1.23		9.96
WAC236-TP1-A	27/11/2020	<0.5																												
WAC236- TP3 - A	27/11/2020							<0.30	<0.30	0.31	0.54	0.58		0.63		0.47	<0.30	0.55	<0.30	1.26	<0.30	0.31	<0.30	0.77	1.34	0.9	1.07	0.74		6.76
WAC236-TP3-A	27/11/2020	<0.5																												
WAC236- TP3 - B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<030	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP3-B	27/11/2020	<0.5																												
WAC236- TP3 - C	27/11/2020							<0.30	<0.30	<0.30	0.73	0.8		1.35		0.52	1.33	0.68	<0.30	1.26	<0.30	0.52	<0.30	0.49	1.33	1.36	1.51	1.21		9.01
WAC236-TP3-C	27/11/2020	<0.5																												
WAC236- TP4 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP4-A	27/11/2020	<0.5																												
WAC236- TP4 - B	27/11/2020							<0.30	<0.30	0.45	3.24	3.6	<0.005	5.68		2.31	5.6	3.06	0.5	5.46	<0.30	2.47	<0.30	1.86	6.3	5.85	5.85	5.85		40.53
WAC236-TP4-B	27/11/2020	<0.5																												
WAC236- TP4 - C	27/11/2020							<0.30	<0.30	<0.30	2.07	2.44	<0.005	3.94		1.6	3.88	1.98	0.4	3.46	<0.30	1.71	<0.30	<0.30	3.98	4.04	4.04	4.04		25.46
WAC236-TP4-C	27/11/2020	<0.5																												
WAC236- TP5 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP5-A	27/11/2020	<0.5																												
WAC236- TP5 - B	27/11/2020							<0.30	0.72	1.45	12.21	12.56	<0.005	20.59		8.95	20.3	9.67	1.97	19.33	<0.30	11.08	<0.30	5.26	21.93	21.13	21.13	21.13		146.02
WAC236-TP5-B	27/11/2020	<0.5																												
WAC236- TP5 - C	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		0.38		<0.30	0.38	<0.30	<0.30	0.44	<0.30	<030	<0.30	<0.30	0.5	0.41	0.74	0.08		1.7
WAC236-TP5-C	27/11/2020	<0.5																												
WAC236- TP6 - A	27/11/2020							<0.30	<0.30	<0.30	0.69	0.76		1.32		0.5	1.3	0.64	<0.30	1.23	<0.30	0.51	<0.30	<0.30	1.29	1.3	1.45	1.15		8.24
WAC236-TP6-A	27/11/2020	<0.5																												
WAC236- TP6 - B	27/11/2020							<0.30	<0.30	<0.30	0.44	0.51		<0.30		0.35	<0.30	0.39	<0.30	0.8	<0.30	0.37	<0.30	<0.30	0.94	0.78	0.96	0.6		3.8
WAC236-TP6-B	27/11/2020	<0.5																												
WAC236- TP6 - C	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	0.42	<0.30	<030	<0.30	<0.30	0.51	0.36	0.73	0		0.93
WAC236-TP6-C	27/11/2020	<0.5																												
WAC236- TP7 - A	27/11/2020							<0.30	0.3	0.56	1.67	1.96	<0.005	2.14		1.2	0.84	1.66	0.31	3.46	<0.30	1.01	<0.30	2.05	3.71	2.86	2.86	2.86		20.87
WAC236-TP7-A	27/11/2020	<0.5																												
WAC236- BR1	27/11/2020							<0.30	<0.30	<0.30	0.86	0.9	<0.005	1.43		0.59	1.41	0.81	<0.30	1.86	<0.30	0.57	<0.30	<0.30	2.01	1.49	1.64	1.34		10.44
WAC236-SR-1	27/11/2020							<0.5	<0.5	<0.5	1.4	1.6			1.8	1.1	0.6	1.3	<0.5	2.8	<0.5	0.8	<0.5	1.0	2.9	2.3	2.6	2.1	15.3	

Maximum concentration		0	0	0	0	0	0	0	0.72	1.45	12.21	12.56		20.59	0	8.95	20.3	9.67	1.97	19.33	0	11.08	0	5.26	21.93	21.13	21.13	21.13	0	146.02
95%UCL												5.604																		

Horizon B - BEDROCK

Field ID	Date																													
WAC236- TP1-B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP1-B	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP2 - A	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP2-A	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	
WAC236- TP7 - B	27/11/2020							<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.36	0.73	0		0
WAC236-TP7-B	27/11/2020	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	

Maximum concentration		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	ND	ND	ND	0	0
95%UCL																														

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	PCBs								Pesticides							Phthalates						Solvents					
	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Chlorobenzilate	Carbazole	DDF	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.5	0.5	0.1	0.05	0.05	0.2	0.05	5	0.5	0.5	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NSW 2014 General Solid Waste CT1 (No Leaching)								50														4,000					
NSW 2014 General Solid Waste SCC1 (with leached)								50														7,200					
NSW 2014 General Solid Waste TCLP1 (leached)																											
NSW 2014 Restricted Solid Waste CT2 (No Leaching)								50														16,000					
NSW 2014 Restricted Solid Waste SCC2 (with leached)								50														28,800					
NSW 2014 Restricted Solid Waste TCLP2 (leached)																											
Berkman (1989) Background Ranges																											
ANZECC (1992) Background Ranges																											
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
0-1m																											
1-2m																											
2-4m																											
>=4m																											
NEPM 2013 Table 1A(1) HILs Rec C Soil								1																			
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil								1																			

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																										
WAC236-TP1-A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP1-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP3 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP3-C	27/11/2020								<0.5	1.4					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP4 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP4-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP5 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP5-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP6 - C	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP6-C	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP7-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- BR1	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-SR-1	27/11/2020								<0.1				<0.05	<0.05	<0.2	<0.05											
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

Horizon B - BEDROCK

Field ID	Date																										
WAC236- TP1-B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP1-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP2 - A	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP2-A	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
WAC236- TP7 - B	27/11/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50				<0.10															
WAC236-TP7-B	27/11/2020								<0.5	<0.5					<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																											

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
ew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		SVOCs														
	a-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	Liming Rate	Liming Rate excluding ANC	Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	2-(dacetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine
	moles H+/t	-	mole H+/t	%S	%S	mole H+/t	mole H+/t	%CaCO3	%S	kg CaCO3/t	kg CaCO3/t	mole H+/t	%S	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	0.5	10	0.02	0.02	2	10	0.01	0.01	1	1	10	0.005	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1
NSW 2014 General Solid Waste CT1 (No Leaching)																												
NSW 2014 General Solid Waste SCC1 (with leached)																												
NSW 2014 General Solid Waste TCLP1 (leached)																												
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																												
NSW 2014 Restricted Solid Waste SCC2 (with leached)																												
NSW 2014 Restricted Solid Waste TCLP2 (leached)																												
Berkman (1989) Background Ranges																												
ANZECC (1992) Background Ranges																												
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
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0-1m																												
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2-4m																												
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NEPM 2013 Table 1A(1) HILs Rec C Soil																												
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																												

Horizon A - GENERAL FILL MATERIALS

Field ID	Date																											
WAC236-TP1-A	27/11/2020																											
WAC236-TP1-A	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	121	0.60	0.19	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - A	27/11/2020																											
WAC236-TP3-A	27/11/2020	11	1.5	<10	<0.02	<0.02	<2	1,850	9.26	2.96	<1	<1	11	0.017	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - B	27/11/2020																											
WAC236-TP3-B	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	333	1.67	0.53	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP3 - C	27/11/2020																											
WAC236-TP3-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	259	1.30	0.42	<1	<1	<10	0.013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - A	27/11/2020																											
WAC236-TP4-A	27/11/2020	15	1.5	<10	<0.02	<0.02	<2	905	4.53	1.45	<1	1	15	0.024	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - B	27/11/2020																											
WAC236-TP4-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	266	1.33	0.43	<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP4 - C	27/11/2020																											
WAC236-TP4-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	1,780	8.93	2.86	<1	<1	<10	0.015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - A	27/11/2020																											
WAC236-TP5-A	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	216	1.08	0.35	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - B	27/11/2020																											
WAC236-TP5-B	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	577	2.89	0.92	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP5 - C	27/11/2020																											
WAC236-TP5-C	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	203	1.02	0.32	<1	<1	<10	0.012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - A	27/11/2020																											
WAC236-TP6-A	27/11/2020	12	1.5	<10	<0.02	<0.02	<2	1,600	8.00	2.56	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - B	27/11/2020																											
WAC236-TP6-B	27/11/2020	18	1.5	<10	<0.02	<0.02	<2	1,140	5.72	1.83	<1	1	18	0.029	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP6 - C	27/11/2020																											
WAC236-TP6-C	27/11/2020	10	1.5	<10	<0.02	<0.02	<2	3,320	16.6	5.32	<1	<1	10	0.016	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - A	27/11/2020																											
WAC236-TP7-A	27/11/2020	12	1.5	<10	<0.02	<0.02	<2	509	2.55	0.82	<1	<1	12	0.019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- BR1	27/11/2020																											
WAC236-SR-1	27/11/2020																											
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

Horizon B - BEDROCK

Field ID	Date																											
WAC236- TP1-B	27/11/2020																											
WAC236-TP1-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP2 - A	27/11/2020																											
WAC236-TP2-A	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2				<1	<1	<10	0.010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
WAC236- TP7 - B	27/11/2020																											
WAC236-TP7-B	27/11/2020	<10	1.5	<10	<0.02	<0.02	<2	100	0.50	0.16	<1	<1	<10	0.011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Maximum concentration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95%UCL																												

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
lew Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

		TPH					VOCs		
	Phenacetin	C5-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	50	100	100	50	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)		650				10,000			
NSW 2014 General Solid Waste SCC1 (with leached)		650				10,000			
NSW 2014 General Solid Waste TCLP1 (leached)									
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		2,600				40,000			
NSW 2014 Restricted Solid Waste SCC2 (with leached)		2,600				40,000			
NSW 2014 Restricted Solid Waste TCLP2 (leached)									
Berkman (1989) Background Ranges									
ANZECC (1992) Background Ranges									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand									
0-1m									
1-2m									
2-4m									
>=4m									
NEPM 2013 Table 1A(1) HILs Rec C Soil									
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									

Horizion A - GENERAL FILL MATERIALS

Field ID	Date									
WAC236-TP1-A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP3 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP3-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - B	**27/11/2020**		<25	<50	247	160	407			
WAC236-TP4-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP4 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP4-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - B	**27/11/2020**		<25	<50	812	433	1,245			
WAC236-TP5-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP5 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP5-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP6 - C	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP6-C	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- BR1	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-SR-1	**27/11/2020**		<10	<50	<100	<100	<50			
Maximum concentration		0	0	0	812	433	407	0	0	0
95%UCL										

Horizon B - BEDROCK

Field ID	Date									
WAC236- TP1-B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP1-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP2 - A	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP2-A	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
WAC236- TP7 - B	**27/11/2020**		<25	<50	<100	<100	0			
WAC236-TP7-B	**27/11/2020**	<0.5						<0.5	<0.5	<0.5
Maximum concentration		0	0	0	0	0	0	0	0	0
95%UCL										

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)
NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)
2013, NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1A(1) HILs Rec C Soil
2013, NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil
New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmenta
, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy and Olszowy et a

	TPH					TRH							BTEX					
	C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C10 - C16	C10 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																		
NEPM 2013 Table 1A(1) HILs Rec C Soil																		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Clay																		
0-1m							310 #9		NL #10				4	NL #10	NL #10			NL #10
1-2m							480 #9		NL #10				6	NL #10	NL #10			NL #10
2-4m							NL #10		NL #10				9	NL #10	NL #10			NL #10
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Clay																		
0-1m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10
1-2m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10
2-4m							NL #10		NL #10				NL #10	NL #10	NL #10			NL #10

Field ID	Date																		
TP01_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	29/11/2019	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	29/11/2019	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics

Number of Results	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Minimum Detect	ND	240	930	88	88	ND	ND	340	340	120	ND	120	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<20	240	930	88	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	
Average Concentration *	10	23	75	28	92	10	10	42	42	96	50	115	0.05	0.05	0.05	0.1	0.05	0.15	
95% UCL (Student's-t) *	10	45.01	162.7	34.59	202.6	10	10	72.94	72.94	169.5	50	221.1	0.05	0.05	0.05	0.1	0.05	0.15	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK & HILD on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#7 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#8 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#9 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#10 Derived soil HSL exceeds soil saturation concentration
#11 To obtain F2 subtract naphthalene from the >C10 - C16 fraction.
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001% w/w. *Organic fibre detected. No trace asbestos detected.
#14 Organic fibres detected.
#15 No respirable fibres detected.

		PAH																			PCB								
		2-Methylchlo lanthrene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum)	Benzo(a)pyrene TEQ calc (Zero)	Arochlor 1016	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																			4,000[#1]	40[#2]								7[#3]
NEPM 2013 Table 1A(1) HILs Rec C Soil																			300[#1]	3[#2]								1[#3]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																												
0-1m																NL[#10]												
1-2m																NL[#10]												
2-4m																NL[#10]												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																												
0-1m																NL[#10]												
1-2m																NL[#10]												
2-4m																NL[#10]												
Field ID	**Date**																												
TP01_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	-	2.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	0.5	2.0	-	2.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																												
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Metals																								
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#4]		500		300,000	900	3,600[#5]	4,000	240,000		1,500[#6]	60,000	730[#7]		6,000			10,000					400,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#4]		90		20,000	90	300[#5]	300	17,000		600[#6]	19,000	80[#7]		1,200			700					30,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																									
0-1m																									
1-2m																									
2-4m																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									
Field ID	**Date**																								
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<5	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																									
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	Phenols																				
	2,3,4,6-tetrachlorophenol	2,4,5-trichlorophenol	2,4,6-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3/4-methyl phenol (m/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Dinoseb	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																	660	240,000			
NEPM 2013 Table 1A(1) HILs Rec C Soil																	120	40,000			
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																					
0-1m																					
1-2m																					
2-4m																					
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																					
0-1m																					
1-2m																					
2-4m																					

Field ID	Date																					
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20	
Average Concentration *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10	
95% UCL (Student's-t) *	2.5	0.5	0.5	0.25	0.25	2.5	0.25	0.25	0.1	0.5	0.2	2.5	10	0.5	2.5	10	0.5	0.25	5	0.5	10	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	OCP																							
	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				45		530,000				3,600						100			50		80	2,500	160
NEPM 2013 Table 1A(1) HILs Rec C Soil				10		70,000				400						20			10		10	400	30
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																							
0-1m																							
1-2m																							
2-4m																							
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																							
0-1m																							
1-2m																							
2-4m																							

Field ID	Date																							
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<100**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<1**
Average Concentration *	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**
95% UCL (Student's-t) *	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
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#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		OPP																	Asbestos	Major/minor ions				Radioactive	Explosives		
		Azinophos methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Parathion	Phorate	Ronnel	Asbestos [Fines and fibrous FA+AF]	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/Kg	% (w/w)	mg/kg	mg/Kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	mg/kg
EQL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2		5	5	5	5	10	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil				2,000																							
NEPM 2013 Table 1A(1) HILs Rec C Soil				250																							
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapo																											
0-1m																											
1-2m																											
2-4m																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																											
0-1m																											
1-2m																											
2-4m																											
Field ID	**Date**																										
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	2,100	520	430	120	<10	-	-	-
TP01_1.2	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600	1,200	300	1,800	<10	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	12,000	170	170	190	<10	-	-	-
TP02_1.2	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,400	2,200	740	1,600	<10	-	-	-
TP03_0.5	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	59,000	410	260	600	<10	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	190	150	310	<10	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,600	470	330	120	<10	-	-	-
TP04_1.0	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	240	180	-	<10	-	-	-
TP05_0.6	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	1,300	400	210	82	<10	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000	350	170	760	<10	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	33,000	200	130	200	<10	-	-	-
TP06_1.0	**29/11/2019**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,000	320	190	880	<10	-	-	-
Statistics																											
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**	**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -<
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

		SPOCAS																																		
		% Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Net Extraneous Material	MCI Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	sulfidic - Titratable Actual Acidity	Sulfidic-Acid Neutral	Titratable Actual Acidity	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-tetrachlorobenzene	1,3,5-Trichlorobenzene	1-Chloronaphthalene	1-naphthylamine	2-chloronaphthalene	2-methylnaphthalene	2-naphthylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzoyl chloride
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.01	-	0.005	0.1	1	10	0.02	0.003	0.02	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																																				
0-1m																																				
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																																				
0-1m																																				
1-2m																																				
2-4m																																				
Field ID	**Date**																																			
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																				
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	SVOC																													
	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz[a,j]acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Diphenylamine	EPN	Ethoprop	Fensulfothion	Hexachlorocyclopentadiene	Hexachloroethane	Mevinphos (Phosdrin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Phronamide	Trichloronate	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5	
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																														
NEPM 2013 Table 1A(1) HILs Rec C Soil																														
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																														
0-1m																														
1-2m																														
2-4m																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																														
0-1m																														
1-2m																														
2-4m																														
Field ID	**Date**																													
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	2-chlorotoluene	4-methyl-2-pentanone (MIBK)	acetone	allyl chloride	bromobenzene	bromochloromethan
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(1) HILs Rec C Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																									
0-1m																									
1-2m																									
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NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									

Field ID	Date																									
TP01_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	29/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	29/11/2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental I
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	VOC																								
	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chlorobenzene	Chloromethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																									
NEPM 2013 Table 1A(1) HILs Rec C Soil																									
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapou																									
0-1m																									
1-2m																									
2-4m																									
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intru																									
0-1m																									
1-2m																									
2-4m																									
Field ID	**Date**																								
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																									
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Total PAHs: Based on sum of 16 most common repor
#2 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their
#3 PCBs: HIL refers to non-dioxin like PCBs only. Where
#4 Arsenic: HIL assumes 70% oral bioavailability. Site-sp
#5 As Chromium VI
#6 Lead: HILs A,B,C based on blood lead models (IEUBK
#7 Elemental mercury: HIL does not address elemental h
#8 Total PAHs: Based on sum of 16 most common repor
#9 To obtain F1 subtract the sum of BTEX concentration
#10 Derived soil HSL exceeds soil saturation concentrati
#11 To obtain F2 subtract naphthalene from the >C10 -(
#12 Nil
#13 No asbestos detected at the reporting limit of 0.001
#14 Organic fibres detected.
#15 No respirable fibres detected.

	TPH					TRH							BTEX					
	C6 - C9	C10 - C14	C15 - C28	C29 - C36	C10 - C36 (Sum)	C6 - C10	C6 - C10 less BTEX (F1)	C10 - C16	C10 - C16 less Naphthalene (F2)	C16 - C34	C34 - C40	C10 - C40 (Sum)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene (Sum)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	20	50	50	50	20	20	50	50	100	100	100	0.1	0.1	0.1	0.2	0.1	0.3
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Public Open Space																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																		
Clay 0-2m							215[#7]	170[#8]		2,500			95	135	185			95
NEPM 2013 Table 1B(6) ESLs for Urban Res																		
Clay 0-2m							180[#7]	120[#11]		1,300	5,600		65	105	125			45

Field ID	Date																		
TP01_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_2.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_1.2	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP02_2.6	29/11/2019	<20	240	930	<50	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_0.5	29/11/2019	<20	<20	<50	88	88	<20	<20	<50	<50	120	<100	120	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP03_2.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_0.5	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP04_2.3	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP05_1.9	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_0.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.0	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP06_1.6	29/11/2019	<20	<20	<50	<50	<50	<20	<20	<50	<50	<100	<100	<100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Statistics

Number of Results	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Minimum Detect	ND	240	930	88	88	ND	ND	340	340	120	ND	120	ND	ND	ND	ND	ND	ND
Maximum Concentration	<20	240	930	88	1,170	<20	<20	340	340	810	<100	1,150	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
Average Concentration *	10	23	75	28	92	10	10	42	42	96	50	115	0.05	0.05	0.05	0.1	0.05	0.15
95% UCL (Student's-t) *	10	45.01	162.7	34.59	202.6	10	10	72.94	72.94	169.5	50	221.1	0.05	0.05	0.05	0.1	0.05	0.15

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#11 Moderate reliability.
#12 Nil
ND=Non detect

		PAH																				PCB								
		3-methylcholanthrene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a) pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum)	Benzo(a)pyrene TEQ calc (Zero)	Arochlor 1016	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1221	Arochlor 1221	PCBs (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																370													
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																170													
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m							1.4																						
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m							0.7																						
Field ID	**Date**																												
TP01_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	2.3	3.4	3.0	1.4	2.7	2.6	<0.5	4.2	<0.5	1.2	<0.5	1.3	5.4	-	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP01_2.2	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP02_2.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	0.8	1.2	0.8	<0.5	0.9	0.9	<0.5	1.5	<0.5	<0.5	<0.5	0.5	2.0	-	2.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP03_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	<0.5	<0.5	<0.5	1.0	1.4	1.1	1.1	1.2	1.4	<0.5	2.0	<0.5	1.0	<0.5	<0.5	2.2	12.4	1.9	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP04_2.3	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP05_1.0	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	1.1	2.1	<0.5	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																													
Number of Results		**6**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**18**	**16**	**16**	**12**	**16**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**0.8**	**1.2**	**0.8**	**1.1**	**0.9**	**0.9**	**ND**	**0.5**	**ND**	**1**	**ND**	**0.5**	**0.6**	**1.1**	**1.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.3**	**3.4**	**3**	**1.4**	**2.7**	**2.6**	**<0.5**	**4.2**	**<0.5**	**1.2**	**<0.5**	**1.3**	**5.4**	**12.4**	**4.4**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.46**	**0.58**	**0.51**	**0.38**	**0.5**	**0.51**	**0.25**	**0.75**	**0.25**	**0.36**	**0.25**	**0.33**	**0.88**	**1.5**	**0.77**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.696**	**0.943**	**0.82**	**0.527**	**0.787**	**0.791**	**0.25**	**1.212**	**0.25**	**0.484**	**0.25**	**0.448**	**1.476**	**3.293**	**1.304**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Metals																										
	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Silicon	Selenium	Silver	Titanium	Tin	Vanadium	Zinc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	10	2	10	2	10	10	0.4	5	5	5	20	5	5	0.1	5	5	5	2	2	0.2	10	10	10	5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind			160[#1]						600		320		1,800[#4]												1200
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ			100[#1]						360		230		1,100[#4]				480								810
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																									
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																									
Field ID	**Date**																										
TP01_0.5	**29/11/2019**	7,600	<10	6.1	84	<2	<10	<10	<0.4	11	<5	22	11,000	100	64	0.1	<5	<5	270	430	<2	<0.2	27	<10	23	94
TP01_1.2	**29/11/2019**	6,900	<10	7.1	65	<2	<10	<10	<0.4	16	<5	27	22,000	110	63	0.2	<5	<5	72	40	<2	<0.2	34	<10	35	160
TP01_2.2	**29/11/2019**	3,900	<10	6.5	20	<2	<10	<10	<0.4	5.4	<5	10	9,000	21	67	<0.1	<5	5.7	150	510	<2	<0.2	180	<10	14	32
TP02_0.5	**29/11/2019**	2,000	<10	3.4	10	<2	<10	<10	<0.4	<5	<5	<5	4,500	15	15	<0.1	<5	<5	76	560	<2	<0.2	20	<10	<10	11
TP02_1.2	**29/11/2019**	1,600	<10	3.2	<10	<2	<10	<10	<0.4	<5	<5	11	3,300	18	7.6	<0.1	<5	<5	67	520	<2	<0.2	13	<10	<10	7.8
TP02_2.6	**29/11/2019**	11,000	<10	15	39	<2	<10	20	<0.4	16	<5	16	19,000	42	35	0.2	<5	<5	320	630	<2	<0.2	40	<10	36	63
TP03_0.5	**29/11/2019**	7,400	<10	7.5	50	<2	<10	<10	<0.4	17	<5	34	23,000	140	130	0.2	<5	<5	340	510	<2	<0.2	87	<10	42	72
TP03_1.0	**29/11/2019**	4,600	<10	5.1	11	<2	<10	<10	<0.4	6.5	<5	11	9,600	12	43	<0.1	<5	<5	<5	17	<2	<0.2	35	23	19	10
TP03_2.0	**29/11/2019**	1,900	<10	9.1	<10	<2	<10	<10	<0.4	<5	<5	<5	5,300	<5	9.5	<0.1	<5	<5	78	460	<2	<0.2	<10	<10	<10	<5
TP04_0.5	**29/11/2019**	4,300	<10	3.2	41	<2	<10	<10	<0.4	9.5	<5	20	15,000	55	64	<0.1	<5	<5	180	490	<2	<0.2	110	<10	28	35
TP04_1.0	**29/11/2019**	1,900	<10	3.9	<10	<2	<10	<10	<0.4	<5	<5	<5	5,400	5.8	13	<0.1	<5	<5	76	450	<2	<0.2	13	<10	<10	5.8
TP04_2.3	**29/11/2019**	1,700	<10	6.4	<10	<2	<10	<10	<0.4	<5	<5	<5	6,500	<5	13	<0.1	<5	<5	120	460	<2	<0.2	11	<10	<10	<5
TP05_0.6	**29/11/2019**	3,500	<10	4.9	21	<2	<10	<10	<0.4	10	<5	21	17,000	39	52	<0.1	<5	<5	99	400	<2	<0.2	85	<10	27	27
TP05_1.0	**29/11/2019**	2,600	<10	18	<10	<2	<10	<10	<0.4	<5	<5	<5	9,400	6.6	22	<0.1	<5	<5	170	420	<2	<0.2	<10	<10	14	7.4
TP05_1.9	**29/11/2019**	1,600	<10	6.5	<10	<2	<10	<10	<0.4	<5	<5	<5	4,400	<5	8.2	<0.1	<5	<5	110	470	<2	<0.2	<10	<10	<10	<5
TP06_0.6	**29/11/2019**	12,000	<10	7.4	47	<2	<10	<10	<0.4	17	<5	15	20,000	60	49	<0.1	<5	<5	83	480	<2	<0.2	28	<10	40	240
TP06_1.0	**29/11/2019**	3,300	<10	10	20	<2	<10	<10	<0.4	5.1	<5	<5	8,800	22	24	<0.1	<5	<5	160	530	<2	<0.2	11	<10	16	24
TP06_1.6	**29/11/2019**	1,600	<10	4.4	<10	<2	<10	<10	<0.4	<5	<5	<5	9,700	6.2	16	<0.1	<5	<5	160	570	<2	<0.2	16	<10	<10	6.9
Statistics																											
Number of Results		**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Minimum Detect		**1,600**	**ND**	**3.2**	**10**	**ND**	**ND**	**20**	**ND**	**5.1**	**ND**	**10**	**3,300**	**5.8**	**7.6**	**0.1**	**ND**	**5.7**	**67**	**17**	**ND**	**ND**	**11**	**23**	**14**	**5.8**
Maximum Concentration		**12,000**	**<10**	**18**	**84**	**<2**	**<10**	**20**	**<0.4**	**17**	**<5**	**34**	**23,000**	**140**	**130**	**0.2**	**<5**	**5.7**	**340**	**630**	**<2**	**<0.2**	**180**	**23**	**42**	**240**
Average Concentration *		**4,411**	**5**	**7.1**	**25**	**1**	**5**	**5.8**	**0.2**	**7.4**	**2.5**	**12**	**11,272**	**37**	**39**	**0.078**	**2.5**	**2.7**	**141**	**442**	**1**	**0.1**	**40**	**6**	**18**	**45**
95% UCL (Student's-t) *		**5,751**	**5**	**8.718**	**34.52**	**1**	**5**	**7.283**	**0.2**	**9.767**	**2.5**	**15.6**	**13,913**	**53.65**	**51.58**	**0.101**	**2.5**	**2.987**	**177.9**	**507.4**	**1**	**0.1**	**59.38**	**7.74**	**23.81**	**70.82**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Asbestos	Major/minor ions				Radioactive	Explosives			Phenols																				
	Asbestos (Fines and Fibrous FA+AF)	Calcium	Magnesium	Potassium	Sodium	Uranium	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	2,3,4,6-tetrachlorophenol	2,4,5-trichlorophenol	2,4,6-Trichlorophenol	2,4-dichlorophenol	2,4-dimethylphenol	2,4-dinitrophenol	2,6-dichlorophenol	2-chlorophenol	2-methylphenol	2-nitrophenol	3/4-methyl phenol (m/p-cresol)	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Dinoseb	Pentachlorophenol	Phenol	tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
	% (w/w)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		5	5	5	5	10	0.5	0.5	0.5	5	1	1	0.5	0.5	5	0.5	0.5	0.2	1	0.4	5	20	1	5	20	1	0.5	10	1	20
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																														
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																														
Clay 0-2m																														
NEPM 2013 Table 1B(6) ESLs for Urban Res																														
Clay 0-2m																														
Field ID	**Date**																													
TP01_0.5	**29/11/2019**	ND	2,100	520	430	120	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	ND	7,200	870	590	400	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP01_2.2	**29/11/2019**	-	6,600	1,200	300	1,800	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	ND	12,000	170	170	190	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	-	13,000	140	140	190	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP02_2.6	**29/11/2019**	-	8,400	2,200	740	1,600	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	ND	2,500	1,000	550	240	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP03_1.0	**29/11/2019**	ND	59,000	410	260	600	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	16,000	190	150	310	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	ND	1,600	470	330	120	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	ND	34,000	210	150	430	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP04_2.3	**29/11/2019**	-	19,000	240	180	<5	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	ND	1,600	220	130	470	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP05_1.0	**29/11/2019**	ND	1,300	400	210	82	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	13,000	350	170	760	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	ND	33,000	200	130	200	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	ND	110,000	440	550	420	<10	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<0.4	<5	<20	<1	<5	<20	<1	<0.5	<10	<1	<20
TP06_1.6	**29/11/2019**	-	19,000	320	190	880	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results		**11**	**18**	**18**	**18**	**18**	**18**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**1,300**	**140**	**130**	**82**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**0**	**110,000**	**2,200**	**740**	**1,800**	**<10**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<1**	**<1**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.2**	**<1**	**<0.4**	**<5**	**<20**	**<1**	**<5**	**<20**	**<1**	**<0.5**	**<10**	**<1**	**<20**
Average Concentration *		**0**	**19,961**	**531**	**298**	**490**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**
95% UCL (Student's-t) *		**0**	**30,989**	**741.1**	**376.6**	**694.4**	**5**	**0.25**	**0.25**	**0.25**	**2.5**	**0.5**	**0.5**	**0.25**	**0.25**	**2.5**	**0.25**	**0.25**	**0.1**	**0.5**	**0.2**	**2.5**	**10**	**0.5**	**2.5**	**10**	**0.5**	**0.25**	**5**	**0.5**	**10**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		OCP																							OPP								
		4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Azinophos methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	100	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.05	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind										640																							
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ										180																							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																																	
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																																	
Field ID	**Date**																																
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.05	<0.05	<0.05	<0.05	<0.05	<100	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<100**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<50**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<1**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<0.2**
Average Concentration *		**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
95% UCL (Student's-t) *		**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**50**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Parathion	Phorate	Ronnel
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind								
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m								
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m								
Field ID **Date**								
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-
Statistics								
Number of Results	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<0.2**	**<0.2**	**<0.2**	**<0.2**	**<2**	**<0.2**	**<0.2**	**<0.2**
Average Concentration *	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**
95% UCL (Student's-t) *	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SPOCAS											
		Analysed Material	Acid Neutralising Capacity	ANC Fineness Factor	Chromium Reducible Sulfur	Extraneous Material	HCl Extractable Sulfur Correction Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Sulfidic - Titratable Actual Acidity	Sulfidic-Acid Neutral	Titratable Actual Acidity
		%	%CaCO3	-	%S	%	FACTOR	mole H+/t	%S	%S	%S	mole H+/t
EQL		0.1	0.01		0.005	0.1	1	10	0.02	0.003	0.02	2
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind												
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind												
Clay 0-2m												
NEPM 2013 Table 1B(6) ESLs for Urban Res												
Clay 0-2m												
Field ID	**Date**											
TP01_0.5	**29/11/2019**	65	0.63	1.5	0.005	35	2.0	<10	<0.02	<0.003	0.20	<2
TP01_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	84	1.7	1.5	<0.005	16	2.0	<10	<0.02	<0.003	0.54	<2
TP02_1.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP03_1.0	**29/11/2019**	89	3.0	1.5	<0.005	11	2.0	<10	<0.02	<0.003	0.97	<2
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	97	0.70	1.5	<0.005	3.2	2.0	<10	<0.02	<0.003	0.22	<2
TP04_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	100	0.53	1.5	<0.005	<0.1	2.0	<10	<0.02	<0.003	0.17	<2
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	98	2.0	1.5	<0.005	1.7	2.0	<10	<0.02	<0.003	0.65	<2
TP06_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-
Statistics												
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Minimum Detect		**65**	**0.53**	**1.5**	**0.005**	**1.7**	**2**	**ND**	**ND**	**ND**	**0.17**	**ND**
Maximum Concentration		**100**	**3**	**1.5**	**0.005**	**35**	**2**	**<10**	**<0.02**	**<0.003**	**0.97**	**<2**
Average Concentration *		**89**	**1.4**	**1.5**	**0.0029**	**11**	**2**	**5**	**0.01**	**0.0015**	**0.46**	**1**
95% UCL (Student's-t) *		**99.66**	**2.236**	**1.5**	**0.00376**	**22**	**2**	**5**	**0.01**	**0.0015**	**0.722**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		SVOC																																	
		1,2,3,4-Tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	1,3,5-Trichlorobenzene	1-Chloronaphthalene	1-naphthylamine	2-chloronaphthalene	2-methylnaphthalene	2-naphthylamine	2-nitroaniline	2-Picoline	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-aminobiphenyl	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	7,12-dimethylbenz(a)anthracene	Acetophenone	Aniline	Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Coumaphos	Demeton-O	Demeton-S	Dibenz(a,j)acridine	Dibenzofuran	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.2	0.2	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																																			
Field ID	**Date**																																		
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Di-n-octyl phthalate	Diphenylamine	EPN	Ethoprop	Fensulfothion	Hexachlorocyclopentadiene	Hexachloroethane	Mevinphos (Phosdrin)	Naled (Dibrom)	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-nitrosopiperidine	Pentachlorobenzene	Pentachloronitrobenzene	Pronamide	Trichloronate	Trifluralin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																	
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																	
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																	
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																	
Field ID **Date**																	
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																	
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.2**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.5**
Average Concentration *	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**
95% UCL (Student's-t) *	**0.25**	**0.25**	**0.1**	**0.1**	**0.1**	**0.25**	**0.25**	**0.1**	**0.1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.1**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

		VOC																																	
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1-dichloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2,3-trichlorobenzene	1,2,4-trimethylbenzene	1,2,4-trichlorobenzene	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,3-dichloropropane	1,4-dichlorobenzene	2-butanone (MEK)	4-chlorotoluene	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																																			
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																																			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind																																			
Clay 0-2m																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res																																			
Clay 0-2m																																			
Field ID	**Date**																																		
TP01_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0	**29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6	**29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Average Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
95% UCL (Student's-t) *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C1
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Chlorobenzene	Chloromethane	Chloroform	cis-1,3-dichloropropene	cis-1,2-dichloroethene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Hexachlorobutadiene	Iodomethane	Isopropylbenzene	Styrene	TCE	Tetrachloroethene	trans-1,3-dichloropropene	trans-1,2-dichloroethene	Trichlorofluoromethane	Vinyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Specific EIL - Comm/Ind																		
NEPM 2013 Table 1B(5) Specific EIL - Urban Res & Publ																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind Clay 0-2m																		
NEPM 2013 Table 1B(6) ESLs for Urban Res Clay 0-2m																		
Field ID **Date**																		
TP01_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01_1.2 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_2.2 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02_1.2 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP02_2.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_0.5 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP03_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03_2.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_0.5 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04_1.0 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP04_2.3 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_0.6 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP05_1.0 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05_1.9 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_0.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06_1.0 **29/11/2019**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP06_1.6 **29/11/2019**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																		
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present
#2 As Chromium III. Clay content of 7%.
#3 Soil pH of 8.65.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To
#5 CEC of 21 meq/100g. .
#6 Soil pH of 8.65 and a CEC of 21.3 meq/100g.
#7 Moderate reliability. To obtain F1 subtract the sum
#8 Moderate reliability.
#9 To obtain F2 subtract napthalene from the >C10 - C
#10 To obtain F1 subtract the sum of BTEX concentrati
#11 Moderate reliability.
#12 Nil
ND=Non detect

	Inorganics	BTEX				TRH							MAH								
	Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.001	1	2	2	2	20	20	100	100	100	100	100	5	5	5	5	5	5	5	5	5
10 x ADWG 2011 (May 2019 Update) - Recreational Water	0.8	10	8000	3000	6000															300	
ANZG (2018) Marine water 95% toxicant DGVs		700 [#1]																			
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																					
2-4m		5,000	NL	NL	NL		6,000 [#8]		NL [#9]												
4-8m		5,000	NL	NL	NL		6,000 [#8]		NL [#9]												
PFAS NEMP 2020 Table 1 Health Recreational Water																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m		NL	NL	NL	NL		NL		NL												
4-8m		NL	NL	NL	NL		NL		NL												

Lab Report Number	Field ID	Date																				
ES2022315	WSP_CR07_GW01	26/06/2020	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_GW03	26/06/2020	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
ES2033039	WSP_BWP_GW01	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_GW03	18/09/2020	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
ES2042721	WSP_BWP_GW02	2/12/2020	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_GW03	2/12/2020	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5
ES2101011	WSP_BWP_GW02	13/01/2021	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5

Statistics

Number of Results	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *	0.0005	0.5	1	1	1	10	10	50	50	50	50	50	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#3 High reliability
#4 Very high reliability
#5 Low reliability (should only be used as an indicative interim working level)
#6 Moderate reliability
#7 Very Low reliability
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			PAH																	
			2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	0.5
10 x ADWG 2011 (May 2019 Update) - Recreational Water											0.1										
ANZG (2018) Marine water 95% toxicant DGVs									0.4[#5]		0.2[#5]				1.4[#6]			70[#6]	2[#6]		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																					
2-4m																		NL			
4-8m																		NL			
PFAS NEMP 2020 Table 1 Health Recreational Water																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m																		NL			
4-8m																		NL			
Lab Report Number	**Field ID**	**Date**																			
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_GW03	**26/06/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_GW03	**18/09/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_GW03	**2/12/2020**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
Statistics																					
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<2**	**<2**	**<2**	**<1**	**<1**	**<1**	**<1**	**<0.5**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<0.5**
Average Concentration *			**1**	**1**	**1**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.25**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to e
#3 High reliability
#4 Very high reliability
#5 Low reliability (should only be used as an indicative interim working level)
#6 Moderate reliability
#7 Very Low reliability
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Metals															Phenols												Explo	
			Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (0-cresol)	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	10	5	2	1	1	1	1	1	1	1	1	1	2	1	2	4
10 x ADWG 2011 (May 2019 Update) - Recreational Water			100	20,000	600	40,000	20			20,000	100	500	10	200	100	170					200	2,000				3,000				100			
ANZG (2018) Marine water 95% toxicant DGVs							5.5[#2]		1[#3]	1.3[#4]	4.4[#3]		0.4[#4]	70[#3]			100[#3]	15[#4]													22	400[#6]		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																
PFAS NEMP 2020 Table 1 Health Recreational Water																																
PFAS NEMP 2020 Table 5 Interim marine 95%																																
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																
Lab Report Number	**Field ID**	**Date**																														
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	3	138	<1	1,010	<0.1	<1	<1	<1	<1	230	<0.1	2	<10	3	<10	6	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_CR07_GW03	**26/06/2020**	<10[#12]	82	<10[#12]	2,360	<1.0[#12]	<10[#12]	<10[#12]	16	<10[#12]	117	<0.1	<10[#12]	<100[#12]	<10[#12]	<100[#12]	51	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	2	50	<1	1,040	<0.1	<1	<1	115	<1	86	<0.1	9	<10	1	<10	100	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_BWP_GW03	**18/09/2020**	<10[#12]	81	<10[#12]	3,130	<1.0[#12]	<10[#12]	<10[#12]	<10[#12]	<10[#12]	24	<0.1	<10[#12]	<100[#12]	<10[#12]	<100[#12]	<50[#12]	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<10	<1	<10	24	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
	WSP_BWP_GW03	**2/12/2020**	<10[#12]	59	<10[#12]	3,800	<1.0[#12]	<10[#12]	<10[#12]	<10[#12]	<10[#12]	16	<0.1	<10[#12]	<100[#12]	<10[#12]	<100[#12]	<5[#12]	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<1	42	<1	100	0.1	2	28	34	3	58	<0.1	30	<10	<1	<10	60	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4
Statistics																																
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**2**	**42**	**ND**	**100**	**0.1**	**2**	**28**	**16**	**3**	**16**	**ND**	**2**	**ND**	**1**	**ND**	**6**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<10**	**138**	**<10**	**3,800**	**<1**	**<10**	**52**	**115**	**<10**	**295**	**<0.1**	**45**	**<100**	**<10**	**<100**	**100**	**<2**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<2**	**<1**	**<2**	**<4**
Average Concentration *			**3**	**74**	**2.4**	**1,671**	**0.25**	**2.6**	**14**	**25**	**2.8**	**118**	**0.05**	**14**	**24**	**2.9**	**24**	**42**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**	**1**	**2**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
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#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	sives		Organochlorine Pesticides																						
	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water						3		20					90								100	3			
ANZG (2018) Marine water 95% toxicant DGVs																			0.008[#1]						
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																									
2-4m																									
4-8m																									
PFAS NEMP 2020 Table 1 Health Recreational Water																									
PFAS NEMP 2020 Table 5 Interim marine 95%																									
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																									
2-4m																									
4-8m																									
Lab Report Number	**Field ID**	**Date**																							
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CR07_GW03	**26/06/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_BWP_GW03	**18/09/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_BWP_GW03	**2/12/2020**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
Statistics																									
Number of Results			7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			**<4**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**
Average Concentration *			**2**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides															Herbicides
	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water							300	100	5	20	100		40	50	70	40	70	700	7	20		700
ANZG (2018) Marine water 95% toxicant DGVs											0.009[#5]											
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																						
2-4m																						
4-8m																						
PFAS NEMP 2020 Table 1 Health Recreational Water																						
PFAS NEMP 2020 Table 5 Interim marine 95%					0.13[#11]																	
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																						
2-4m																						
4-8m																						

Lab Report Number	Field ID	Date																					
ES2022315	WSP_CR07_GW01	26/06/2020	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_CR07_GW03	26/06/2020	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2033039	WSP_BWP_GW01	18/09/2020	0.02	<0.02	0.05	<0.02	0.06	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_BWP_GW03	18/09/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2042721	WSP_BWP_GW02	2/12/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
	WSP_BWP_GW03	2/12/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2
ES2101011	WSP_BWP_GW02	13/01/2021	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2

Statistics

Number of Results	4	4	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect	0.02	ND	0.05	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.02	<0.02	0.05	<0.02	0.06	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2
Average Concentration *	0.012	0.01	0.02	0.01	0.019	0.01	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25	1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Pesticides						Halogenated Hydrocarbons					PFAS		Halogenated Benzenes									
			Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Sum of PFHxS and PFOS	Sum of PFAS	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	0.5	0.5	2	0.5	5	50	50	5	50	0.01	0.01	5	2	2	2	2	5	5	5	5	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water						5	200	5	10	10				0.7				15,000		400				3,000	
ANZG (2018) Marine water 95% toxicant DGVs																	80[#6]								
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																									
2-4m																									
4-8m																									
PFAS NEMP 2020 Table 1 Health Recreational Water														2[#10]											
PFAS NEMP 2020 Table 5 Interim marine 95%																									
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																									
2-4m																									
4-8m																									
Lab Report Number	**Field ID**	**Date**																							
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_CR07_GW03	**26/06/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	0.11	0.22	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_GW03	**18/09/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_GW03	**2/12/2020**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	<0.01	<0.01	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2
Statistics																									
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**4**	**4**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.11**	**0.22**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<2**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<5**	**<50**	**<50**	**<5**	**<50**	**0.11**	**0.22**	**<5**	**<2**	**<2**	**<2**	**<2**	**<5**	**<5**	**<5**	**<5**	**<2**
Average Concentration *			**1**	**1**	**0.25**	**0.25**	**1**	**0.25**	**2.5**	**25**	**25**	**2.5**	**25**	**0.031**	**0.059**	**2.5**	**1**	**1**	**1**	**1**	**2.5**	**2.5**	**2.5**	**2.5**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Chlorinated Hydrocarbons																														
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50
10 x ADWG 2011 (May 2019 Update) - Recreational Water						300				30						30									7				500			3
ANZG (2018) Marine water 95% toxicant DGVs				1,900[#7]																												
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																
PFAS NEMP 2020 Table 1 Health Recreational Water																																
PFAS NEMP 2020 Table 5 Interim marine 95%																																
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																

Lab Report Number	Field ID	Date																														
ES2022315	WSP_CR07_GW01	26/06/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_CR07_GW03	26/06/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2033039	WSP_BWP_GW01	18/09/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_GW03	18/09/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2042721	WSP_BWP_GW02	2/12/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_GW03	2/12/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
ES2101011	WSP_BWP_GW02	13/01/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50

Statistics

Number of Results	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
Average Concentration *	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	25	2.5	25	2.5	2.5	2.5	1	5	1	2.5	2.5	2.5	2.5	25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to e
#3 High reliability
#4 Very high reliability
#5 Low reliability (should only be used as an indicative interim working level)
#6 Moderate reliability
#7 Very Low reliability
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Perfluoroalkane Carboxylic Acids	VOCs			Solvents						SVOCs																
	Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	5	5	5	50	50	50	5	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
10 x ADWG 2011 (May 2019 Update) - Recreational Water	5.6																										
ANZG (2018) Marine water 95% toxicant DGVs																											
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																											
2-4m																											
4-8m																											
PFAS NEMP 2020 Table 1 Health Recreational Water	10[#10]																										
PFAS NEMP 2020 Table 5 Interim marine 95%	220[#11]																										
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																											
2-4m																											
4-8m																											

Lab Report Number	Field ID	Date																										
ES2022315	WSP_CR07_GW01	26/06/2020	-	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_CR07_GW03	26/06/2020	-	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2033039	WSP_BWP_GW01	18/09/2020	0.02	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_GW03	18/09/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2042721	WSP_BWP_GW02	2/12/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_GW03	2/12/2020	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
ES2101011	WSP_BWP_GW02	13/01/2021	-	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2

Statistics

Number of Results	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Minimum Detect	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.02	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
Average Concentration *	0.0088	2.5	2.5	2.5	25	25	25	2.5	1	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
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#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates						Organotins
	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Tributyltin as SN
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/Sn/L
EQL	2	2	2	2	1	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2	
10 x ADWG 2011 (May 2019 Update) - Recreational Water																300	100						
ANZG (2018) Marine water 95% toxicant DGVs																							
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							
PFAS NEMP 2020 Table 1 Health Recreational Water																							
PFAS NEMP 2020 Table 5 Interim marine 95%																							
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																							
2-4m																							
4-8m																							
Lab Report Number	**Field ID**	**Date**																						
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_CR07_GW03	**26/06/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
ES2033039	**WSP_BWP_GW01**	**18/09/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
	WSP_BWP_GW03	**18/09/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_BWP_GW03	**2/12/2020**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
ES2101011	**WSP_BWP_GW02**	**13/01/2021**	<2	<2	<2	<2	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
Statistics																								
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**2**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<2**	**<2**	**<2**	**<1**	**<2**	**<4**	**<4**	**<4**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<10**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**
Average Concentration *			**1**	**1**	**1**	**1**	**0.5**	**1**	**2**	**2**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**1**	**1**	**1**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refe
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to e
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#9 To obtain F2 subtract napthalene from the >C10 - C16 fraction.
#10 Recreational Water Quality Guideline Value (NHMRC 2019)
#11 Australian and New Zealand Guidelines for marine and Marine Water Quality
#12 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

					Lab Screening	Acidity and Liming Rate															
					pH_{KCl}	Actual Acidity (TAA)		Sulfidic Acidity (S_{Cr})		Snas	Retained Acidity (S_{NAS})		s-ANC bt	Acid Neutralising Capacity (ANC)		Net Acidity Without ANC [3]		Liming Rate With ANC [4]	Liming Rate Without ANC [4]	Comments
					pH Units	mol H+/t	kg H_2SO_4/t [2]	mol H+/t	kg H_2SO_4/t [2]	%s	mol H+/t	kg H_2SO_4/t [2]	%S	mol H+/t	kg H_2SO_4/t [2]	mol H+/t	kg H_2SO_4/t [2]	kg $CaCO_3$/t	kg $CaCO_3$/t	
Action Criteria								62								62				
	Strata																			
Depth	description	Colour	Material type	Borehole																
0.5	Weathered sandstone	Orange/light brown	Reworked natural	WSP_CRW_GW02	-	<2	-	11.00	-	**0.018**			n/a	587	n/a	11.00	n/a	<1	<1	Likely Not ASS

			PAH																BTEX			
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	PAHs (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylene Total
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.3
Lab Report Number	**Field ID**	**Date**																				
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.5	<0.5	<0.5
717043	**QA01**	**28/04/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.1	<0.1	<0.1	<0.3
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.5	<0.5	<0.5
	WSP_CRW_QA04	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.5	<0.5	<0.5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.2	<0.5	<0.5	<0.5
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.1	<0.1	<0.1	<0.3
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments

#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

			TRH							Metals																		
			C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (hexavalent)	Chromium (III+VI)	Chromium (Trivalent)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	10	50	50	100	100	50	2	10	1	10	0.4	1	2	5	2	5	5	5	0.1	2	2	0.1	5	5
Lab Report Number	**Field ID**	**Date**																										
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<50	<1	-	3	-	<2	<5	<5	26	<0.1	<2	<5	<0.1	<5	12
717043	**QA01**	**28/04/2020**	<20	<20	<50	<50	<100	<100	<100	<2	<10	<2	<10	<0.4	-	<5	-	<5	<5	<5	6.7	<0.1	<5	<5	-	<10	14
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	**118**	0	0	0	-	0	15
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<50	<1	-	4	-	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
	WSP_CRW_QA04	**23/11/2020**	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<50	<1	-	4	-	4	<5	<5	<5	<0.1	<2	<5	<0.1	<5	<5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	22	0	0	0	0	40	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<10	<10	<50	<50	<100	<100	<50	<5	<10	<1	<50	<1	-	4	-	5	<5	<5	5	<0.1	3	<5	<0.1	<5	<5
759374	**WSP_CRW_QA04A**	**23/11/2020**	<20	<20	<50	<50	<100	<100	<100	<2	<10	<2	<10	<0.4	<2[#1]	<5	<5	<5	<5	<5	<5	0.2	<5	-	<1	<10	<5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	67	0	-	0	0	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Phenols																	
			3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.4	0.5	0.5	0.5	0.5	5	0.5	0.5	0.2	0.5	5	20	0.5	5	1	0.5	1	20
Lab Report Number	**Field ID**	**Date**																		
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
717043	**QA01**	**28/04/2020**	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5	<1	<0.5	<1	<20
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
	WSP_CRW_QA04	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<1	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.5	-	-
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5	<1	<0.5	<1	<20
RPD			0	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Organochlorine Pesticides																							
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.05	0.2
Lab Report Number	**Field ID**	**Date**																								
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
717043	**QA01**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CRW_QA04	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0

Comments
#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**
*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Organophosphorous Pesticides															Herbicides	Pesticides				PCBs							
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Dinoseb	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	20	0.05	0.05	0.2	0.05	0.5	0.1	0.5	0.5	0.5	0.5	0.5	0.1
Lab Report Number	**Field ID**	**Date**																												
ES2014462	**WSP_BP_EX04_1.8**	**28/04/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
717043	**QA01**	**28/04/2020**	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	-	<20	-	-	<0.2	-	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD			0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-	-	-	-	-	-	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
	WSP_CRW_QA04	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	-	-	-	-	0
ES2041504	**WSP_CRW_GW02_1.0**	**23/11/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	<0.1
759374	**WSP_CRW_QA04A**	**23/11/2020**	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	-	<20	-	-	<0.2	-	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD			0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-	-	-	-	-	-	0

Comments

#1 The LORs have been raised due to matrix interference

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each E**

*****Interlab Duplicates are matched on a per compound basis as methods vary between la**

			Inorganics	BTEX				TRH							MAH								
			Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene Total	C6-C10_	C6-C10 minus BTEX (F1)	C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.001	1	1	1	2	20	20	50	50	100	100	100	1	1	1	5	5	5	5	1	5
Lab Report Number	**Field ID**	**Date**																					
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_QA01A	**26/06/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CR07_QA01	**26/06/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_QA01	**18/09/2020**	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<0.001	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
745423	**WSP_BWP_QA01A**	**18/09/2020**	<0.005	<1	<1	<1	<3	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	-	-	-	-	<1	-
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_QA03	**2/12/2020**	-	<1	<2	<2	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<1	<2	<1	<2	<20	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
761419	**WSP_BWP_QA03A**	**2/12/2020**	-	<1	<1	<1	<3	<20	<20	<50	<50	<100	<100	<100	<1	<1	<1	-	-	-	-	<1	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

			PAH																				
			1-Chloronaphthalene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(e) pyrene	Benzo(j,k)fluorene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	0.5
Lab Report Number	**Field ID**	**Date**																					
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_QA01A	**26/06/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_CR07_QA01	**26/06/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_QA01	**18/09/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
745423	**WSP_BWP_QA01A**	**18/09/2020**	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
	WSP_BWP_QA03	**2/12/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5
761419	**WSP_BWP_QA03A**	**2/12/2020**	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

***RPDs have only been considered where a concentration is greater than 1 times th**
****Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for**
*****Interlab Duplicates are matched on a per compound basis as methods vary bet**

			Metals																Explosives			
			Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	50	0.1	1	1	1	1	1	0.1	1	1	1	5	5	2	4	4	2
Lab Report Number	**Field ID**	**Date**																				
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	3	138	<1	1,010	<0.1	<1	<1	<1	<1	230	<0.1	2	<10	3	<10	6	<2	<4	<4	<2
	WSP_CR07_QA01A	**26/06/2020**	3	139	<1	1,110	<0.1	<1	1	4	<1	232	<0.1	7	<10	3	<10	41	<2	<4	<4	<2
RPD			0	1	0	9	0	0	0	120	0	1	0	**111**	0	0	0	**149**	0	0	0	0
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	3	138	<1	1,010	<0.1	<1	<1	<1	<1	230	<0.1	2	<10	3	<10	6	<2	<4	<4	<2
	WSP_CR07_QA01	**26/06/2020**	3	140	<1	1,160	<0.1	<1	<1	2	<1	229	<0.1	5	<10	3	<10	21	<2	<4	<4	<2
RPD			0	1	0	14	0	0	0	67	0	0	0	86	0	0	0	**111**	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<$10^{#1}$	81	<$10^{#1}$	3,130	<$1.0^{#1}$	<$10^{#1}$	<$10^{#1}$	<$10^{#1}$	<$10^{#1}$	24	<0.1	<$10^{#1}$	<$100^{#1}$	<$10^{#1}$	<$100^{#1}$	<$50^{#1}$	<2	<4	<4	<2
	WSP_BWP_QA01	**18/09/2020**	<$10^{#1}$	76	<$10^{#1}$	2,940	<$1.0^{#1}$	<$10^{#1}$	<$10^{#1}$	42	<$10^{#1}$	25	<0.1	<$10^{#1}$	<$100^{#1}$	<$10^{#1}$	<$100^{#1}$	<$50^{#1}$	<2	<4	<4	<2
RPD			0	6	0	6	0	0	0	123	0	4	0	0	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<$10^{#1}$	81	<$10^{#1}$	3,130	<$1.0^{#1}$	<$10^{#1}$	<$10^{#1}$	<$10^{#1}$	<$10^{#1}$	24	<0.1	<$10^{#1}$	<$100^{#1}$	<$10^{#1}$	<$100^{#1}$	<$50^{#1}$	<2	<4	<4	<2
745423	**WSP_BWP_QA01A**	**18/09/2020**	<1	80	<1	3,700	<0.2	<1	<1	52	1	33	<0.1	7	<1	-	<5	75	-	<5	<5	<50
RPD			0	1	0	17	0	0	0	135	0	32	0	0	0	-	0	40	-	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<10	<1	<10	24	<2	<4	<4	<2
	WSP_BWP_QAO3	**2/12/2020**	<1	65	<1	280	<0.1	<1	57	4	<1	278	<0.1	49	<10	<1	<10	29	<2	<4	<4	<2
RPD			0	2	0	7	0	0	9	120	0	6	0	9	0	0	0	19	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<1	64	<1	260	<0.1	<1	52	<1	<1	295	<0.1	45	<10	<1	<10	24	<2	<4	<4	<2
761419	**WSP_BWP_QA03A**	**2/12/2020**	1	60	<1	300	<0.2	<1	58	2	<1	290	<0.1	51	<1	<5	6	27	-	<5	<5	<5
RPD			0	6	0	14	0	0	11	67	0	2	0	12	0	0	0	12	-	0	0	0

Comments
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			Phenols																			
			3&4-Methylphenol (m&p-cresol)	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	1	1	1	1	30	1	1	1	1	30	100	1	30	2	1	10	100
Lab Report Number	**Field ID**	**Date**																			
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_CR07_QA01A	**26/06/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_CR07_QA01	**26/06/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_BWP_QA01	**18/09/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
745423	**WSP_BWP_QA01A**	**18/09/2020**	<6	<10	<10	<10	<3	<3	<30	<3	<3	<3	<10	<30	<100	<10	<30	<10	<3	<10	<100
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
	WSP_BWP_QA03	**2/12/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-
761419	**WSP_BWP_QA03A**	**2/12/2020**	<6	<2	<10	<10	<3	<3	<30	<3	<3	<3	<10	<30	<100	<10	<30	<10	<3	<10	<100
RPD			0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-

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			Organochlorine Pesticides																							
			4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Lab Report Number	**Field ID**	**Date**																								
ES2022315	WSP_CR07_GW01	26/06/2020	<0.8	<0.5	<0.8	<0.5	<0.8	<0.5	<0.8	<0.5	<0.8	<0.5	<2.0	<0.5	<0.8	<0.5	<0.8	<0.5	<0.8	<0.5	<0.8	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CR07_QA01A	26/06/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2022315	WSP_CR07_GW01	26/06/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CR07_QA01	26/06/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_BWP_QA01	18/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
745423	WSP_BWP_QA01A	18/09/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_BWP_QA03	2/12/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
761419	WSP_BWP_QA03A	2/12/2020	<0.1	<0.1	<0.1	<0.2	<0.1	<2	-	-	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
RPD			0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
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			Perfluoroalkane Sulfonic Acids							Organophosphorous Pesticides															Herbicides		
			Perfluorooctanesulfonic acid (PFOS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Dinoseb	Pronamide	Trifluralin
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	100	2	5
Lab Report Number	**Field ID**	**Date**																									
ES2022315	WSP_CR07_GW01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_CR07_QA01A	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2022315	WSP_CR07_GW01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_CR07_QA01	26/06/2020	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2033039	WSP_BWP_GW03	18/09/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_BWP_QA01	18/09/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2033039	WSP_BWP_GW03	18/09/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
745423	WSP_BWP_QA01A	18/09/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<100	<5	<5
RPD			-	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
	WSP_BWP_QA03	2/12/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	-	<2	-
761419	WSP_BWP_QA03A	2/12/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<100	<5	<5
RPD			-	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-

Comments
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***Interlab Duplicates are matched on a per compound basis as methods vary betv

			Pesticides						Halogenated Hydrocarbons					Halogenated Benzenes													
			Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,3-trichlorobenzene	1,2,4,5-tetrachlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3,5-Trichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	0.5	0.5	2	0.5	1	1	1	1	1	5	5	5	2	2	1	5	1	1	5	1	1	1	2
Lab Report Number	**Field ID**	**Date**																									
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_CR07_QA01A	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_CR07_QA01	26/06/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_QA01	18/09/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
745423	WSP_BWP_QA01A	18/09/2020	-	-	-	-	<2	-	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<1	<5	<1	<1	-	<1	<1	<1	<5
RPD			-	-	-	-	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_QA03	2/12/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD			0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
761419	WSP_BWP_QA03A	2/12/2020	-	-	-	-	<2	-	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<1	<5	<1	<1	-	<1	<1	<1	<5
RPD			-	-	-	-	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0

Comments

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*****Interlab Duplicates are matched on a per compound basis as methods vary betv**

			Chlorinated Hydrocarbons																																			
			Chlorinated hydrocarbons EPA Vic	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Benzyl chloride	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			-	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.005	1	1	1	1	1	1	5	1	5	1	1	1	5	5	1	1	1	1	1	1	5	1	1	1	1	1	2	4	2	1	1	1	1	1
Lab Report Number	**Field ID**	**Date**																																				
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_CR07_QA01A	**26/06/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2022315	**WSP_CR07_GW01**	**26/06/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_CR07_QA01	**26/06/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_QA01	**18/09/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2033039	**WSP_BWP_GW03**	**18/09/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
745423	**WSP_BWP_QA01A**	**18/09/2020**	<0.005	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	-	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_QA03	**2/12/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD			-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
761419	**WSP_BWP_QA03A**	**2/12/2020**	<0.005	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	-	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1
RPD			-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0

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			Perfluoroalkane Carboxylic Acids	VOCs				Solvents								SVOCs																		
			Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Dibenz[a,j]acridine	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	5	5	5	5	1	50	1	1	1	1	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
Lab Report Number	**Field ID**	**Date**																																
ES2022315	WSP_CR07_GW01	26/06/2020	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_CR07_QA01A	26/06/2020	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD			-	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2022315	WSP_CR07_GW01	26/06/2020	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_CR07_QA01	26/06/2020	-	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD			-	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_QA01	18/09/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD			0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
745423	WSP_BWP_QA01A	18/09/2020	<0.01	-	-	<5	-	<1	-	<1	<1	<1	<1	-	-	-	<5	<5	<5	<5	<5	-	<5	-	<5	-	<5	<5	-	-	-	<5	-	-
RPD			0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_QA03	2/12/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD			0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
761419	WSP_BWP_QA03A	2/12/2020	<0.01	-	-	<5	-	<1	-	<1	<1	<1	<1	-	-	-	<5	<5	<5	<5	<5	-	<5	-	<5	-	<5	<5	-	-	-	<5	-	-
RPD			0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-

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***RPDs have only been considered where a concentration is greater than 1 times th**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for**
*****Interlab Duplicates are matched on a per compound basis as methods vary betv**

			Amino Aliphatics				PCBs								Amino Aromatics				Anilines						Nitroaromatics			Phthalates						Organotins
			N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	PCBs (Sum of total)	1-naphthylamine	2-naphthylamine	Diphenylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Tributyltin as SN
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/Sn/L
EQL			2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	5	2	2	2	2	2	
Lab Report Number	**Field ID**	**Date**																																
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_CR07_QA01A	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2022315	WSP_CR07_GW01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_CR07_QA01	26/06/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
	WSP_BWP_QA01	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2033039	WSP_BWP_GW03	18/09/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
745423	WSP_BWP_QA01A	18/09/2020	-	<5	<5	-	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	-	<5	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-
RPD			-	0	0	-	-	-	-	-	-	-	-	0	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
	WSP_BWP_QAO3	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
RPD			0	0	0	0	-	-	-	-	-	-	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	<2	<2	<2	<2	-	-	-	-	-	-	-	<1	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-
761419	WSP_BWP_QA03A	2/12/2020	-	<5	<5	-	<5	<1	<5	<5	<5	<5	<5	<1	<5	<5	<5	-	<5	-	-	-	-	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	-
RPD			-	0	0	-	-	-	-	-	-	-	-	0	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

*RPDs have only been considered where a concentration is greater than 1 times th
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for
***Interlab Duplicates are matched on a per compound basis as methods vary bet

				BTEX								TRH										MAH									
				Benzene		Toluene		Ethylbenzene		Xylene Total		C6-C10_		C6-C10 minus BTEX (F1)		C10-C16	C10-C16 minus Naphthalene (F2)	C16-C34 (F3)	C34-C40 (F4)	C10-C40 (Sum of total)		1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	
				mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.2	1	0.5	2	0.5	2	0.5	2	10	20	10	20	100	100	100	100	100	5	5	5	5	5	5	5	5	5	5	5
Lab Report Number	**Field ID**	**Investigation**	**Date**																												
ES2014462	WSP_BP_TB01	Trench	27/04/2020	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<10	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	RINSATE	GME1	26/06/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RY05_Trip Blank		26/06/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	Trip Blank	GME 2	18/09/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<10	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_R803	GME 2	2/12/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_TB03		1/12/2020	-	<1	-	<2	-	<2	-	<2	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																															
Number of Results				2	7	2	7	2	7	2	7	2	7	2	7	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<10	<20	<10	<20	<100	<100	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *				0.1	0.5	0.25	1	0.25	1	0.25	1	5	10	5	10	50	50	50	50	50										

* A Non Detect Multiplier of 0.5 has been applied.

				PAH																					Metals																	
				2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz[a]anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(e) pyrene	Benzo[g,h,i]perylene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	0.5	1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	10	5
Lab Report Number	Field ID	Investigation	Date																																						
ES2014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RY05_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	-	-	-	-	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	GME 2	2/12/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<0.5	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
	WSP_BWP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																								
Number of Results				1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
Average Concentration *								0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.9	0.5	0.5	0.25																			

* A Non Detect Multiplier of 0.5 has been applied.

				Phenols												Explosives				Organochlorine Pesticides																					
				3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (lindane)	Heptachlor
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	1	1	1	1	1	1	1	1	1	2	1	2	4	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Investigation**	**Date**																																				
ES2014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RY05_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CRW_TB4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	GME 2	2/12/2020	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_BWP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																							
Number of Results				2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *				1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5					0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

| | | |

				Halogenated Benzenes										Chlorinated Hydrocarbons																											
				1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				5	2	2	2	2	5	5	5	5	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2
Lab Report Number	Field ID	Investigation	Date																																						
ES2014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RY05_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	GME 2	2/12/2020	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2
	WSP_BWP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																								
Number of Results				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2
Average Concentration *																																								

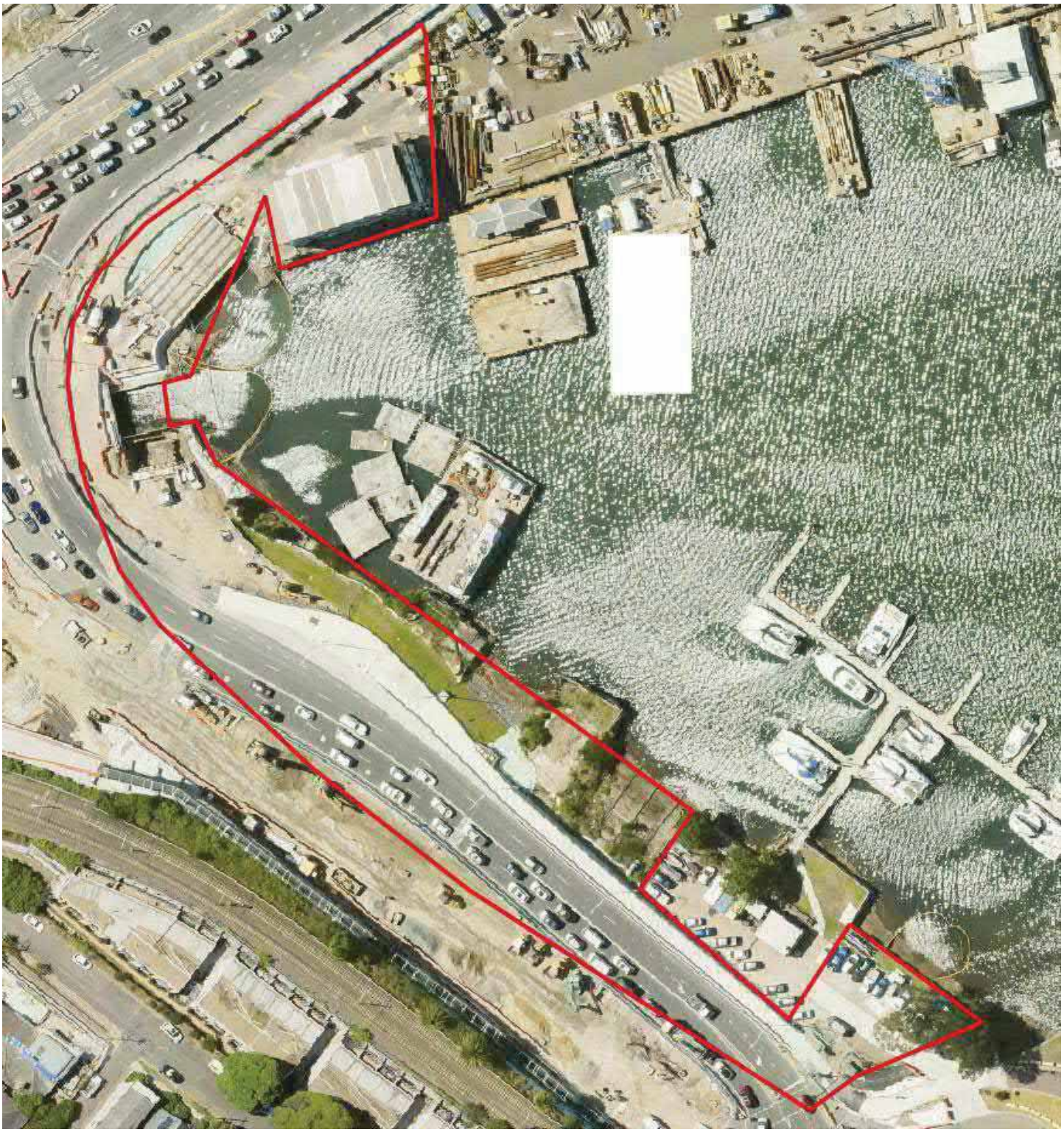
* A Non Detect Multiplier of 0.5 has been applied.

				VOCs						Solvents						SVOCs																	Amino Aliphatics			
				Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-Hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				5	5	5	5	50	0.01	5	5	5	50	50	50	5	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2
Lab Report Number	**Field ID**	**Investigation**	**Date**																																		
ES2014462	**WSP_BP_TB01**	**Trench**	**27/04/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	**RINSATE**	**GME1**	**26/06/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RY05_Trip Blank		**26/06/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	**Trip Blank**	**GME 2**	**18/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		**18/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	**WSP_CRW_rinsate4**	**Soil GW02**	**23/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		**20/11/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	**WSP_BWP_R303**	**GME 2**	**2/12/2020**	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2
	WSP_BWP_TB03		**1/12/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2
Average Concentration *																																					

* A Non Detect Multiplier of 0.5 has been applied.

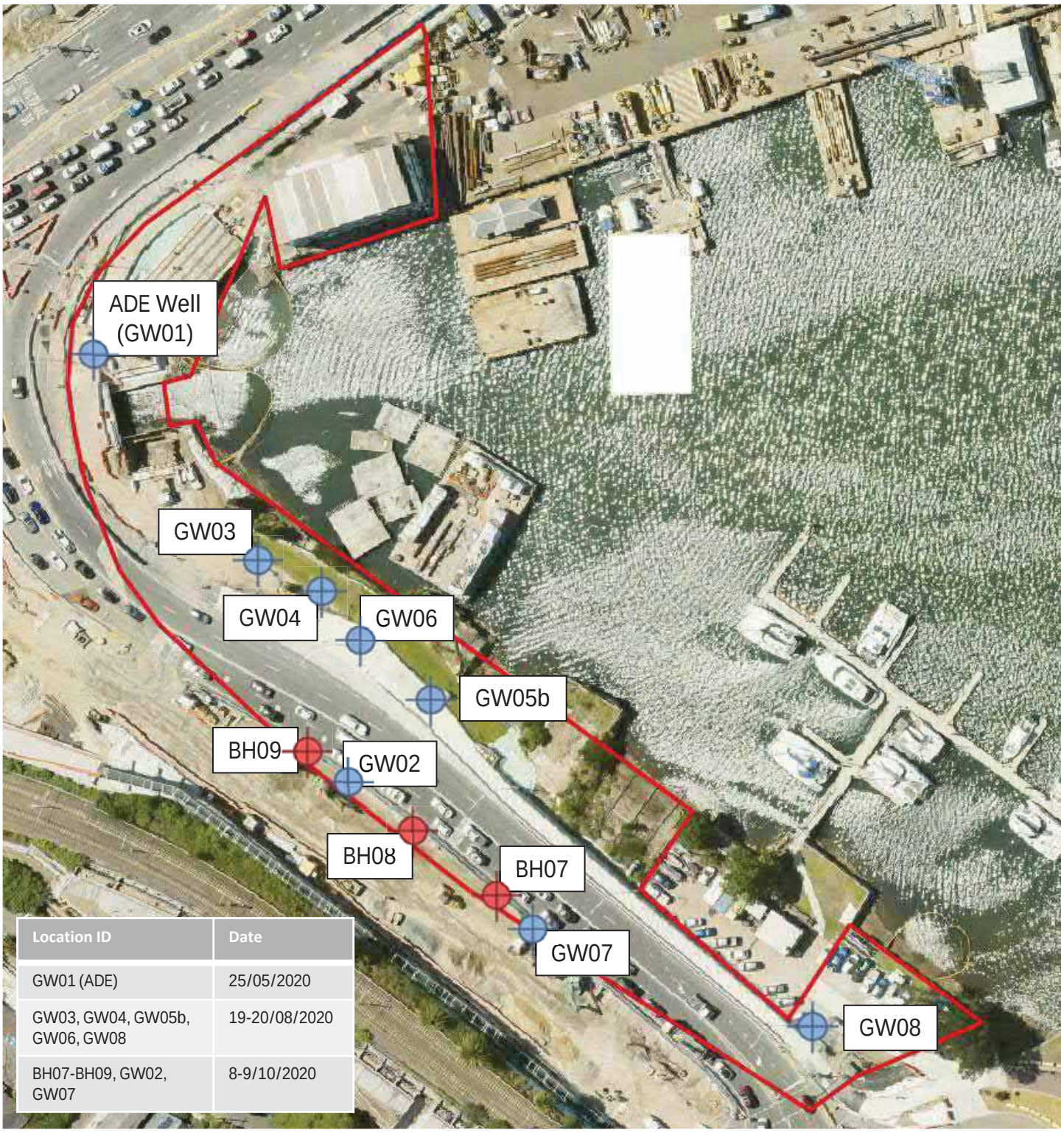
				PCBs	Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
				PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				1	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2
Lab Report Number	Field ID	Investigation	Date																		
ES2014462	WSP_BP_TB01	Trench	27/04/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2022315	RINSATE	GME1	26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_RYDS_Trip Blank		26/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033039	Trip Blank	GME 2	18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_RINSATE		18/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2041504	WSP_CRW_rinsate4	Soil GW02	23/11/2020	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CRW_TB4		20/11/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	GME 2	2/12/2020	<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
	WSP_BWP_TB03		1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																					
Number of Results				2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<1	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Average Concentration *				0.5																	

* A Non Detect Multiplier of 0.5 has been applied.



Approximate Site Boundary

Figure 1 – Site Location
Sub Site Area – Crescent Civil



Location ID	Date
GW01 (ADE)	25/05/2020
GW03, GW04, GW05b, GW06, GW08	19-20/08/2020
BH07-BH09, GW02, GW07	8-9/10/2020

Approximate Site Boundary

Groundwater monitoring well

Borehole

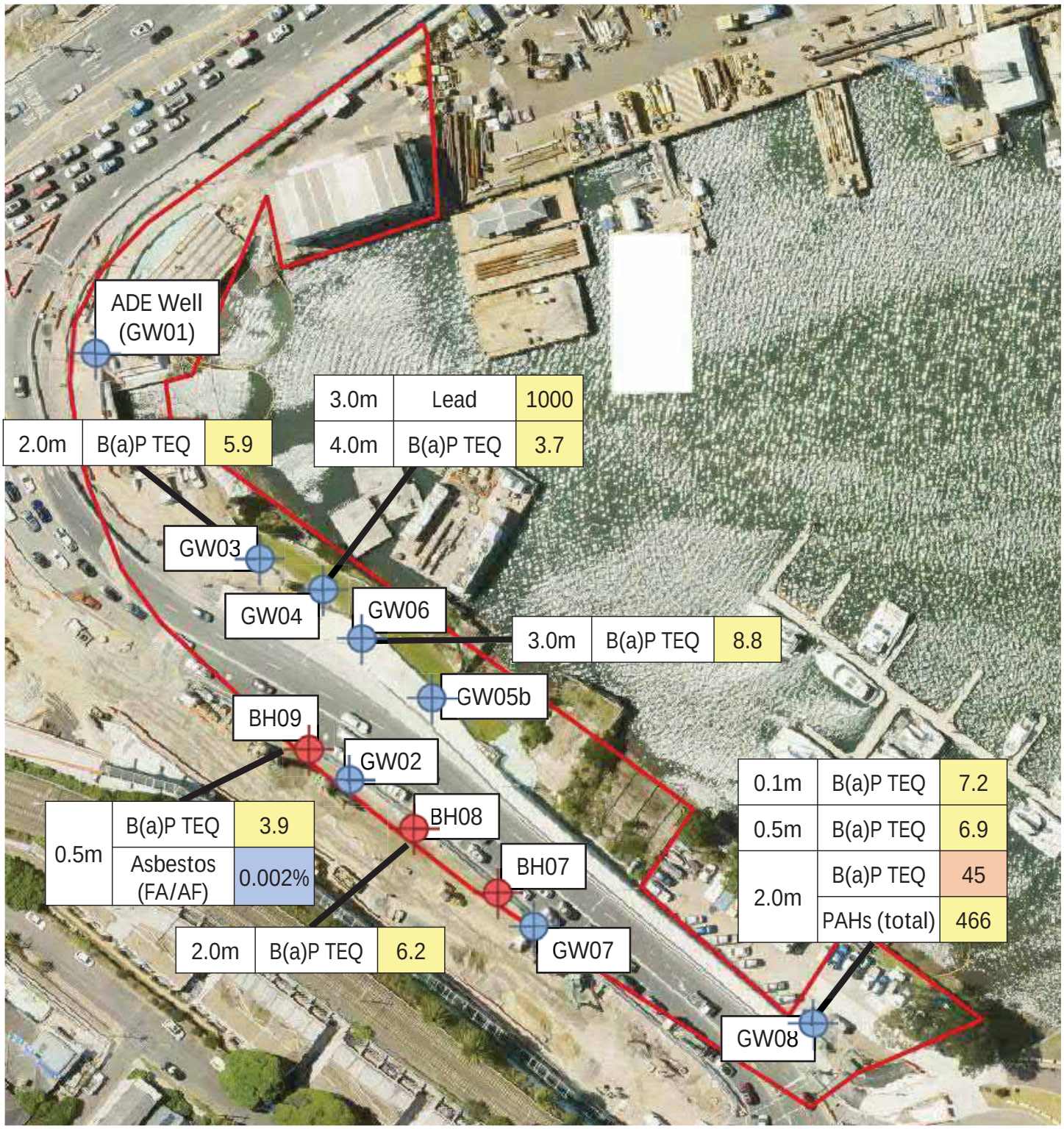
Figure 2a – WSP intrusive locations
Sub Site Area – Crescent Civil

Approximate Site Boundary

Groundwater monitoring well

Borehole

Figure 2b – WSP intrusive locations
Sub Site Area – Crescent Civil



Approximate Site Boundary

NEPM (2013) Table 1A(1) HILs Comm/Ind D Soil

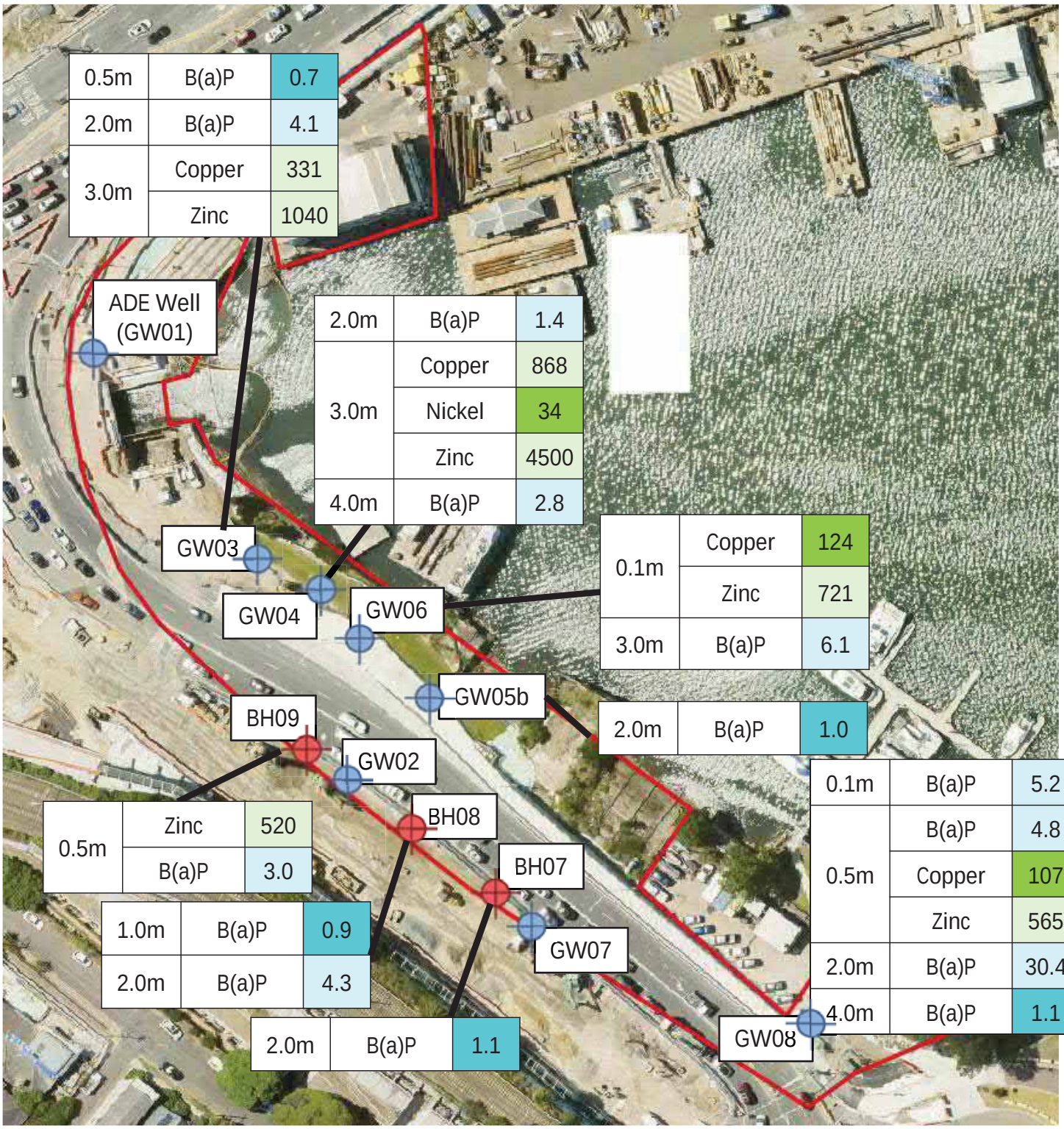
NEPM (2013) Table 1A(1) HILs Recreational C Soil

NEPM (2013) HSLs for Asbestos (all land uses)

Groundwater monitoring well

Borehole

Figure 4 – Soil human health criteria exceedances
Sub Site Area – Crescent Civil



Approximate Site Boundary

Groundwater monitoring well

Borehole

NEPM (2013) Table 1B(5) Site Specific EIL – Comm/Ind

NEPM (2013) Table 1B(5) Site Specific EIL – Urban Res & Public Open Space

NEPM (2013) Table 1B(6) ESLs for Comm/Ind, Coarse Soil

NEPM (2013) Table 1B(6) ESLs for Urban Residential/Public Open Space, Coarse Soil

Figure 5 – Soil ecological criteria exceedances
Sub Site Area – Crescent Civil

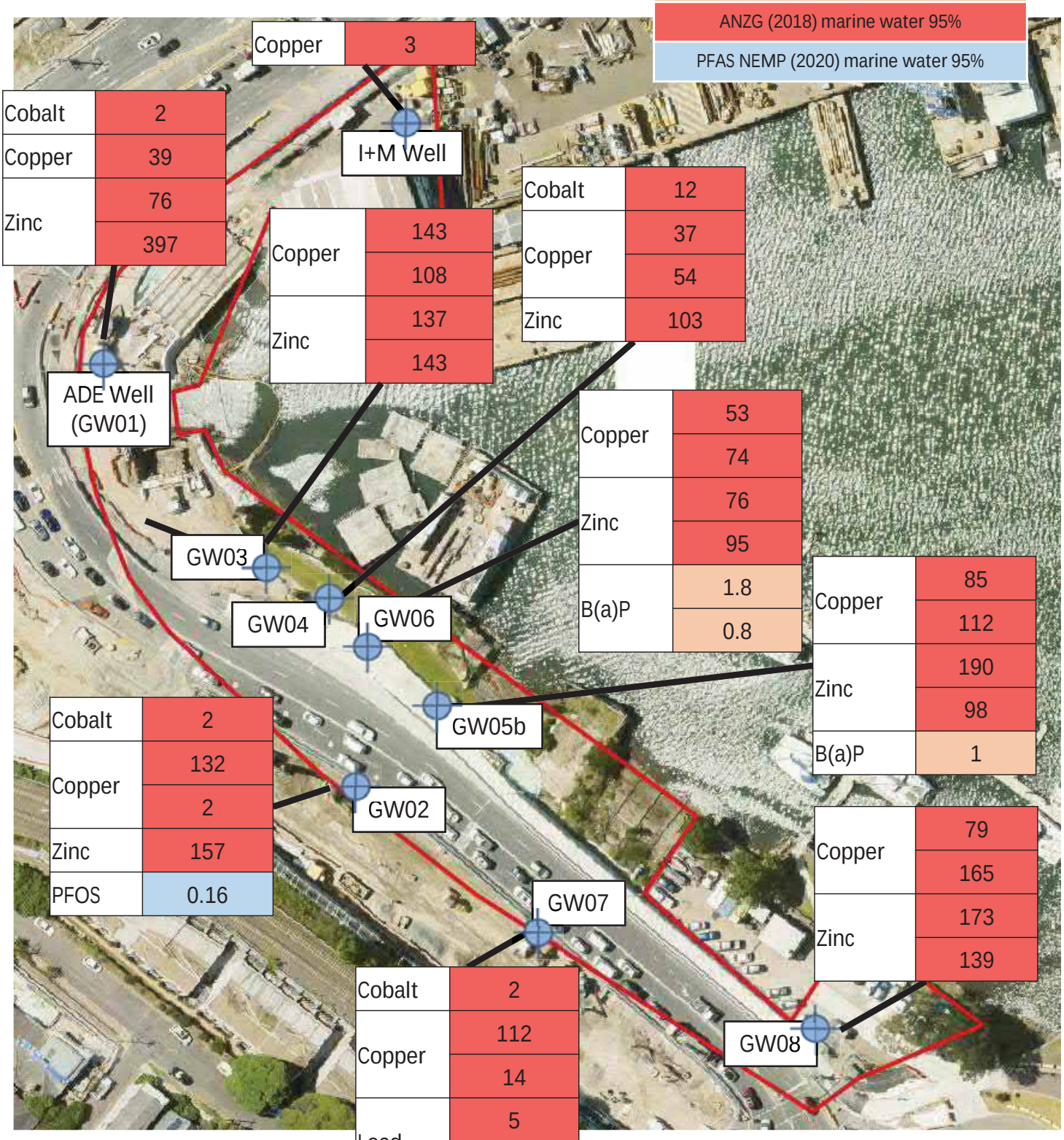
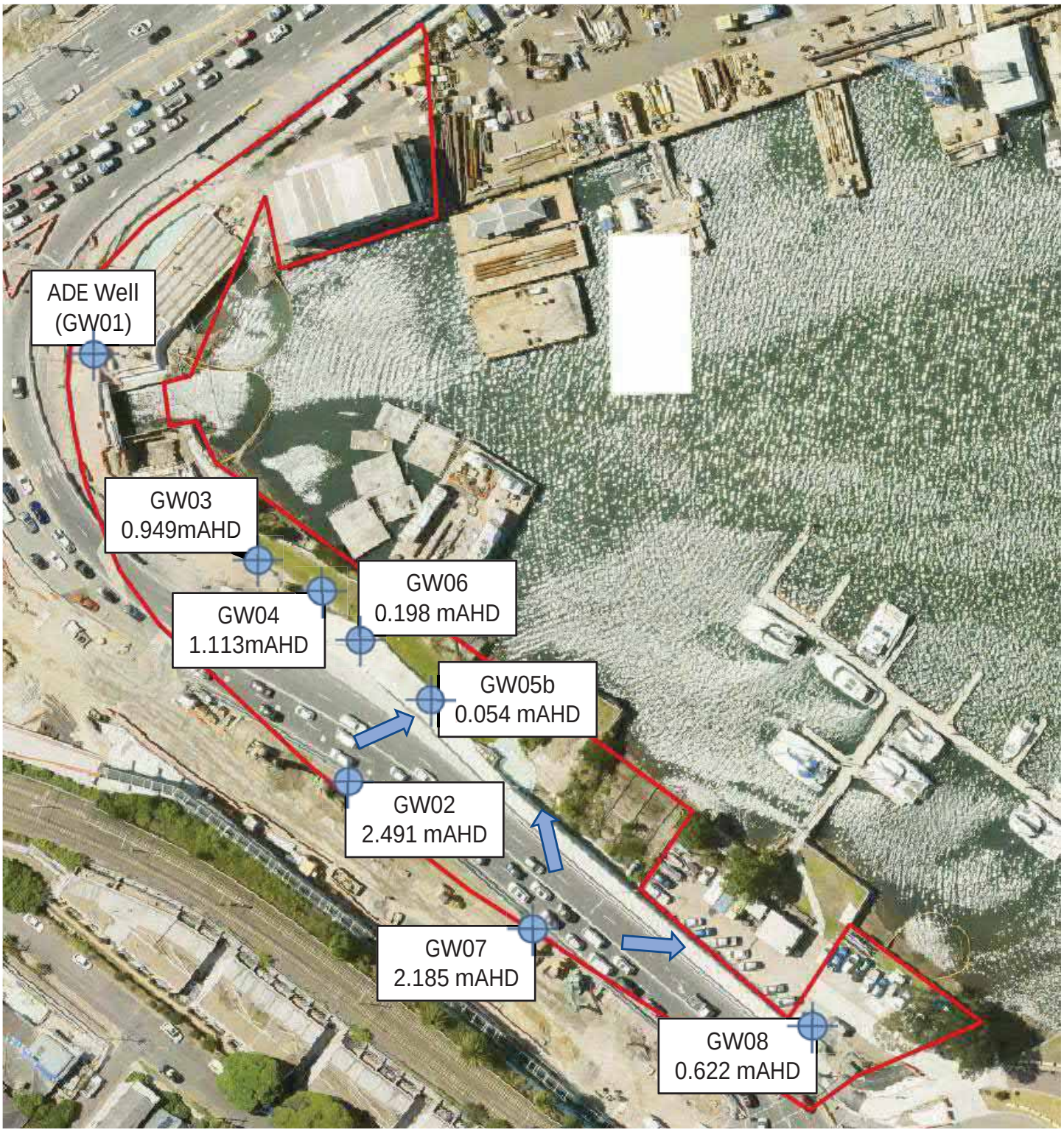


Figure 6 – Groundwater criteria exceedances
Sub Site Area – Crescent Civil



Measurements recorded 16 Oct 2020

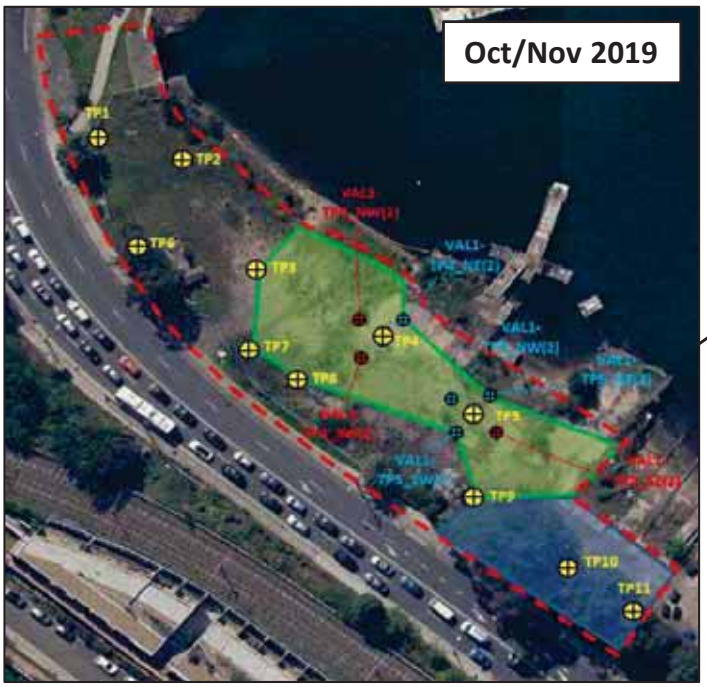
Approximate Site Boundary

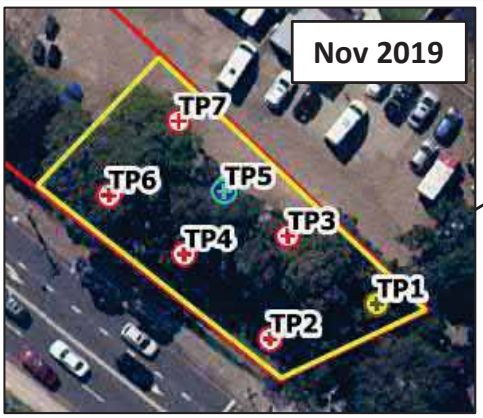
Inferred general groundwater flow direction

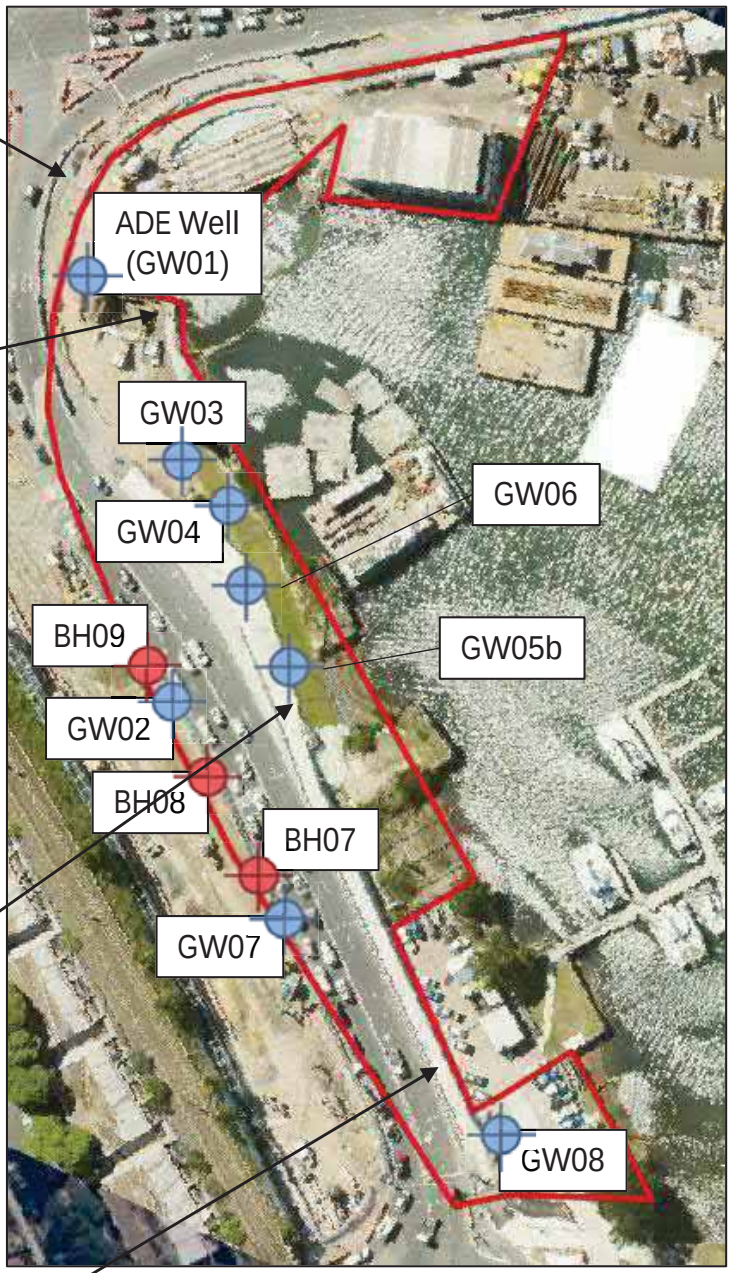
Groundwater monitoring well

Figure 7 – Groundwater flow direction
Sub Site Area – Crescent Civil

May/Jun 2020





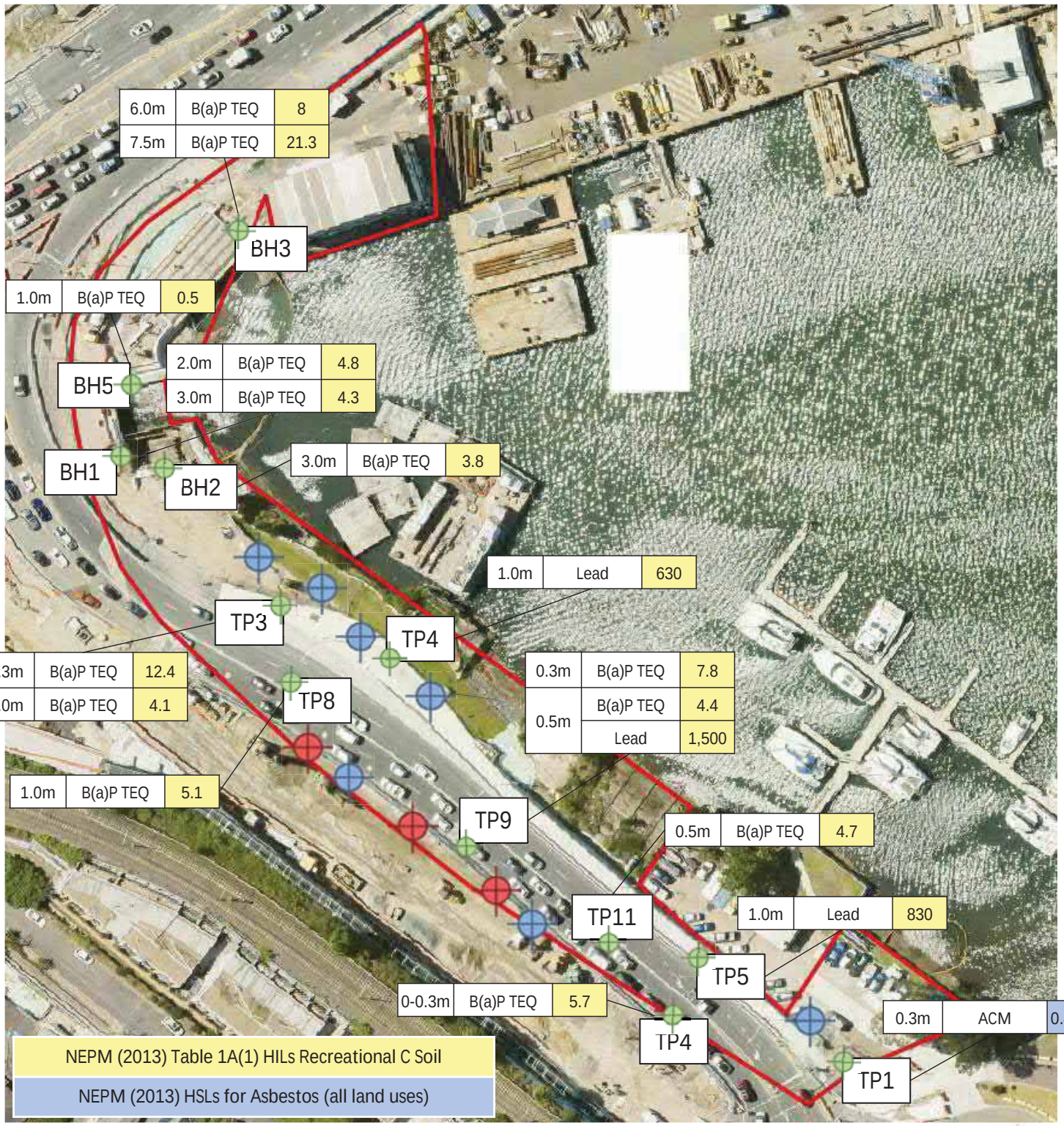


Approximate Site Boundary

Groundwater monitoring well

Borehole

Figure 8 – ADE waste classification
Sub Site Area – Crescent Civil



Approximate Site Boundary

ADE borehole/test pit

Note – ADE locations are approximate only

WSP groundwater monitoring well

WSP borehole

Figure 9 – ADE waste classification Human health criteria exceedances
Sub Site Area – Crescent Civil

Key Project Elements

1. Rozelle Ventilation Facility
2. Western Harbour Tunnel Portal
3. Green Link Bridge (subject to approval of modification SSI-7485-Mod-2)
4. Residual Land (subject to the Residual Land Management Plan)
5. Whites Creek Shared User Path Bridge
6. Landscape terraces
7. Sydney Trains Switching Station
8. Maintenance access and hardstand area
9. Western drainage channel
10. Rozelle Bay Light Rail Stop connection
11. Street pocket parks and landscaping

LEGEND

- Proposed tree planting
- Sand ground cover for play areas
- Gravel paths
- Publicly accessible turf areas
- Landscape revegetation areas
- Constructed wetland
- Concrete Path
- Softfall ground cover areas for fitness and play
- Project Boundary

Note: further detail description for parkland elements in Rozelle Rail Yards parkland is provided in Section 4.6

0 20 40 80m

Figure 4-14: Rozelle - Concept Plan - Drawing 4 of 4

BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH07

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	**E 331125 N 6250521**

Borehole Information							Field Material Description			
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY (FB VL L MD D VD / VS S F ST VST H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS				0.00	PID=1.4 ppm	J+B+P			FILL Gravelly SAND; dark brown, f-c grained sand, m-c grained sandstone gravels, R-SR, dry	D		CC_BH07_0.2
									Some fine A shale gravel inclusions			
				1.00 -1	PID=1.3 ppm	J+B+P			FILL SAND; yellow/light brown, m grianed, well sorted, minor black inclusions, dry			CC_BH07_1.0 (QA04/QA04-A)
				1.50					Becoming black and yellow/light brown, minor SR-SA gravel inclusions, inclusions of roots			
				2.00 -2	PID=0.4 ppm	J+B+P			[FILL] Gravelly SAND; black/light brown, A-R shale and sandstone gravels,			CC_BH07_2.0
				2.50					Clayey SAND; black/dark grey, m-c grained, l-m plasticity, moist, alluvial	M		
									Becoming wet	W		
				2.90	PID=0.5 ppm	J+B+P			Weathered SANDSTONE; moist	M		CC_BH07_3.0
				-3								
				3.40					SANDSTONE; recovered as sandy silt, cream/light brown, f-m grained, dry	D		
				-4	PID=1.4 ppm	J+B+P						CC_BH07_4.0 Target depth reached
									END OF BOREHOLE AT 4.00 m			

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BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH08

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**9/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**9/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	

Borehole Information							Field Material Description					
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS									[SANDSTONE FILL] Gravelly SAND; brown, m-c grained, R-SR sandstone gravels, SA grey/dark grey shale gravels, dry	D		
					PID=6.8 ppm	J+B+P			Coarse shale gravel inclusions			CC_BH08_0.5
					PID=35.9 ppm	J+B+P						CC_BH08_1.0
				1.00 -1					[FILL] Gravelly SAND; black, broken anthropogenic inclusions (possible ACM tiles), possible coal tar inclusions	M		
				1.40					[FILL] Increased sand content Gravelly SAND; light brown/black, sandstone and shale gravel inclusions			
					PID=2.0 ppm	J+B+P						CC_BH08_2.0
				-2								
				2.10					[NATURAL] SANDSTONE; recovered as silty sand, brown/white with black mottles, minor inclusions of SR gravels, slightly moist	M		
				2.80					Increased silt content, white/grey, becoming harder			
					PID=4.0 ppm	J+B+P						CC_BH08_3.0 Target depth reached
				-3					END OF BOREHOLE AT 3.00 m			

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BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH09

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	

Borehole Information							Field Material Description												
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY VS	S	F	ST	VST	FB	VL	L	MD	D	VD	H	STRUCTURE AND ADDITIONAL OBSERVATIONS
SFA									FILL Sandy gravelly CLAY; black with grey gravels, m-h plasticity, m-c grained sand, SA-A gravels, slightly moist	M													
					PID=0.3 ppm	J+B+P			Inclusions of roots and anthropogenic material (soft plastic)														CC_BH09_0.5
				0.60					Gravelly SAND; black/light brown/cream mottled, m-c grained, SR-A sandstone and shale gravels, slightly moist														
					PID=0.7 ppm	J+B+P																	CC_BH09_1.0 Borehole terminated at 1.0 mBGL - Refusal.
				-1					END OF BOREHOLE AT 1.00 m														

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW02

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**9/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**9/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Driller:	**Mac Geotech**	Surface RL:	
Borehole Diameter:	**150 mm**	Driller Lic No:		Co-ords:	

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Monument and casing Backfill		0.7	J+B+P		[SANDSTONE FILL] SAND; yellow/light brown, m-c grained, f-c grained R-SR gravel inclusions, slightly moist		M		CC_GW02_0.5
				0.60				[FILL] Gravelly SAND; light brown/grey, m-c grained, R-SR coarse gravels Becoming dark brown, anthropogenic inclusions (metal wire), slightly moist		M		
			Bentonite seal	-1	0.8	J+B+P						CC_GW02_1.0
				1.20				SANDSTONE; recovered as silty sand, white/light grey/cream, minor sandstone gravels				
			Sand									
					1.8	J+B+P		Increased silt content Water added to borehole, very stiff				CC_GW02_2.0
			1mm uPVC slotted screen	-2								
					1.4	J+B+P						CC_GW02_3.0
				3.00 -3				Silty SAND; brown, soft				
				3.50				Sandy SILT; white/light grey, hard				
					2.0	J+B+P						CC_GW02_4.0
				-4								
			Bottom cap		1.9	J+B+P						CC_GW02_5.0 Target depth reached
				5.00 -5				END OF BOREHOLE AT 5.00 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW03

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**19/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**19/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.253 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331080.014 N 6250585.732**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 10 SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up Grout			0.2	B&J		FILL: Gravels, crushed gravels, grey, dry, road base		D		High tide during installation WSP_CCS_GW03_0.1 Roadbase for future footpath
						2.1	B&J		Crushed gravels, concrete inclusions				WSP_CCS_GW03_0.5 QA01/QA01A
				3	-1	2.0	B&J		Very hard, compacted fill, clay percentage of fill increases, mixed fill material				WSP_CCS_GW03_1.0
			Bentonite										
			Sand - (2mm)	2	-2	1.8	B&J						WSP_CCS_GW03_2.0
			2mm Machine Slotted Screen										
				1	-3	2.3	B&J		Dark in colour, clay percentage in fill inceased				WSP_CCS_GW03_3.0
				0	-4	1.9	B&J		Alternating layers of hard and soft material				WSP_CCS_GW03_4.0
									Very wet and 'sloppy' fill material encountered		W		
				-1	-5								
			Bottom cap		5.50				Target depth reached, hard sandstone layer encountered END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW04

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**19/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**19/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.516 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331092.577 N 6250579.151**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up Grout			0.8	B&J		FILL: Gravel road base, grey, dry.		D		High tide during installation WSP_CCS_GW04_0.1 Plastic material noted in fill material
						1.4	B&J		Clayey sandy fill material, black				WSP_CCS_GW04_0.5 Plastic fragments noted
				4	-1	2.3	B&J		Very hard and compacted layer				WSP_CCS_GW04_1.0 Nails and clinker noted in fill material
			Bentonite										
			Sand - (2mm)	3	-2	2.1	B&J						WSP_CCS_GW04_2.0
			2mm Machine Slotted Screen										
				2	-3	2.0	B&J		Very wet material encountered. Fill continued, higher percentage of clayey sand.		W		WSP_CCS_GW04_3.0
				1	-4	2.3	B&J		Very wet				WSP_CCS_GW04_4.0 Low recovery of material for samples
				0	-5	2.0	B&J		Very wet, "sloppy" brown material				WSP_CCS_GW04_5.0
			Bottom cap		5.50				Target depth reached, hard sandstone layer encountered END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05 (1)

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:		Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 151.174057 N -33.871855**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS					0.1	B&J		FILL: Road base, gravels, crushed gravels, grey, dry.		D		Low tide during drilling WSP_CCS_GW05_0.1
				0.50	0.0	B&J		Clayey SAND; with grey gravels, brown sand				WSP_CCS_GW05_0.5
				-1	1.7	B&J		Very hard, compacted material clay percentage increases.				WSP_CCS_GW05_1.0
				-2	2.3	B&J						WSP_CCS_GW05_2.0 Samples put on hold
				2.10				Refusal on potential former slab END OF BOREHOLE AT 2.10 m -				Struck a very large and very hard layer - Potential former slab from historical buildings that were present on the site. Hole moved 2m to south (GW05a)
				-3								
				-4								
				-5								

VS S F ST VST H | FB VL L MD D VD

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05a (2)

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:		Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 151.173979 N -33.87184**

Borehole Information

Field Material Description

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS					0.1	B&J		FILL: Road base, gravels, crushed gravels, grey, dry. Clayey sandy fill material, black		D		High tide during drilling WSP_CCS_GW05a_0.1
					3.3	B&J		Fill material continues, gravels present, very compacted, dry.				WSP_CCS_GW05a_0.5
				-1	3.1	B&J						WSP_CCS_GW05a_1.0
						B&J						WSP_CCS_GW05a_2.0
				2.00 -2				Refusal on potential former slab END OF BOREHOLE AT 2.00 m -				Struck a very large and very hard layer - Potential former slab from historical buildings that were present on the site. Hole moved 1m to south (GW05b)
				-3								
				-4								
				-5								

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05b

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.939 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331114.408 N 6250557.582**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up Grout						FILL: Gravel road base, grey, dry.		D		Samples from GW05a renamed and analysed as GW05b
									Clayey sandy fill material, black				
				4	-1				Very hard and compacted layer				
			Bentonite										
			Sand - (2mm)	3	-2	2.8	J+B						WSP_CCS_GW05b_2.0
			2mm Machine Slotted Screen										
				2	-3	3.1	J+B		Very wet material encountered. Fill continued, higher percentage of clayey sand.				WSP_CCS_GW05b_3.0
				1	-4	3.2	J+B		Very wet		W		WSP_CCS_GW05b_4.0
				0	-5	3.6	J+B		Very wet, "sloppy" brown material				WSP_CCS_GW05b_5.0
			Bottom cap	5.50					Target depth reached END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW06

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.716 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331100.495 N 6250570.368**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST | FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Top cap and gatic were placed on top of a 0.4 m stickup for the concreters to install Grout			0.1	B&J		FILL Gravel roadbase, grey gravels, rounded to angular		D		High tide during installation WSP_CCS_GW06_0.1
						0.6	B&J		Sandstone sands observed.				WSP_CCS_GW06_0.5
				4	-1	0.8	B&J		Slightly increase in clay percentage, gravelly fill continues, dark brown, very hard layer of concrete / rock				WSP_CCS_GW06_1.0
			Bentonite										
			Sand - (2mm)	3	-2	2.3	B&J						WSP_CCS_GW06_2.0
			2mm Machine Slotted Screen										
				2	3.00 -3	2.6	B&J		FILL Sandy CLAY; topsoil material present, no inclusion of gravels				WSP_CCS_GW06_3.0 QA02/QA02A
				1	-4	2.8	B&J		Very wet, 'sloppy' material		W		WSP_CCS_GW06_4.0
				0	-5	3.8	B&J						WSP_CCS_GW06_5.0
			Bottom cap		5.20				Target depth reached at 5.2 mbgl. END OF BOREHOLE AT 5.20 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW07

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Driller:	**Mac Geotech**	Surface RL:	
Borehole Diameter:	**150 mm**	Driller Lic No:		Co-ords:	**E 331129 N 6250506**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
NDD			Monument and casing Backfill					[SANDSTONE FILL] Gravelly SAND; yellow/light brown, m-c grained sand, m-c grained R-SR gravels (white/grey), dry		D		
					1.2	J+B+P						CC_GW07_0.5
								Becoming more brown, some SA gravels and anthropogenic inclusions (metal wires)				
					0.9	J+B+P		Becoming more compact				CC_GW07_1.0
			Bentonite seal	1.00 -1				FILL Clayey SAND; black, m-c grained, l-m plasticity clay, minor sandstone gravel and anthropogenic inclusions (tile)				
				1.20						M		
			Sand					FILL Sandy CLAY; brown with black mottles, l-m plasticity, m-c grained, minor gravels, slightly moist				
					1.1	J+B+P						CC_GW07_2.0
AS			1mm uPVC slotted screen	2.00 -2				FILL Silty Gravelly SAND; black/dark/brown, dry		D		
								Becoming very hard				
					3.4	J+B+P						CC_GW07_3.0
				3.00 -3				CONCRETE				
				3.10				Weathered SANDSTONE; grey/brown				
				3.50				Becoming very wet and hard. Recovered as sandy clay, m-h plasticity, white/light brown/dark grey mottles.		W		
					1.8	J+B+P						CC_GW07_4.0
				-4								
			Bottom cap		0.7	J+B+P		Hole collapse				CC_GW07_5.0
				5.00 -5				END OF BOREHOLE AT 5.00 m -				Target depth reached

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW08

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**South-east of boat hire shed**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**2.691 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331187.163 N 6250495.069**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 10 SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST | FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Top cap and gatic						FILL material		D		
			Grout			0.2	B&J		Clayey silty SAND, dark brown, slightly moist, with sandstone gravels.				WSP_CCS_GW08_0.1
			Bentonite			2.4	B&J		Crushed sandstone fill material.				WSP_CCS_GW08_0.5 QA03/QA03A
			Sand - (2mm)	2	-1	1.6	B&J		Material slightly moist		M		WSP_CCS_GW08_1.0
			2mm Machine Slotted Screen	1	-2	1.6	B&J						WSP_CCS_GW08_2.0
									Very wet, 'sloppy' material		W		
				0	-3	2.2	B&J						WSP_CCS_GW08_3.0
				-1	-4	3.0	B&J						WSP_CCS_GW08_4.0
				-2	-5		B&J						WSP_CCS_GW08_5.0
			Bottom cap						Hole collapse to 5.3 mbgl, well install				
					5.50				Target depth reached at 5.5 mbgl. END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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Borehole Log WAC2-BH1

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 25.05.2020
COMPLETED: 25.05.2020
DRILLING COMPANY: ADE
LOCATION: 331046.848, 6250625.986
EQUIPMENT: Comacchio GEO 305
ELEVATION (RL) 3.600 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
SFA	3.5	0.5		SC	Clayey SAND: fine to medium grained, well graded, grey / brown, with gravels, moist.	BH1 0.3			Horizon A - General Fill
	3	1			(Horizon A) Silty SAND: fine to medium grained, yellow / grey and brown, moderately graded, some gravels, moist.	BH1 1.0			
	2.5	1.5							
	2	2				BH1 2.0			
	1.5	2.5							
	1	3				BH1 3.0			
	0.5	3.5							
	0	4				BH1 4.0			
	-0.5	4.5							
	-1	5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist to wet.	BH1 5.0	Natural Shells		Horizon B - Marine Sediment / Alluvium Material
	-1.5	5.5							
	-2				Termination Depth at: 5.5 m BGL - Target Depth Reached				

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Borehole ID

RIC-WAJ_PZ_BH002

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								Soil Description					Observations
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
DT		N								CONCRETE: 230 mm.				
Pothole		N								Pothole interval not observed.				0.23: The following comments are based on sidewall observations: PROBABLY FILL: Cobbley, gravelly SAND with Silt, brown to pale yellow, medium to coarse grained, gravel medium grained, angular, cobbles comprised of Sandstone up to 500 mm.
AD/T		N				2.7	1		SP	Gravelly SAND with silt trace cobbles: medium to coarse grained, brown and pale yellow; gravel fine to medium grained; cobbles sub-angular.				
				SPT 1.50-1.95 m 6,5,6 N=11		1.7	2		SP	SAND with clay trace gravel: medium to coarse grained, brown; clay low plasticity; gravel fine grained.	M	MD		
						0.7	3		Cl	Silty CLAY with sand: medium plasticity, dark brown; sand fine to medium grained; with shell fragments.				2.80: POSSIBLY ALLUVIUM / MARINE
				SPT 3.00-3.45 m HW/270mm,0,1,0 N=1							w > PL	VS		
WB		C				-0.3	4		SC	Clayey SAND: medium grained, dark grey; clay medium plasticity; with shell and shell fragments, occasional clay band..				
				SPT 4.00-4.45 m HW/300mm,0,0,4 N=4							W	VL		

Method
AD/T - Auger drilling TC bit
AD/V - Auger drilling V bit
WB - Washbore
SPT - Standard penetration test
PT - Push tube
AS - Auger screwing
CT - Continuous push tube 1.5m long 76mm diameter

Penetration
No resistance
Refusal

Water
Inflow
Partial Loss
Complete Loss

Samples and Tests
U - Undisturbed Sample
D - Disturbed Sample
SPT - Standard Penetration Test
ES - Environmental Sample
TW - Thin Walled
LB - Large Disturbed Sample

Moisture Condition
D - Dry
M - Moist
W - Wet

Consistency/Relative Density
VS - Very soft
S - Soft
F - Firm
St - Stiff
VSt - Very stiff
H - Hard
VL - Very loose
L - Loose
MD - Medium dense
D - Dense
VD - Very dense
Ce - Cemented
C - Compact

Logged in accordance with AS 1726:2017 Geotechnical site investigations

PSM 3.02.2. LIB.GLB Log PSM AU NONCORE BH NZ AU PSM3797 MASTER DATABASE ADDEMENT 20200519_DH.GPJ <<DrawingFile>> 24/05/2020 21:57 10.00.00.69 Datgel Fence and Map Tool | Lib: PSM 3.02.1 2019-03-06 Prj: PSM 3.02.0 2019-02-24

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								***Soil Description***					***Observations***
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 5.00-5.45 m 1,0,0 N=0					SC	Clayey SAND: medium grained, dark grey; clay medium plasticity; with shell and shell fragments, occasional clay band.. *(continued)* 50 mm clay band, with shells.	W	VL		
				SPT 6.00-6.45 m HW/450mm		-2.3	6		CL	Silty CLAY with sand: low plasticity, dark grey; sand fine to medium grained; with shell fragments.				
				SPT 7.00-7.45 m HW/450mm		-3.3	7				w > PL	VS		
				SPT 8.00-8.45 m HW/450mm		-4.3	8		CI	CLAY with silt: medium plasticity, grey.				
				SPT 9.00-9.45 m HW/450mm		-5.3	9		SP	SAND with silt: medium grained, grey; silt low plasticity.	W	VL		

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No resistance
Refusal

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PSM 3.02.2_LIB.GLB Log PSM AU NONCORE BH NZ AU PSM3797 MASTER DATABASE ADDEMENT 20200519_DH.GPJ <<DrawingFile>> 24/05/2020 21:57 10.00.00.69 Datgel Fence and Map Tool | Lib: PSM 3.02.1 2019-03-06 Prj: PSM 3.02.0 2019-02-24

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								Soil Description					Observations
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 10.00-10.45 m HW/260mm,0,1,0 N=1					SC	Clayey SAND trace silt: medium grained, grey; clay low plasticity.		VL		
				SPT 11.00-11.45 m 4,5,6 N=11		-7.3	11		SP	SAND: medium to coarse grained, pale grey and brown; with occasional low plasticity clay band 20 mm.	W	MD		
									SC	Clayey SAND: medium grained, grey to dark grey; clay low plasticity.		VL		
				SPT 12.00-12.45 m 2,0,1 N=1		-8.3	12		CI	CLAY trace sand trace silt: medium plasticity, dark grey; sand fine to medium grained.				
				SPT 13.00-13.45 m 4,0,0 N=0		-9.3	13		CI	Sandy CLAY: medium plasticity, grey; sand fine to medium grained.	w > PL	VS		
				SPT 14.00-14.45 m 2,3,2 N=5		-10.3	14		SP	SAND trace silt: medium to coarse grained, dark grey. Silt content increasing.	W	L		

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Penetration
No resistance
Refusal

Water
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Complete Loss

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Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								***Soil Description***					***Observations***
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 15.00-15.45 m 2,2,4 N=6					SP	SAND trace silt: medium to coarse grained, dark grey. *(continued)* Trace shell fragments, and wood.		L		
									SP	SAND: medium to coarse grained, pale grey to grey.	W	MD to D		15.57: POSSIBLY EXTREMELY WEATHERED SANDSTONE
				SPT 15.87-15.97 m HB/100 N=R		-12.3	16			Hole Terminated at 15.97 m Target depth. Standpipe installed. Hole grouted to surface and reinstated.				15.97: Standpipe installed: VWP installed free hanging at 14.85 m 0.0 m - 0.2 m Concrete 0.2 m - 9.90 m - Grout 9.90 m - 10.90 m - Bentonite 10.90 m - 14.85 m - Sand 11.85 m - 14.85 m - Slotted PVC 14.85 m - 15.97 m - Bentonite
						-13.3	17							
						-14.3	18							
						-15.3	19							

Method
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No resistance
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Inflow
Partial Loss
Complete Loss

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Logged in accordance with AS 1726:2017 Geotechnical site investigations

PSM 3.02.2. LIB.GLB Log PSM AU NONCORE BH NZ AU PSM3797 MASTER DATABASE ADDEMENT 20200519_DH.GPJ <<DrawingFile>> 24/05/2020 21:58 10.00.00.69 Datgel Fence and Map Tool | Lib: PSM 3.02.1 2019-03-06 Prj: PSM 3.02.0 2019-02-24

Table D1 - Groundwater Gauging Data

Well ID	Gauging Date	Screen Interval (mBGL)	T.O.C Elevation (mAHD)	Well Depth (mBTOC)	Depth to Water (mBTOC)	Depth to Product (mBTOC)	Apparent LNAPL Thickness (m)	Corrected Water Elevation (mAHD)
GW01	4/06/2020	1.0-5.0	3.60	5.00	3.119	NA	-	0.481
	1/09/2020				3.385	NA	-	0.215
	16/10/2020				Well destroyed			
	17/12/2020							
GW02	4/06/2020	2.0-5.0	5.321	5.00	Well not yet established			
	1/09/2020							
	16/10/2020				2.830	NA	-	2.491
	17/12/2020				2.843	NA	-	2.478
GW03	4/06/2020	2.5-5.5	4.478	5.50	Well not yet established			
	1/09/2020				3.842	NA	-	0.636
	16/10/2020				3.529	NA	-	0.949
	17/12/2020				Not sampled during GME 4			
GW04	4/06/2020	2.5-5.5	4.776	5.50	Well not yet established			
	1/09/2020				4.330	NA	-	0.446
	16/10/2020				3.663	NA	-	1.113
	17/12/2020				4.438	NA	-	0.338
GW05b	4/06/2020	2.5-5.5	4.880	5.50	Well not yet established			
	1/09/2020				4.808	NA	-	0.072
	16/10/2020				4.826	NA	-	0.054
	17/12/2020				Not sampled during GME 4			
GW06	4/06/2020	2.2-5.2	4.644	5.20	Well not yet established			
	1/09/2020				4.493	NA	-	0.151
	16/10/2020				4.446	NA	-	0.198
	17/12/2020				Not sampled during GME 4			
GW07	4/06/2020	2.0-5.0	4.991	5.00	Well not yet established			
	1/09/2020							
	16/10/2020				2.806	NA	-	2.185
	17/12/2020				2.390	NA	-	2.601
GW08	4/06/2020	2.0-5.5	2.587	5.50	Well not yet established			
	1/09/2020				2.339	NA	-	0.248
	16/10/2020				1.965	NA	-	0.622
	17/12/2020				Not sampled during GME 4			
I&M	2/12/2020	11.85-14.85	2.370	13.50	5.476	NA	-	-3.106

Table D2 - Water quality data

Well ID	Gauging Date	pH	Temperature (ºC)	Conductivity (µS/cm)	Redox (mV)	Dissolved Oxygen (mg/l)	Comments
GW01	4/06/2020	7.64	19.0	29003	377.4	1.73	Brown, turbid, no odours/sheens
	1/09/2020	7.78	16.9	26706	247.3	1.87	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	Well destroyed					
	17/12/2020						
GW02	4/06/2020	Well not yet established					
	1/09/2020						
	16/10/2020	7.37	19.4	852	156.5	1.69	Low turbidity, grey
	17/12/2020	6.46	25.1	850	201.2	1.80	Light brown, slightly cloudy, no odours/sheen
GW03	4/06/2020	Well not yet established					
	1/09/2020	7.86	17.5	48763	197.8	3.78	Cloudy, slightly brown, no HCO/odour, no sheen
	16/10/2020	7.53	20.0	44987	341.7	6.03	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
GW04	4/06/2020	Well not yet established					
	1/09/2020	7.74	18.2	47356	321.3	3.67	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	7.62	20.0	45902	329.8	5.15	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
GW05b	4/06/2020	Well not yet established					
	1/09/2020	7.69	17.7	46873	246.3	4.29	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	7.74	20.0	42581	334.0	2.93	Very dark brown, highly turbid
	17/12/2020	Not sampled during GME 4					
GW06	4/06/2020	Well not yet established					
	1/09/2020	7.95	17.6	48385	244.3	4.08	Very turbid, brown/grey, no HCO, no sheen
	16/10/2020	7.09	20.1	42371	301.1	4.40	Dark brown, highly turbid
	17/12/2020	Not sampled during GME 4					
GW07	4/06/2020	Well not yet established					
	1/09/2020						
	16/10/2020	8.42	19.3	860	254.8	2.07	Low turbidity, grey
	17/12/2020	5.98	28.7	403	386.1	3.40	Colourless, slightly cloudy, no odours/sheen
GW08	4/06/2020	Well not yet established					
	1/09/2020	7.70	18.8	38863	252.4	3.25	Slightly turbid, light brown, no HCO, no sheen
	16/10/2020	7.46	19.6	31355	339.7	4.12	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
I&M	2/12/2020	6.95	21.1	27014	314.5	1.82	Clear water, no odours, black suspended particles, no sheen

(1) Redox potential values collected in the field using a silver chloride electrode have been corrected to standard hydrogen electrode values by adding 199 mV to each reading.

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB

Project: Rozelle Interchange WCX3B
Construction: VW Piezometers
Location: BH002

GEODATA

Water Level - Time Related Diagram

30/01/2020
12/10/2020

Plan View

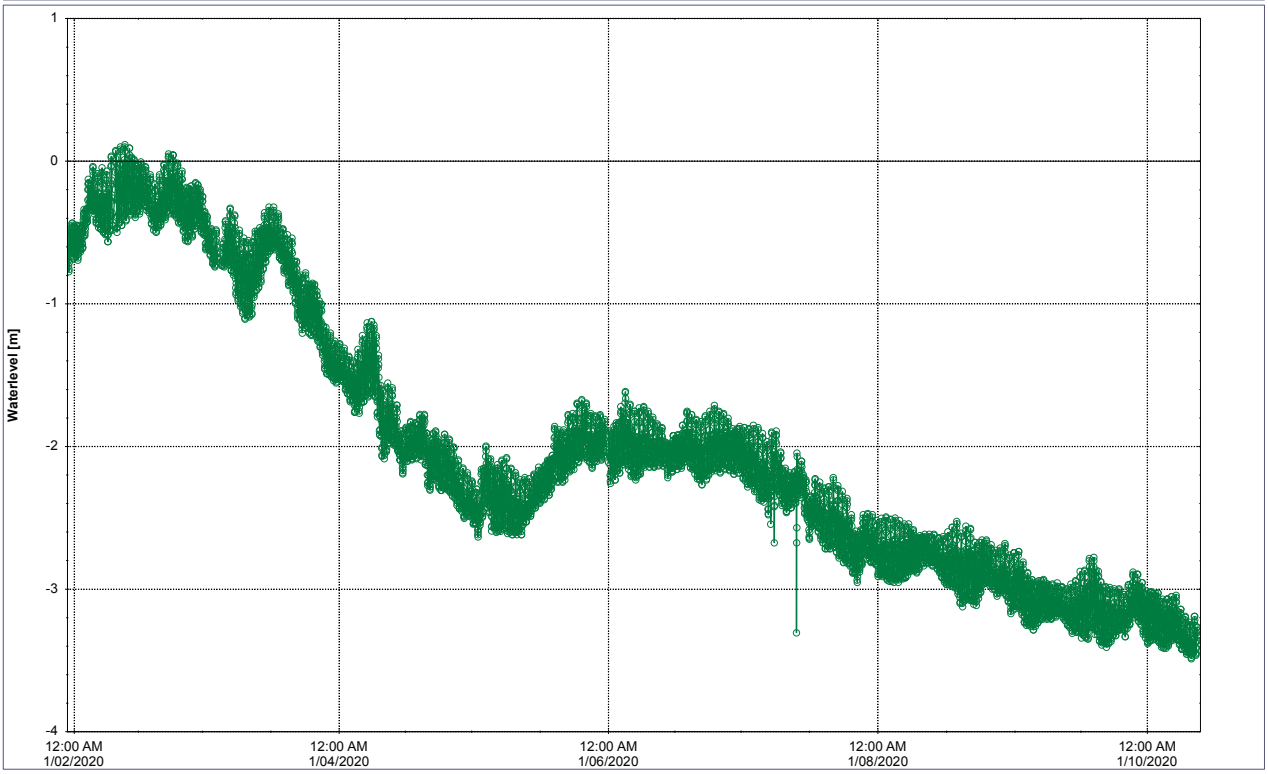
New zero measurements

- RIC-JV_PZ_BH002
  30/01/2020 11:00 AM

Remarks

- RIC-JV_PZ_BH002 Sensor RL = -10.5932

RIC-JV_PZ_BH002



wsp

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client:	Job Number: PS
Field Scientist: CW	Project Manager: MW

Well ID	GW08	Time	PM
Did well purge dry?	Y (N)	Volume removed (L)?	~ 20 L
Water Quality Meter Type		* Around 20 baiter loads removed. Put into the waste area.	

Water Quality Parameters

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

NO NEED TO DO

Well ID		Time	
Did well purge dry?	Y / N	Volume removed (L)?	
Water Quality Meter Type			

Water Quality Parameters

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client: JH / CPB - CV	Job Number:
Field Scientist: CW	Project Manager: MV

Well ID	GW04	Time	AM
Did well purge dry?	Y / (N)	Volume removed (L)?	~20 L
Water Quality Meter Type	N/A	* ~20 L removed in ~20 bailer loads.	
Water Quality Parameters		- Not dry but almost.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW06	Time	PM
Did well purge dry?	Y / (N)	Volume removed (L)?	~25-30 L
Water Quality Meter Type	N/A	* Between 25-30 L removed over 25-30 bailer loads.	
Water Quality Parameters			

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity
				DIDNT DO.			

Version: B	Reviewer: C. McKay	Date: 07/04/2016	Reviewer: C. McKay	Date: 07/04/2016

wsp

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client: JH/CPB Rozelle-Crescent wells	Job Number:
Field Scientist: CW	Project Manager: MV

Well ID	GW03	Time	AM
Did well purge dry?	Y / (N)	Volume removed (L)?	~25
Water Quality Meter Type	N/A	* Removed approx. 25 bailer loads out.	
Water Quality Parameters		didn't go dry. Tipped water into the collection pond/dam on site.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW05b	Time	AM
Did well purge dry?	Y / (N)	Volume removed	~20L removed.
Water Quality Meter Type	N/A	* ~20L	In ~20 bailer loads.
Water Quality Parameters		* Not dry. Recharge rate too high.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

* Met Roger on site - PM.

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 9/10/20	Time: Arrive Depart 2pm
Client: **JHCPB**	Job Number: **PS117368**
Field Scientist: **Leila Bowe**	Project Manager: **Matt Vanderheyden**

Well ID	GW02	Time	NR
Did well purge dry?	Y / N	Volume removed (L)?	20
Water Quality Meter Type	—		

Water Quality Parameters							
Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW07	Time	NR
Did well purge dry?	Y / N	Volume removed (L)?	20
Water Quality Meter Type	—		

Water Quality Parameters							
Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

			TRH				Asbestos						TPH					BTEX			
			C6-C10 minus BTEX (F1)	C10-C16	C16-C34 (F3)	C34-C40 (F4)	Asbestos (Fines and Fibrous <7mm)	Asbestos (Trace)	Asbestos Containing Material	Asbestos Containing Material (as 15% Asbestos in A	Asbestos from FA & AF	Bonsai Asbestos >7mm	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylene Total
			mg/kg	mg/kg	mg/kg	mg/kg	g	Fibres	g	% (w/w)	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	100	100	0.0004	5	0.1		0.001	0.0004	10	50	100	100	50	0.2	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																					
NEPM 2013 Table 1A(1) HILs Rec C Soil																					
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand			260[#8] | 370[#8] | 630[#8] | NL [#5]															3 | 3 | 3 | 3	NL [#3]	NL [#3]	230 | NL [#3] | NL [#3] | NL [#3]
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand			NL [#3]															NL [#3]	NL [#3]	NL [#3]	NL [#3]
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil				1,000[#10]	2,500	10,000															
Lab Report	**Field ID**	**Date**																			
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<10	<50	**450**	**230**	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**270**	**260**	**530**	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	<10	<50	**700**	**340**	-	-	-	-	-	-	<10	<50	**410**	**460**	**870**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	<10	<50	**160**	**120**	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	**110**	**110**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	<10	<50	**580**	**280**	-	-	-	-	-	-	<10	<50	**290**	**390**	**680**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	<10	<50	**280**	**180**	-	-	-	-	-	-	<10	<50	**170**	**190**	**360**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_GW05b_0.5	**20/08/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	<10	<50	**180**	**110**	-	-	-	-	-	-	<10	<50	**110**	**110**	**220**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	<10	<50	**260**	<100	-	-	-	-	-	-	<10	<50	**170**	**140**	**310**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_GW08_0.5	**20/08/2020**	<10	<50	**330**	**130**	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**200**	**190**	**390**	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	<10	**70**	**1,270**	**250**	-	-	-	-	-	-	<10	<50	**970**	**480**	**1,450**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_BH07_1.0	**8/10/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH07_2.0	**8/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH07_4.0	**8/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH9_0.5	**8/10/2020**	<10	<50	**130**	<100	**0.0075**	**0**[#11]	<0.1	<0.01	**0.002**	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH9_1.0	**8/10/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_0.5	**8/10/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_4.0	**8/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	<10	<50	**120**	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH08_2.0	**9/10/2020**	<10	<50	**180**	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**110**	<100	**110**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_2.0	**9/10/2020**	<10	<50	<100	<100	<0.0004	**0**[#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_4.0	**9/10/2020**	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assesment should be considered if elemental mercury is present, or suspected to be present.
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should not be subtracted from the relevant fractions to obtain F1 & F2
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

	MAH									PAH																				
	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Benzojfluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Zero)	HAHs (Sum of total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																															$40^{\#1}$	$4,000^{\#2}$
NEPM 2013 Table 1A(1) HILs Rec C Soil																															$3^{\#1}$	$300^{\#2}$
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												NL [#9]				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												NL [#9]				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																																

Lab Report	Field ID	Date																														
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.7	<0.5	<0.5	<0.5	0.7	<0.5	2.0	<0.5	<0.5	<0.5	0.8	1.6
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	1.9	0.9	8.3
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	0.9	1.7	3.7	4.1	5.1	2.3	1.6	3.4	0.5	9.0	0.8	2.1	<0.5	6.4	8.6	5.9	50.2
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.5	0.6	0.7	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	1.3	0.7	4.3
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	1.1	1.4	1.6	0.9	0.5	1.1	<0.5	2.4	<0.5	0.9	<0.5	1.2	2.5	1.8	13.6
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0.9	2.5	2.8	3.2	1.7	1.1	2.4	<0.5	4.9	<0.5	1.4	0.9	3.2	5.2	3.7	30.2
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0.6	1.1	1.0	1.1	0.5	<0.5	1.1	<0.5	3.5	<0.5	<0.5	<0.5	3.5	3.4	1.2	15.8
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	0.6	1.4	6.0	6.1	7.5	3.9	2.3	5.4	0.7	12.0	<0.5	3.0	<0.5	4.3	12.0	8.8	65.2
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	4.9	5.2	-	3.0	-	4.2	0.5	7.5	<0.5	2.3	<0.5	3.5	7.7	7.2	46.4
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	0.6	1.1	4.6	4.8	5.3	3.0	2.2	4.3	0.6	9.7	<0.5	2.2	0.7	4.8	8.6	6.9	52.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.8	2.2	10.1	37.3	30.4	40.3	14.9	12.1	33.2	3.8	81.8	8.9	13.5	19.6	76.6	70.9	45.0	466
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0.9	1.3	1.1	1.2	0.5	<0.5	1.1	<0.5	3.8	<0.5	<0.5	0.7	3.4	3.1	1.4	17.1
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.8	1.1	1.2	0.8	0.5	0.6	<0.5	1.4	<0.5	0.6	<0.5	<0.5	1.6	1.4	8.6
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	3.0	3.1	2.5	1.3	2.1	<0.5	4.9	<0.5	2.2	<0.5	1.5	4.4	3.9	27.3
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	1.6
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.1
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	0.6	1.0	0.9	1.0	0.6	<0.5	0.9	<0.5	2.1	<0.5	<0.5	<0.5	2.0	2.2	1.1	11.3
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	1.2	4.5	4.3	4.8	2.1	2.1	3.8	0.5	8.5	<0.5	2.0	<0.5	4.0	7.1	6.2	44.9
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	1.0
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspect
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

	Metals															Phenols											
	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	10	1	50	1	2	2	5	5	5	0.1	2	5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil	3,000[#3]		500	300,000	900	3,600[#4]	4,000	240,000	1,500[#5]	60,000	730[#6]	6,000	10,000		400,000											660	240,000
NEPM 2013 Table 1A(1) HILs Rec C Soil	300[#3]		90	20,000	90	300[#4]	300	17,000	600[#5]	19,000	80[#6]	1,200	700		30,000											120	40,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																											
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																											
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																											

Lab Report	Field ID	Date																									
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	6	70	<1	<50	<1	15	4	49	41	320	<0.1	8	<5	62	154	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW03_1.0	19/08/2020	<5	80	<1	<50	<1	16	7	49	40	407	<0.1	10	<5	55	87	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW03_3.0	19/08/2020	16	140	<1	<50	<1	25	7	331	372	270	1.0	15	<5	27	1,040	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	6	60	<1	<50	<1	11	4	36	46	229	<0.1	6	<5	21	137	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_1.0	19/08/2020	<5	60	<1	<50	<1	9	4	30	49	210	<0.1	7	<5	18	124	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_3.0	19/08/2020	26	210	<1	<50	2	57	16	868	1,000	361	0.9	34	<5	21	4,500	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<5	80	<1	<50	<1	9	4	6	12	284	<0.1	4	<5	10	17	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	<5	80	<1	<50	<1	10	5	<5	10	336	<0.1	4	<5	10	18	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW05b_4.0	20/08/2020	<5	40	<1	<50	<1	12	3	30	57	208	1.2	4	<5	12	72	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	<5	60	<1	<50	<1	16	6	124	101	238	0.2	6	<5	18	721	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	<5	80	<1	<50	<1	24	6	54	40	542	0.1	6	<5	33	282	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	<5	70	<1	<50	<1	12	5	42	76	243	0.3	6	<5	15	132	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	6	140	<1	<50	<1	14	3	107	406	138	0.9	6	<5	25	565	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW08_1.0	20/08/2020	<5	60	<1	<50	<1	8	<2	33	155	59	0.3	2	<5	17	168	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_3.0	20/08/2020	<5	60	<1	<50	<1	9	<2	42	124	70	0.3	5	<5	16	164	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	<5	80	<1	<50	<1	8	5	11	17	290	<0.1	5	<5	16	36	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	<5	20	<1	<50	<1	4	<2	14	56	31	<0.1	2	<5	7	106	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_4.0	8/10/2020	<5	<10	<1	<50	<1	5	10	<5	14	7	<0.1	<2	<5	6	26	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_0.5	8/10/2020	24	140	<1	<50	<1	18	4	66	202	341	0.1	9	<5	28	520	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_1.0	8/10/2020	37	20	<1	<50	<1	7	<2	17	29	54	<0.1	<2	<5	12	135	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	<5	160	<1	<50	<1	7	6	39	49	414	<0.1	5	<5	20	57	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	<5	10	<1	<50	<1	9	14	<5	<5	38	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	<5	<10	<1	<50	<1	<2	8	<5	<5	<5	<0.1	<2	<5	<5	<5	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_BH08_1.0	9/10/2020	<5	60	<1	<50	<1	8	4	12	26	216	<0.1	5	<5	14	37	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_2.0	9/10/2020	<5	100	<1	<50	<1	6	4	25	25	218	<0.1	7	<5	16	75	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_3.0	9/10/2020	<5	20	<1	<50	<1	3	4	<5	6	33	<0.1	<2	<5	<5	10	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	<5	40	<1	<50	<1	6	5	<5	9	179	<0.1	4	<5	8	19	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	6	<10	<1	<50	<1	7	4	23	<5	10	<0.1	<2	<5	8	27	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_4.0	9/10/2020	<5	<10	<1	<50	<1	3	3	<5	<5	<5	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 90). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assesme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Explosives				Organochlorine Pesticides																				
			1,3,5-Trinitrobenzene	1,4-Dinitrotoluene	1,6-dinitrotoluene	Nitrobenzene	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.2
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									45		530						3,600		2,000,000				100			50		2,500
NEPM 2013 Table 1A(1) HILs Rec C Soil									10		70						400		340,000				20			10		400
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																												
Lab Report	**Field ID**	**Date**																										
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**																										
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**					<0.05	<0.05	<0.05	<0.05	**0.07**	<0.05	**0.07**	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<1.0	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_GW05b_0.5	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_GW08_0.5	**20/08/2020**					<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**					<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<1.0[#8]	<0.05[#8]	<0.05[#8]	<160[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<250[#8]	<0.05[#8]	<0.05[#8]	<0.05[#8]	<1.0[#8]
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for v
#6 Elemental mercury: HIL does not address elemental mercury, a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should r
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides														Herbicides	Pesticides						
			Perfluorooctane sulfonic acid (PFOS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonic acid (PFOS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Fenitrothion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorbenzilate	Carbazole	Demeton-S-methyl	Hexamiphos	Iprodione	Pirimiphos-ethyl	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil													2,000															
NEPM 2013 Table 1A(1) HILs Rec C Soil													250															
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																												
Lab Report	**Field ID**	**Date**																											
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_1.0	**19/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0003**	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<0.5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_1.0	**20/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0002**	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<0.5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<1.0[#12]	<1.0[#12]	<0.25[#12]	-	-	-	<0.25[#12]	<0.25[#12]	<1.0[#12]	<0.25[#12]
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<0.5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH9_0.5	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_0.5	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH08_2.0	**9/10/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0025**	<0.0002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0004**	<0.0002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (EUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury, a site specific assesme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Halogenated Hydrocarbons					Per- and Polyfluoroalkyl Subst	Perfluoroalkyl Sulfonamides							PFAS		Halogenated Benzenes										
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Sum of PFAS (WA DER List)	Perfluorooctanesulfonamide (PFOSA)	N-Methyl perfluorooctane sulfonamide (NMeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid	N-methyl perfluorooctane sulfonamidoethanol (NMeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.0002	0.0002	0.0005	0.0002	0.5	0.0005	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											80	
NEPM 2013 Table 1A(1) HILs Rec C Soil																											10	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																												
Lab Report	**Field ID**	**Date**																											
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	**0.0003**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0003**	**0.0003**	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	**0.0002**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0002**	**0.0002**	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	<0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28 [#2]	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	**0.0175**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0025**	**0.0175**	-	-	-	-	-	-	-	-	-	-	<0.05
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<5	<5	<0.5	<5	**0.0004**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0004**	**0.0004**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models ((EUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assesme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Chlorinated Hydrocarbons																														
			1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	1,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																	
NEPM 2013 Table 1A(1) HILs Rec C Soil																																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																																	
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																																	
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																																	
Lab Report	**Field ID**	**Date**																															
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
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#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
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#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should r
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Perfluoroalkane Carboxylic Acids											VOCs			Solvents					
			Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDcA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																							
NEPM 2013 Table 1A(1) HILs Rec C Soil																							
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																							
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																							
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																							
Lab Report	**Field ID**	**Date**																					
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**																					
	WSP_CCS_GW03_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW03_1.0	**19/08/2020**																					
	WSP_CCS_GW03_2.0	**19/08/2020**																					
	WSP_CCS_GW03_3.0	**19/08/2020**																					
	WSP_CCS_GW04_0.1	**19/08/2020**												<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002									
	WSP_CCS_GW04_2.0	**19/08/2020**																					
	WSP_CCS_GW04_3.0	**19/08/2020**																					
	WSP_CCS_GW04_4.0	**19/08/2020**																					
	WSP_CCS_GW04_5.0	**19/08/2020**																					
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**												<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	**20/08/2020**																					
	WSP_CCS_GW05b_1.0	**20/08/2020**																					
	WSP_CCS_GW05b_2.0	**20/08/2020**																					
	WSP_CCS_GW05b_4.0	**20/08/2020**																					
	WSP_CCS_GW05b_5.0	**20/08/2020**																					
	WSP_CCS_GW06_0.1	**20/08/2020**																					
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	**20/08/2020**	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002									
	WSP_CCS_GW06_2.0	**20/08/2020**																					
	WSP_CCS_GW06_3.0	**20/08/2020**																					
	WSP_CCS_GW06_5.0	**20/08/2020**																					
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	**20/08/2020**																					
	WSP_CCS_GW08_1.0	**20/08/2020**	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002									
	WSP_CCS_GW08_2.0	**20/08/2020**																					
	WSP_CCS_GW08_3.0	**20/08/2020**																					
	WSP_CCS_GW08_4.0	**20/08/2020**																					
	WSP_CCS_GW08_5.0	**20/08/2020**																					
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**												<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	**8/10/2020**																					
	WSP_CCS_BH07_2.0	**8/10/2020**																					
	WSP_CCS_BH07_4.0	**8/10/2020**																					
	WSP_CCS_BH9_0.5	**8/10/2020**												<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	**8/10/2020**																					
	WSP_CCS_GW07_0.5	**8/10/2020**												<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	**8/10/2020**																					
	WSP_CCS_GW07_2.0	**8/10/2020**																					
	WSP_CCS_GW07_3.0	**8/10/2020**																					
	WSP_CCS_GW07_4.0	**8/10/2020**																					
	WSP_CCS_GW07_5.0	**8/10/2020**																					
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH08_1.0	**9/10/2020**																					
	WSP_CCS_BH08_2.0	**9/10/2020**	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002									
	WSP_CCS_BH08_3.0	**9/10/2020**																					
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	**9/10/2020**																					
	WSP_CCS_GW02_4.0	**9/10/2020**																					
	WSP_CCS_GW02_5.0	**9/10/2020**																					

Comments

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#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
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#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			SVOCs																	Amino Aliphatics				PCBs	Amino Aromatics	
			4-(4-acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-4-Oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyle ther	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n- propylamine	N-Nitrosomethylethylamine	PCBs (total)	1-naphthylamine	4-Aminobiphenyl & Diphenylamine
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																								7[#7]		
NEPM 2013 Table 1A(1) HILs Rec C Soil																								1[#7]		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																										
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																										
Lab Report	**Field ID**	**Date**																								
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Anilines						Nitroaromatics			Phthalates						Organotins		
			4-nitroaniline	2-nitroaniline	4-chloroaniline	3-nitroaniline	2,4-dimethyl-5-nitroaniline	Aniline	2,4,6-trichloroaniline	2-amino-4-nitrophenol	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Tributyltin as Sn	Monobutyltin
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	µg/kg	mg/kg
EQL			1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	1	1	0.001
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																				
Lab Report	Field ID	Date																		
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.3	<0.001
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
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#10 Separate management limits for BTEX & napthalene are not available hence should r
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#12 Reported Analyte LOR is higher than Requested Analyte LOR

	Acid Sulphate Soils - Acid Base Accounting			Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		Inorganics							NA		Particle Size	TRH			
	ANC Fineness Factor	Net Acidity (sulfur units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising capacity	Acid Neutralising capacity (acidity units)	Acid Neutralising capacity (sulfur units)	liming Rec for excess ANC	liming Rec for excess ANC	Chromium Reducible Sulfur	Chromium Reducible Sulphur (acidity units)	Exchangeable Sodium Percent	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	pH (Lab)	Chlorides as CN	Clay (<0.002 mm)	Weight Used for % Calculation	105/377	C6-C10 minus BTEX (F1)	C10-C16	C16-C34 (F2)	C34-C40 (F3)
	-	moles H+/t	%S	%S	moles H+/t	%CaCO3	moles H+/t	%S	kg CaCO3/t	kg CaCO3/t	%S	moles H+/t	mg/kg	meq/100g	meq/100g	meq/100g	meq/100g	pH Unit	mg/kg	%	kg	g/cm3	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	0.02	0.02	2	0.01	10	0.01	1	1	0.005	10	1.000	0.1	0.1	0.1	0.1	0.1	0.0005	1	0.0001	0.01	10	50	100	100
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																										
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																										
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																							215[4]	170	1,700	3,300
																							215[4]	170	1,700	3,300
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																							180[4]	120[4]	300	2,800
																							180[4]	120[4]	300	2,800
Lab Report Number	**Field ID**	**Date**																								
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.490	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.490	-	-	-	450	230
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700	340
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.462	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0010	-	0.533	-	-	-	160	120
	WSP_CCS_GW04_1.0	**19/08/2020**	1.5	-	-	-	-	3.97	793	1.27	-	-	0.020	12	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	580	280
	WSP_CCS_GW04_3.0	**19/08/2020**	1.5	-	-	-	-	7.34	1,470	2.35	4	-	0.091	57	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	280	160
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	194.000	2.1	2.5	1.1	1.4	8.8	0.0071	14	-	2.56	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.513	-	-	-	-	-
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.552	-	-	-	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180	110
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.629	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0078	0.583	-	-	-	-	-
	WSP_CCS_GW06_1.0	**20/08/2020**	1.5	-	-	-	-	3.09	617	0.99	1	-	0.031	19	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0026	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	1.5	-	-	-	-	1.70	340	0.54	1	-	0.026	16	-	-	-	-	-	-	-	-	-	-	260	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	153.000	3.8	-	0.5	0.8	9.7	-	14	-	2.65	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.613	-	-	-	-	-
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.499	-	-	330	130
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	1,270	250
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	1.5	-	-	-	-	1.03	207	0.33	6	-	0.119	74	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	299.000	1.2	1.9	0.5	1.5	8.8	-	19	-	2.65	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.331	-	-	-	-	-
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.272	-	-	-	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.298	-	-	130	-	-
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.292	-	-	-	-	-
	WSP_CCS_GW07_0.5	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.378	-	-	-	-	-
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.245	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.284	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.304	-	-	180	-	-
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	15.000	4.6	0.2	0.4	-	6.7	-	13	-	2.59	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	1.5	-	-	-	-	1.57	314	0.50	-	-	0.021	13	-	-	-	-	-	-	0.0013	-	-	-	-	-	-
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.462	-	-	-	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	1.5	-	-	-	-	1.11	223	0.36	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	89.000	-	0.1	0.4	-	7.1	-	13	-	2.66	-	-	-

Statistics																										
Number of Results	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	7	5	20	5	27	27	27	27
Minimum Detect	1.5	ND	ND	ND	ND	1.03	207	0.33	1	ND	0.012	12	15.000	1.2	0.1	0.4	0.8	6.7	0.001	13	0.245	2.56	ND	70	120	110
Maximum Concentration	1.5	<10	<0.02	<0.02	<2	7.34	1,470	2.35	6	<1	0.119	74	299.000	4.6	2.5	1.1	1.5	8.7	0.0078	19	0.629	2.66	<10	70	1,270	340
Average Concentration *	1.5	5	0.01	0.01	1	2.8	566	0.91	1.9	0.5	0.046	28	150.000	2.4	0.96	0.58	0.76	8.2	0.0029	15	0.42	2.6	5	27	200	96
95% UCL (Student's-t) *	1.5	5	0.01	0.01	1	4.493	899.2	1.438	3.535	0.5	0.0763	47.41	252.342	4.123	2.059	0.861	1.429	9.429	0.00526	16.99	0.471	2.664	5	29.51	299.2	123.6

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The ACL should be adjusted based on site-specific Clay content (when available). To calculate a site specific EIL, add the ABC to the ACL.
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be adjusted based on site-specific pH or CEC (when available). To calculate a site specific EIL, add the ABC to the ACL.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 Generic ACL value from NEPM 2013 Table 1B(2) using a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific CEC (when available). To calculate a site specific EIL, add the added background concentration (ABC) to the ACL.
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific pH and CEC (when available). To calculate a site specific EIL, add the ABC to the ACL.
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

	TPH					BTEX				PAH																						
	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)	benzene	toluene	ethylbenzene	m+p-xylene	Total	benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	1-methylnaphthalene	1,2-benzanthracene	acenaphthene	acenaphthylene	anthracene	benzo(a)anthracene	benzo(a)pyrene	benzo(b+j)fluoranthene	benzo(g,h,i)perylene	benzo(k)fluoranthene	chrysene	dibenz(a,h)anthracene	fluoranthene	fluorene	indeno(1,2,3-c,d)pyrene	naphthalene	phenanthrene	pyrene	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (Zero)	PAHs (Sum of total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	50	100	100	50	0.2	0.5	0.5	0.5		1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																	
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																													170				
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m						75	135	165	180											1.4													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m						75	135	165	180											1.4													
						50	85	70	105											0.7													
						50	85	70	105											0.7													
Lab Report Number	**Field ID**	**Date**																															
512029196	WSP_CCS_GW03_0.1	19/08/2020	<10	<50	-	-	-	<0.2	<0.5	<0.5	<0.5	-	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<10	<50	270	260	530	<0.2	<0.5	<0.5	<0.5	-	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.7	-	-	-	-	0.7	-	2.0	-	-	-	0.8	1.2	1.6
			<10	<50	-	-	-	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.7	-	-	-	-	0.7	-	2.0	-	-	1.2	1.9	1.4	0.9	8.3
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	<10	<50	410	460	870	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	1.7	3.7	4.1	5.1	2.3	1.6	3.4	0.5	9.0	0.8	2.1	<0.5	6.4	8.6	5.9	5.9	50.2
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	<10	<50	<100	110	110	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.6	0.7	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	1.3	1.3	0.7	4.3
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	<10	<50	290	390	680	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	1.4	1.8	0.9	0.5	1.1	<0.5	2.4	<0.5	0.9	<0.5	1.2	2.5	2.3	1.8	13.6
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	<10	<50	170	190	360	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	2.5	2.8	3.2	1.7	1.1	2.4	<0.5	4.9	<0.5	1.4	0.9	3.2	5.2	4.2	3.7	30.2
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512029397	WSP_CCS_GW05b_0.1	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	<10	<50	110	110	220	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	1.0	1.1	0.5	<0.5	1.1	<0.5	3.5	<0.5	<0.5	<0.5	3.5	3.4	1.8	1.2	15.8
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	<10	<50	170	140	310	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.4	6.0	6.1	7.5	3.9	2.3	5.4	0.7	12.0	<0.5	3.0	<0.5	4.3	12.0	8.8	8.8	65.2
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	-	<0.2	<0.5	<0.5	<0.5	-	7	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	4.9	5.2	-	3.0	-	4.2	0.5	7.5	<0.5	2.3	<0.5	3.5	7.7	7.2	7.2	46.4
	WSP_CCS_GW08_0.5	20/08/2020	<10	<50	200	190	390	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.1	4.6	4.8	5.3	3.0	2.2	4.3	0.6	9.7	<0.5	2.2	0.7	4.8	8.6	6.9	6.9	52.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	<10	<50	970	480	1,450	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	10.8	2.2	10.1	37.3	30.4	40.3	14.9	12.1	33.2	3.8	81.8	8.9	13.5	<0.5	76.6	70.9	45.0	45.0	466
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.6	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	<10	<50	-	-	-	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW08_4.0	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	1.3	1.3	1.2	0.5	<0.5	1.1	<0.5	3.8	<0.5	0.7	0.7	3.4	3.1	2.0	1.4	17.1
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035543	WSP_CCS_BH07_0.2	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.2	0.5
	WSP_CCS_BH07_1.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.1	1.2	0.8	0.5	0.6	<0.5	1.4	<0.5	0.6	<0.5	<0.5	1.6	1.9	1.4	8.6
	WSP_CCS_BH07_4.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_BH8_0.5	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	3.0	3.1	2.5	1.3	2.1	<0.5	4.9	<0.5	2.2	<0.5	1.5	4.4	4.4	3.9	27.3
	WSP_CCS_BH8_1.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.1	1.2	0.8	0.5	0.6	<0.5	1.4	<0.5	0.6	<0.5	<0.5	1.6	1.9	1.4	8.6
	WSP_CCS_GW07_0.5	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035544	WSP_CCS_BH08_0.5	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	1.1
	WSP_CCS_BH08_1.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.0	0.9	1.0	0.6	<0.5	0.9	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	2.0	2.2	1.7	1.1	11.3
	WSP_CCS_BH08_2.0	9/10/2020	<10	<50	110	<100	110	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	4.5	4.3	4.8	2.1	2.1	3.8	0.5	8.5	<0.5	2.0	<0.5	4.0	7.1	6.2	6.2	44.3
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.1	9/10/2020	<10	<50	-	-	-	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_1.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.2	<0.5	1.0
	WSP_CCS_GW02_2.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW02_4.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results			27	27	27	27	27	30	30	30	30	27	6	10	10	10	10	30	30	30	30	31	31	27	30	27	31	30	33	30	30	34	31	33	33	31	33
Minimum Detect			ND	ND	110	110	110	ND	ND	ND	ND		1	ND	ND	ND	ND	10.8	0.6	0.6	0.5	0.6	0.7	0.5	0.5	0.6	0.5	0.5	0.8	0.6	0.7	1.2	0.5	1.2	0.7	0.5
Maximum Concentration			<10	<50	970	480	1,450	<0.2	<0.5	<0.5	<0.5		7	<0.5	<0.5	<0.5	<0.5	10.8	2.2	10.1	37.3	30.4	40.3	14.9	12.1	33.2	3.8	81.8	8.9	13.5	19.6	76.6	70.9	45	45	466
Average Concentration *			5	25	133	120	202	0.1	0.25	0.25	0.25		1.7	0.25	0.25	0.25	0.25	0.6	0.56	0.8	2.5	2.3	2.9	1.4	1	2.2	0.42	4.9	0.56	1.2	0.89	3.9	4.5	3.7	3.2	26
95% UCL (Student's-t) *			5	25	156.2	162.2	312.8	0.1	0.25	0.25	0.25		3.822	0.25	0.25	0.25	0.25	1.199	0.477	1.362	4.5	3.982	5.484	2.222	1.802	4.022	0.622	9.066	1.046	1.941	1.855	8.023	8.095	5.99	5.714	50.33

* 1/2 Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c1
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

	MAH									Metals												Phenols													
	1,2-dimethylbenzene	1,3-dimethylbenzene	isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	styrene	tert-butylbenzene	Arsenic	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Molybdenum	Mercury	Nickel	Selenium	Vanadium	Zinc	2&4-Methylphenol (Cresols)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	3-Methylphenol	4-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	10	1	50	1	2	2	5	5	5	0.1	2	5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
NEPM 2013 Table 1B(5) Generic ESL - Comm/Ind										160[#3]					770		140	1,800[#3]			620														
NEPM 2013 Table 1B(5) Generic ESL - Urban Res & Public Open Space										100[#3]					460		100	1,100[#3]			290														
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																			

Lab Report Number	Field ID	Date																																		
152029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	6	70	<1	<50	<1	15	4	49	41	320	<0.1	8	<5	62	154	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	16	7	49	40	407	<0.1	10	<5	55	87	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	16	140	<1	<50	<1	25	7	181	372	270	1.0	15	<5	27	1,248	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6	60	<1	<50	<1	11	4	36	46	229	<0.1	6	<5	21	137	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	60	<1	<50	<1	9	4	30	49	210	<0.1	7	<5	18	124	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	26	210	<1	<50	2	57	19	968	1,000	361	0.9	34	<5	21	4,593	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	80	<1	<50	<1	9	4	6	12	284	<0.1	4	<5	10	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	10	5	<5	10	336	<0.1	4	<5	10	18	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	40	-	-	-	12	3	30	57	208	1.2	4	<5	12	72	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	16	6	124	101	238	0.2	6	<5	18	721	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	24	6	54	40	542	0.1	6	<5	33	282	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	70	<1	<50	<1	12	5	42	76	243	0.3	6	<5	15	132	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	6	140	<1	<50	<1	14	3	107	406	138	0.9	6	<5	25	565	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	8	<2	33	155	59	0.3	2	<5	17	168	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	9	<2	42	124	70	0.3	5	<5	16	164	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	8	5	11	17	290	<0.1	5	<5	16	36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	20	<1	<50	<1	4	<2	14	56	31	<0.1	2	<5	7	106	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	10	14	7	-	-	-	-	6	26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH9_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	24	140	<1	<50	<1	18	4	66	202	341	0.1	9	<5	28	520	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	37	20	<1	<50	<1	7	<2	17	29	54	<0.1	<2	<5	12	135	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	160	-	-	-	7	6	39	49	414	-	5	-	20	57	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	10	<1	<50	<1	9	14	<5	<5	38	<0.1	<2	<5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	8	4	12	24	218	<0.1	5	<5	14	37	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	100	<1	<50	<1	6	4	25	25	218	<0.1	7	<5	16	75	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	20	<1	<50	<1	3	4	<5	6	33	<0.1	<2	<5	<5	10	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	<5	40	-	-	-	6	5	-	9	179	-	4	-	8	19	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	6	<10	<1	<50	<1	7	4	23	<5	10	<0.1	<2	<5	8	27	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	3	3	<5	<5	<5	<0.1	<2	<5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																			
Number of Results	10	10	10	10	10	10	10	10	10	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	10	ND	ND	2	3	3	6	6	7	0.1	2	ND	6	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37	210	<1	<50	2	57	19	968	1,000	542	1.2	34	<5	62	4,593	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
Average Concentration *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	6.2	68	0.5	25	0.55	12	5.1	70	102	198	0.22	5.8	2.5	17	318	0.45	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.9	0.25
95% UCL (Student's-t) *	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	8.887	83.83	0.5	25	0.64	14.99	6.225	122.3	165.5	244.8	0.32	7.758	2.5	21.82	583.9	0.482	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.963	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific ESL, add the ac
#5 Generic ACL value from NEPM 2013 Table 1B(5) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

	Explosives				Organochlorine Pesticides																				Perfluoroalkane Sulfonic Acids					
	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	a-HCH	Aldrin	Aldrin + Dieldrin	b-HCH	Chlordane (cis)	Chlordane (trans)	d-HCH	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-HCH (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Perfluorobutane sulfonic acid (PFBS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctane sulfonamide (PFOSA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.2	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind														640																	
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space														180																	
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																															
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																															
Lab Report Number	**Field ID**	**Date**																														
512029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<1	<1	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<1	<1	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0003	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.1	-	<0.1	-	-	-	<0.1	<0.1	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.1	-	<0.05	<0.1	<0.1	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	<0.1	<0.2	-	<0.2	-	<0.1	-	<0.2	<0.2	<0.4	-	<0.1	-	<0.1	<0.1	<0.1	<0.2	-	<0.1	<0.2	<0.2	<0.4	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0002	0.0003
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	<0.2	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.2	-	-	-	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0003
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	<0.2	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.5	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<1.0	<1.0	<0.5	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	<0.2	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	0.0025	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	0.0004	-
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results			10	10	10	10	30	30	27	30	27	27	27	30	30	30	27	30	27	30	30	30	27	30	30	30	27	5	5	5	5	5	5
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND
Maximum Concentration			<0.5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.58	<0.5	<0.58	<0.25	<0.25	<0.5	<0.5	<1	<0.58	<0.5	<150	<0.5	<0.5	<0.5	<0.5	<250	<0.5	<0.5	<0.5	<1	<0.0002	<0.0002	<0.0002	<0.0002	0.0025	<0.0003
Average Concentration *			0.25	0.5	0.5	0.25	0.051	0.051	0.026	0.051	0.027	0.029	0.03	0.051	0.051	0.15	0.026	0.051	27	0.051	0.051	0.051	0.051	29	0.051	0.051	0.051	3.11	0.0001	0.0001	0.0001	0.0001	0.0007	0.0001
95% UCL (Student's-t) *			0.25	0.5	0.5	0.25	0.0725	0.0725	0.0265	0.0725	0.0302	0.035	0.0372	0.0725	0.0725	0.196	0.0265	0.0725	30.01	0.0725	0.0725	0.0725	0.0725	35.02	0.0725	0.0725	0.0725	0.14	0.0001	0.0001	0.0001	0.0001	0.00167	0.0001

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ac
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Organophosphorous Pesticides															Herbicides	Pesticides						Halogenated Hydrocarbons					Per- and Polyfluoroalkyl Substances	Perfluoroalkyl Sulfonamides							
			Azinophos methyl	Bromophos-methyl	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Methyl parathion	Mevinphos	Terbufos	2,4-Dichlorophenoxyacetic acid	Atrazine	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	1,2-dichloroethane	Dichloromethane	Dichlorodifluoromethane	Hexachlorobutadiene	Tetrachloroethene	Sum of PFAS (WA DER List)	Perfluorooctane sulfonamide (PFOSA)	N-Methyl Perfluorooctane sulfonamide (MeFOSA)	N-Ethyl Perfluorooctane sulfonamide (EtFOSA)	N-methyl Perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl Perfluorooctane sulfonamidoethanol (EtFOSE)	Perfluorooctane sulfonamide (PFOSA)	N-Methyl Perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Ethyl Perfluorooctane sulfonamidoacetic acid (EtFOSAA)	Perfluorooctane sulfonamide (FOSA)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.2	0.2	0.05	0.5	5	5	0.5	5	0.0002	0.0002	0.0005	0.0002	0.5	0.0005	0.0002	0.0005
NEPM 2013 Table 1B(7) Generic EIL - Comm/Ind																																					
NEPM 2013 Table 1B(7) Generic EIL - Urban Res & Public Open Space																																					
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																					
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																					
Lab Report Number	**Field ID**	**Date**																																			
E52059196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	-	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0003	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<50	<5	<50	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_0.5	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.5	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<50	<5	<50	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_1.0	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH7_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_1.0	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	0.0175	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.5	<5	<5	<0.5	<5	0.0004	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																				
Number of Results			27	27	27	30	30	30	30	30	30	30	30	30	27	27	30	10	10	10	27	27	27	30	10	10	10	10	10	5	5	5	5	5	5	5	5
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.25	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.25	<0.25	<0.25	<1	<0.5	<5	<5	<5	<0.5	<5	0.0175	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
Average Concentration *			0.029	0.029	0.029	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.11	0.11	0.051	0.25	0.25	0.25	0.029	0.029	0.029	0.11	0.051	2.5	2.5	2.5	0.25	2.5	0.0037	0.0001	0.00025	0.0001	0.25	0.00025	0.0001	0.00025
95% UCL (Student's-t) *			0.035	0.035	0.035	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.14	0.14	0.0725	0.25	0.25	0.25	0.035	0.035	0.035	0.14	0.0725	2.5	2.5	2.5	0.25	2.5	0.0111	0.0001	0.00025	0.0001	0.25	0.00025	0.0001	0.00025

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			PFAS		Chlorinated Hydrocarbons																																			
			Sum of PFOS and PFOS	Sum of PFAS	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ACL			0.0002	0.0002	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1B(7) Generic EIL - Comm/Ind																																								
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																								
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																								
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																								
Lab Report Number	**Field ID**	**Date**																																						
512029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	0.0003	0.0003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW06_1.0	20/08/2020	0.0002	0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	(0.0002)	(0.0002)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH8_0.5	8/10/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_BH8_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035544	WSP_CCS_BH08_0.5	9/10/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	0.0025	0.0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW02_1.0	9/10/2020	0.0004	0.0004	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																							
Number of Results			5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Minimum Detect			**0.0002**	**0.0002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			**0.0025**	**0.0175**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**	**<0.5**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5**
Average Concentration *			**0.0007**	**0.0037**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**2.5**	**0.25**	**2.5**	**0.25**	**0.25**	**0.25**	**0.25**	**1.2**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**2.5**
95% UCL (Student's-t) *			**0.00167**	**0.0111**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**2.5**	**0.25**	**2.5**	**0.25**	**0.25**	**0.25**	**0.25**	**1.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**2.5**

* 1/2 Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c1 f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ae
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Halogenated Benzenes											Perfluoroalkane Carboxylic Acids										VOCs			Solvents					
			1,2-Dichlorobenzene	1,2,4-Trichlorobenzene	1,2-dichloroethane	1,3-dichloropropane	1,4-dichloropropane	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Total chlorinated benzenes	Perfluorobutanoic acid (PFBA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluorotetradecanoic acid (PFTeDA)	1,1,1,2-Tetrachloro-2-fluoroethane	1,2-cis-1,4-Dichloro-2-butene	1,2-trans-1,4-Dichloro-2-butene	Methyl tert-butyl ether	Total chlorinated methane	Ethylene glycol	Thiourea	Methyl-2-pentanone	Carbon disulfide	Hexachlorobutadiene	Ethyl acetate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NEPM 2013 Table 1B(5) Generic ESL - Comm/Ind																																
NEPM 2013 Table 1B(5) Generic ESL - Urban Res & Public Open Space																																
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																
Lab Report Number	**Field ID**	**Date**																														
ES2629196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2629397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH8_0.3	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH8_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW02_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results			10	10	10	10	10	10	10	10	10	31	10	5	5	5	5	5	5	5	5	5	5	5	10	10	10	10	10	10	10	10	10
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Average Concentration *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.09	0.25	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.25	0.25	0.25	2.5	2.5	2.5	0.25	0.25	2.5
95% UCL (Student's-t) *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.139	0.25	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.25	0.25	0.25	2.5	2.5	2.5	0.25	0.25	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific ESL, add the ac
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/ 100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			SVOCs																				Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics		
			2-(acetylamino) fluorene	1,2-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-(p-cumylphenyl) phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[b]fluoranthene	Benzo[ghi]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	4-aminobiphenyl	3,3'-dimethoxybenzidine	3,3'-dimethylbenzidine	7,12-dimethylbenz(a)anthracene	PCBs (Sum of total)	Hexachlorobenzene	Pentachlorophenol & Pentachloroanisole	1-naphthylamine	2-naphthylamine	2-chloroaniline	3-nitroaniline	4-chloro-2-methylaniline	4-nitroaniline	Aniline	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Nitrobenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ACL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(7) Generic EIL - Comm/Ind																																							
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																							
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																							
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																							
Lab Report Number	Field ID	Date																																					
512029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH8_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH8_1.0	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																																						
Number of Results		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	27	10	10	10	10	10	10	10	10	10	10	10
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.25	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.25	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* 1/2 Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ar
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Phthalates							Organotins	
			Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Di-n-butyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate		Tributyltin cation	Dibutyltin cation
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		µg/kg	mg/kg
EQL			5	0.5	0.5	0.5	0.5	0.5		1	0.001
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind											
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space											
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m											
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m											
Lab Report Number	Field ID	Date									
512029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW03_0.5	19/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW04_0.1	19/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-		-	-
512029397	WSP_CCS_GW05b_0.1	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW06_0.5	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW08_0.1	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-		-	-
512035543	WSP_CCS_BH07_0.2	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_BH8_0.5	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_BH8_1.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW07_0.5	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-		-	-
512035544	WSP_CCS_BH08_0.5	9/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		-	-
			-	-	-	-	-	-		-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW02_1.0	9/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.001
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-		-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-		-	-
Statistics											
Number of Results			10	10	10	10	10	10		1	1
Minimum Detect			ND	ND	ND	ND	ND	ND		ND	ND
Maximum Concentration			<5	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.001
Average Concentration *			2.5	0.25	0.25	0.25	0.25	0.25			
95% UCL (Student's-t) *			2.5	0.25	0.25	0.25	0.25	0.25			

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Inorganics	BTEX					TRH				MAH									
			Cyanide Total	Benzene	Toluene	Ethylbenzene	o-Xylene (m- & p)	o-Xylene (o)	C6-C10	C10-C16	C16-C34 (F3)	C34-C40 (F4)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	
			mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL			0.001	1	2	2	2	2	20	100	100	100	5	5	5	5	5	5	5	5	5	
ANZG (2018) Marine water 95% toxicant DGVs				700[#4]																		
10 x ADWG 2011 (May 2019 Update) - Recreational Water			800	10	8000	3000		6000												300		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																						
2-4m				5,000	NL	NL																
4-8m				5,000	NL	NL																
PFAS NEMP 2020 Table 1 Health Recreational Water																						
PFAS NEMP 2020 Table 5 Interim marine 95%																						
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																						
2-4m				NL	NL	NL																
4-8m				NL	NL	NL																
Lab Report Number	**Field ID**	**Date**																				
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	0.001	<1	4	3	6	3	20	<100	500	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP_CCS_GW03	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP_CCS_GW04	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP_CCS_GW05b	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP_CCS_GW06	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP_CCS_GW08	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	120	190	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW03	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW04	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW05B	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW06	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW07	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	CRESCENT-GW08	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
	WSP-CCS-GW07	**17/12/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Statistics																						
Number of Results			**6**	**17**	**18**	**18**	**18**	**18**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	
Minimum Detect			**0.001**	**ND**	**4**	**3**	**6**	**3**	**20**	**120**	**190**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	
Maximum Concentration			**<0.004**	**<1**	**4**	**3**	**6**	**3**	**20**	**120**	**500**	**<100**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	
Average Concentration *			**0.0018**	**0.5**	**1.3**	**1.2**	**1.6**	**1.2**	**11**	**54**	**85**	**50**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	
95% UCL (Student's-t) *			**0.00217**	**0.5**	**1.731**	**1.487**	**2.219**	**1.487**	**11.62**	**61.31**	**132.2**	**50**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			PAH																			
			Benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	2-methylnaphthalene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b,j)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			4	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1
ANZG (2018) Marine water 95% toxicant DGVs										0.4[#11]		0.2[#11]				1.4[#11]			70[#1]	2.0[#11]	
10 x ADWG 2011 (May 2019 Update) - Recreational Water												0.1									
NEPM 2013 Table 1A(4) Comm/ind HSL D GW for Vapour Intrusion, Sand																					
2-4m																			NL		
4-8m																			NL		
PFAS NEMP 2020 Table 3 Health Recreational Water																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m																			NL		
4-8m																			NL		
Lab Report Number	**Field ID**	**Date**																				
ES2019471	WSP_CC01_GW01	4/06/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2030732	WSP_CCS_GW01	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW03	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW04	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW05b	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW06	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	1.7	1.8	1.4	1.5	<1.0	2.9	<1.0	1.1	<1.0	<1.0	<1.0	3.2
	WSP_CCS_GW08	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2036491	CRESCENT-GW02	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW03	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW04	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW05B	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	1	<1	<1	<1	1.2	<1	<1	<1	<1	<1	1.4
	CRESCENT-GW06	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	0.8	<1	<1	<1	1.2	<1	<1	<1	<1	<1	1.3
	CRESCENT-GW07	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW08	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ES2042721	WSP_CCS_I&M	2/12/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2045287	WSP-CCS-GW02	17/12/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP-CCS-GW07	17/12/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Statistics																						
Number of Results			**3**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.7**	**0.8**	**1.4**	**1.5**	**ND**	**1.2**	**ND**	**1.1**	**ND**	**ND**	**ND**	**1.3**
Maximum Concentration			**<4**	**<2**	**<2**	**<2**	**<2**	**<1**	**<1**	**<1**	**1.7**	**1.8**	**1.4**	**1.5**	**<1**	**2.9**	**<1**	**1.1**	**<1**	**<1**	**<1**	**3.2**
Average Concentration *			**2**	**1**	**1**	**1**	**1**	**0.5**	**0.5**	**0.5**	**0.57**	**0.42**	**0.55**	**0.56**	**0.5**	**0.72**	**0.5**	**0.54**	**0.5**	**0.5**	**0.5**	**0.76**
95% UCL (Student's-t) *			**2**	**1**	**1**	**1**	**1**	**0.5**	**0.5**	**0.5**	**0.694**	**0.594**	**0.645**	**0.662**	**0.5**	**0.98**	**0.5**	**0.597**	**0.5**	**0.5**	**0.5**	**1.051**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Metals																Phenols												
			Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium	Vanadium (filtered)	Zinc (filtered)	3&4-Methylphenol (m &p-cresol)	2-4,5-Trichlorophenol	2-4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Me thylphenol (O-cresol)	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	1	10	5	2	1	1	1	1	1	1	1	1	1	2	1
ANZG (2018) Marine water 95% toxicant DGVs							5.5[#2]		1[#2]	1.3[#4]	4.4[#5]		0.4[#4]	70[#2]			100[#4]	15[#4]													
10 x ADWG 2011 (May 2019 Update) - Recreational Water			100	20000	600	40000	20	500		20000	100	5000	10	200	100	170	170				200	2000			3000				100	
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand 2-4m																															
4-8m																															
NEMP 2020 Table 1 Health Recreational Water																															
PFAS NEMP 2020 Table 5 Interim marine 95%																															
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																															
4-8m																															
Lab Report Number	**Field ID**	**Date**																													
ES2019471	WSP_CC01_GW01	4/06/2020	<10[#10]	110	<10[#7]	2,150	<1.0[#10]	<10[#10]	<10[#10]	<10[#10]	<10[#10]	843	<0.1	<10[#10]	<100[#10]	<10[#10]	-	-	76	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2030732	WSP_CCS_GW01	1/09/2020	1	73	<1	1,500	0.2	<1	2	39	1	110	<0.1	44	<10	-	-	<10	397	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW03	1/09/2020	<10[#10]	33	<10[#7]	4,100	<1.0[#10]	<10[#10]	<10[#10]	143	<10[#10]	56	<0.1	15	<100[#10]	-	-	<100[#10]	137	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW04	1/09/2020	<10[#10]	56	<10[#7]	4,040	<1.0[#10]	<10[#10]	12	37	<10[#10]	801	<0.1	<10[#10]	<100[#10]	-	-	<100[#10]	<50[#10]	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW05b	1/09/2020	<10[#10]	59	<10[#7]	3,850	<1.0[#10]	<10[#10]	<10[#10]	85	<10[#10]	615	<0.1	19	<100[#10]	-	-	<100[#10]	190	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW06	1/09/2020	<10[#10]	76	<10[#7]	4,170	<1.0[#10]	<10[#10]	<10[#10]	53	<10[#10]	789	<0.1	18	<100[#10]	-	-	<100[#10]	76	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW08	1/09/2020	<10[#10]	37	<10[#7]	3,260	<1.0[#10]	<10[#10]	<10[#10]	79	<10[#10]	60	<0.1	15	<100[#10]	-	-	<100[#10]	173	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2036491	CRESCENT-GW02	16/10/2020	<1	-	-	-	0.1	<1	-	132	1	-	<0.1	15	-	-	2	-	157	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW03	16/10/2020	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	108	<10[#10]	-	<0.1	14	-	-	<10[#10]	-	143	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW04	16/10/2020	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	54	<10[#10]	-	<0.1	<10[#10]	-	-	<10[#10]	-	103	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW05B	16/10/2020	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	112	<10[#10]	-	<0.1	20	-	-	<10[#10]	-	98	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW06	16/10/2020	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	74	<10[#10]	-	<0.1	13	-	-	<10[#10]	-	95	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW07	16/10/2020	<1	-	-	-	<0.1	<1	-	112	5	-	<0.1	12	-	-	<1	-	128	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW08	16/10/2020	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	165	<10[#10]	-	<0.1	12	-	-	<10[#10]	-	139	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
ES2042721	WSP_CCS_I&M	2/12/2020	<1	779	<1	2,540	<0.1	<1	<1	3	<1	72	<0.1	<1	<10	-	<1	<10	5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2045287	WSP-CCS-GW02	17/12/2020	<1	42	<1	170	<0.1	<1	2	2	<1	194	<0.1	1	<10	-	3	<10	15	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP-CCS-GW07	17/12/2020	<1	61	<1	60	<0.1	<1	2	14	65	63	<0.1	2	<10	-	<1	<10	18	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Statistics																															
Number of Results			**17**	**10**	**10**	**10**	**17**	**17**	**10**	**17**	**17**	**10**	**17**	**17**	**10**	**1**	**10**	**10**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**1**	**33**	**ND**	**60**	**0.1**	**ND**	**2**	**2**	**1**	**56**	**ND**	**1**	**ND**	**ND**	**2**	**ND**	**5**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<10**	**779**	**<10**	**4,170**	**<1**	**<10**	**12**	**165**	**65**	**843**	**<0.1**	**44**	**<100**	**<10**	**<10**	**<100**	**397**	**<2**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<2**	**<1**
Average Concentration *			**3.4**	**133**	**3.2**	**2,584**	**0.35**	**3.4**	**4.4**	**72**	**7.5**	**360**	**0.05**	**13**	**32**		**3.2**	**32**	**116**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**
95% UCL (Student's-t) *			**4.364**	**264.9**	**4.547**	**3,502**	**0.441**	**4.35**	**6.204**	**93.42**	**13.85**	**564.8**	**0.05**	**17.04**	**45.47**		**4.365**	**45.47**	**155.1**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Explosives				Organochlorine Pesticides																					
	1,3,5- Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	2	4	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
ANZG (2018) Marine water 95% toxicant DGVs																				0.008[#]						
40 x ADWG 2011 (May 2019 Update) - Recreational Water	300							3		20					90							100	3			
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand 2-4m																										
4-8m																										
PFAS NEMP 2020 Table 3 Health Recreational Water																										
PFAS NEMP 2020 Table 5 Interim marine 95%																										
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																										
4-8m																										

Lab Report Number	Field ID	Date																									
ES2019471	WSP_CC01_GW01	4/06/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2030732	WSP_CCS_GW01	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW03	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW04	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW05b	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW06	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW08	1/09/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2036491	CRESCENT-GW02	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW03	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW04	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW05B	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW05	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW07	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW08	16/10/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
ES2042721	WSP_CCS_I&M	2/12/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2045287	WSP-CCS-GW02	17/12/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP-CCS-GW07	17/12/2020	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0

Statistics																											
Number of Results	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
Average Concentration *	1	2	2	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1
95% UCL (Student's-t) *	1	2	2	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides														Pesticides					
	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctane sulfonic acid (PFOS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos-ethyl	Chlorbenzilate	Carbazole	Dimethoate-S-methyl	Fenamiphos	Parathion	Pirimiphos-ethyl
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	2	2	0.5	0.5	2	0.5
ANZG (2018) Marine water 95% toxicant DGVs											0.009[#2]																
10 x ADWG 2011 (May 2019 Update) - Recreational Water																											
NEPM 2013 Table 1A(4) Comm/ind HSL D GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											
RAS NEMP 2020 Table 1 Health Recreational Water																											
PFAS NEMP 2020 Table 5 Interim marine 95%					0.13[#9]																						
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											

Lab Report Number	Field ID	Date																										
ES2019471	WSP_CC01_GW01	4/06/2020	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2030732	WSP_CCS_GW01	1/09/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW03	1/09/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW04	1/09/2020	<0.02	<0.02	0.02	<0.02	0.10	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW05b	1/09/2020	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW06	1/09/2020	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW08	1/09/2020	<0.02	<0.02	<0.02	<0.02	0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2036491	CRESCENT-GW02	16/10/2020	0.03	-	0.21	-	0.12	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<3	<0.5	<3	<3	<0.5	<0.5	<3	<0.5
	CRESCENT-GW03	16/10/2020	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<3	<0.5	<3	<3	<0.5	<0.5	<3	<0.5
	CRESCENT-GW04	16/10/2020	<0.02	-	<0.02	-	0.03	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW05B	16/10/2020	<0.02	-	<0.02	-	0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW06	16/10/2020	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW07	16/10/2020	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW08	16/10/2020	<0.02	-	<0.02	-	0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
ES2042721	WSP_CCS_I&M	2/12/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2045287	WSP-CCS-GW02	17/12/2020	<0.02	<0.02	0.20	<0.02	0.16	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP-CCS-GW07	17/12/2020	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5

Statistics

Number of Results	17	10	17	10	17	10	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect	0.03	ND	0.02	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.03	<0.02	0.21	<0.02	0.16	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
Average Concentration *	0.011	0.01	0.034	0.01	0.031	0.01	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25	1	1	0.25	0.25	1	0.25
95% UCL (Student's-t) *	0.0132	0.01	0.0609	0.01	0.0515	0.01	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25	1	1	0.25	0.25	1	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
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#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Herbicides	Halogenated Hydrocarbons					Halogenated Benzenes									Chlorinated Hydrocarbons									
	Pronamide	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	2	5	50	50	5	50	5	2	2	2	2	5	5	5	5	2	5	5	5	5	5	5	5	5	5	5	5	5
ANZG (2018) Marine water 95% toxicant DGVs								80[#6]												1,900[#7]							
10 x ADWG 2011 (May 2019 Update) - Recreational Water							300	300	15000		400				3000						300					30	
NEPM 2013 Table 1A(4) Comm/ind HSL D GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											
BKS NEMP 2020 Table 1 Health Recreational Water																											
PFAS NEMP 2020 Table 5 Interim marine 95%																											
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											

Lab Report Number	Field ID	Date																										
ES2019471	WSP_CC01_GW01	4/06/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2030732	WSP_CCS_GW01	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW03	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW04	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW05b	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW06	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW08	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2036491	CRESCENT-GW02	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW03	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW04	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW05B	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW06	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW07	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW08	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2042721	WSP_CCS_I&M	2/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2045287	WSP-CCS-GW02	17/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP-CCS-GW07	17/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Statistics

Number of Results	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *	1	2.5	25	25	2.5	25	2.5	1	1	1	1	2.5	2.5	2.5	2.5	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
95% UCL (Student's-t) *	1	2.5	25	25	2.5	25	2.5	1	1	1	1	2.5	2.5	2.5	2.5	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Chlorinated Hydrocarbons																				Perfluoroalkane Carboxylic Acids	VOCs			Solv		
	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,3-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-Hexanone (MBK)	4-Methyl-2-pentanone
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50	0.01	5	5	5	50	50	50
ANZG (2018) Marine water 95% toxicant DGVs																											
80 x ADWG 2011 (May 2019 Update) - Recreational Water					30								7				500			3							
HEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											
PFAS NEMP 2020 Table 1 Health Recreational Water																					$10^{[9]}$						
PFAS NEMP 2020 Table 5 Interim marine 95%																					$220^{[9]}$						
HEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																											
4-8m																											
Lab Report Number	**Field ID**	**Date**																										
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW03	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW04	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW05b	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW06	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW08	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	0.05	<5	<5	<5	<50	<50	<50
	CRESCENT-GW03	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW04	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW05B	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW06	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW07	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW08	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	0.04	<5	<5	<5	<50	<50	<50
	WSP-CCS-GW07	**17/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	<0.01	<5	<5	<5	<50	<50	<50
Statistics																												
Number of Results			17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<5	0.05	<5	<5	<5	<50	<50	<50
Average Concentration *			2.5	2.5	2.5	2.5	2.5	2.5	25	2.5	25	2.5	2.5	2.5	2.5	1	5	1	2.5	2.5	2.5	2.5	2.5	0.01	2.5	2.5	2.5	25	25	25
95% UCL (Student's-t) *			2.5	2.5	2.5	2.5	2.5	2.5	25	2.5	25	2.5	2.5	2.5	2.5	1	5	1	2.5	2.5	2.5	2.5	2.5	0.0157	2.5	2.5	2.5	25	25	25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			ents			SVOCs																		Amino Aliphatics				Amino Aromatics		
			Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	2,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachlorobenzene	Hexachloroethane	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Pronetalol	N-nitrosodiethylamine	N-nitroso-di-n-butylamine	N-nitroso-di-n-propylamine	N-Nitrosodimethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-chloroaniline
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	4	4
ANZG (2018) Marine water 95% toxicant DGVs																														
10 x ADWG 2011 (May 2019 Update) - Recreational Water																														
NEPM 2013 Table 1A(4) Comm/ind HSL D GW for Vapour Intrusion, Sand 2-4m																														
4-8m																														
PFAS NEMP 2020 Table 1 Health Recreational Water																														
PFAS NEMP 2020 Table 5 Interim marine 95%																														
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand 2-4m																														
4-8m																														
Lab Report Number	**Field ID**	**Date**																												
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP_CCS_GW03	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP_CCS_GW04	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP_CCS_GW05b	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP_CCS_GW06	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP_CCS_GW08	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW03	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW04	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW05B	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW06	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW07	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	CRESCENT-GW08	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
	WSP-CCS-GW07	**17/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<4	<4	<4
Statistics																														
Number of Results			**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			**<5**	**<2**	**<50**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<4**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<4**	**<4**
Average Concentration *			**2.5**	**1**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**
95% UCL (Student's-t) *			**2.5**	**1**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Anilines					Nitroaromatics			Phthalates						Organotins			
			3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminodiphenyl	Nitrobenzene	bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Tributyltin as Sn	Monobutyltin as Sn	Tributyltin as SN	Tributyltin
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/L	ng/L	ngSn/L	ng/L
EQL			4	2	2	2	2	2	2	2	10	2	2	2	2	2	5	5		2
ANZG (2018) Marine water 95% toxicant DGVs																				6
10 x ADWG 2011 (May 2019 Update) - Recreational Water																				
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																				
2-4m																				
4-8m																				
PFAS NEMP 2020 Table 1 Health Recreational Water																				
PFAS NEMP 2020 Table 5 Interim marine 95%																				
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																				
2-4m																				
4-8m																				
Lab Report Number	**Field ID**	**Date**																		
ES2019471	WSP_CC01_GW01	4/06/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	2	<2	-	-	<2	-
ES2030732	WSP_CCS_GW01	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW03	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW04	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW05b	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW06	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW08	1/09/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
ES2036491	CRESCENT-GW02	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW03	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW04	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	7	6	6	-
	CRESCENT-GW05B	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW06	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW07	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW08	16/10/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
ES2042721	WSP_CCS_I&M	2/12/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	<10	-
ES2045287	WSP-CCS-GW02	17/12/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	<2
	WSP-CCS-GW07	17/12/2020	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
Statistics																				
Number of Results			17	17	17	17	17	17	17	17	17	17	17	17	17	17	7	7	9	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	7	6	6	ND
Maximum Concentration			<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	2	<2	7	6	<10	<2
Average Concentration *			2	1	1	1	1	1	1	1	5	1	1	1	1.1	1	3.1	3	2	
95% UCL (Student's-t) *			2	1	1	1	1	1	1	1	5	1	1	1	1.162	1	4.392	3.972	3.24	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

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Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

				BTEX					THM				NA	MAH								
				Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	1+1+DCE	1,1,1-Tri	1,1,2-Tri,1,2,2-T P	1,1,2,2-T P	Weight loss/dry % moisture	1,2,4 - trimethylbenzene	1,3,5 - trimethylbenzene	isopropylbenzene	naphthalene	propylbenzene	butylbenzene	sec-butylbenzene	styrene	tert-butylbenzene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL				0.1	0.1	0.1	0.2	0.1	100	100	1000	1000	0.0001	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	Field ID	Date	Matrix Type																			
S12/29106	MSP_CCI_GW03_0.5	20/08/2020	soil	-	-	-	-	-	-	-	450	230	0.480	-	-	-	-	-	-	-	-	-
	QA05	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QFD				0	0	0	0	0	0	0	127	79	-	0	0	0	0	0	0	0	0	0
S12/29106	MSP_CCI_GW03_0.5	20/08/2020	soil	-	-	-	-	-	-	-	450	230	0.480	-	-	-	-	-	-	-	-	-
T29549	QA04A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	127	79	-	0	0	0	-	-	-	-	0	-
S12/29397	MSP_CCI_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	260	120	-	-	-	-	-	-	-	-	-	-
	MSP_CCI_QA02	20/08/2020	soil	-	-	-	-	-	-	-	502	170	-	-	-	-	-	-	-	-	-	-
QFD				0	0	0	0	0	0	0	65	57	-	-	-	-	-	-	-	-	-	-
S12/29397	MSP_CCI_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	260	120	-	-	-	-	-	-	-	-	-	-
T29599	MSP_CCI_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	502	170	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	175	140	-	-	-	-	-	-	-	-	-	-
S12/29397	MSP_CCI_GW06_6.0	20/08/2020	soil	-	-	-	-	-	-	-	300	130	0.459	-	-	-	-	-	-	-	-	-
	MSP_CCI_QA02	20/08/2020	soil	-	-	-	-	-	-	-	270	110	-	-	-	-	-	-	-	-	-	-
QFD				0	0	0	0	0	0	0	26	17	-	-	-	-	-	-	-	-	-	-
S12/29397	MSP_CCI_GW06_6.0	20/08/2020	soil	-	-	-	-	-	-	-	300	130	0.459	-	-	-	-	-	-	-	-	-
T29599	MSP_CCI_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
S12/29543	MSP_CCI_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	0.272	-	-	-	-	-	-	-	-	-
	MSP_CCI_QA04	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QFD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
S12/29543	MSP_CCI_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	0.272	-	-	-	-	-	-	-	-	-
T29602	MSP_CCI_QA04A	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-

Comments
#1 No.
#2 A. SAFLIE
#3
#4 Mid grey soil.
#5 C. Clift/JJI
#6 Mid brown soil.

RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))
***Intertab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

				PAH																				Metals													
				Naphthalene	2-Chloronaphthalene	1-Chloronaphthalene	2-methylnaphthalene	1-methylnaphthalene	1-methylphenanthrene	1,2,5-Trimethylnaphthalene	Biphenyl	Acenaphthylene	Acenaphthene	Dibenzofuran	Fluorene	9-methylfluorene	Dibenzothiophene	Phenanthrene	Anthracene	1-methylphenanthrene	Carbazole	Fluoranthene	Pyrene	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury (Hg)	Nickel	Silver	Zinc	Boron	Cobalt	Molybdenum	Selenium	Thallium	Vanadium	Tin
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL				1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	1	0.5	0.5	1	1	5	5	5	0.1	2	2	5	5
Lab Report Number	Field ID	Date	Matrix Type																																			
612809496	WSP_CCS_GW03_8.5	15/08/2020	soil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA01	15/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QFD				0	-	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612809496	WSP_CCS_GW03_8.5	15/08/2020	soil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736169	QA01A	15/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612809397	WSP_CCS_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	0.6	1.4	6.0	6.1	3.9	5.4	0.7	13.0	-	-	3.0	-	4.3	13.0	-	70	-	-	-	12	5	42	76	240	0.3	4	-	15	110
	WSP_CCS_QA02	20/08/2020	soil	-	-	-	-	-	-	-	-	0.8	1.8	7.2	7.2	4.5	6.4	0.8	14.0	-	-	2.5	-	5.2	14.1	-	80	-	-	-	17	6	43	113	243	0.3	10	-	17	200
RPD				-	-	-	-	-	-	-	-	0	29	18	16	14	17	15	7	0	0	15	0	9	8	-	13	0	0	0	34	18	34	28	1	50	50	0	13	57
612809397	WSP_CCS_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	0.6	1.4	6.0	6.1	3.9	5.4	0.7	13.0	-	-	3.0	-	4.3	13.0	-	70	-	-	-	12	5	42	76	240	0.3	6	-	15	110
736168	WSP_CCS_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	-	0.8	1.8	7.2	7.2	4.5	6.4	0.8	14.0	-	-	2.5	-	5.2	14.1	6.3	80	-	-	-	17	6	43	113	243	0.3	10	-	17	200
RPD				-	-	-	-	-	-	-	-	0	29	18	16	14	17	15	7	0	0	15	0	9	8	-	13	0	0	0	34	18	34	28	1	50	50	0	13	57
612809397	WSP_CCS_GW06_8.5	20/08/2020	soil	-	-	-	-	-	-	-	-	0.6	1.1	4.6	4.8	3.0	4.3	0.6	9.7	-	-	2.2	0.7	4.6	8.6	6	140	-	-	-	14	7	107	406	136	0.9	6	-	25	665
	WSP_CCS_QA03	20/08/2020	soil	-	-	-	-	-	-	-	-	0.8	1.6	6.0	5.8	3.9	5.3	0.7	12.9	-	-	2.6	0.8	5.4	11.7	6	130	-	-	-	11	4	126	276	184	0.9	7	-	24	450
RPD				-	-	-	-	-	-	-	-	29	37	26	19	26	19	14	29	-	-	17	15	16	30	0	7	-	-	-	24	55	18	8	30	0	15	4	4	29
612809397	WSP_CCS_GW06_8.5	20/08/2020	soil	-	-	-	-	-	-	-	-	0.6	1.1	4.6	4.8	3.0	4.3	0.6	9.7	-	-	2.2	0.7	4.6	8.6	6	140	-	-	-	14	7	107	406	136	0.9	6	-	25	665
736169	WSP_CCS_QA03A	20/08/2020	soil	-	-	-	-	-	-	-	-	0.8	1.6	6.0	5.8	3.9	5.3	0.7	12.9	-	-	2.6	0.8	5.4	11.7	6	130	-	-	-	11	4	126	276	184	0.9	7	-	24	450
RPD				-	-	-	-	-	-	-	-	29	37	26	19	26	19	14	29	-	-	17	15	16	30	0	7	-	-	-	24	55	18	8	30	0	15	4	4	29
612809397	WSP_CCS_GW06_8.5	20/08/2020	soil	-	-	-	-	-	-	-	-	0.6	1.1	4.6	4.8	3.0	4.3	0.6	9.7	-	-	2.2	0.7	4.6	8.6	6	140	-	-	-	14	7	107	406	136	0.9	6	-	25	665
736169	WSP_CCS_QA03A	20/08/2020	soil	-	-	-	-	-	-	-	-	0.8	1.6	6.0	5.8	3.9	5.3	0.7	12.9	-	-	2.6	0.8	5.4	11.7	6	130	-	-	-	11	4	126	276	184	0.9	7	-	24	450
RPD				-	-	-	-	-	-	-	-	29	37	26	19	26	19	14	29	-	-	17	15	16	30	0	7	-	-	-	24	55	18	8	30	0	15	4	4	29
612809543	WSP_CCS_SH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	0	68	59	54	58	54	55	39	31	6	0	30	21	39	59	25	0	0	0	64	6	25	40	21	76	24	0	28	8
	WSP_CCS_QA04	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	-	-	-	8	5	16	17	290	-	5	-	16	36
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	8	4	38	16	220	-	4	-	10	59
RPD				-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0
612809543	WSP_CCS_SH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	-	-	-	8	5	16	17	290	-	5	-	16	36
736992	WSP_CCS_QA04A	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-	-	8.0	-	7.0	18	470	-	-	-	12	60
RPD				-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	27	11	47	0	0	0	21	50

Comments
#1 No
#2 A. SAFLIE
#3
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range a
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any mat

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				Explosives				Organophosphorous Pesticides														Herbicides			Pesticides						Halogenated Hydrocarbons				
				2,3,5-Trinitrotoluene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Chlorpyrifos methyl	Chlorpyrifos-ethyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenitrothion	Malathion	Parathion	Parathion methyl	Pirimiphos methyl	Trichlorfon	Bromacil	Hexazinone	Diuron	Carbofuran	Diazinon-5-methyl	Haloxyfop	Isoxaflutole	Metribuzin	Terbuthylazine	1,2-dichloroethane	Hexachlorobutadiene	Hexachloroethane	Naphthalene	Tetrachloroethene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL				0.5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.5	0.5	0.5	0.05	0.5	0.5	0.2	0.05	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	Field ID	Date	Matrix Type																															
532935646	WSP_CCS_GW03_0.5	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA01	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0
532935656	WSP_CCS_GW03_0.5	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736560	QA60A	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	-	-	-	0	-	0	0	0	0	0
532935657	WSP_CCS_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736561	WSP_CCS_QA02	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	0	0	0	0	-	-	-	-
532935697	WSP_CCS_GW06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736589	WSP_CCS_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
532935697	WSP_CCS_GW08_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736589	WSP_CCS_QA03	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	0	0	0	0	-	-	-	-
532935697	WSP_CCS_GW08_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736589	WSP_CCS_QA03A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
532935643	WSP_CCS_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA04	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
532935643	WSP_CCS_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736582	WSP_CCS_QA04A	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-

Comments
#1 No.
#2 A. SMYLIE
#3
#4 Mid-grey soil.
#5 C. OAKER
#6 Mid brown soil.

*RPDs have only been considered where a concentration is greater than 5 times the EQL.
**Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range a
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met

| | Halogenated Benzenes | | | | | | | | | | | | | | | Chlorinated Hydrocarbons | | | | | | | | | | | | | | |

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				PCBs							Amino Aromatics				Amines						Nitroaromatics			Phthalates						
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	1-naphthylamine	2-naphthylamine	4-Nitroaniline	4,6-dinitro-2-methyl-4-hydroxyaniline	2,4-dinitroaniline	2,6-dinitroaniline	3,3'-dimethoxybenzidine	3,3'-dimethylbenzidine	4-chloroaniline	4-methyl-2-nitroaniline	4-nitroaniline	2,4,6-trichlorophenol	2-chloronaphthalene	2-nitroaniline	3,3'-dichlorobenzidine	3-nitroaniline	4-bromophenyl-phenylether	4-chlorophenyl-phenylether	bis(2-chloroethoxy)methane	bis(2-chloroethyl)ether	bis(2-chloroisopropyl)ether
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	Field ID	Date	Matrix Type																												
512629186	WSP_CCS_GM03_0.5	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA01	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512629186	WSP_CCS_GM05_0.5	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736169	QA01A	19/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0
512629397	WSP_CCS_GM06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA02	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512629397	WSP_CCS_GM06_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736169	WSP_CCS_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512629397	WSP_CCS_GM06_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA03	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512629397	WSP_CCS_GM06_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736169	WSP_CCS_QA03A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512635643	WSP_CCS_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA04	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
512635643	WSP_CCS_BH07_1.0	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
736582	WSP_CCS_QA04A	6/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
#1 No.
#2 A. SMYLE
#3
#4 Mild grey soil.
#5 C. OAKLEI
#6 Mild brown soil.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range a
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met

				Inorganics	BTEX					TRH				PFOS/PFOA	MAH							
				Cyanide, Total	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	C6-C10	C10-C16	C16-C34 (F3)	C34-C40 (F4)	Perfluorooctanesulfonic acid (PFOS)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.001	1	1	1	2	1	20	50	100	100	0.01	1	1	1	5	5	5	1	5
Lab Report Number	Field ID	Date	Matrix Type																			
E52019471	WSP_GC01_GW05	4/06/2020	water	0.001	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
	QA01	4/06/2020	water	0.001	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
RPD				0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
E52019471	WSP_GC01_GW05	4/06/2020	water	0.001	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
734158	QA01A	4/06/2020	water	<0.005	<1	<1	<1	<2	<1	<20	50	400	<100	<0.01	<1	<1	<1	-	-	-	<1	-
RPD				0	0	0	0	0	0	0	0	120	0	-	0	0	0	-	-	-	0	-
E52030732	WSP_CC1_GW04	1/09/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
	WSP_CC1_QA01	1/09/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
E52030732	WSP_CC1_GW04	1/09/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
741649	WSP_CC1_QA01A	1/09/2020	water	-	<1	<1	<1	<2	<1	<20	70	200	<100	-	<1	<1	<1	-	-	-	<1	-
RPD				-	0	0	0	0	0	0	0	67	0	-	0	0	0	-	-	-	0	-
E52036491	CRESCENT-GW07	16/10/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
	CRESCENT-QA01	16/10/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	-	-	-	<1	-
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
E52036491	CRESCENT-GW07	16/10/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
761789	CRESCENT - QA01A	16/10/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	-	-	-	<1	-
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
E52042721	WSP_BWP_GW02	2/12/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
	WSP_BWP_QAO3	2/12/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
E52042721	WSP_BWP_GW02	2/12/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	<5	<5	<5	<1	<5
761419	WSP_BWP_QA03A	2/12/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	-	-	-	<1	-
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	0	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

				PAH																			
				Benzo(b+j+k)fluoranthene	1-Chloronaphthalene	2-chloronaphthalene	1-methylnaphthalene	2-methylnaphthalene	1,2,5,6-Dibenzanthracene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b,k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Perylene	Pyrene
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				4	5	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1
Lab Report Number	Field ID	Date	Matrix Type																					
E52019471	WSP_GC01_GW05	4/06/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	QA01	4/06/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52019471	WSP_GC01_GW05	4/06/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
734158	QA01A	4/06/2020	water	<4	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52030732	WSP_CC1_GW04	1/09/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CC1_QA01	1/09/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52030732	WSP_CC1_GW04	1/09/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
741649	WSP_CC1_QA01A	1/09/2020	water	<4	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52036491	CRESCENT-GW07	16/10/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	CRESCENT-QA01	16/10/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52036491	CRESCENT-GW07	16/10/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
761789	CRESCENT - QA01A	16/10/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	2	2	2	2	<1.0	2	<1.0	1	<1.0	2
RPD				-	-	-	-	-	-	0	0	0	67	120	67	67	0	67	0	0	0	0	67	
E52042721	WSP_BWP_GW02	2/12/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_BWP_QAO3	2/12/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E52042721	WSP_BWP_GW02	2/12/2020	water	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
761419	WSP_BWP_QA03A	2/12/2020	water	<4	<5	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 Quantification of linear and branched isomers has been conducted as a single total response using the relat

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any mi**

				Metals																															
				Arsenic	Arsenic (filtered)	Barium	Beryllium (filtered)	Beryllium	Beryllium (filter red)	Boron	Boron (filtered)	Cadmium	Cadmium (filter red)	Chromium	Chromium (hexavalent 4)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Chromium (Trivalent)	Cobalt	Cobalt (filtered)	Copper	Copper (filt red)	Lead	Lead (filter red)	Lithium	Lithium (filtered)	Mercury	Mercury (filtered)	Molybdenum	Molybdenum (filtered)	Nickel	Nickel (filtered)	Selenium	Selenium (filtered)	Silver	Silver (filtered)	Thallium	Thallium (filtered)	Tin	Tin (filtered)	Uranium	Uranium (filtered)	Vanadium	Vanadium (filtered)	Zinc	Zinc (filtered)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				1	1	20	1	1	1	50	50	0.2	0.1	5	1	1	1	1	1	1	1	1	1	5	1	0.1	0.1	1	1	1	1	1	1	1	1	1	5	5	5	5
Lab Report Number	Field ID	Date	Matrix Type																																									
8520819471	WSP_GC01_GW05	4/06/2020	water	-	[1]	-	37	-	[1]	-	60	-	[0.1]	-	-	[1]	-	-	34	-	[1]	-	[1]	-	138	-	[0.1]	-	2	[1]	-	-	[1]	-	[1]	-	25
	QA01	4/06/2020	water	-	[1]	-	38	-	[1]	-	60	-	[0.1]	-	-	[1]	-	-	35	-	[1]	-	[1]	-	137	-	[0.1]	-	2	[1]	-	-	[1]	-	[1]	-	26
RPD				-	0	-	3	-	0	-	40	-	0	-	-	0	-	-	3	-	0	-	0	-	1	-	0	-	0	0	-	-	0	-	0	-	15
8520819471	WSP_GC01_GW05	4/06/2020	water	-	[1]	-	37	-	[1]	-	60	-	[0.1]	-	-	[1]	-	-	34	-	[1]	-	[1]	-	138	-	[0.1]	-	2	[1]	-	-	[1]	-	[1]	-	25
724158	QA01A	4/06/2020	water	3	-	100	-	[1]	-	2,000	-	[0.1]	-	[5]	[1]	-	[1]	5	-	[1]	-	[1]	-	930	-	0.1	-	7	-	-	-	[1]	-	32	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8520930732	WSP_CC1_GW04	1/09/2020	water	-	[10]	-	56	-	[10]	-	4,040	-	[1.0]	-	-	[10]	-	-	12	-	37	-	[10]	-	801	-	[0.1]	-	[10]	[10]	-	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]
	WSP_CC1_QA01	1/09/2020	water	-	[10]	-	59	-	[10]	-	4,040	-	[1.0]	-	-	[10]	-	-	12	-	79	-	[10]	-	814	-	[0.1]	-	13	[10]	-	-	[10]	-	[10]	-	119	-	[10]	-	[10]	-	[10]	-	[10]
RPD				-	0	-	5	-	0	-	0	-	0	-	-	0	-	-	0	-	72	-	0	-	2	-	0	-	26	0	-	-	0	-	0	-	82	-	0	-	0	-	0	-	0
8520930732	WSP_CC5_GW04	1/09/2020	water	-	[10]	-	56	-	[10]	-	4,040	-	[1.0]	-	-	[10]	-	-	12	-	37	-	[10]	-	801	-	[0.1]	-	[10]	[10]	-	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]	-	[10]
743549	WSP_CC5_QA01A	1/09/2020	water	-	3	-	50	-	[1]	-	3,600	-	[0.1]	-	-	[1]	-	-	10	-	22	-	2	-	800	-	[0.1]	-	7	2	-	-	[1]	-	[1]	-	25	-	[1]	-	[1]	-	[1]	-	[1]
RPD				-	0	-	11	-	0	-	12	-	0	-	-	0	-	-	18	-	51	-	0	-	0	-	0	-	0	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0
8520936491	CRESCENT-GW07	16/10/2020	water	-	[1]	-	-	-	[1]	-	-	-	[0.1]	-	-	[1]	-	-	-	-	112	-	5	-	-	-	[0.1]	-	12	-	-	-	[1]	-	[1]	-	128	-	[1]	-	[1]	-	[1]	-	7
	CRESCENT-QA01	16/10/2020	water	-	[10]	-	-	-	[10]	-	-	-	[1.0]	-	-	[10]	-	-	-	-	-	-	-	-	-	-	[0.1]	-	[10]	-	-	-	[10]	-	[10]	-	-	-	[10]	-	[10]	-	[10]	-	[10]
RPD				-	0	-	-	-	-	-	-	-	0	-	-	0	-	-	-	-	167	-	0	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88
8520936491	CRESCENT-GW07	16/10/2020	water	-	[1]	-	-	-	[1]	-	-	-	[0.1]	-	-	[1]	-	-	-	-	112	-	5	-	-	-	[0.1]	-	12	-	-	-	[1]	-	[1]	-	128	-	[1]	-	[1]	-	[1]	-	7
751789	CRESCENT - QA01A	16/10/2020	water	-	3	-	-	-	[1]	-	-	-	[0.1]	-	-	[1]	-	-	-	-	4	-	[1]	-	-	-	[0.1]	-	5	-	-	-	[1]	-	[1]	-	7	-	[1]	-	[1]	-	[1]	-	[1]
RPD				-	100	-	-	-	-	-	-	-	0	-	-	0	-	-	-	-	186	-	133	-	-	-	-	0	-	82	-	-	-	-	-	-	-	179	-	-	-	-	-	-	-	-
8520942721	WSP_BMP_GW02	2/12/2020	water	-	[1]	-	64	-	[1]	-	260	-	[0.1]	-	-	[1]	-	-	52	-	[1]	-	[1]	-	295	-	[0.1]	-	45	[1]	-	-	[1]	-	[1]	-	24	-	[1]	-	[1]	-	[1]	-	[1]
	WSP_BMP_QAC3	2/12/2020	water	-	[1]	-	65	-	[1]	-	280	-	[0.1]	-	-	[1]	-	-	57	-	4	-	[1]	-	278	-	[0.1]	-	49	[1]	-	-	[1]	-	[1]	-	29	-	[1]	-	[1]	-	[1]	-	[1]
RPD				-	0	-	2	-	0	-	7	-	0	-	-	0	-	-	9	-	120	-	0	-	6	-	0	-	9	0	0	-	0	-	0	-	19	-	0	-	0	-	0	-	0
8520942721	WSP_BMP_GW02	2/12/2020	water	-	[1]	-	64	-	[1]	-	260	-	[0.1]	-	-	[1]	-	-	52	-	[1]	-	[1]	-	295	-	[0.1]	-	45	[1]	-	-	[1]	-	[1]	-	24	-	[1]	-	[1]	-	[1]	-	[1]
781419	WSP_BMP_QA05A	2/12/2020	water	-	3	-	60	-	[1]	-	300	-	[0.1]	-	-	[1]	-	-	56	-	2	-	[1]	-	290	-	[0.1]	-	51	[1]	-	-	[1]	-	[1]	-	6	-	[1]	-	[1]	-	[1]	-	[1]
RPD				-	0	-	6	-	0	-	14	-	0	-	-	0	-	-	11	-	67	-	0	-	2	-	0	-	12	0	0	-	0	-	0	-	12	-	0	-	0	-	0	-	0

Comments
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*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Phenols																		Explosives				Perfluoroalkane Sulfonic Acids						
				3&4-4-Methylphenol (3-Methylphenol)	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,3-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichloro-4-methylphenol	2,6-Dichlorophenol	2-Methylphenol (o-Cresol)	2-Nitrophenol	3,5-Dichloro-2-methylphenol	3,5-Dimethoxy-4-hydroxybenzyl alcohol	4,6-Dinitro-2-methylphenol	4-Methylphenol	Pentachlorophenol	Phenol	Phenols (Total Recoverable)	Phenols (Total Recoverable)	1,3,5-Trinitrobenzene	2,4,6-Trinitrotoluene	2,6-dinitrotoluene	Tetryl	Perfluorooctanesulfonic acid (PFOS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorooctanesulfonic acid (PFOS)	Perfluoroheptanesulfonic acid (PFHpS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecanesulfonic acid (PFDS)
EQL				2	2	1	1	1	1	30	1	1	1	1	1	30	100	1	30	2	1	10	100	2	4	4	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lab Report Number	Field ID	Date	Matrix Type																													
R320119471	WSP_GCS1_GW05	4/06/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	QA01	4/06/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0
R320119471	WSP_GCS1_GW05	4/06/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7234158	QA01A	4/06/2020	water	<2.0	<200	<2.0	<2.0	<2.0	<2.0	<600	<2.0	<2.0	<2.0	<2.0	<600	<2000	<2.0	<600	<2.0	<2.0	<600	<2000	-	-	-	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	0	0	0	0	0	0	0
R320203732	WSP_CCS_GW04	1/09/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	0.02	<0.01	0.10	<0.01	<0.01
	WSP_CCS_QA01	1/09/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	0.02	<0.01	0.07	<0.01	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	35	0	0
R320203732	WSP_CCS_GW04	1/09/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	0.02	<0.01	0.10	<0.01	<0.01
7431649	WSP_CCS_QA01A	1/09/2020	water	<2.0	<200	<2.0	<2.0	<2.0	<2.0	<600	<2.0	<2.0	<2.0	<2.0	<600	<2000	<2.0	<600	<2.0	<2.0	<600	<2000	-	-	-	-	-	<0.02	<0.02	0.02[#1]	<0.02	0.04[#1]	<0.02	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	0	0	0	0	86	0	0
R320204681	CRESCENT-GW07	16/10/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	-	<0.01	-	<0.01	-
	CRESCENT-QA01	16/10/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	-	<0.01	-	<0.01	-
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R320204681	CRESCENT-GW07	16/10/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	-	<0.01	-	<0.01	-
751789	CRESCENT - QA01A	16/10/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	<600	<2.0	<2.0	<2.0	<2.0	<600	<2000	<2.0	<600	<2.0	<2.0	<600	<2000	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R320942721	WSP_BWP_GW02	2/12/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	WSP_BWP_QA03	2/12/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0
R320942721	WSP_BWP_GW02	2/12/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	-	<2.0	<2.0	-	-	<2.0	<2.0	<2.0	<2.0	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
781419	WSP_BWP_QA03A	2/12/2020	water	<2.0	-	<2.0	<2.0	<2.0	<2.0	<600	<2.0	<2.0	<2.0	<2.0	<600	<2000	<2.0	<600	<2.0	<2.0	<600	<2000	-	-	-	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0

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				Organochlorine Pesticides																				Pesticides						Herbicides		
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Chlorpyrifos-methyl	Diazinon	Dimethoate & omethyl	Fenamiphos	Parathion	Pirimiphos-ethyl	Bromacil	Picloramide	Triallate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	0.5	0.5	2	0.5	100	2	5
Lab Report Number	Field ID	Date	Matrix Type																															
E12019471	WSP_GC01_GW05	4/08/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
	QA01	4/08/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E12019471	WSP_GC01_GW05	4/08/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
734158	QA01A	4/08/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	<100	-	-
RPD				0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
E12030732	WSP_CC1_GW04	1/09/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
	WSP_CC1_QA01	1/09/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E12030732	WSP_CC1_GW04	1/09/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
741649	WSP_CC1_QA01A	1/09/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	<100	-	-
RPD				0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	0	-
E12036491	CRESCENT-GW07	16/10/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
	CRESCENT-QA01	16/10/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	-	-	-
E12036491	CRESCENT-GW07	16/10/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
761789	CRESCENT - QA01A	16/10/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	<100	-	-
RPD				0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-
E12042721	WSP_BWP_GW02	2/12/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
	WSP_BWP_QA03	2/12/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
E12042721	WSP_BWP_GW02	2/12/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<2	<0.5	<0.5	<2	<0.5	<100	<2	<5
761419	WSP_BWP_QA03A	2/12/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	<100	-	-
RPD				0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	0	-

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				Organophosphorous Pesticides														Halogenated Hydrocarbons					Halogenated Benzenes												
				Azinphos methyl	Bromophos-methyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenchlorfos	Malathion	Methyl parathion	Mevinphos	Parathion	1,2-dichloroethene	1,2-dichloropropene	Dichloromethane	Hexachlorobutadiene	Tetrachloroethene	1,2,3,4-tetrachlorobenzene	1,2,3,5-tetrachlorobenzene	1,2,4-trichlorobenzene	1,2,4,5-tetrachlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3,5-trichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Hexachlorobenzene	Monochlorobenzene	Pentachlorobenzene	Trichlorobenzenes
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	1	1	1	1	1	5	5	5	2	2	1	5	1	1	5	1	1	2
Lab Report Number	Field ID	Date	Matrix Type																																
1520319471	WSP_CC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
	QA01	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
1520319471	WSP_CC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
724158	QA01A	4/06/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
1520330732	WSP_CC5_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC5_QA01	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
1520330732	WSP_CC5_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
741649	WSP_CC5_QA01A	1/09/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
1520396491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-QA01	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1520396491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
751789	CRESCENT - QA01A	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1520427721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_QA03	2/12/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
1520427721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-
751410	WSP_BWP_QA03A	2/12/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-

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| | | | | Chlorinated Hydrocarbons | | | |

				Perfluoroalkane Carboxylic Acids	VOCs				Solvents								SVOCs																	
				Perfluorooctanoic acid (PFOA)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethene (VCM)	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichloropropene (sum of isomers)	2-Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Ethylbenzene
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.01	5	5	5	5	1	50	1	1	1	1	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																															
012809471	WSP_GC01_GW05	4/06/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	QA01	4/06/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	0	0	-	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
012810471	WSP_GC01_GW05	4/06/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
724158	QA01A	4/06/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
012830732	WSP_CC5_GW04	1/09/2020	water	0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	WSP_CC5_QA01	1/09/2020	water	0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	0	0	-	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
012830732	WSP_CC5_GW04	1/09/2020	water	0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
741649	WSP_CC5_QA01A	1/09/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
012836491	CRESCENT-GW07	16/10/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	CRESCENT-QA01	16/10/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
012835491	CRESCENT-GW07	16/10/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
751789	CRESCENT - QA01A	16/10/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
012842721	WSP_BWP_GW02	2/12/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	WSP_BWP_QAO3	2/12/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	0	0	-	0	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
012842721	WSP_BWP_GW02	2/12/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
791419	WSP_BWP_QA03A	2/12/2020	water	<0.01	<5	<5	<5	<5	<1	<50	<1	<1	<1	<1	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
RPD				0	-	-	-	-	0	-	0	-	-	-	0	-	-	0	0	0	0	0	-	0	-	0	-	-	0	-	-	-	-	-

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				Amino Aliphatics				PCBs							Amino Aromatics				Anilines					Nitroaromatics			Phthalates					Organotins		
				N-Nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	1-naphthylamine	2-naphthylamine	Diphenylamine	N-Nitrosodiphenyl & Diphenylamine	2-chloroaniline	3-chloroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2,4-Dinitrotoluene	4-aminobiphenyl	Azobenzene/Diazine	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Monobutyltin as Sn	Tributyltin as Sn
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/L	ng/L	ng/L
EQL				2	2	2	2	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	5	2	2	2	2	5	5	
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																
152019471	WSP_GC01_GW05	4/06/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
	QA01	4/06/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
152019471	WSP_GC01_GW05	4/06/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
724158	QA01A	4/06/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	6	<2	<2	<2	<2	<5	<5	<1
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-
152030732	WSP_CC5_GW04	1/09/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
	WSP_CC5_QA01	1/09/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
152030732	WSP_CC5_GW04	1/09/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
741649	WSP_CC5_QA01A	1/09/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-
152036491	CRESCENT-GW07	16/10/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
	CRESCENT-QA01	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152036491	CRESCENT-GW07	16/10/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
751789	CRESCENT - QA01A	16/10/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152042721	WSP_BWP_GW02	2/12/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
	WSP_BWP_QA03	2/12/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
152042721	WSP_BWP_GW02	2/12/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
761459	WSP_BWP_QA03A	2/12/2020	water	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<5	<5	<1
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 Quantification of linear and branched isomers has been conducted as a single total response using the relat

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any mi**

			BTEX								TRH					MAH								
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes (m & o)			C6-C10 less BTEX (F1)	>C10-C16 less Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)		1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
PQL			1	0.2	2	0.5	2	0.5	2	0.5	20	10	100	100	100	5	5	5	5	5	5	5	5	5
Lab Report Number	Field ID	Date																						
ES2019471	WSP_CCS1_R801	4/06/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	WSP_CCS1_TB01	4/06/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_R803	2/12/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	1/12/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																								
Number of Results			10	3	10	3	10	3	10	3	10	3	10	3	6	6	6	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<1	<0.2	<2	<0.5	<2	<0.5	<2	<0.5	<2	<0.5	<20	<10	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *			0.5	0.1	1	0.25	1	0.25	1	0.25	1	0.25	10	5	50	50	50									
95% UCL (Student's-t) *			0.5	0.1	1	0.25	1	0.25	1	0.25	1	0.25	10	5	50	50	50									

* A Non Detect Multiplier of 0.5 has been applied.

			PAH																				Metals													
			1-Methylnaphthalene	2-Methylnaphthalene	2-methylnaphthanthrene	2,3,5-trimethylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RDL			2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.1	1	10	1	10	5
Lab Report Number	**Field ID**	**Date**																																			
612019471	WSP_CC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029186	Rinsate01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612030732	WSP_CC5_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC5_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612042721	WSP_BWP_TB03	27/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results			1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	10	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
Average Concentration *							0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.1	0.5	0.5	0.5																	
95% UCL (Student's-t) *							0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.569	0.5	0.5	0.5																	

* A Non Detect Multiplier of 0.5 has been applied.

			Phenols												Organochlorine Pesticides																					
			3&4-Methylphenol (Methylcresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chloronaphthalene	2-Methylphenol (o-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenol	4,4-DDE	alpha-BHC	Aldrin	Aldrin + Dieldrin	beta-BHC	Chlordane	Chlordane (cis)	Chlordane (Trans)	delta-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	1	1	1	1	1	1	1	1	1	2	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
Lab Report Number	**Field ID**	**Date**																																		
612019471	WSP_GCS1_RB01	4/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GCS1_TB01	4/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029196	Rinsate01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612030732	WSP_CS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612042721	WSP_BWP_TB03	27/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	17/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																				
Number of Results			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
Average Concentration *			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1
95% UCL (Student's-t) *			1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1

* A Non Detect Multiplier of 0.5 has been applied.

			Explosives				Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides															Herbicides	Pesticides									
			1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Nitrobenzene	Perfluorobutane sulfonic acid (PFBS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinphos-methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Mevinphos	Profenofos	Atrazine	Chlorotoluron	Carbaryle	Bromoxynil-5-methyl	Fenoxaprop-ethyl	Iprodione	Metribuzin	Pirimiphos-ethyl	1,1,1,2-tetrachloroethane	1,1,1,2-trichloroethane	1,1,2,2-tetrachloroethane
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RDL			2	4	4	2	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	2	2	0.5	0.5	2	0.5	2	0.5	5	5	5
Lab Report Number	**Field ID**	**Date**																																			
E12019471	WSP_CC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12029186	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12030732	WSP_CC5_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC5_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E12036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	[0.02]	-	[0.02]	-	[0.01]	-	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[2]	[2]	[0.5]	-	-	-	[0.5]	[0.5]	[2]	[0.5]	[5]	[5]	[5]
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	[0.02]	-	[0.02]	-	[0.01]	-	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[2]	[2]	[0.5]	-	-	-	[0.5]	[0.5]	[2]	[0.5]	[5]	[5]	[5]
E12042721	WSP_BWP_TB03	27/12/2020	-	-	-	-	[0.02]	-	[0.02]	-	[0.01]	-	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[2]	[2]	[0.5]	-	-	-	[0.5]	[0.5]	[2]	[0.5]	[5]	[5]	[5]
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results			1	1	1	1	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<2	<4	<4	<2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<2	<2	<0.5	<0.5	<2	<0.5	<5	<5	<5
Average Concentration *							0.01		0.01		0.005		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25				0.25	0.25	1	0.25			
95% UCL (Student's-t) *							0.01		0.01		0.005		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25				0.25	0.25	1	0.25			

* A Non Detect Multiplier of 0.5 has been applied.

			Chlorinated Hydrocarbons																											
			1,1,2-trichlorotrifluoroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,3-dichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,3-dichloropropene	1,3-dichloropropene	2,2-dichloropropene	Bromochloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichlorodifluoromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Isopropylbenzene	Methylene chloride	Naphthalene	Styrene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50
Lab Report Number	**Field ID**	**Date**																													
E52019471	**WSP_GCSS_RB01**	**4/06/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GCSS_TB01	**4/06/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52029196	**Rinsate01**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52029397	**Rinsate02**	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	**17/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52030732	**WSP_CCS_Rinsate**	**1/09/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	**31/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52035543	**TRIP BLANK 03**	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52036491	**CRESCENT-RINSATE**	**16/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	**16/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E52042721	**WSP_BWP_RB03**	**2/12/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	**1/12/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics																														
Number of Results	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
Average Concentration *																														
95% UCL (Student's-t) *																														

* A Non Detect Multiplier of 0.5 has been applied.

			Halogenated Hydrocarbons					Halogenated Benzenes										Perfluoroalkane Carboxylic Acids	SVOCs																
			1,2-dichloroethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,3-dichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Carbon tetrachloride	Chlorobenzene	Dibromochloromethane	Chloroform	Hexachlorobutadiene	Perfluorooctanoic acid (PFOA)	2-Quinolinamine	1,2-Dichlorobenzidine	4-(dimethylamino)-azobenzene	4-Bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitrobiphenyl-N-N-dioxide	Acenaphthene	Acenaphthylene	Aniline	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
CVs			5	50	50	5	50	5	2	2	2	2	5	5	5	5	2	0.01	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2
Lab Report Number	**Field ID**	**Date**																																	
8120219471	WSP_CC01_RB01	4/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC01_TB01	4/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120229196	Rinsate01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	18/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120229397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank602	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120230732	WSP_CC_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CC_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120235543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120236481	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[0.013]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120242721	WSP_BWP_RB03	2/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																			
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<0.01	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2
Average Concentration *																		0.005																		
95% UCL (Student's-t) *																		0.005																		

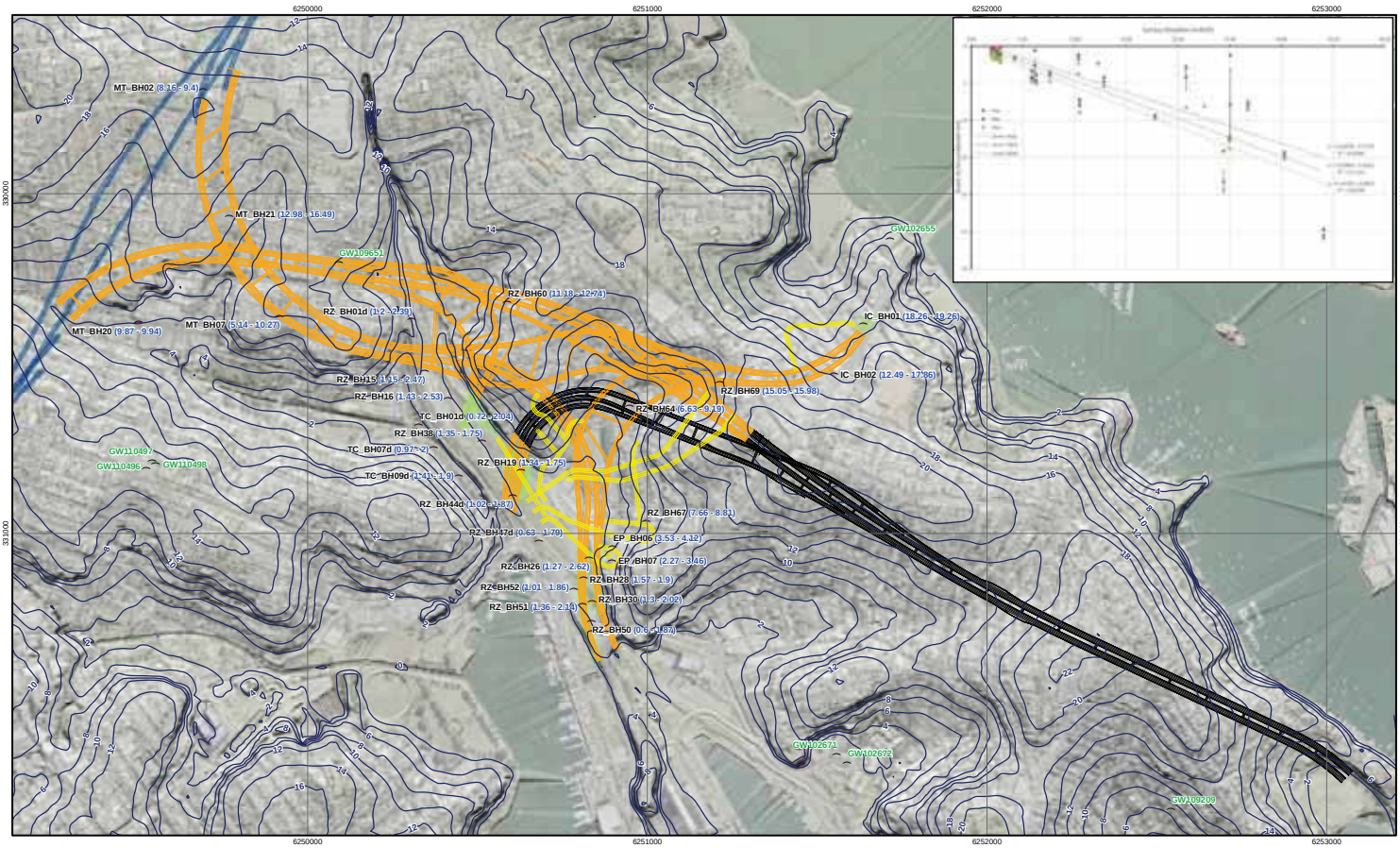
* A Non Detect Multiplier of 0.5 has been applied.

			VOCs			Solvents						Amino Aliphatics				Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
			1,4-Dichloro-2-butene	Trans-1,4-Dichloro-2-butene	Trichlorotrifluoroethane	Methyl Ethyl Ketone	Isobutanol (MIBK)	4-Methyl-2-pentanone	Carbon Disulfide	Naphthalene	Vinyl acetate	N-nitrosodiethylamine	N-nitrosodi-n-propylamine	N-nitrosodimethylamine	4b-Methyl-N-nitroso-N-methylbenzylamine	1-naphthylamine	N-Nitrosodiphenylamine + 4-Bromophenyl-phenylether	2-nitroaniline	3-nitroaniline	4-nitroaniline	2-methyl-5-nitroaniline	3-methyl-4-nitroaniline	N-Ethyl-4-nitroaniline	2,4-Dinitrotoluene	2-nitrotoluene	Nitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RDL			5	5	5	50	50	50	5	2	50	2	2	2	2	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2
Lab Report Number	**Field ID**	**Date**																														
612010471	WSP_CCRS_RM01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCRS_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612030752	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612042721	WSP_BWP_RM03	2/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Average Concentration *																																
95% UCL Student's-t) *																																

* A Non Detect Multiplier of 0.5 has been applied.

APPENDIX F

HISTORICAL INVESTIGATION DATA



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

OVERVIEW

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

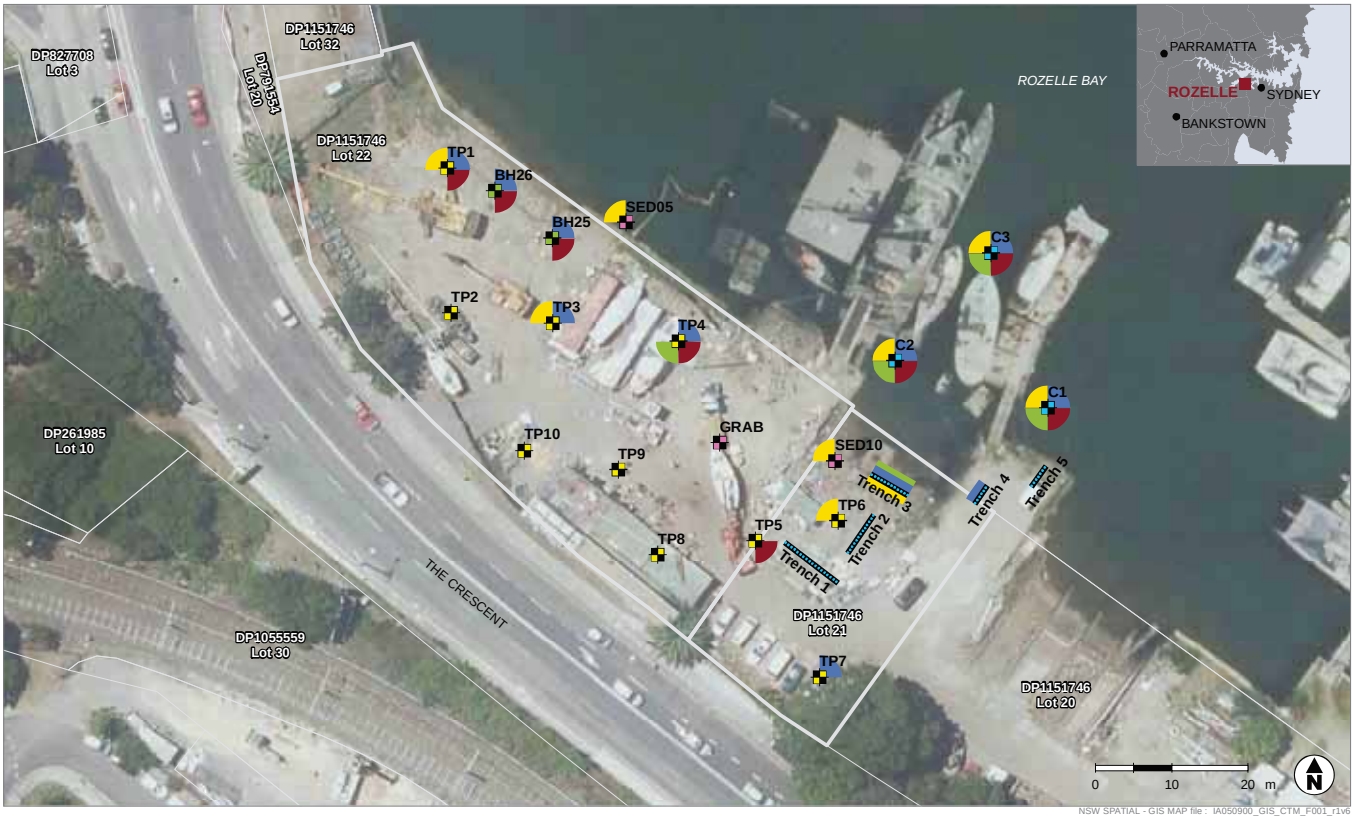
Rozelle Interchange & WHT Enabling Works
Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\P3M3958\gis\Grid\3_Figures\P3M3958-0228 RiseFigure 4 Project Wide Interpreted Groundwater Level Contours.mxd



NSW SPATIAL - GIS MAP file : IA050900_GIS_CTM_F001_r1v6

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FIGURE 1 SITE LAYOUT, SAMPLING LOCATIONS AND CONTAMINANTS OF CONCERN IN EXCESS OF CRITERIA

DETAILED SITE INVESTIGATION
RMS Lots 21 and 22, DP1151746, Rozelle Bay

NSW SPATIAL - GIS MAP file : IA050900_GIS_CTM_F002_r1v4

Site SKM 1998 sampling locations SKM 1998 site

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DETAILED SITE INVESTIGATION
RMS Lots 21 and 22, DP1151746, Rozelle Bay

FIGURE 2 SKM Assessment locations 1998

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Field_ID	Grit-SA09	SED-SA05	SED-SA10	TP01-SA01	TP01-SA02	TP02-SA03	TP03-SA06	TP04-SA07	TP05-SA11	TP06-SA12	TP07-SA13	TP08-SA14	TP09-SA15	TP10-QA01
Sampled_Date-Time	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014

Method_Type	ChemName	Units	EQL	NEPM 2013 Table 1A(1) HIL's Column D Commercial/Industrial	NEPM 2013 Table 1A(1) HIL's Column C Recreational	NEPM 2013 Table 1B(6) TPH Management Limits (Coarse)	NEPM 2013 Table 1B(6) ESL's for TPH Urban Residential/Public Open Space (Coarse)												
Moisture Content	Moisture	%	1					<1	17.6	18.1	14.7	22	8.4	7.3	12.9	18.4	14.3	7.5	15.1	13.9	9.6
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5					<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.9	0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5					<0.5	<0.5	0.7	0.8	3.9	<0.5	1.6	0.9	0.8	0.6	2.8	0.6	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5					<0.5	1	1.3	3.7	14.6	0.5	3	2.5	1.5	1.5	12.3	2.4	1.8	0.7
	Benzo(a) pyrene	mg/kg	0.5				0.7	<0.5	1.2	1.1	4	12.9	0.6	2.3	2.5	1.8	1.4	10.1	2.3	1.7	0.7
	Benzo(b)fluoranthene	mg/kg	0.5					<0.5	1.4	1.7	5.8	18.4	0.8	3.2	3.7	2.6	1.9	16.1	3.3	2.6	0.9
	Benzo(g,h,i)perylene	mg/kg	0.5					<0.5	0.8	0.7	2.8	7	<0.5	1.2	1.8	1	0.8	5.7	1	0.7	<0.5
	Benzo(k)fluoranthene	mg/kg	0.5					<0.5	0.5	0.6	1.8	7.5	<0.5	1.3	1.3	1	0.6	5.6	1.2	1	<0.5
	Chrysene	mg/kg	0.5					<0.5	1.1	1.3	3.7	14	0.5	2.6	2.6	1.8	1.5	12.2	2.6	1.9	0.7
	Dibenz(a,h)anthracene	mg/kg	0.5					<0.5	<0.5	<0.5	0.6	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5					<0.5	2	3.2	7.5	33.5	1	6.8	4.9	4	3.4	20.1	5.6	3.9	1.3
	Fluorene	mg/kg	0.5					<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5					<0.5	0.6	0.6	2.3	6.3	<0.5	1.1	1.5	0.9	0.7	4.9	1	0.8	<0.5
	Naphthalene	mg/kg	0.5					<0.5	0.7	0.6	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	PAHs (Sum of total)	mg/kg	0.5	4000	300			<0.5	12.3	18.4	42.4	166	5.1	35.6	30.9	23.4	17.4	120	27.2	19.8	6.4
	Phenanthrene	mg/kg	0.5					<0.5	0.9	2.7	1.9	10.4	0.6	5	2.9	2.7	1.5	6.2	1.8	1.5	0.6
	Pyrene	mg/kg	0.5					<0.5	2.1	2.8	7.5	34.3	1.1	6.6	5.2	4.1	3.5	19.2	5.4	3.9	1.5
Total Mercury by FIMS	Mercury	mg/kg	0.1	730	80			<0.1	0.3	0.2	<0.1	0.2	0.1	0.1	1.2	1.8	0.4	0.2	0.2	0.2	0.4
Total Metals by ICP-AES	Arsenic	mg/kg	5	3000	300			<5	8	28	10	10	5	<5	17	26	24	25	5	5	7
	Cadmium	mg/kg	1	900	90			<1	<1	<1	<1	<1	<1	1	7	4	<1	2	<1	<1	<1
	Chromium (III+VI)	mg/kg	2					18	30	84	11	19	24	26	86	61	78	49	79	11	13
	Copper	mg/kg	5	240000	17000			8	327	836	176	143	113	321	1020	944	467	276	78	107	75
	Lead	mg/kg	5	1500	600			44	278	241	797	363	181	341	1650	801	299	553	192	340	173
	Nickel	mg/kg	2	6000	1200			<2	13	58	39	19	10	16	38	56	65	37	7	20	13
	Zinc	mg/kg	5	400000	30000			41	1680	1260	515	667	900	1940	13,200	1780	1110	1100	579	269	336
TRH - Semivolatile Fraction	C10-C16	mg/kg	50			1000	120	-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C16-C34	mg/kg	100			2500	300	-	-	-	280	-	-	220	-	-	490	770	-	-	-
	C34-C40	mg/kg	100			10000	2800	-	-	-	<100	-	-	<100	-	-	180	340	-	-	-
	F2-NAPHTHALENE	mg/kg	50					-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C10 - C14	mg/kg	50					-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C15 - C28	mg/kg	100					-	-	-	190	-	-	130	-	-	320	490	-	-	-
	C29-C36	mg/kg	100					-	-	-	130	-	-	130	-	-	280	440	-	-	-
	>C10 - C36 (Sum of total)	mg/kg	50					-	-	-	320	-	-	260	-	-	600	930	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50					-	-	-	280	-	-	220	-	-	670	1110	-	-	-
TRH Volatiles/BTEX	Benzene	mg/kg	0.2				50	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	-	-
	Ethylbenzene	mg/kg	0.5				70	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Naphthalene	mg/kg	1					-	-	-	<1	-	-	<1	-	-	<1	<1	-	-	-
	Toluene	mg/kg	0.5				85	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Total BTEX	mg/kg	0.2					-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	-	-
	C6 - C9	mg/kg	10					-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-
	Xylene (m & p)	mg/kg	0.5					-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Xylene (o)	mg/kg	0.5					-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Xylene Total	mg/kg	0.5				105	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	10					-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-
	C6-C10	mg/kg	10			700	180	-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-

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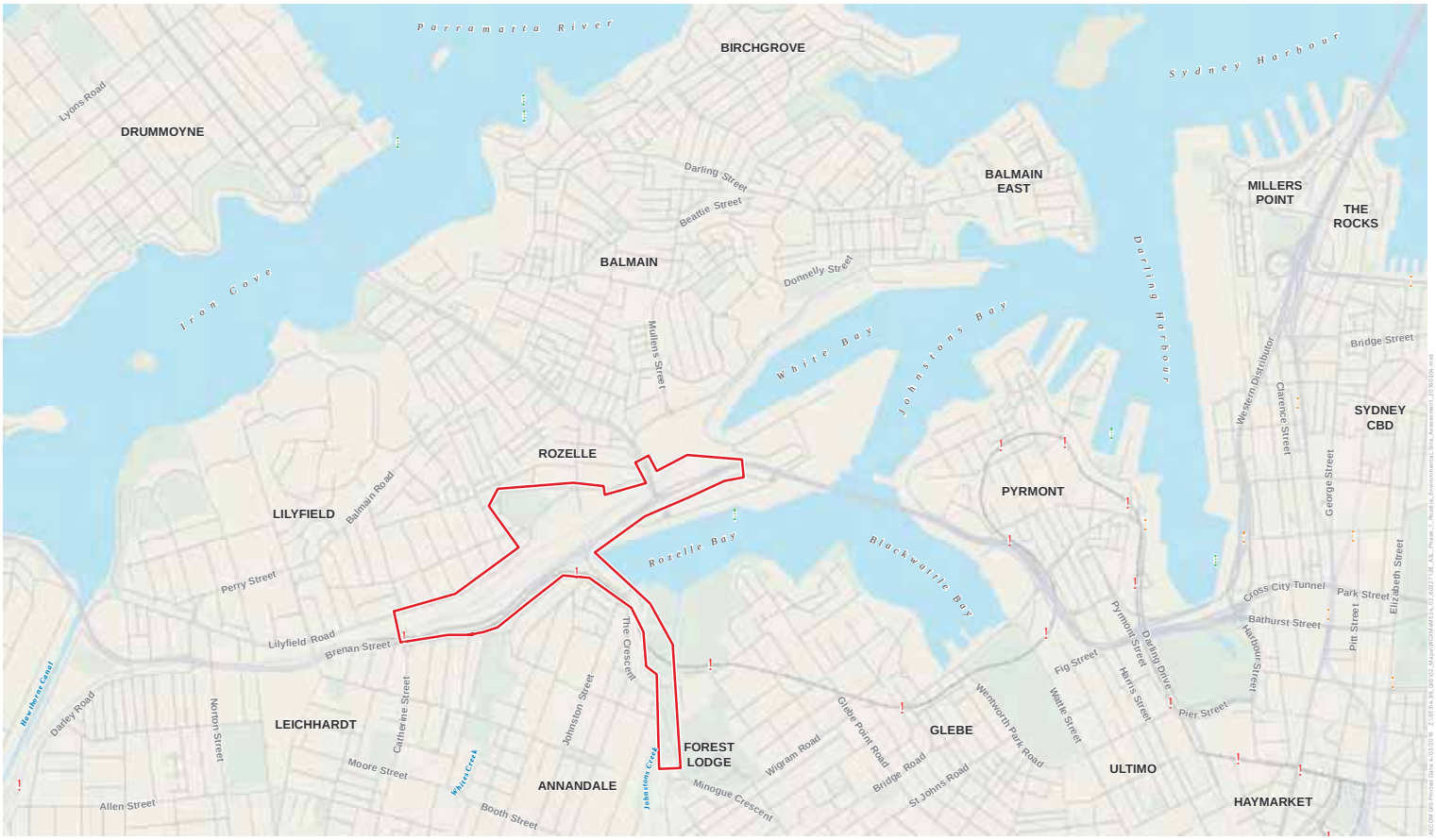
Field_ID	TP10-SA16
Sampled_Date-Time	1/01/0/2014

Method_Type	ChemName	Units	EQL	NEPM 2013 Table 1A(1) HIL's Column D Commercial/Industrial	NEPM 2013 Table 1A(1) HIL's Column C Recreational	NEPM 2013 Table 1B(6) TPH Management Limits (Coarse)	NEPM 2013 Table 1B(6) ESL's for TPH Urban Residential/Public Open Space (Coarse)	
Moisture Content	Moisture	%	1					8.9
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5					<0.5
	Acenaphthylene	mg/kg	0.5					<0.5
	Anthracene	mg/kg	0.5					<0.5
	Benz(a)anthracene	mg/kg	0.5					0.9
	Benzo(a) pyrene	mg/kg	0.5				0.7	1
	Benzo(b)fluoranthene	mg/kg	0.5					1.3
	Benzo(g,h,i)perylene	mg/kg	0.5					<0.5
	Benzo(k)fluoranthene	mg/kg	0.5					<0.5
	Chrysene	mg/kg	0.5					1
	Dibenz(a,h)anthracene	mg/kg	0.5					<0.5
	Fluoranthene	mg/kg	0.5					1.8
	Fluorene	mg/kg	0.5					<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5					<0.5
	Naphthalene	mg/kg	0.5					<0.5
	PAHs (Sum of total)	mg/kg	0.5	4000	300			8.8
	Phenanthrene	mg/kg	0.5					0.8
	Pyrene	mg/kg	0.5					2
Total Mercury by FIMS	Mercury	mg/kg	0.1	730	80			0.3
Total Metals by ICP-AES	Arsenic	mg/kg	5	3000	300			6
	Cadmium	mg/kg	1	900	90			1
	Chromium (III+VI)	mg/kg	2					28
	Copper	mg/kg	5	240000	17000			72
	Lead	mg/kg	5	1500	600			138
	Nickel	mg/kg	2	6000	1200			13
	Zinc	mg/kg	5	400000	30000			340
TRH - Semivolatile Fraction	C10-C16	mg/kg	50			1000	120	-
	C16-C34	mg/kg	100			2500	300	-
	C34-C40	mg/kg	100			10000	2800	-
	F2-NAPHTHALENE	mg/kg	50					-
	C10 - C14	mg/kg	50					-
	C15 - C28	mg/kg	100					-
	C29-C36	mg/kg	100					-
	>C10 - C36 (Sum of total)	mg/kg	50					-
	C10 - C40 (Sum of total)	mg/kg	50					-
TRH Volatiles/BTEX	Benzene	mg/kg	0.2				50	-
	Ethylbenzene	mg/kg	0.5				70	-
	Naphthalene	mg/kg	1					-
	Toluene	mg/kg	0.5				85	-
	Total BTEX	mg/kg	0.2					-
	C6 - C9	mg/kg	10					-
	Xylene (m & p)	mg/kg	0.5					-
	Xylene (o)	mg/kg	0.5					-
	Xylene Total	mg/kg	0.5				105	-
	C6-C10 less BTEX (F1)	mg/kg	10					-
	C6-C10	mg/kg	10			700	180	-



Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F1: Study area location

KEY

Study area boundary

WestConnex
Building for the future

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0 250 500 m

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Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F2: Site locations within the study area

KEY

- Study area boundary
- Property locations within the study area
- 1m contour line
- Stormwater channel

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0 125 250 m

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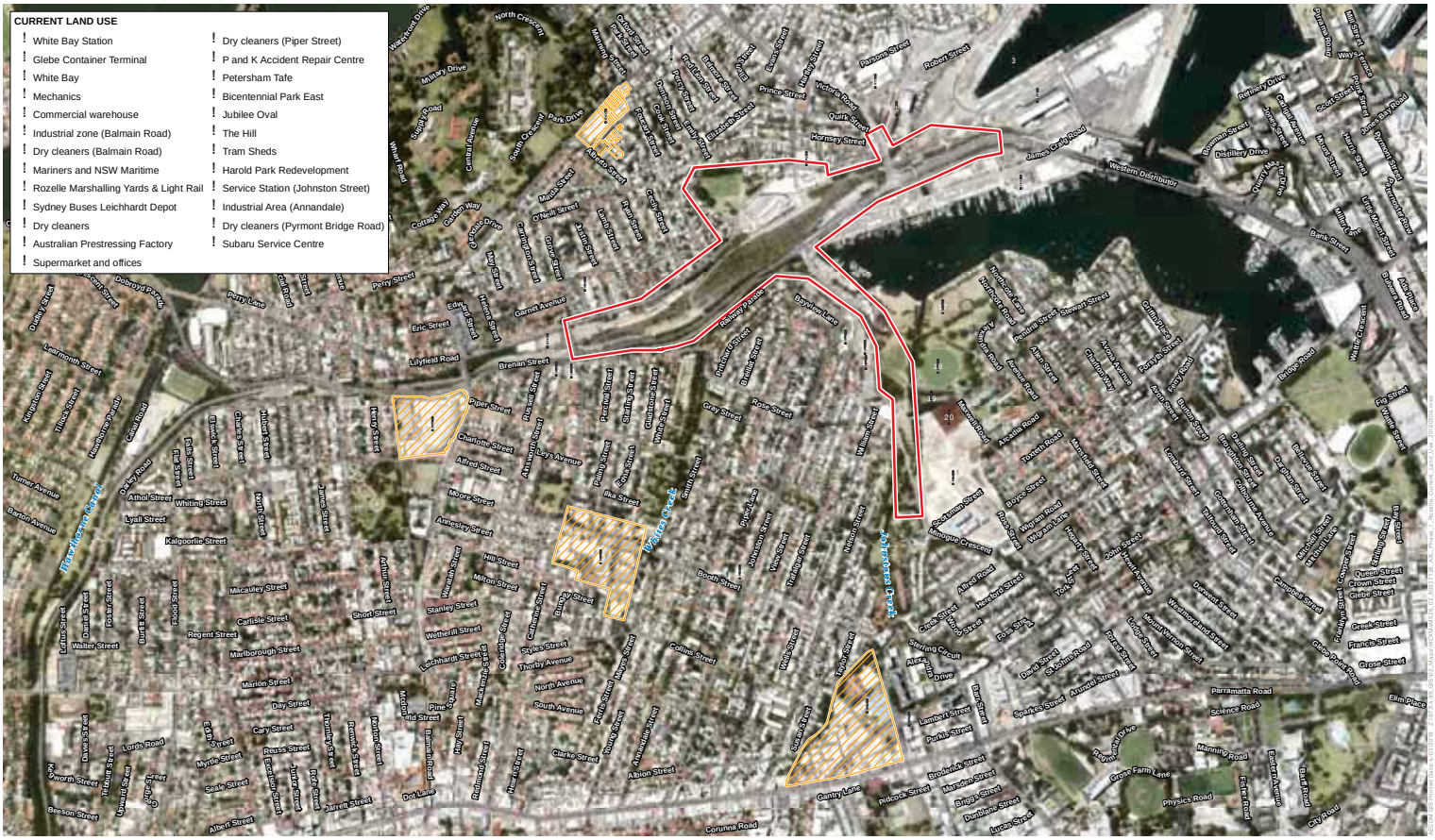
PROPERTY INFORMATION
Former White Bay Hotel
White Bay Power Station
Wynston Blinds
Rozelle Rugs
Burt Street Houses
59 Lilyfield Road
Bella-hoots
Lilyfield Road Terraces
Desane
Easton Park Hotel
Easton Park
Easton Park Houses
Lilyfield Road Units
Gillespie's
Swaddling's
Allstone
Balmain Stone
Rozelle Marshalling Yards (RMY)
City West Link
Whites Creek
Brenan Street
The Crescent
Waterway Constructions
2 James Craig Road
Reserve
Reserve
Vacant Boat Yards
RMS Land
Crescent Timber
Bicentennial Park West
Federal Park North
Federal Park Central
Sydney Light Rail
Federal Park South
Jubilee Pathway
Webbers
Nelson Street Houses
Sydney Water Sewer Pumping Station No. 4
Smith Park West
Smith Park East
Harold Park
Coneill Place Houses
Whites Creek
Johnstons Creek
Victoria Road
James Craig Road
Lilyfield Road
Quirk Street
Hornsey Street
Kelly Parade
Brenan Street
City West Link Road
Maxwell Road
Gordon Street
Elizabeth Street
Albert Street
Joseph Street
Eric Street
Perry Lane
Piper Street
Charlotte Street
Alfred Street
Moore Street
Annesley Street
Rose Street
Hudson Street
Gipps Street
Wentworth Road
Parramatta Road
Fisher Road
Victoria Lane
Maxwell Lane
Arcadia Road
Arcadia Lane
Toxteth Road
Bay Street
Boyce Street
Boyce Lane
Rose Street
Rose Lane
Gipps Street
Gipps Lane
Nelson Lane
Nelson Street
Wentworth Lane
Weyman Road
Sydenham Road
Peacock Street
Annandale Road
Annandale Lane
Alexandra Lane
Edward Lane
Cooks Lane
Anna Street
Avenue Road
Park Avenue
Mary Street
Northcote Lane
Gibbons Road
Fisher Road
Weyman Street
Weyman Lane
Kentville Avenue
Kentville Lane
Richard Street
Richard Lane
Brenan Lane
Johnston Street
Gladstone Road
Ray Street
Ray Lane
Wilson Street
Wilson Lane
Taylor Street
Madigan Lane
Argyle Lane
Annandale Street
Young Street
Catherine Street
Piper Lane
Percival Street
Stanley Street
Gale Avenue
White Street
Lucretia Street
Renwick Street
Brenan Street
Perry Lane
Balmain Street
Henry Lane
Robert Street
Alexander Street
Lays Avenue
Phillip Street
Emma Street
Swift Street
Marlborough Street
Ika Street
Moore Lane
Norton Street
Victoria Street
Albert Lane
Cecily Street
Francis Lane
Lamb Street
Darling Street
Dore Lane
Dore Street
O'Neill Street
O'Neill Lane
Balmain Road
Park Drive
Ford Street
Forrest Street
Collard Street
Camp Street
Early Street
Brockley Street
Cheltenham Street
Alfred Street
Alfred Lane
Pyrmont Bridge
Johnstons Creek
Whites Creek
Bayview Crescent
Bayview Lane
Weyman Lane
Weyman Street
Richard Street
Richard Lane
Brenan Lane
Johnston Street
Gladstone Road
Maxwell



Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F3: Current surrounding land use

KEY

- Study area boundary
- Current surrounding land use
- Current surrouding land use area boundary

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0 250 500 m

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Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F4: Former land use

KEY

- 1970's reclamation area
- Pre 1930's reclaimed or filled land
- Former commercial/industrial buildings
- Rail line
- Tram lines
- Federal Road
- Study area boundary

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0 100 200 m

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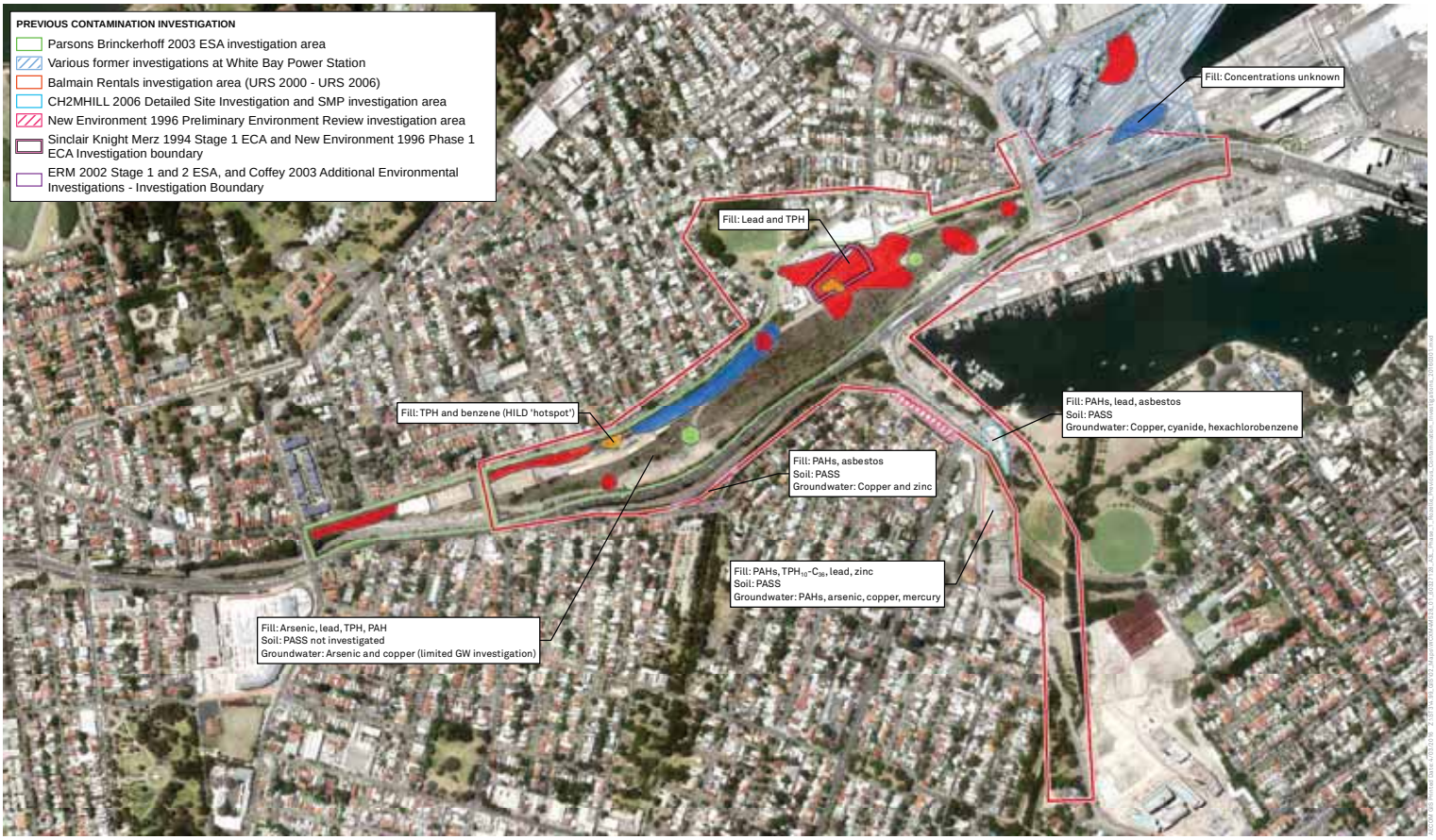

Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F5: Summary of Previous Contamination Investigations

KEY

- Areas exceeding HILC in RMY site for CPAHs
- Areas exceeding HILC in RMY site for Arsenic
- Areas exceeding HILC in RMY site for Lead
- Areas exceeding HILC in RMY site for TPH
- Study area boundary

HIL C - NEPM (2013) Health investigation level (HIL) for open space land use
HIL D - NEPM (2013) HIL for commercial/industrial land use

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AECOM

0 100 200 m

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M4-M5 Link Contamination Site Investigation
Figure F1: Site Location Plan

KEY

- ! Light rail stop
- Railway
- Light rail
- Site boundary
- Construction footprint

WestConnex
Building for the future

AECOM

0 200 400 m

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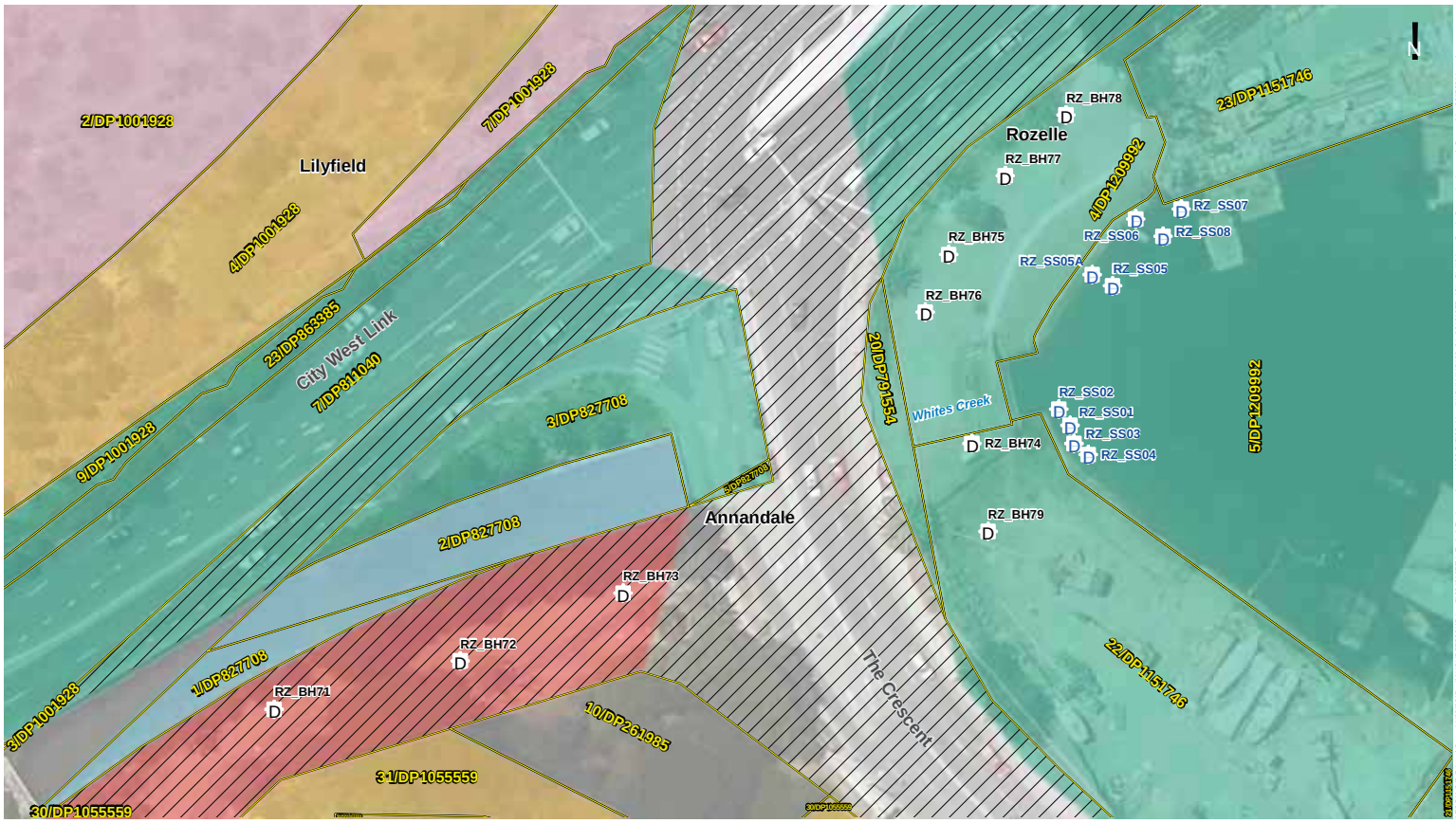

M4-M5 Link Contamination Site Investigation
Figure F2: Existing Property Ownership

KEY

Contamination site investigation

- D Borehole locations (subject to site inspection)
- D Sediment sampling location

Property Ownership Information

- Water Board
- Roads & Maritime Services
- Rail Corporation NSW
- Sydney Harbour Foreshore Authority
- The Minister Administering the Environmental Planning and Assessment Act, 1979
- Inner West Council

Existing Boundaries

- Indicative cadastre boundary
- Existing road corridor

0 8.5 17 m

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SCALE 1:500 A3
SHEET Page 1 of 1
COORDINATE SYSTEM GDA 1994 MGA Zone 56
TITLE
M4-M5 LINK SITE INVESTIGATION
CONTAMINATION SITE INVESTIGATION
AND EXISTING PROPERTY OWNERSHIP
PROJECT
WESTCONNEX M4-M5 LINK
CLIENT
SYDNEY MOTORWAY CORPORATION
DRAWN SG PROJECT # 60491677 MAP # REV Project
CHECK DATE 14/06/2017 WCXM4M5426 04 60491677

WestConnex
Building for the future

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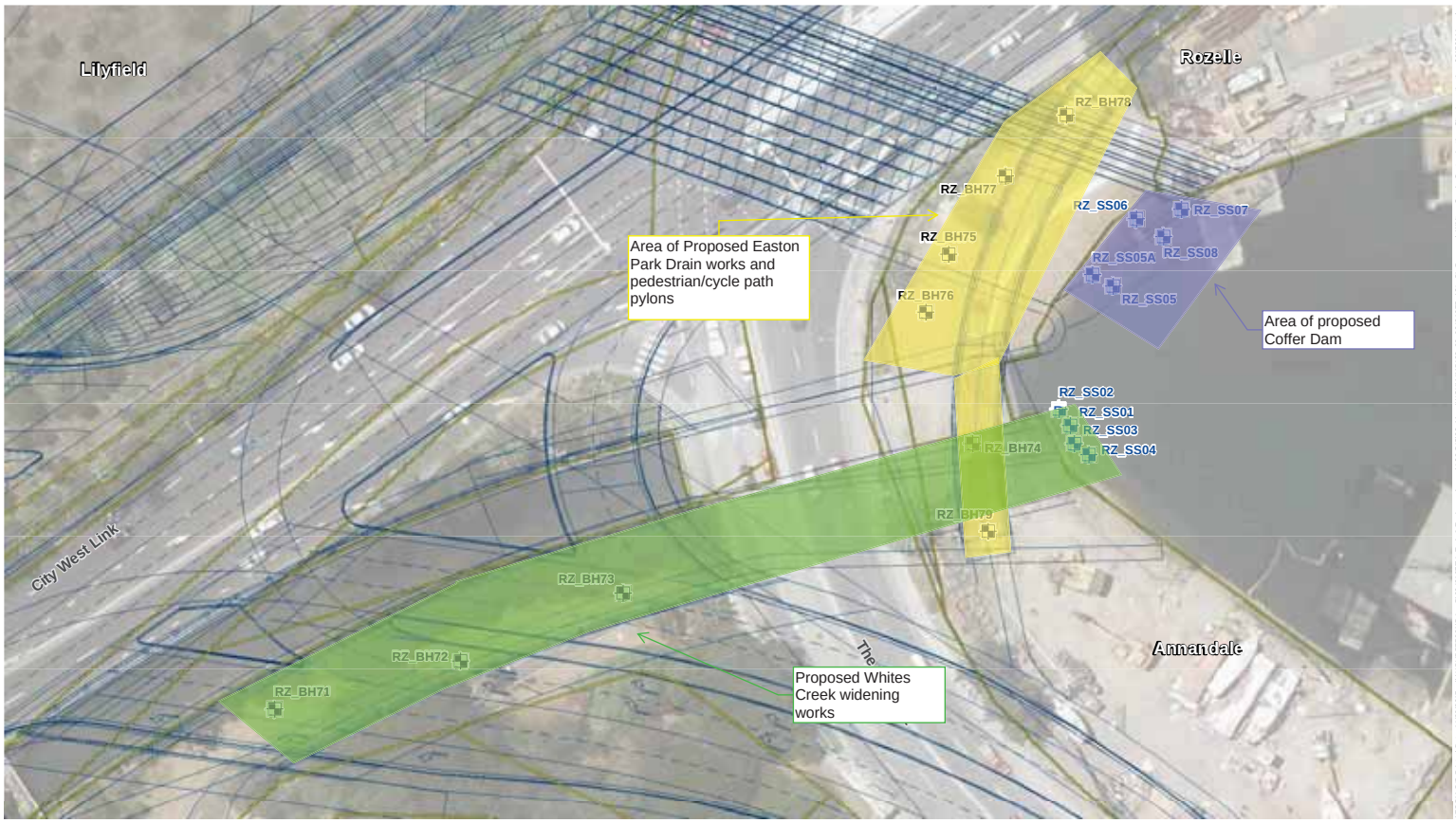

M4-M5 Link Contamination Site Investigation
Figure F3: Contamination Site Investigation Sample Locations

KEY

Contamination site investigation
D Sediment sampling location
D Borehole locations

Project features
Proposed design

Indicative cadastre boundary

WestConnex
Building for the future

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0 8.5 17 m

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SCALE 1:500 A3
SHEET Page 1 of 1
COORDINATE SYSTEM GDA 1994 MGA Zone 56
TITLE
M4-M5 LINK SITE INVESTIGATION
CONTAMINATION SITE INVESTIGATION
PROJECT
WESTCONNEX M4-M5 LINK
CLIENT
SYDNEY MOTORWAY CORPORATION

DRAWN	PROJECT #	MAP #	REV	Project
SG	60491677			
CHECK	DATE	WCXM4M5423 06 60491677		
	14/06/2017			

AECOM G:\& Printed Date: 14/06/2017 \\AUSYDDFP001\Drive-P\60491677\4. Tech & Enviro\work areas\499 GIS\02_Maps\WCXM4M5423_06_60491677_A3L_SI_Proposed_Whites_Creek_Contamination_Site_Investigation_20170614.mxd

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH71

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Sandy Gravel TOPSOIL. Light brown, medium grained.	0.20
				0.4		FILL	Gravelly Sand FILL. Light brown, dry, medium grained. Contains shells (25%), gravels (10%), ballast gravels (10%) and trace grey with red mottling, low plasticity clay (<5%).	
0.4		RZ_BH71_0.5	✳	0.6				
				0.8				
0.4		RZ_BH71_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8			Piece of metal pipe 3 cm with copper wires 0.2 cm thickness observed at 1.7 m bgs	
0.6		RZ_BH71_2.0	✳	2.0				
				2.2		FILL	Sand FILL. Grey, coarse grained. Contains (20%) shells throughout. Black staining (15%), slight hydrocarbon odour.	2.20
				2.4			Becoming saturated from 2.4 m bgs	
				2.6				
				2.8				
				3.0		CH	CLAY. Black/dark grey, moist, high plasticity. Slight hydrocarbon odour.	2.90
0.5		QC201 RZ_BH71_3.1	✳ ✳	3.2		SW	SAND. Dark grey, coarse grained. Contains shells (30%).	3.20
				3.4				3.50
							Borehole terminated at 3.5 m bgs; push-tube refusal. Total Depth: 3.50 m	

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BOREHOLE LOG RZ_BH72

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0		TOPSOIL	Gravelly Sand TOPSOIL. Light brown, coarse grained. Organic odour.	
				0.2		FILL	Gravelly Sand FILL. Light brown, coarse grained. Contains sandstone gravels (10-15 cm) (10%), ballast gravels (10%) and minor plastic fragments.	0.20
0.6		RZ_BH72_0.5	✳	0.4			Increase in ballast gravels from 0.5 m bgs	
				0.6				
				0.8		FILL	Sand FILL. Light brown, dry, medium grained. Contains shells (25%), minor grey and red, medium plasticity clay (15%).	0.80
0.6		RZ_BH72_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8				
				2.0				
				2.2				
				2.4				
				2.5		FILL	Sand FILL. Dark grey, coarse grained, saturated. Contains shells (20%). Black staining (15%), slight sheen and hydrocarbon odour.	2.50
2.8		RZ_BH72_2.6	✳	2.6				
				2.8		CH	CLAY. Dark grey, high plasticity. Black staining (15%) and hydrocarbon odour.	2.80
						SW		2.90
0.8		QC101	✳	3.0			SAND. Grey, coarse grained. Contains shells (30%).	3.00
		RZ_BH72_3.0	✳				Borehole terminated at 3 m bgs; push-tube refusal. Total Depth: 3.00 m	

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BOREHOLE LOG RZ_BH73

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Gravelly Sand TOPSOIL. Light brown.	
				0.4		FILL	Gravelly Sand FILL. Light brown, coarse grained. Contains ballast gravels (30%).	0.20
0.5		RZ_BH73_0.5	✳	0.6				
				0.8		FILL	Clayey Sand FILL. Light brown, coarse grained. Contains light grey, medium plasticity clay with red mottling and minor ballast gravels (15%). Black staining (20%).	0.70
0.5		RZ_BH73_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8				
				2.0				
				2.2				
				2.4				
0.5		RZ_BH73_2.5	✳	2.6		CH	CLAY. Light grey, saturated, high plasticity. Contains shells (15%). Slight hydrocarbon odour.	2.50
				2.8	▽	SW	SAND. Light brown/grey, coarse grained. Contains shells (30%). Becoming saturated from 2.8 m bgs	2.70
0.6		RZ_BH73_3.0	✳	3.0		CH	CLAY. Dark grey, high plasticity. Sheen (15%) and hydrocarbon odour noted.	3.00
				3.2		SW	SAND. Grey, coarse grained. Contains shells (25%). Slight hydrocarbon odour.	3.20
				3.4			Borehole terminated at 3.4 m bgs; push-tube refusal Total Depth: 3.40 m	3.40

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BOREHOLE LOG RZ_BH74

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained, dry. Contains minor fragments of brick, pottery and glass. Organic odour.	
				0.4		FILL		0.40
0.1		RZ_BH74_0.5	✳	0.6			Silty Sandy Gravel FILL. Dark brown/grey, medium grained, dry. Contains large sandstone and concrete boulders (approximately 15-20cm) Resistance with hand auger encountered at 0.7 m bgs. Commenced drilling with mechanical auger from 0.7 to 1.5 m bgs	
				0.8				
				1.0				
				1.2				
				1.4				
0.3		RZ_BH74_1.5	✳	1.6				1.60
				1.8		FILL	Clayey Sand FILL. Light brown, fine grained, slightly moist. Contians medium plasticity clay, gravels (25%), large sandstone and concrete boulders.	
				2.0				
				2.2				
				2.4				
0.3		RZ_BH74_2.5	✳	2.6				
				2.8				
				3.0				
				3.2				
				3.4				
0.9		RZ_BH74_3.5	✳	3.6				
				3.8				
				4.0	▽			4.10
				4.2		FILL	Silty Sand FILL. Light grey, fine grained, saturated. Patches of black staining (15%) and slight hydrocarbon odour.	
				4.4				
0.8		RZ_BH74_4.5		4.6				
				4.8				
				5.0				
				5.2				5.30
				5.4		MLS	Sandy SILT: Black, very fine grained. Contains shells (30%). Black staining (15%) and slight hydrocarbon odour.	
				5.6				
				5.8				
				6.0				
				6.2				6.20
							Borehole terminated at 6.2 m bgs; target depth reached. Total Depth: 6.20 m	

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BOREHOLE LOG RZ_BH75

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Gravel TOPSOIL. Dark brown/grey, medium grained. Contains large sandstone boulders (15-20 cm) (50%) and minor ballast gravels, glass and pottery fragments. Organic odour.	
				0.4				0.50
				0.6		FILL	Gravel FILL. As above.	
0.2		RZ_BH75_0.8	✳	0.8			Resistance encountered with hand auger at 0.5 m bgs due to large boulders.	
				1.0				
				1.2				
				1.4				
				1.6				1.60
						FILL	Clayey Sand FILL. Light brown, medium grained. Contains gravels (20%) and large sandstone boulders.	
0.1		RZ_BH75_1.8	✳	1.8				
				2.0				
				2.2				
				2.4				
				2.6				
0.1		RZ_BH75_2.8	✳	2.8				
				3.0				
				3.2				
				3.4				
								3.50
				3.6		FILL	Silty Sand FILL. Dark grey, fine grained. Patches of black staining (15%) and hydrocarbon odour noted.	
0.9		RZ_BH75_3.8	✳	3.8				
				4.0				
				4.2				
				4.4				
				4.6				
				4.8				4.80
						FILL	Sandy Silt FILL. Dark grey, fine grained, saturated. Contains shale gravels (20%). Patches of black staining (15%).	5.00
				5.0		OLSH	Clayey SILT. Black. Contains shells (20%). Organic odour.	5.20
				5.2			Borehole terminated at 5.2 m bgs; target depth reached. Total Depth: 5.20 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH76

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains organic matter, gravels, glass and pottery fragments. Organic odour.	0.30
				0.4		FILL	Gravelly Sand FILL. As above. Contains large sandstone boulders (15-20 min) (50%) and minor ballast gravels.	
0.2		RZ_BH76_0.5	✳	0.6				
				0.8			Resistance with hand auger encountered at 0.7 m bgs.	
				1.0				1.10
				1.2		FILL	Clayey Sand FILL. Light brown, medium grained, slightly moist. Contains meidum plasticity clay, gravels (20%) and large sandstone boulders.	
0.3		RZ_BH76_1.3	✳	1.4				
				1.6				
				1.8				
		RZ_BH76_2.0	✳	2.0			Increase in clay content (30%) from 2.0 m bgs	
				2.2				
				2.4				
				2.6				
				2.8			Decrease in clay content (20%) from 2.8 m bgs	
1.0		RZ_BH76_3.0	✳	3.0			Black staining (10%) noted at 3.0 m bgs	
				3.2				
				3.4				
				3.6				
				3.8				
0.9		RZ_BH76_4.0		4.0				
				4.2				
				4.4				
				4.6				
				4.8		MLS	Gravelly Sandy Silt. Reworked natural. Black. Contains shale gravels (30%). Organic odour. Saturated.	4.80
0.2		RZ_BH76_5.0		5.0				
				5.2				5.20
							Borehole terminated at 5.2 m bgs; target depth reached. Total Depth: 5.20 m	

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Sydney, NSW 2000

BOREHOLE LOG RZ_BH77

PROJECT NUMBER 60491677 **DATE** 4 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains organic matter, gravels, small pieces of metal, ballast, glass and pottery. Organic odour.	
1.1		RZ_BH77_0.5	✳	0.4				
				0.6		FILL	Gravelly Sand FILL. As above. Contains large sandstone boulders (15-20 cm) (50%).	0.60
				0.8				
				1.0				
				1.2			Resistance with hand auger encountered at 1.3 m bgs. Contains minor small glass and metal fragments from 1.3 m bgs	
				1.4				
1.1		RZ_BH77_1.5	✳	1.6				
				1.8		FILL	Clayey Sand FILL. Light brown, medium grained. Contains minor gravels and large sandstone boulders.	1.80
				2.0				
				2.2				
				2.4				
1.9		RZ_BH77_2.5	✳	2.6				
				2.8		FILL	Sandy Clay FILL. light brown, minor gravel inclusions, large sandstone boulders continue, slightly moist, naphthalene odour.	2.70
				3.0				
				3.2				
				3.4				
4.3		RZ_BH77_3.5	✳	3.6 ▽				
				3.8		SM	Silty SAND. Reworked natural. Dark grey, fine grained, saturated, slight naphthalene odour.	3.60
				4.0				
1.8		RZ_BH77_4.0		4.2				4.20
							Borehole terminated at 4.2 m bgs; push-tube refusal on sandstone Total Depth: 4.20 m	

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Sydney, NSW 2000

BOREHOLE LOG RZ_BH78

PROJECT NUMBER 60491677 **DATE** 4 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.1		RZ_BH78_0.2		0.2		TOPSOIL	TOPSOIL. Brown, medium grained. Minor gravels (20%) and minor organic matter (20%). Organic odour.	
				0.4				0.50
				0.6		FILL	Gravelly Sand FILL. Brown, medium grained. Contain large sandstone boulders (15-20 cm) (50%) and minor ballast gravels (15%).	
0.1		RZ_BH78_0.8	✳	0.8				
				1.0				
				1.2				
				1.4				
				1.6				
				1.8				1.80
						FILL	Clayey Sand FILL. Light brown, medium grained, slightly moist. Contains medium plasticity clay and minor gravels (15%).	
1.0		RZ_BH78_2.0	✳	2.0				
				2.2				
				2.4				
				2.6			Increase in clay content (30%) from 2.7 m bgs. Patches of black staining (10%) noted.	
				2.8				
1.4		RZ_BH78_3.0	✳	3.0				
				3.2				
				3.4				
				3.6				
				3.8				3.80
						SM	Silty SAND. Reworked natural. Dark brown, saturated, fine grained. Minor sandstone gravels (15%). Patches of black staining with high sheen and hydrocarbon odour (10%) noted.	
1.5		RZ_BH78_4.0	✳	4.0				
				4.2				
				4.4				
				4.6				
				4.8				4.80
						OL	Clayey SILT. Black, low plasticity, saturated. Slight sheen, slight hydrocarbon odour.	5.00
		RZ_BH78_5.0		5.0			Borehole terminated at 5.0 m bgs; target depth reached. Total Depth: 5.00 m	

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AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

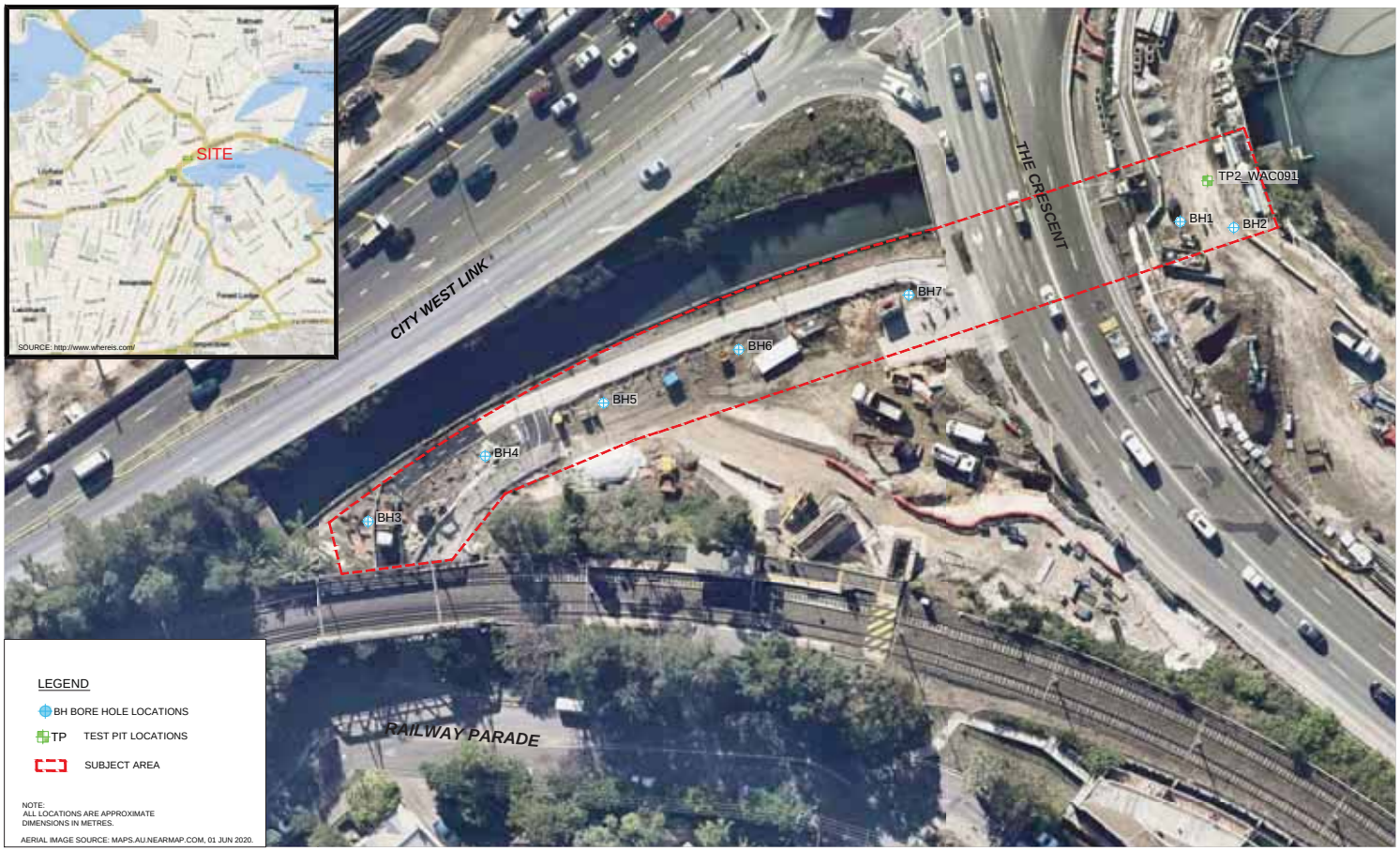
BOREHOLE LOG RZ_BH79

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains minor gravels, pottery, brick and glass fragments (20%).	0.30
				0.4		FILL	Gravelly Sand FILL. Dark brown/grey, medium grained. Sandstone and concrete boulders (15-20cm) (50%).	
0.2		RZ_BH79_0.5	✳	0.6				
				0.8			Resistance with hand auger encountered at 0.8 m bgs.	
0.3		RZ_BH79_1.0	✳	1.0				
				1.2				
				1.4				1.40
				1.6		FILL	Clayey Sand FILL. Light brown, medium grained. Contains minor gravels, sandstone and concrete boulders.	
				1.8				
0.3		RZ_BH79_2.0		2.0				
				2.2				
				2.4				
				2.6				
0.8		RZ_BH79_2.7	✳	2.8				
				3.0				
				3.2				
				3.4				
				3.6				3.70
				3.8		SM	Silty SAND. Reworked natural. Dark grey, fine grained.	3.90
0.6		RZ_BH79_3.8	✳	▽		MLS	Sandy SILT. Black, fine grained, saturated. Black staining with sheen (15%) and organic odour noted.	
				4.0				
				4.2				
				4.4				
				4.6				
1.2		RZ_BH79_4.8		4.8				
				5.0				
				5.2				5.20
							Borehole terminated at 5.2 m bgs; push-tube refusal on sandstone. Total Depth: 5.20 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17



revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	EM	24/06/20

SCALE 0 5 10 15 20 25 METRES 1:500 @A3

drawn	MC
approved	MT
date	24/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC169 | drawing no: Figure 1 | rev: 0

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ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

							TRHs			BTEX				Heavy Metals																		
							C6-C9 F2 (S)	C10-C14 F3 (S)	C15-C28 F3 (S)	C29-C36 F4 (S)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Beryllium	Boron	Cadmium	Chromium (Total)	Chromium - TCLP	Cobalt	Copper	Lead	Lead - TCLP	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)*					650	10000	288	10000	1200	1200	288	-	-	-	100	-	3000	20	100	-	-	5000	100	-	1900	100	50	-	500	-	-	5000
Waste Classification Guidelines - Restricted Solid Waste CT1 (mg/kg)*					650	10000	288	10000	1200	1200	288	-	-	-	100	-	3000	20	100	-	-	5000	100	-	1900	100	50	-	500	-	-	5000
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)*					650	10000	18	518	1,680	1,680	0.88	-	-	350	-	100	1,800	-	-	-	-	1,000	-	-	80	1,000	50	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*					-	-	0.5	14.4	30	30	0.5	-	-	1	-	5	5	-	-	-	-	-	-	-	0.2	2	0.5	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*					2,600	40,000	23	2,073	6,300	7,200	2,000	-	-	400	-	400	7,400	-	-	-	-	6,000	-	-	200	4,000	200	-	-	-	-	-
Soil Vapour Sub-Slab/Bulk - Commercial					-	-	0.5	0.5	0.5	0.5	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soil Vapour Sub-Slab/Bulk - Industrial					-	-	0.5	0.5	0.5	0.5	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW Background Ranges - Sydney (1998)*					ND	ND	ND	ND	ND	ND	0.1-30	-	-	-	-	-	-	0.04-2	0.5-110	-	-	3-300	<0.05	-	-	0.001-0.5	2-400	-	-	-	0-100	0-300
NSW Background Ranges - Richmond (1998)*					ND	ND	ND	ND	ND	ND	0-30	140-1010	-	-	-	1	5-1000	-	-	-	1-50	2-100	5-200	-	3-53	0.10	5-400	-	-	-	20-300	30-300
Consultant	Sample I.D	In-situ / Ex-situ	Depth (m AGL)	Date	Material Type																											
HORIZON A - TO - (1000K)																																
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	13	140	<1	205	<0.3	151	<0.2	<1	31	63	-	56	0.3	<10	<1	NT	26	96
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<1	69	<0.3	16	-	8	515	511	<0.2	293	0.2	<10	<1	NT	19	900
ADE	WAC1-BH1 2.2	In-Situ	2.2	20.05.2020	Silty SAND	<20	<50	295	<100	<0.5	<0.5	<1	<2	9	90	<1	84	<0.3	17	-	13	147	111	<0.2	282	0.2	11	<1	NT	10	665
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<1	35	<0.3	8	-	<5	58	73	-	77	<0.2	<10	<1	NT	11	67
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<1	<5	<0.3	<5	-	<5	<5	<10	-	52	<0.2	<10	<1	NT	16	10
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<20	<50	340	<100	<0.5	<0.5	<1	<2	33	100	<1	92	<0.3	22	-	<5	74	126	<0.2	171	0.3	<10	<1	NT	19	360
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	189	<100	<0.5	<0.5	<1	<2	10	50	<1	93	<0.3	17	-	8	139	160	<0.2	439	0.2	10	<1	NT	37	1160
ADE	WAC1-BH3 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	70	<1	161	<0.3	11	-	5	31	65	-	177	<0.2	30	<1	0.4	45	110
ADE	WAC1-BH3 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	70	<0.2	5	-	<5	26	23	-	83	<0.2	<10	<1	0.2	19	68
ADE	WAC1-BH3 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<1	36	<0.3	11	-	<5	51	101	<0.2	103	0.2	<10	<1	0.3	30	114
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<20	<50	109	2.39	<0.5	<0.5	<1	<2	7	80	<1	68	<0.3	14	-	<5	7	55	-	31	<0.2	<10	<1	0.3	23	67
ADE	WAC1-BH5 1.0	In-Situ	1.0	11.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<1	34	<0.3	7	-	<5	2	15	-	60	<0.2	<10	<1	0.2	15	47
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	47	60	<1	72	<0.3	12	-	<5	33	101	-	117	<0.2	<10	<1	0.4	20	197
WSP	TP02_0.5	In-Situ	0.5	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	33	<2	<10	<0.4	12	-	<5	32	133	-	44	0.1	<2	<10	<2	<10	27	382
WSP	TP02_2.5	In-Situ	2.5	28.11.2019	Silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.4	52	<2	<10	<0.4	<5	-	<5	18	115	-	15	0.1	<2	<10	<2	<10	<10	15
WSP	TP03_0.5	In-Situ	0.5	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.6	53	<2	<10	<0.4	17	-	<5	32	100	-	130	0.4	<2	<10	<2	<10	42	72
WSP	TP04_0.5	In-Situ	0.5	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.1	31	<2	<10	<0.4	8.5	-	<5	19	63	-	64	<1	<5	<2	<10	29	35
WSP	TP05_0.5	In-Situ	0.5	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	33	<2	<10	<0.4	12	-	<5	15	50	-	52	<1	<5	<2	<10	27	27
WSP	TP06_0.6	In-Situ	0.6	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.4	67	<2	<10	<0.4	17	-	<5	31	93	-	49	<1	<5	<2	<10	40	193
	TC_BH09	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<50	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	8.3	-	NT	13	53	-	NT	0.05	2.3	NT	NT	NT	51
	TC_BH09	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<50	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	8.3	-	NT	13	53	-	NT	0.05	2.3	NT	NT	NT	51
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<20	<50	366	3.14	<0.5	<0.5	<1	<2	6	60	<1	62	<0.3	9	-	NT	25	58	-	60	0.3	<10	<1	NT	NT	66
ADE	WAC1-TP2 (0.2-0.3)	In-Situ	0.2-0.3	02.03.2020	Silty SAND	<20	<50	1040	1100	<0.5	<0.5	<1	<2	5	50	<1	42	<0.3	9	-	NT	25	58	-	60	0.3	<10	<1	NT	NT	66
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	<1	57	<0.3	8	-	NT	9	53	-	NT	<0.2	<10	<1	NT	NT	153
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	57	<1	57	<0.3	8	-	NT	10	47	-	NT	<0.2	<10	<1	NT	NT	17
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.03.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	9	-	NT	122	261	<0.2	NT	0.3	<10	<1	NT	NT	387
			% UCL																													
			Maximum Concentration (mg/kg)				0	0	340	2.74	0	0	0	0	47	0	ND	205	ND	151	-	1.0	147	511	ND	439	0.5	30	0	-	0	1163
HORIZON B - 100M PASS																																
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	<20	<50	140	<100	<0.5	<0.5	<1	<2	7	90	<1	68	<0.3	9	-	<5	80	317	-	66	0.5	<10	<1	NT	66	197
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	7	70	<1	50	<0.3	9	-	<5	52	83	-	162	0.4	<10	<1	NT	25	344
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	10	<1	32	<0.3	9	-	<5	29	63	-	111	0.2	<10	<1	NT	22	150
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	14	50	<1	46	<0.3	15	-	<5	62	63	-	129	0.2	<10	<1	NT	33	226
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	8	10	<1	7	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	NT	18	7
ADE	WAC1-BH2 2.2	In-Situ	2.2	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	10	<1	68	<0.3	10	-	<5	<5	<10	-	13	<0.2	<10	<1	0.2	12	<5
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<1	34	<0.3	5	-	<5	<5	<10	-	17	<0.2	<10	<1	1.3	10	64
ADE	WAC1-BH3 4.0	In-Situ	4.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	7	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<10	<1	1.5	9	<5
ADE	WAC1-BH3 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	11	<0.2	<10	<1	0.6	16	<5
ADE	WAC1-BH5 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	10	<1	31	<0.3	5	-	<5	<5	<10	-	24	<0.2	<10	<1	0.4	10	8
ADE	WAC1-BH5 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	10	<1	10	<0.3	<5	-	<5	<5	<10	-	7	<0.2	<10	<1	0.6	14	<5
ADE	WAC1-BH5 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	13	<0.3	<5	-	<5	<5	<10	-	10	<0.2	<10	<1	1.7	18	<5
ADE	WAC1-BH5 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	5	<0.2	<10	<1	0.2	<5	<5
ADE	WAC1-BH6 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<1	<5	<0.3	10	-	<5	5	18	-	6	0.2	<10	<1	0.8	<5	<5
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<1	32	<0.3	<5	-	<5	<5	13	-	100	<0.2	<10	<1	0.6	11	32
ADE	WAC1-BH5 2.0	In-Situ	2.0	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<1	45	<0.3	9	-	<5	10	71	-	142	<0.2	<10	<1	0.9	14	76
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<1	20	<0.3	<5	-	<5	5	21	-	21	<0.2	<10	<1	1.8	60	67
ADE	WAC1-BH6 0.7	In-Situ	0.7	12.06.2020	Silty SAND	<20	<50	100	274	<0.5	<0.5	<1	<2	22	50	<1	64	<0.3	9	-	<5	32	68	-	146	<0.2	<10	<1	0.6	18	96
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	10	30	<1	35	<0.3	<5	-	<5	7	35	-	71	<0.2	<10	<1	0.8	12	6
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<1	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	1.1	10	<5
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<20	<50	<100	<100	<0.5	<0.5	<1	<2	5	20	<1	46	<0.3	5	-	<5	5	13	-	66	<0.2	<10	<1	1.6	17	18
WSP	TP01_0.5	In-Situ	0.5	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.1	63	<2	<10	<0.4	18	-	<5	37	118	-	82	0.2	<10	<2	<10	<2	39	163
WSP	TP01_2.0	In-Situ	2.0	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.8	20	<2	<10	<0.4	9.8	-	<5	20	73	-	33	0.1	<2	<10	<2	<10	<10	58
WSP	TP02_2.7	In-Situ	2.7	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	<10	<2	<10	<0.4	<5	-	<5	11	63	-	7.6	<1	<5	<2	<10	<10	7.8
WSP	TP03_2.0	In-Situ	2.0	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.5	28	<2	<10	<0.4	11	-	<5	15	69	-	16	0.1	<2	<10	<2	<10	18	53
WSP	TP03_2.9	In-Situ	2.9	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.8	31	<2	<10	<0.4	9.3	-	<5	12	52	-	43	<1	<5	<2	<10	18	10
WSP	TP04_2.0	In-Situ	2	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.1	<10	<2	<10	<0.4	5.5	-	<5	10	50	-	9.5	<1	<5	<2	<10	<10	<5
WSP	TP04_2.0	In-Situ	2	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.1	<10	<2	<10	<0.4	5.5	-	<5	<5	53	-	13	<1	<5	<2	<10	<10	6.9
WSP	TP04_2.3	In-Situ	2.3	28.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.4	13	<2	<10	<0.4	<5	-	<5	<5	75	-	12	<1	<5	<2	<10	<10	15
WSP	TP05_2.0	In-Situ	2	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	16	<10	<2	<10	<0.4	<5	-	<5	9	63	-	22	<1	<5	<2	<10	14	7.6
WSP	TP06_1.0	In-Situ	1	28.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.1	<10	<2	<10	<0.4	5.5	-	<5	<5	53	-	14	<1	<5	<2	<10	<10	6.9
WSP	TP06_2.6	In-Situ	2.6	28.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.8	<10	<2	<10	<0.4	<5	-	<5	15	63	-	16	<1	<5	<2	<10	<10	9.9
ADE	WAC1-TP2 (3.5)	In-Situ	3.5	02.03.2020	Silty SAND	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	<5	-	NT	12	51	-	NT	<0.2	<10	<1	NT	NT	102
			% UCL																													
			Maximum Concentration (mg/kg)				ND	ND	140	110	ND	ND	ND	ND	22	ND	ND	102	ND	15	-	ND	80	317	ND	162	0.5	ND	ND	ND	-	59	344
HORIZON C - 100M																																
ADE	WAC1-BH2 7.1	In-Situ	7.1	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	NT	<5	<5
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	NT	<5	<5
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	NT	<5	<5
ADE	WAC1-BH3 6.0	In-Situ	6.0	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	<5
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	<5
ADE	WAC1-BH5 5.5	In-Situ	5.5	10.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	<5
ADE	WAC1-BH5 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	7	8
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	10	<5
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	<5
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	<5
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	<0.1	<5	5
ADE	WAC1-BH7 8.5	In-Situ	8.5	12.06.2020	SANDSTONE	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<1	<5	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<10	<1	<0.1	<5	9
			% UCL																													
			Maximum Concentration (mg/kg)				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
QA/QC																																
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<1	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<10	<1	NT	<5	<5
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 2.0	<20	<50	<100	<100	<0.5	<0.5	<1	<2	9	NT	<1	103	<0.3	13	-	<5	13	51	-	29	<0.2	<10	<1	NT	NT	58
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<20	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	<5	-	NT	12	54	-	NT	0.2	6	NT	NT	NT	102
			% UCL																													
			Maximum Concentration (mg/kg)				ND	ND	813	274	ND	ND	ND	ND	22						-			317	0		0.5	5.7				344

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from Reid-Seeliger's Manual, compiled by Dr A Berriman. Third Edition 1998. Publisher – The Australasian Institute of Mining & Metallurgy (Berriman, 1998)

4 - AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169							PAHs			PCBs	DCPs				Cyanide	Phenols	VOCs / BTEXN		Organotins (TBT)	PFAS	
							Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(a)pyrene TEF	Total PCBs	4,4'-Dichlorodiphenyldichloroethylene	4,4'-Dichlorodiphenyltrichloroethane	Aldrin + Dieldrin	Chlordane	Sum of DDD+DDE+DDD	Cyanide Total	Phenols Total	Sum of VOCs	Sum of BTEXN	Tributyltin (as Sn)	PFOS + PFHxS	PFOA
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)							0.8	-	-	50	<50	<50	<50	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)							3.2	-	-	200	<200	213	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)							10	-	-	200	<50	213	-	-	-	-	-	-	-	-	0.01	0.2
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)							-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	0.01	0.2
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)							23	-	-	800	<50	<50	613	-	-	-	-	-	-	-	0.1	2
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSW Health Soil Investigation Guidance							1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
NSW Health Asbestos Investigation Guidance (DRAFT)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NSW Background Range - Richmond (HMC)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-situ	Depth (m AGL)	Date	Material Type																	
HORIZON A – TO – (SAND)																						
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	3.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND		3.6	4.9	<0.005	23	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.3	In-Situ	2.3	20.05.2020	Silty SAND		<0.1	0.7	-	-	0.7	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND		0.5	1	<0.005	40.2	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 3.0	In-Situ	2.0	20.05.2020	Silty SAND		2.7	3.9	<0.005	29.1	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH3 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY		0.9	1.3	-	-	6.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 2.3	In-Situ	2.3	20.05.2020	Silty SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.3	In-Situ	0.3	11.06.2020	Clayey SAND		0.7	1.2	-	-	5.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.7	In-Situ	0.7	11.06.2020	Clayey SAND		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	<0.2
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND		0.6	1	-	-	6.1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP02_0.3	In-Situ	0.3	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	Silty CLAY		<0.5	-	-	-	<0.5	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY		0.8	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<1	<0.5	<0.5	<0.5	NT	NT
WSP	TP04_0.5	In-Situ	0.5	29.11.2019	SAND		1.6	-	-	-	17.2	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_0.5	In-Situ	0.5	29.11.2019	SAND		<0.5	-	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	<0.5	NT	NT
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.3	-	-	-	<0.5	NT	-	<0.3	<0.3	<0.3	NT	NT	NT	NT	NT	<0.3	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.4	-	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
-	TC_BH09	In-Situ	0.1-0.3	05.05.2014	Fill		0.4	-	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (0.2-0.3)	In-Situ	0.2-0.3	02.12.2020	Silty SAND		1.2	-	<0.005	320.1	ND	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.12.2020	Silty SAND		<0.2	-	-	-	2.5	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.12.2020	SAND		<0.2	-	-	-	0	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.12.2020	Silty SAND		0.3	-	-	-	2.5	ND	ND	ND	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
			% UCL				0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				4.1	6	0	40.2	0	0	0	0	0	0	0	0	0	0	0	3	0	0
HORIZON B – SAND PASS																						
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY		3	4.3	<0.005	29.9	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0.6	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND		0.4	0.8	-	-	2.8	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY		<0.1	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	<0.2
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	<5	<5
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	NT	NT	NT	NT	NT
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND		0.4	1.1	-	-	6.7	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND		<0.3	0.7	-	-	0.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND		1	1.5	-	-	7.9	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.7	In-Situ	5.7	11.06.2020	Silty SAND		0.3	0.7	-	-	5.3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	11.06.2020	Silty CLAY		2	3	-	-	7.9	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND		0.3	1	-	-	3.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND		<0.3	0.7	-	-	3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY		<0.3	0.7	-	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP02_2.0	In-Situ	2.0	29.11.2019	Sandy CLAY		0.4	-	-	-	<0.3	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY		0.8	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.7	In-Situ	2.7	29.11.2019	SAND		<0.5	-	-	-	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.9	In-Situ	2.9	29.11.2019	Sandy CLAY		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.0	In-Situ	2	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_2.7	In-Situ	2.7	29.11.2019	SAND		<0.5	-	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_3.0	In-Situ	3	29.11.2019	Clayey SAND		<0.5	-	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_3.6	In-Situ	3.6	29.11.2019	SAND		-	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-TP-2 (3.5)	In-Situ	3.5	02.12.2020	Silty SAND		<0.2	-	ND	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	NT	NT	NT	NT	NT
			% UCL				0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				3	4.3	ND	29.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HORIZON C – SWAB																						
ADE	WAC1-BH2 7.1	In-Situ	7.1	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<3	<3	ND	ND	<0.2	NT	NT
ADE	WAC1-BH3 6.0	In-Situ	6.0	10.06.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<3	<3	ND	ND	NT	NT	NT
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE		<0.3	0.7	-	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 7.5	In-Situ	7.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.2	NT	NT
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.7	In-Situ	6.7	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 9.5	In-Situ	9.5	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
			Maximum Concentration (mg/kg)				ND	4.3	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADE	WAC-BH1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 2.0		<0.3	0.7	-	-	ND	ND	ND	<0.2	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-BH5	In-Situ	2	11.06.2020	Replicate of WAC1-BH5 2.0		0.7	-	-	-	7.3	ND	ND	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT
			% UCL				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)				3.4	4.3	0	29.9	0	0	0	0	0	0	0	1	0	0	0	3	0	0

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites. Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from Field Geologist's Manual, compiled by D A Berkman. Third Edition 1998. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1998)

4 - AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASMP

							Acid Sulfate Soils²							Asbestos
ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169							pH (Field)	pH (Field Peroxide)	Titratable Actual Acidity (TAA) (Moles H+/t)	Net Acidity (Including Acid Base Potential) (Moles H+/t)	Net Acidity (Including Acid Base Potential) (kg H2SO4/t)	Net Acidity (mole H+)	Net Acidity (kg H2SO4/t)	Asbestos ID in soil >0.1g/kg
Waste Classification Guidelines – General Solid Waste CT1 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste CT2 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste SCC1 (mg/kg)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste TCLP1 (mg/L)							-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste SCC2 (mg/kg)							-	-	-	-	-	-	-	-
Soil Texture Group							-	-	-	-	-	-	-	-
Acid Sulfate Soil Investigation Criteria⁴							4 to 6.5	3 to 5	18	18	0.9	-	-	-
NSW Background Range - Metropolitan (1:250k)⁵							4.5	4.5	4.5	NA	NA			ND
NSW Background Range - Richmond (1:250k)⁵							4.5	5.5	5.5	NA	NA			ND
Consultant	**Sample I.D**	**In-situ / Ex-situ**	**Depth (m AGL)**	**Date**	**Material Type**									
HORIZON A – TO – (1000K)														
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH3 0.3	In-Situ	0.3	03.06.2020	Sandy CLAY	7.5	6	1	NT	NT	-	-	NAD	
ADE	WAC1-BH3 1.0	In-Situ	1.0	03.06.2020	Sandy CLAY	8.3	8.4	3	NT	NT	-	-	NAD	
ADE	WAC1-BH3 2.0	In-Situ	0.3	03.06.2020	Silty SAND	8.4	8.1	2	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.0	8.2	3	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.1	8	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	8.3	8.1	3	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Silty CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP04_0.5	In-Situ	0.5	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP05_0.5	In-Situ	0.5	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP06_0.5	In-Situ	0.5	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
-	TC_BH09	In-Situ	0.1-0.2	05.05.2014	Fill	8.3	7.8	NT	NT	NT	-	-	NT	
-	TC_BH09	In-Situ	0.1-0.2	05.05.2014	Fill	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (0.0-0.2)	In-Situ	0.0-0.2	02.02.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (1.0)	In-Situ	1.0	02.02.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (2.0)	In-Situ	2.0	02.02.2020	SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-TP2 (2.5)	In-Situ	2.0	02.02.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
% GCL							-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)										N/A				-
HORIZON B – 100M PASS														
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	8.4	8.2	3	NT	NT	-	-	NT	
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.5	8.1	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	8.5	8.1	5	**0.17**	3	-	-	NT	
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.4	8	2	NT	NT	-	-	NT	
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	8.9	8.1	5	**197**	12	-	-	NT	
ADE	WAC1-BH2 2.2	In-Situ	2.2	03.06.2020	Silty SAND	8.3	8.4	3	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	3.0	03.06.2020	Silty CLAY	8.5	8.8	4	**1.66**	**664**	-	-	NT	
ADE	WAC1-BH3 4.0	In-Situ	4.0	03.06.2020	Silty SAND	8.1	8.7	3	**0.32**	**128**	-	-	NT	
ADE	WAC1-BH3 1.0	In-Situ	1.0	03.06.2020	Silty SAND	8.4	8.8	4	NT	NT	-	-	NT	
ADE	WAC1-BH3 2.2	In-Situ	2.2	03.06.2020	Clayey SAND	8.4	8.3	3	**0.71**	**181**	-	-	NT	
ADE	WAC1-BH3 2.0	In-Situ	2.0	03.06.2020	Clayey SAND	8.1	8.8	4	**0.29**	**182**	-	-	NT	
ADE	WAC1-BH4 4.0	In-Situ	4.0	03.06.2020	Clayey SAND	7.9	8.3	3	**0.16**	**208**	-	-	NT	
ADE	WAC1-BH4 5.0	In-Situ	5.0	03.06.2020	Clayey SAND	8.1	7.5	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 6.0	In-Situ	6.0	03.06.2020	Clayey SAND	8.9	8.9	5	NT	NT	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	10.1	7.3	2	**0.22**	16	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	10.4	7.6	2	**0.15**	**19**	-	-	NAD	
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	9	6.3	2	**1.07**	**670**	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	9.5	6.7	2	NT	NT	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	8.9	8.1	3	NT	NT	-	-	NAD	
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	9	6.6	1	**<0.12**	**11**	-	-	NT	
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	10.4	7.6	2	**0.15**	**19**	-	-	NAD	
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	9.5	6.7	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	9.2	6.5	2	**<0.12**	**11**	-	-	NAD	
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	8.6	8.4	3	**0.13**	**84**	-	-	NT	
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	8.7	8.3	2	**0.17**	**214**	-	-	NT	
WSP	TP02_0.5	In-Situ	0.5	26.11.2019	Sandy CLAY	8.2	8.4	3	NT	NT	-	-	NT	
WSP	TP02_2.2	In-Situ	2.2	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.7	In-Situ	2.2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.5	In-Situ	2.5	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_1.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_2.0	In-Situ	2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_1.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_2.3	In-Situ	2.3	26.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_1.0	In-Situ	1	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_2.0	In-Situ	2	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.0	In-Situ	1	26.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_2.6	In-Situ	1.6	26.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC1-TP2 (2.5)	In-Situ	2.5	02.02.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
% GCL							-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)										N/A				-
HORIZON C – 100M														
ADE	WAC1-BH2 7.1	In-Situ	7.5	20.05.2020	SANDSTONE	7	5.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	7	5.4	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	8.7	6.3	2	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 6.0	In-Situ	6.0	03.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 8.5	In-Situ	8.5	03.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 8.5	In-Situ	7.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 8.5	In-Situ	8.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
% GCL							-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)										N/A				-
ADE	WAC-BD1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BD1	In-Situ	3	11.06.2020	Replicate of WAC1-BH5 3.0	8.6	8.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BD5	In-Situ	3	11.06.2020	Replicate of WAC1-BH5 3.0	NT	NT	NT	NT	NT	NT	NT	NT	
% GCL										N/A				
Maximum Concentration (mg/kg)														

All units in mg/kg unless specified otherwise

NT – Not Tested

ND – Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 – Assessment criteria extracted from NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, 2014)

2 – Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites: Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

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4 – AS4964-2004 Method for the qualitative identification of asbestos in bulk samples

5 – Adopted Site Assessment Criteria as per the Site's ASSMP

LEGEND

- BH — BORE HOLE LOCATIONS
- TP — TEST PIT LOCATION
- SUBJECT AREA
- SECTION LINE

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 01 JUN 2020.

BH	EASTING	NORTHING	RL
BH1	331046.85	6250625.99	3.6
BH2	331060.01	6250647.48	3.573
BH3	331075.49	6250649.99	3.562
BH4	331064.73	6250642.51	3.575
BH5	331053.51	6250621.90	3.606
BH6	331050.99	6250626.34	3.525
BH7	331055.03	6250612.43	3.301
BH8	331054.31	6250617.21	3.567

revision no.	description	drawn	approved	date
A	FIRST ISSUE	MC	BE	18/06/20

SCALE 1:400 @A3 METRES (0 4 8 12 16 20)

drawn	MC
approved	EM
date	22/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC170 | figure no: FIGURE 1 | rev: A

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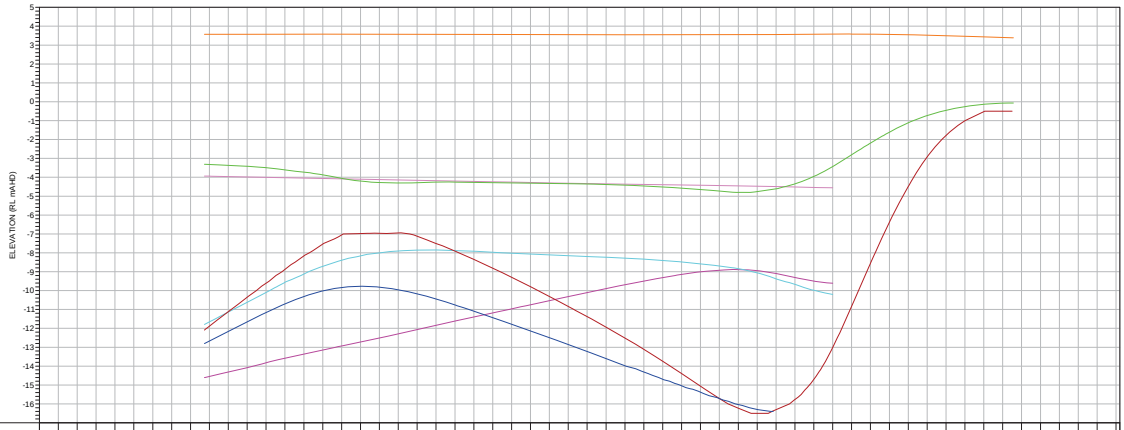
LEGEND

- REDUCED LEVEL (RL)
- PROPOSED EXCAVATION DEPTH
- HORIZON A - FILL
- HORIZON B - MARINE SEDIMENTS
- HORIZON C - RESIDUAL / BEDROCK



| | | |

LEGEND

- BH — BORE HOLE LOCATIONS
- TP — TEST PIT LOCATION
- SUBJECT AREA
- HORIZON C GENERAL SOLID WASTE (BH5 9.0-11.5)

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 01 JUN 2020.

BH	EASTING	NORTHING	RL
BH1	331046.85	6250625.99	3.6
BH2	331060.01	6250647.48	3.573
BH3	331075.49	6250649.99	3.562
BH4	331064.73	6250642.51	3.575
BH5	331053.51	6250621.90	3.606
BH6	331050.99	6250626.34	3.525
BH7	331055.03	6250612.43	3.301
BH8	331054.31	6250617.21	3.567

revision no.	description	drawn	approved	date
A	FIRST ISSUE	MC	EM	22/06/20

0 4 8 12 16 20
SCALE 1:400 @A3 METRES

drawn	MC
approved	EM
date	22/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND GSW HOTSPOT WITHIN HORIZON C

project no: WCX-08-17868_WAC170 | figure no: FIGURE 3 | rev: A

ADE CONSULTING GROUP

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ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC170

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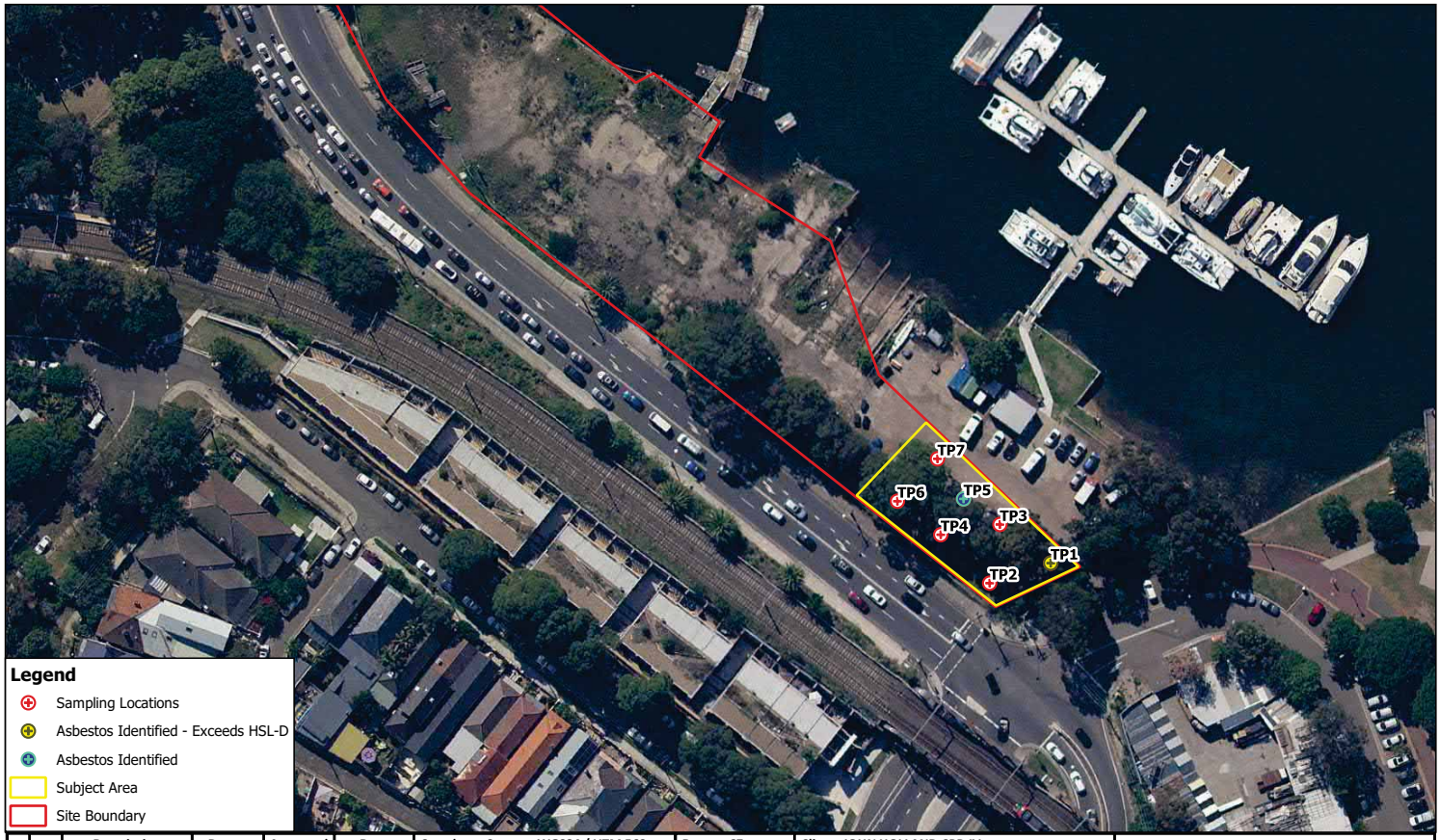
| | | |



Revision	no.	Description	Drawn	Approved	Date
	A	FIRST ISSUE	CZ	BE	13.12.2019

Coordnate System: WGS84 / UTM 56S

N

0 15 30 m

1:700

Drawn: CZ

Approved: BE

Date: 13.12.2019

Reference:

Client: JOHN HOLLAND CPB JV

Project: Waste Classification & Analysis

Title: Approximate Locations of the Subject Area, Sampling Points and Site Boundary

Project no: WCX-08-17049 | Figure no: 1 | Rev: 1

ADECONSULTINGGROUP

Revision	no.	Description	Drawn	Approved	Date
	A	FIRST ISSUE	CZ	BE	13.12.2019

Coordnate System: WGS84 / UTM 56S

N

0 15 30 m

1:700

Drawn: CZ

Approved: BE

Date: 13.12.2019

Reference:

Client: JOHN HOLLAND CPB JV

Project: Waste Classification & Analysis

Title: Inferred Extent of Asbestos Contamination Exceeds HSL-D

Project no: WCX-08-17049 | Figure no: 2 | Rev: 1

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ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

					TRHs				BTEX				Heavy Metals										
					C6-C10 (F1)	C10-C16 (F2)	C16-C34 (F3)	C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	TCLP - Lead	Mercury	Nickel	TCLP - Nickel	Zinc	Acenaphthene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]					650		10,000		10	288	600	1,000	100	20	100	-	100	-	4	40		-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]					2,600		40,000		40	1,152	2,400	4,000	400	80	400	-	400	-	16	160		-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]					650		10,000		18	518	1,080	1,800	500	100	1,900	-	1,500	-	50	1,050		-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]					-		-		0.5	14.4	30	50	5	1	5	-	-	5	0.2	2		-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]					2,600		40,000		23	2,073	4,320	7,200	2,000	400	7,600	-	6,000	-	200	4,200		-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]					-		-		0.48	9.6	20	100	100	4	20	-	-	20	0.8	8		-	-
Acid Sulfate Soils Screening Criteria[2]					-		-		-	-	-	-	-	-	-	-	-	-	-	-		-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000		400,000	-
NEPM 2013 HIL-C (Public Open Space)					-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200		30,000	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-		-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)					800	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Direct Contact (HSL-D)					26,000	20,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-		-	-
Direct Contact (HSL-C)					5,100	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-		-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT					250	NL	-	-	4	4	NL	NL	-	-	-	-	-	-	-	-		-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT					NL	NL	-	-	NL	NL	-	NL	-	-	-	-	-	-	-	-		-	-
HSL Intrusive Maintenance Worker (Shallow Trench)					82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-		-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																		
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<35	<50	134	106	<0.5	<0.5	<1	<2	<5	<0.3	21	670	**370**	<0.5	0.4	33	-	700	<0.3
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	16	68	-	<0.2	<10	-	79	<0.3
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	181	157	<0.5	<0.5	<1	<2	5	<0.3	17	67	**390**	<0.5	0.3	23	-	430	<0.3
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	130	48	-	1	<10	-	46	<0.3
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	121	152	<0.5	<0.5	<1	<2	<5	<0.3	80	250	**260**	<0.5	0.3	**85**	<0.2	1200	<0.3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<35	<50	<100	155	<0.5	<0.5	<1	<2	<5	<0.3	25	310	**260**	<0.5	0.2	20	-	1000	<0.3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	244	228	<0.5	<0.5	<1	<2	<5	<0.3	10	220	**260**	<0.5	0.3	10	-	370	<0.3
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<35	<50	155	280	<0.5	<0.5	<1	<2	<5	<0.3	20	110	**330**	<0.5	0.2	18	-	510	<0.3
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	108	125	<0.5	<0.5	<1	<2	<5	<0.3	32	140	**590**	<0.5	0.3	21	-	1100	<0.3
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<35	<50	112	128	<0.5	<0.5	<1	<2	10	0.3	29	270	**830**	2.6	0.5	19	-	1200	<0.3
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	16	98	-	2.7	<10	-	200	<0.3
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<35	<50	<100	107	<0.5	<0.5	<1	<2	<5	<0.3	8	10	55	-	0.5	<10	-	67	<0.3
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	8	68	**240**	<0.5	0.9	<10	-	210	<0.3
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	11	23	-	0.2	<10	-	59	<0.3
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	87	36	-	<0.2	<10	-	40	<0.3
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	<10	<50	<100	<100	<0.5	<0.5	<1	<0.5	6	<0.3	5	106	55	-	<0.1	2	-	52	<0.5
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	**380.6**	-	-	**43.72**	-	-	-
Maximum Concentration (mg/kg)						ND	ND	244	280	ND	ND	ND	ND	10	0.3	80	670	**830**	2.6	2.7	**85**	ND	1200	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

	PAHs							PAHs											PCBs
	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ (half FOQ)	Benzo(a)pyrene	TCLP - Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(b,j,k,l)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)	Total PCBs
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	<50
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	<50
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	<50
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	800	<50
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]	-	-	-	-	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	7
NEPM 2013 HIL-C (Public Open Space)	-	-	-	3	-	-	-		-	-	-	-	-	-	-	-	-	300	1
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	-	-	-	-
Direct Contact (HSL-C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,900	-	-	-	
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HSL Intrusive Maintenance Worker (Shallow Trench)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																		
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	0.3	0.3	1	1.9	**1.3**	<0.005	1.5	1	0.5	1	<0.3	1.8	<0.3	1	<0.3	0.5	2	12.2	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	0.5	1.1	0.7	-	0.8	0.5	0.3	0.5	<0.3	0.8	<0.3	0.6	<0.3	<0.3	1	5.7	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.5	0.8	0.5	-	0.6	0.5	<0.3	0.4	<0.3	0.9	<0.3	0.4	<0.3	0.4	1	5.2	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	<0.3	0.4	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.7	1.3	**0.9**	<0.005	1	0.7	0.4	0.7	<0.3	1.4	<0.3	0.7	<0.3	0.5	1.5	8.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.3	<0.3	0.3	0.7	0.4	-	0.5	0.3	<0.3	0.3	<0.3	0.5	<0.3	0.3	<0.3	<0.3	0.6	3.2	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	0.5	1	3.4	**5.7**	**3.9**	<0.005	4.3	2.3	1.6	3.1	0.5	5.9	<0.3	2.7	<0.3	2.1	6.3	37.6	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.3	0.3	1.3	2.3	**1.6**	<0.005	1.8	1	0.7	1.2	<0.3	2.2	<0.3	1.1	<0.3	0.6	2.5	14.3	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	0.3	0.4	1.5	2.8	**1.9**	<0.005	2.1	1.2	0.8	1.5	0.3	2.7	<0.3	1.3	<0.3	1.1	2.9	18.0	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.3	0.4	1.4	2.1	**1.5**	<0.005	1.7	0.9	0.6	1.2	<0.3	2.4	<0.3	1	<0.3	1	2.6	14.7	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.4	0.8	0.5	-	0.6	0.3	<0.3	0.4	<0.3	0.8	<0.3	0.3	<0.3	<0.3	0.9	4.2	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.3	<0.3	0.3	0.6	0.3	-	0.4	<0.3	<0.3	0.3	<0.3	0.5	<0.3	<0.3	<0.3	<0.3	0.6	2.4	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.3	<0.3	0.4	0.7	0.4	-	0.5	<0.3	<0.3	0.3	<0.3	0.7	<0.3	<0.3	<0.3	0.3	0.7	3.3	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	0.4	0.7	0.4	-	0.5	<0.3	<0.3	0.3	<0.3	0.6	<0.3	<0.3	<0.3	0.3	0.7	3.2	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	<0.3	<0.3	<0.3	0.4	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	<0.5
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	<0.5	<0.5	<0.5	1.2	<0.5	-	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	0.8	0.9	2.7	<0.1
95% UCL						-	-	-	2.2	**1.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						0.5	1	3.4	**5.7**	**3.9**	ND	4.3	2.3	1.6	3.1	1	5.9	ND	2.7	ND	2.1	6.3	37.6	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

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NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023							OCPs					OPPs	Chlorinated Hydrocarbons													
							Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Chlorpyrifos	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]							<50	60	-	-	-	4	200	600	26	24	-	14	-	-	-	10	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]							<50	240	-	-	-	16	360	1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]							<50	108	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]							-	3	-	-	-	0.2	800	2,400	104	96	-	56	-	-	-	40	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]							<50	432	-	-	-	30	1,440	4,320	187	173	-	100	-	-	-	72	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]							-	12	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)							-	3,600	40	530	3,600	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)							-	340	10	70	400	250	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential,Parkland and Public Open Space)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)													-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT													-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																				
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)		<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)		<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						Chlorinated Hydrocarbons												
						Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	10	-	-	120	-	-	-	-	-	-	-	10	14	-	-	4
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	18	-	-	126	-	-	-	-	-	-	-	18	25.2	-	-	7.2
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	40	-	-	480	-	-	-	-	-	-	-	40	56	-	-	16
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	72	-	-	864	-	-	-	-	-	-	-	72	101	-	-	28.8
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																		
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						Halogenated Benzenes								Halogenated Hydrocarbons				
						1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	86	-	150	-	-	-	2,000	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	344	-	600	-	-	-	8,000	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**														
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						Inorganics									MAH								
						Exchangeable Calcium	Exchangeable Sodium Percent	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	CEC	Tributyltin (ug/kg)	Cyanide Total	pH (lab)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	70	320	-	-	-	-	-	-	-	-	60	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	240	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	23,600	-	-	-	-	-	-	-	-	432	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																		
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	5.4	5	0.6	0.4	0.3	6.8	<1	<1	8.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	2.8	10.3	<0.2	<0.2	0.3	3.2	<0.5	<1	7.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	7.3	<0.2	<0.2	0.3	<0.2	7.6	<0.6	<1	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	2.1	<0.2	<0.2	<0.2	<0.2	2.1	<0.5	<1	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	10.2	6.2	1.8	0.3	0.8	13.1	10.8	<1	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	9.3	7	1.8	0.4	0.9	12.3	41.3	<1	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.5	7.3	0.6	0.2	0.5	6.9	<0.6	<1	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	8.2	8	0.9	0.4	0.8	10.4	1.6	<1	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.4	<0.2	0.5	<0.2	<0.2	6.1	<1.3	2	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	5.2	4.5	0.5	0.2	0.3	6.1	7.1	1	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.1	6.2	<0.2	0.3	0.4	5.7	<0.5	<1	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	4.2	6.2	<0.2	<0.2	0.3	4.7	<0.5	<1	7.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	3.5	25.7	0.4	0.2	1.4	5.7	<0.5	<1	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	1.7	37.7	0.8	<0.2	1.6	4.2	<0.5	<1	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	8.1	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						10.2	37.7	1.8	0.4	1.6	13.1	41.3	2	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023							Solvents													Phenols							
							Methyl Ethyl ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	Clay in soils <2um %	DENSITY(g/cm3)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]							4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]							7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]							16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]							28,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																	
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	10	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND		<5	<5	<5	<0.5	<0.5	<5	5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	17	2.47	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND		<5	<5	<5	<0.5	<0.5	<5	10	2.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	10	2.55	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	9	2.52	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	8	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<5	<5	<5	<0.5	<0.5	<5	11	2.34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	11	2.49	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<5	<5	<5	<0.5	<0.5	<5	11	2.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5	<5	<5	<0.5	<0.5	<5	10	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND		<5	<5	<5	<0.5	<0.5	<5	14	2.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND		<5	<5	<5	<0.5	<0.5	<5	6	2.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND		<5	<5	<5	<0.5	<0.5	<5	3	2.55	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)							ND	ND	ND	ND	ND	ND	17	2.6	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

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ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						Phenols					Amino Aliphatics				Amino Aromatics		Anilines					
						2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																	
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<6.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						Explosives				Halogenated		Herbicides	Nitroaromatics			Other	Pesticides		
						1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Hexachlorobenzene	Pentachlorobenzene	Pronamide	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Acetophenone	Chlorobenzilate	Carbazole	Pirimphos-ethyl
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**														
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	<1	<0.5	NT	NT	NT	NT	NT	<0.5	<0.5	<0.5
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	<0.05	<0.5	NT	NT	NT	NT	NT	<0.5	<0.5	<0.05
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023							Phthalates						SVOCs											
							Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																			
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND		<5.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND		<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023						SVOCs				VOCs			Acid Sulfate Soils[5]			Asbestos
						N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Asbestos (g/kg)[4]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	**<5.5**	**≤4.5**	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	**0.05%**
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	**0.02%**
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**											
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.7	5.7	2	**0.417%**
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.6	5.7	1	NAD
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.0	5.7	2	NAD
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.1	5.4	2	NAD
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<3	<3	<3	<3	<0.5	<0.5	<0.5	7.5	5.2	2	NAD
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<3	<3	<3	<3	<0.5	<0.5	<0.5	7.9	5.6	2	NAD
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.4	6.5	2	NAD
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.4	6.3	1	NAD
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.4	7.6	1	NAD
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.3	7.5	1	0.004%
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.5	6.8	1	NAD
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.9	7.2	1	NAD
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	8.2	1	NAD
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.3	7.4	1	NAD
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	8.1	6.8	1	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	-	-	-	NT
95% UCL						-	-	-	-	-	-	-	NA			
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND				

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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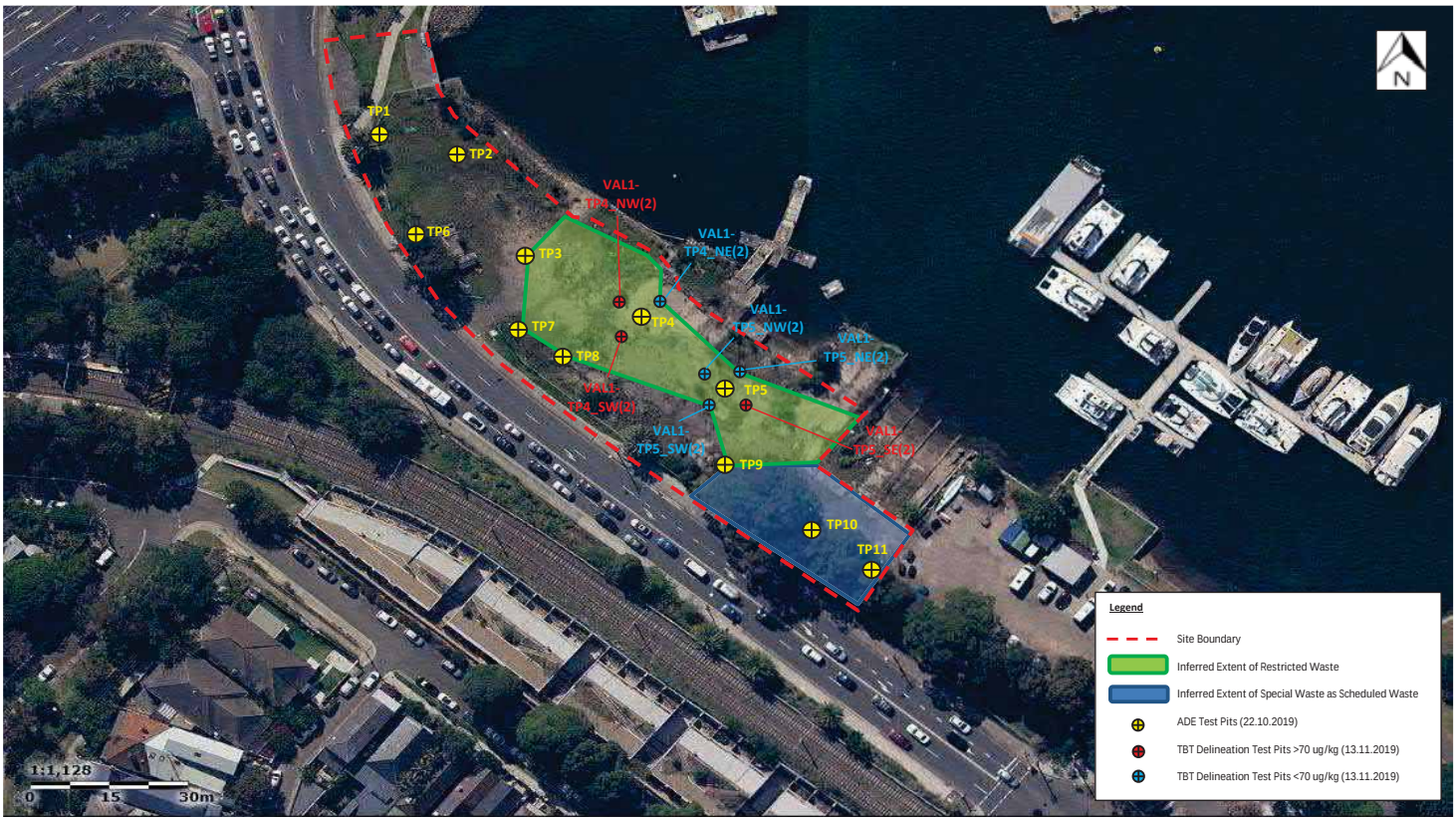
4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP



drawn	BE	client:	John Holland CPB Joint Venture
approved	MT	project:	Westconnex Stage 3B, The Crescent, Annandale NSW
date	19.12.2019		
scale	AS SHOWN	title:	Site Location and Exceedances Against the NSW EPA Waste Classification Guidelines
Original size	A4	project no: WCX-08-16890 / WAC004.v3f	figure no: FIGURE 1

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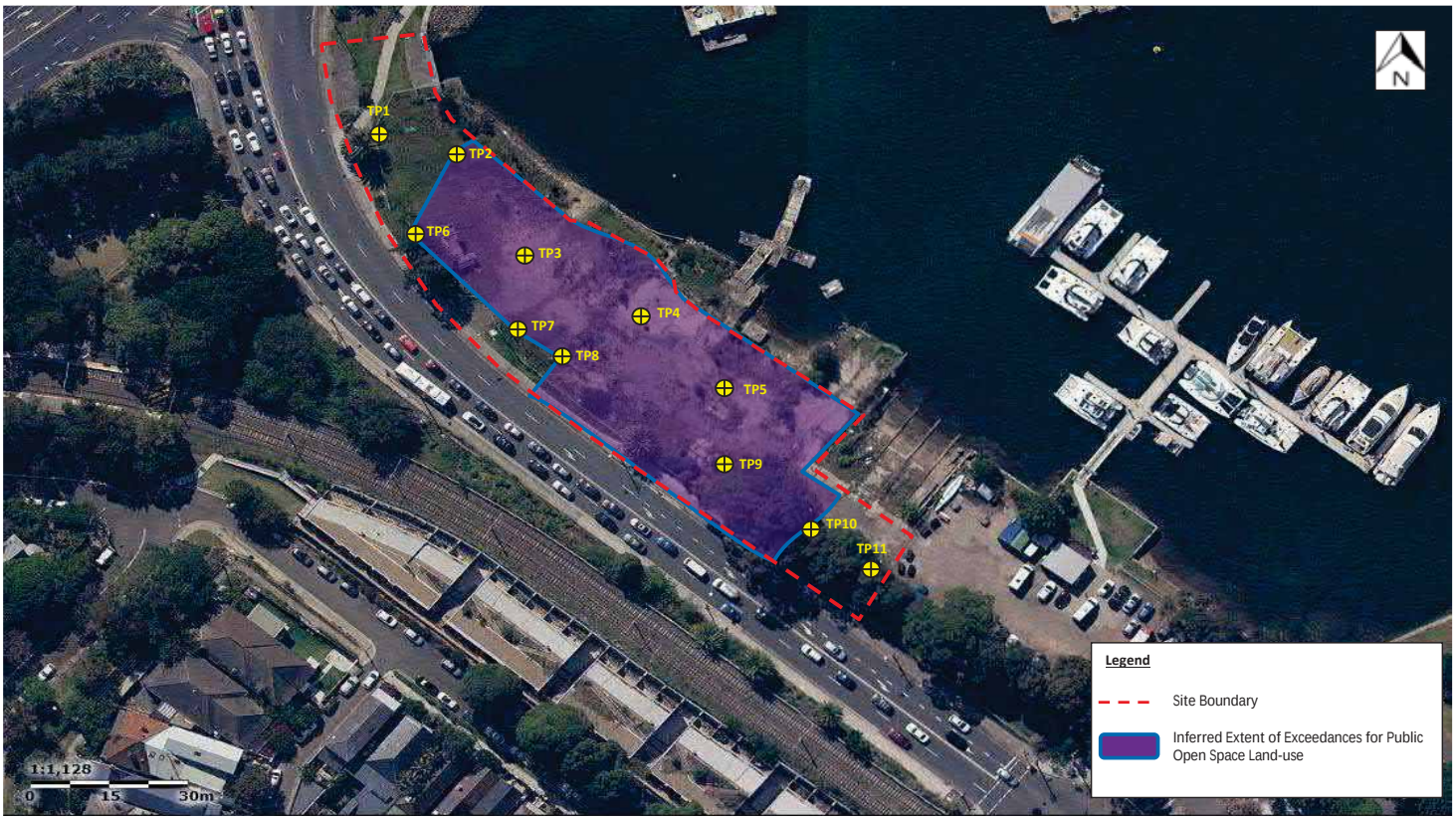

drawn	BE	client:	John Holland CPB Joint Venture
approved	EM	project:	Westconnex Stage 3B, The Crescent, Annandale NSW
date	04.12.2019		
scale	AS SHOWN	title:	Site Location and Exceedances of Public Open Space Land-use Criteria
Original size	A4	project no: WCX-08-16890 / WAC004.v3f	figure no: FIGURE 2

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ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

							TRHs				BTEX				Heavy Metals								PAHs												PAHs
							C6-C10 (F1)	>C10-C16 (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	PCP - Lead	Mercury	Nickel	Zinc	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[a]pyrene TEQ	Benz[a]pyrene	PCP - Benzo[a]pyrene	Benz[ghi]perylene	Benzo[b]fluoranthene	Benzo[j]fluoranthene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)							650		10,000		10	288	600	1,000	100	20	100	-	100	-	4	40	-	-	-	-	-	0.8	-	-	-	-	-	3.2	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)							2,600		40,000		40	1,152	2,400	4,000	400	80	400	-	400	-	16	160	-	-	-	-	-	3.2	-	-	-	-	-	12.8	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*							650		10,000		18	518	1,080	1,800	500	100	1,300	-	1,500	-	50	1,050	-	-	-	-	-	10	-	-	-	-	-	40	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*							-		-		0.5	14.4	30	50	5	1	5	-	-	5	0.2	2	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*							2,600		40,000		23	2,073	4,320	7,200	2,600	450	7,600	-	6,000	-	200	4,200	-	-	-	-	-	23	-	100	-	-	-	92	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP1 (mg/L)*							650		10,000		18	518	1,080	1,800	500	100	1,300	-	1,500	-	50	1,050	-	-	-	-	-	10	-	-	-	-	-	40	-	-	-	-
Acid Sulfate Soil Assessment Criteria*							-		-		-	-	-	-	20	20	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)							-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000	400,000	-	-	-	-	-	40	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)							-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200	30,000	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)							700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)							700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)							26,000	26,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)							6,500	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT							250	NL	-	-	6	6	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT							NL	NL	-	-	NL	NL	-	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)							82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																																	
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	14	<0.3	18	14	73	NT	<0.2	<10	120	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	6	31	NT	<0.2	<10	51	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	0.7	29	220	240	<0.5	0.3	30	1600	<0.3	<0.3	<0.3	<0.3	0.8	<0.3	NT	0.6	0.4	<0.3	0.3	<0.3	0.5	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	0.3	23	170	240	<0.5	0.2	<10	1400	<0.3	<0.3	<0.3	0.3	0.8	0.3	NT	0.8	0.6	0.3	0.4	<0.3	0.9	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	930	530	<0.5	<0.5	<1	<2	9	<0.3	6	31	35	NT	<0.2	<10	94	1.1	0.7	5	11	12.4	6.4	<0.005	9.5	6.4	8	7.3	2.2	15	1	1.1	1.1	1.1
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	390	320	<0.5	<0.5	<1	<2	<5	0.3	16	110	140	<0.5	<0.2	<10	710	0.3	0.3	1.5	5.2	4.1	0.7	NT	10	7.5	3.4	3.6	0.6	8.2	0.3	0.4	0.4	0.4
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<35	<50	570	270	<0.5	<0.5	<1	<2	<5	0.5	50	380	420	<0.5	0.5	27	1300	0.3	0.7	1.3	4.1	2.3	0.5	NT	3.7	2.5	1.9	3	0.5	6.3	<0.3	0.3	0.3	0.3
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	850	320	<0.5	<0.5	<1	<2	7	1.6	79	680	630	<0.5	0.6	34	4500	0.5	0.7	2	8.3	2.9	0.6	NT	3.9	3.3	2.3	3.7	0.6	9.2	0.4	0.4	0.4	0.4
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	140	140	<0.5	<0.5	<1	<2	<5	<0.3	33	230	130	<0.5	0.2	23	590	<0.3	<0.3	0.3	0.9	0.9	<0.3	NT	0.8	0.6	0.4	0.7	<0.3	1.6	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<35	<50	240	200	<0.5	<0.5	<1	<2	<5	<0.3	190	470	300	<0.5	0.3	37	840	<0.3	<0.3	<0.3	0.7	0.8	<0.3	NT	0.5	0.5	0.3	0.5	<0.3	1.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	13	20	74	NT	<0.2	10	69	<0.3	<0.3	<0.3	<0.3	0.7	0.3	NT	0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	14	73	99	NT	0.2	37	270	<0.3	<0.3	0.5	0.7	1.4	0.8	NT	1	0.4	0.3	0.7	<0.3	1.5	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	9	15	74	NT	<0.2	<10	130	<0.3	<0.3	<0.3	0.4	1.1	0.6	NT	0.7	<0.3	0.3	0.4	<0.3	0.5	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<35	<50	180	230	<0.5	<0.5	<1	<2	<5	0.4	25	170	360	<0.5	0.3	16	1500	<0.3	<0.3	<0.3	0.4	1.2	0.7	NT	0.7	0.3	0.4	0.5	<0.3	0.7	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	120	110	<0.5	<0.5	<1	<2	11	0.6	67	280	520	<0.5	<0.2	16	4600	<0.3	<0.3	<0.3	0.6	1.7	1.1	<0.005	1.2	0.4	0.6	0.7	<0.3	1	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	190	<100	<0.5	<0.5	<1	<2	<5	0.4	21	140	240	<0.5	0.8	<10	1700	<0.3	0.4	0.9	2.9	5.1	3.7	<0.005	3.9	1.5	1.6	2.7	<0.3	5	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	460	280	<0.5	<0.5	<1	<2	6	0.3	45	280	390	<0.5	0.3	21	1400	<0.3	0.7	1.2	4.1	7.8	5.8	<0.005	6.5	2.4	3.4	3.8	<0.3	6.4	0.3	0.3	0.3	0.3
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<35	<50	140	110	<0.5	<0.5	<1	<2	<5	<0.3	12	180	1500	0.7	0.4	23	360	<0.3	0.3	0.4	2.2	4.4	3.2	<0.005	3.5	1.2	1.5	2	<0.3	3.2	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	25	<0.3	8	100	54	NT	0.3	<10	180	<0.3	<0.3	<0.3	0.3	0.9	0.4	NT	0.6	0.6	<0.3	0.3	<0.3	0.4	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	11	110	440	2.2	0.9	11	280	<0.3	<0.3	<0.3	0.7	1.6	1.0	<0.005	1.1	0.4	0.4	0.7	<0.3	1.2	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	<100	100	<0.5	<0.5	<1	<2	<5	<0.3	10	9	25	NT	<0.2	<10	45	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<35	<50	200	<100	<0.5	<0.5	<1	<2	<5	<0.3	6	29	85	NT	0.3	<10	130	<0.3	0.6	1	3.5	6.7	5.0	<0.005	5.2	1.8	2.4	3.6	<0.3	6.1	<0.3	<0.3	<0.3	<0.3
ADE	VAL1-TP4_NE(3) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) _0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) _1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) _0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP6_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2) _0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2) _0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2) _0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) _0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) _0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	47	-	-	425	-	-	-	-	-	-	4.3	3.3	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	930	530	ND	ND	ND	ND	25	1.6	190	680	1500	2.2	0.9	37	4600	1.1	0.7	5.0	11.0	12.4	6.4	<0.005	10	7.5	8	7.3	2.2	15	1	1.1	1.1	1.1

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1								PCBs	OCPs					OPPs	Chlorinated Hydrocarbons								Chlorinated											
								Total PCBs	4,4'-DDD + 2,4'-DDD + 4,4'-DDT	Aldrin + Dieldrin	Chlordane	Endosulfan I + Endosulfan II + Endosulfan sulphate	Endrin + Endrin aldehyde + Endrin ketone	Heptachlor + Heptachlor epoxide	Hexachlorobenzene (HCB)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroform	Cis-1,2-dichloroethene	Cis-1,3-dichloropropene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)*								-	-	-	-	-	-	4	200	600	34	24	-	14	-	-	-	10	-	-	-	-	10	-	-	120	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)*								<50	<50	240	-	-	-	16	360	1,080	46.8	43.2	-	6.7	-	-	-	0.5	-	-	-	-	18	-	-	126	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*								<50	<50	108	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*								-	-	3	-	-	-	0.2	800	2,400	104	96	-	56	-	-	-	40	-	-	-	-	40	-	-	480	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*								<50	<50	432	-	-	-	30	3,440	4,320	187	173	-	100	-	-	-	72	-	-	-	-	72	-	-	864	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/kg)*								-	-	15	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria**								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)								7	-	3,600	40	530	3,600	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)								1	-	340	10	70	400	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)								-	11,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)								-	1,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																													
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<4.8	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.3	<0.3	<0.3	0.4	5.0	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.3	<0.3	<0.3	0.6	5.7	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	0.3	<0.3	0.4	1	7.1	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	9.8	<0.3	4.4	14	102.1	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	4.2	<0.3	1.3	8.9	57.3	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	2.4	<0.3	1	6.8	35.6	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	3.3	<0.3	1.7	9.1	47.9	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	0.5	<0.3	0.8	1.6	10.0	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	0.4	<0.3	0.7	1.4	8.4	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.3	<0.3	<0.3	0.4	5.0	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	0.4	<0.3	0.5	1.3	9.6	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	0.3	<0.3	<0.3	0.6	6.2	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	0.4	<0.3	<0.3	0.8	7.0	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	0.7	<0.3	<0.3	1	9.4	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	1.9	<0.3	0.9	5.2	31.8	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	3.7	<0.3	1.2	7	47.4	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	1.8	<0.3	0.4	3.5	24.4	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.3	<0.3	<0.3	0.4	5.7	<0.5	7.6	<0.2	0.2	<0.1	6.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	0.5	<0.3	0.7	1.2	9.7	<0.5	3.5	<0.2	0.2	<0.1	1.9	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.3	<0.3	<0.3	<0.3	4.8	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	2.4	<0.3	1	6.6	40.4	<0.5	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
ADE	VAL1-TP4_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					9.8	0	4.4	14	102.1	ND	7.6	ND	0.2	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1						Hydrocarbons											
						C6 - Hexane/Hexane	C6 - 1,1,2-trichloroethane	C9 - 1,3,5-trichloropropane	C9 - n-nonane/Nonane	C10 - Isopropylbenzene/Cumene	C10 - n-propylbenzene/Propylbenzene	C10 - Isopropylbenzene/Cumene	C10 - Tert-butylbenzene/TBB	C11 - Sec-butylbenzene/SBB	C12 - 1,2,4-trimethylbenzene/Pseudocumene	C12 - 1,3,5-trimethylbenzene/Mesitylene	C12 - n-butylbenzene/NBB	PAH (Total) a
Waste Classification Guidelines – General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	18	10	-	-	4
Waste Classification Guidelines – Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	18	25.2	-	-	7.2
Waste Classification Guidelines – General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	40	56	-	-	16
Waste Classification Guidelines – Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	72	101	-	-	28.8
Waste Classification Guidelines – Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soil Screening Criteria[2]						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type												
ADE	WAC1- TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1- TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	VAL1-TP4_NE(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) 1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2) 0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assesment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

						Halogenated Benzenes									Halogenated Hydrocarbons						Inorganics									
						1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	2-chlorotoluene	Hexachlorobenzene	Monochlorobenzene	1,2-dibromomethane	Dibromomethane	Dichloromethane	Hexachloroethane	Tetrachloroethene	Trichloroethene	Exchangeable Calcium	Exchangeable Sodium Percent	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	CEC	Phenol (Total)	Phenols (Non-chlorinated)	Cyanide Total	pH (Lab)
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)*						-	-	88	-	150	-	-	-	2,000	-	-	-	-	-	-	-	-	-	-	-	-	79	320	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)*						-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*						-	-	344	-	600	-	-	-	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	1,280	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*						-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-	-	-	-	-	-	-	-	-	23,600	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria**						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																									
ADE	WAC1- TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	10.1	1.6	0.8	0.1	0.2	11.2	<0.5	<1	7.2
ADE	WAC1- TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.2	13.8	1.6	0.2	0.6	4.7	<0.5	<1	8.5
ADE	WAC1- TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.5	8.7	0.9	0.3	0.4	5.1	4.8	<1	8.3
ADE	WAC1- TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.1	10.2	<0.2	<0.2	0.3	2.6	7.5	<1	8.2
ADE	WAC1- TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.2	11.5	<0.2	<0.2	0.3	2.7	1.8	<1	8.8
ADE	WAC1- TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.7	6.1	0.4	0.2	0.2	3.6	9.8	<1	8.6
ADE	WAC1- TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	8.4	<0.2	0.5	0.3	<0.2	9.2	1400	<1	8.3
ADE	WAC1- TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	5.3	<0.2	<0.2	<0.2	<0.2	5.4	64.7	<1	8.1
ADE	WAC1- TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	8.6	3	0.4	0.8	0.3	10.2	468	<1	8.9
ADE	WAC1- TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	8.8	<0.2	<0.2	0.6	<0.2	9.3	230	<1	8.5
ADE	WAC1- TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	4.2	9.4	0.6	<0.2	0.5	5.2	<0.5	<1	7.4
ADE	WAC1- TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.8	10.8	1.4	0.2	0.7	6.2	0.8	<1	8.6
ADE	WAC1- TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.6	<0.2	<0.2	0.3	<0.2	3.9	8.4	<1	8.4
ADE	WAC1- TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.2	5.4	0.5	0.2	0.2	4.2	0.6	<1	8.4
ADE	WAC1- TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	4.8	<0.2	<0.2	0.2	<0.2	5	<0.5	<1	8.5
ADE	WAC1- TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.2	<0.2	<0.2	<0.2	<0.2	3.4	<0.5	<1	8.5
ADE	WAC1- TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	5.5	3.6	0.5	0.4	0.2	6.6	12.8	<1	8.6
ADE	WAC1- TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	4.6	4.9	<0.2	0.3	0.2	5.1	3.2	<1	8.5
ADE	WAC1- TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.5	10.7	<0.2	<0.2	0.3	2.9	2.6	<1	8.7
ADE	WAC1- TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.9	8.5	<0.2	0.2	0.4	4.5	3.3	<1	8.7
ADE	WAC1- TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	2.8	<0.2	0.9	0.2	<0.2	3.9	2	<1	8.4
ADE	WAC1- TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<5	3.8	6.6	0.6	0.2	0.3	5	<0.5	<1	8.6
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	885	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	714	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	13.8	1.6	0.8	0.7	11.2	1400	ND	8.9

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assesment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1					MAH									Solvents								Phenols										Phenols						
					1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	naphthalene	n-butylbenzene	n-propylbenzene	sec-butylbenzene	styrene	tert-butylbenzene	Methyl Ethyl Ketone	Cyclohexanone (MEK)	4-Methyl-2-pentanone	Carbon tetrachloride	naphthalene	n-hexane	Vinyl acetate	Clay in soils <2um %	SOLVENTS (Lion3)	2,4,6-tribromophenol	2,4,5-Trichlorophenol	2,3,4,6-Tetrachlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2,4-Methylphenol	2-Nitrophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)*					-	-	-	-	-	-	-	65	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)*					-	-	-	-	-	-	-	168	7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)*					-	-	-	-	-	-	-	240	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)*					-	-	-	-	-	-	-	432	38,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)*																																					
Acid Sulfate Soils Screening Criteria**					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																																	
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	39	2.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1	<0.5
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	10	2.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	12	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	6	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	11	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	12	2.58	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6	<3.0	<1	<3.0
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	18	2.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	6	2.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1- TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.3	<5	6	2.46	<0.5	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.47	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	VAL1-TP4_NE(3) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(3) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(3) 1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(3) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(3) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(3) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2) (0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(3) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	39	2.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1					Amino Aliphatics			Amino Aromatics		Anilines						Explosives				Halogenated		Herbicides	Nitroaromatics			Other	Pesticides			Phthalates				
					N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosodimethylamine	2-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Hexachlorobenzene	Pentachlorobenzene	Pronamide	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Acetophenone	Chlorobenzilate	Carbazole	Pirimiphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
Waste Classification Guidelines – General Solid Waste CT1 (mg/kg)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste CT2 (mg/kg)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste SCC1 (mg/kg)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste TCLP1 (mg/L)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste SCC2 (mg/kg)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste TCLP2 (mg/L)*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria**					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																												
ADE	WAC1- TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC1- TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.3	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.3	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.3	<0.5	<0.5	<0.5
ADE	WAC1- TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	0.5
ADE	WAC1- TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1- TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assesment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

						SVOCs												SVOCs				VOCs			Acid Sulfate Soils*			Asbestos
						Di-n-octyl phthalate	2-(1-methylundecyl) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-Bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	Cis-1,4-Dichloro-2-butene	Trans-1,4-Dichloro-2-butene	Pentachloroethane	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Unit)	Asbestos in Soil
Waste Classification Guidelines – General Solid Waste CT1 (mg/kg)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste CT2 (mg/kg)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste SCC1 (mg/kg)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – General Solid Waste TCLP1 (mg/L)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste SCC2 (mg/kg)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines – Restricted Solid Waste TCLP2 (mg/L)¹						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria²						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.5	≤6.5	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05%
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02%
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI. Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																							
ADE	WAC1- TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.1	5.1	1	NAD
ADE	WAC1- TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.6	7.0	2	NAD
ADE	WAC1- TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.7	6.3	3	NAD
ADE	WAC1- TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.6	6.0	3	NAD
ADE	WAC1- TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.5	7.0	3	NAD
ADE	WAC1- TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	6.2	3	NAD
ADE	WAC1- TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	5.8	3	NAD
ADE	WAC1- TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	8.7	6.1	3	NAD
ADE	WAC1- TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	8.5	3	NAD
ADE	WAC1- TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.2	6.8	4	NAD
ADE	WAC1- TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.7	6.6	3	NAD
ADE	WAC1- TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.1	7.5	2	NAD
ADE	WAC1- TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	6.4	2	NAD
ADE	WAC1- TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	7.0	4	NAD
ADE	WAC1- TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	6.3	3	NAD
ADE	WAC1- TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	6.8	3	NAD
ADE	WAC1- TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.9	7.2	4	NAD
ADE	WAC1- TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	6.6	2	NAD
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	7.2	2	NAD
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.5	7.3	3	NAD
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	8.1	1	NAD
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	7.2	2	NAD
ADE	VA1-TP4_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP5_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VA1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	95% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA			

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assesment Criteria as per the Site's ASSMP

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	BE	20/05/20

0 4 8 12 16 20
SCALE 1:400 @A3 METRES

drawn	MC
approved	BE
date	20/05/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND SITE LOCATION PLAN

project no: WCX-08-17708_WAC144 | figure no: FIGURE 1 | rev: A

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ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144				TRHs				BTEX				Heavy Metals								
				C6-C10 (F1)	>C10-C16 (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Lead - TCLP	Mercury	Nickel	Zinc
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				650		10,000		10	288	600	1,000	100	20	100	-	100	-	4	40	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				2,600		40,000		40	1,152	2,400	4,000	400	80	400	-	400	-	16	160	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				650		10,000		18	518	1,080	1,800	500	100	1,900	-	1,500	-	50	1,050	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-		-		0.5	14.4	30	50	5	1	5	-	-	5	0.2	2	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				2,600		40,000		23	2,073	4,320	7,200	2,000	400	7,600	-	6,000	-	200	4,200	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]				-		-		0.58	57.6	120	200	20	4	20	-	-	20	0.8	8	-
Acid Sulfate Soils Screening Criteria[2]				-		-		-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/ Industrial)				-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000	400,000
NEPM 2013 HIL-C (Public Open Space)				-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200	30,000
NEPM 2013 - Management Limits HIL-D (Commercial/ Industrial)				700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)				800	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)				26,000	20,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)				5,100	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				250	NL	-	-	4	4	NL	NL	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				NL	NL	-	-	NL	NL	-	NL	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-	-
Consultant	**Sample LD**	**Date**	**Material Type**																	
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<35	<50	552	153	<0.5	<0.5	<1	<2	15	0.3	35	268	**588**	<0.005	0.8	33	8513
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	<35	<50	502	151	<0.5	<0.5	<1	<2	18	<0.3	33	328	**664**	<0.005	0.6	19	898
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<35	<50	963	143	<0.5	<0.5	<1	<2	6	<0.3	5	113	**414**	<0.005	<0.2	<10	1080
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	31	<0.3	26	198	**621**	<0.005	<0.2	36	1506
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<35	<50	<100	138	<0.5	<0.5	<1	<2	10	<0.3	8	33	16	NT	<0.2	<10	65
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	<5	<10	NT	<0.2	<10	<5
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<35	<50	112	<100	<0.5	<0.5	<1	<2	17	<0.3	40	141	**186**	<0.005	0.3	16	520
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<35	<50	145	<100	<0.5	<0.5	<1	<2	11	<0.3	13	90	**232**	<0.005	0.4	13	629
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	<0.3	7	59	**185**	<0.005	<0.2	<10	273
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	11	<0.3	12	94	**263**	<0.005	<0.2	12	425
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	<5	<10	NT	<0.2	<10	<5
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	32	69	NT	<0.2	<10	120
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<35	<50	265	124	<0.5	<0.5	<1	<2	13	0.8	31	143	**455**	<0.005	0.5	24	1191
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	36	**105**	<0.005	0.2	<10	233
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	23	59	NT	0.2	<10	144
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	13	<10	NT	<0.2	<10	43
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<35	<50	414	121	<0.5	<0.5	<1	<2	14	<0.3	31	223	**506**	NT	0.6	19	2735
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	<10	<50	540	530	<0.2	<0.5	<0.5	<0.5	16	<1	30	221	**538**	NT	0.4	18	1280
% UCL				-	-	-	-	-	-	-	-	-	-	-	-	371	-	-	-	-
Maximum Concentration (mg/kg)				0	0	963	530	0	0	0	0	31	0.8	40	328	**664**	0	0.8	36	8513

All units in mg/kg unless specified otherwise

NT - Not Tested

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144				PAHs																		
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(b)pyrene - TCLP	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(j,k)fluorene	Benzo(j)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				-	-	-	-	**0.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**200**
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				-	-	-	-	**3.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**800**
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				-	-	-	-	**10**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**200**
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-	-	-	-	-	-	**0.04**	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				-	-	-	-	**23**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**800**
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]				-	-	-	-	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/ Industrial)				-	**40**	-	-	-	**40**	-	-	-	-	-	-	-	-	-	-	-	-	-	**4,000**
NEPM 2013 HIL-C (Public Open Space)				-	**3**	-	-	-	**3**	-	-	-	-	-	-	-	-	-	-	-	-	-	**300**
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)				-						-													
Direct Contact (HSL-D)				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	**11,000**	-	-	-
Direct Contact (HSL-C)				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	**1,900**	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample LD**	**Date**	**Material Type**																				
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<0.3	0.5	0.7	3.6	**4.1**	**6**	ND	5.2	NT	3.2	1.8	3.7	0.5	6.9	<0.3	3.1	<0.3	1.8	6.8	41.9
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	0.4	0.5	0.8	2.9	**3.9**	**5.6**	ND	4.3	NT	3	1.2	2.9	0.5	5.2	0.3	3	<0.3	2.3	5.5	36.7
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<0.3	0.3	1.8	11.2	**11.1**	**16**	ND	12.7	NT	7	4.8	10.6	1.3	22.6	<0.3	5.4	<0.3	5.9	22.4	117.1
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<0.3	<0.3	<0.3	0.7	**0.8**	**1.3**	NT	0.9	NT	0.5	0.3	0.6	<0.3	1.2	<0.3	0.4	<0.3	0.4	1.4	7.2
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<0.3	<0.3	<0.3	0.8	**1.1**	1.8	ND	1.3	NT	0.8	0.5	0.9	<0.3	1.6	<0.3	0.8	<0.3	0.6	1.6	10.0
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<0.3	<0.3	<0.3	1.2	**1.5**	2.3	ND	1.7	NT	1.1	0.6	1.2	<0.3	2.2	<0.3	1	<0.3	0.7	2.1	13.3
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<0.3	<0.3	<0.3	0.7	**0.8**	1.4	NT	0.9	NT	0.5	0.4	0.7	<0.3	1.2	<0.3	0.4	<0.3	<0.3	1.3	6.9
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	0.5	<0.3	<0.3	<0.3	0.5	0.5	1.5
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<0.3	<0.3	0.4	1.2	**1.7**	2.5	ND	1.8	NT	1.2	0.5	1.3	<0.3	2.4	<0.3	1.1	<0.3	1.4	2.5	15.5
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<0.3	<0.3	<0.3	0.3	0.4	0.8	NT	0.4	NT	0.3	<0.3	0.3	<0.3	0.6	<0.3	0.3	<0.3	<0.3	0.6	3.2
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	0.3
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<0.3	0.5	0.7	2.4	**3.3**	**4.7**	NT	3.7	NT	2.5	1.3	2.5	0.4	4.6	<0.3	2.4	<0.3	1.8	4.8	30.9
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	<0.5	0.8	1.9	6.2	**6.9**	**10**	NT	NT	8.3	4.8	2.8	5.9	0.9	12.2	<0.5	3.6	<0.5	5.3	12.8	72.4
% UCL				-	-	-	-	**5.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)				0.4	0.8	1.9	11.2	**11.1**	16	0	12.7	8.3	7	4.8	10.6	1.3	22.6	0.3	5.4	0	5.9	22.4	117.1

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NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144				PCBs	OCPs						Cyanide	Phenols	VOCs / SVOCs		Organotins	PFAS			Physical Parametre		Acid Sulfate Soils[5]			Asbestos
				Total PCBs	Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD		Cyanide Total	Phenols Total	Sum of + VOCs	Sum of + SVOCs	Tributyltin (ug/Kg)	PFOS + PFHxS	PFOS + PFHxS - TCLP	PFOA	Clay in soils <2um %	Cation Exchange Capacity (CEC)	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Asbestos (g/kg)[4]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				<50	<50	60	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				<50	<50	240	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				<50	<50	108	-	-	-		-	-	-	-	-	0.05		0.2	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-	-	3	-	-	-		-	-	-	-	-	-	1.8	7.2	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				<50	<50	432	-	-	-		-	-	-	-	-	0.5		2	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCCP2 (mg/L)[1]				-	-	12	-	-	-		-	-	-	-	-	-	10	72	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]				-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	<5.5	≥4.5	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/ Industrial)				7	2,000	100	45	530	3,600		-	-	-	-	-	20	-	50	-	-		-	-	0.05%
NEPM 2013 HIL-C (Public Open Space)				1	340	20	10	70	400		-	-	-	-	-	1	-	10	-	-		-	-	0.02%
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)					-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample LD**	**Date**	**Material Type**																					
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<35	0.1	<0.4	0.1	<0.1	<0.3		2	<1	ND	ND	4.1	0.0054	NT	0.0004	12	13.6	7.8	5.8	3	Y
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	<35	0.1	<0.4	0.1	<0.1	<0.3		<1	<1	ND	ND	7.1	0.0065	NT	0.0004	13	12.2	8.1	6	3	ND
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	2	ND	ND	<0.5	0.0015	NT	<0.0002	8	7.6	6.9	5.7	1	ND
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0003	NT	<0.0002	8	5.7	7.4	5.7	1	ND
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	23	9.5	8.5	5.9	1	ND
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	NT	2.4	5.7	4.6	1	NT
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	1	ND	ND	1.3	0.0027	NT	0.0004	19	9.1	8.4	6.3	3	ND
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<35	0.2	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0014	NT	0.0003	13	8.7	8.8	6.3	2	Y
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0008	NT	<0.0002	10	5.9	8.2	5.7	2	ND
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0006	NT	<0.0002	11	6.2	7.7	6.7	4	ND
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	19	4.5	8.3	5.8	1	ND
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0002	NT	<0.0002	12	5.1	8.7	6.2	1	ND
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<35	<0.1	<0.4	0.1	0.1	<0.3		<1	<1	ND	ND	<0.5	0.0014	NT	<0.0002	10	8.6	8.5	6.4	3	ND
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0005	NT	<0.0002	14	7.4	8.4	6.3	2	ND
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	0.0006	NT	<0.0002	9	5.6	8.5	6.3	2	ND
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3		<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	8	3.2	8.5	6	1	ND
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<35	0.1	<0.4	0.1	<0.1	<0.3		NT	NT	NT	NT	NT	NT	NT	NT	NT	-	9.2	6.1	3	NT
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	0.1	0.9	<0.05	<0.05	<0.05	<0.05		NT	NT	NT	NT	NT	NT	NT	NT	NT	-	NT	NT	NT	NT
% UCL				-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	NA			
Maximum Concentration (mg/kg)				0.1	0.9	0	0.1	0.1	0		2	2	0	0	7.1	0.0065	0	0.0004	23	13.6				

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

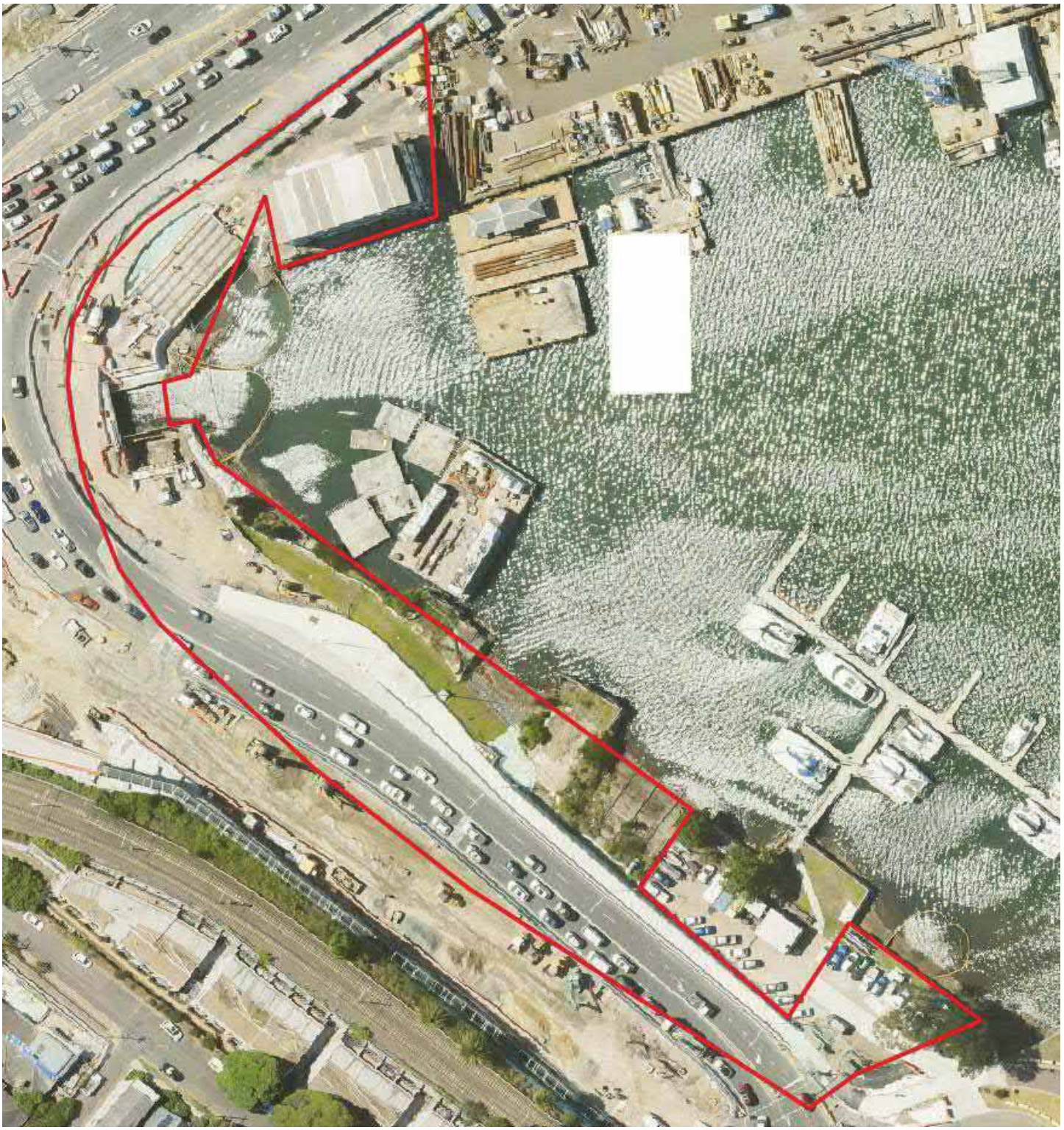
1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

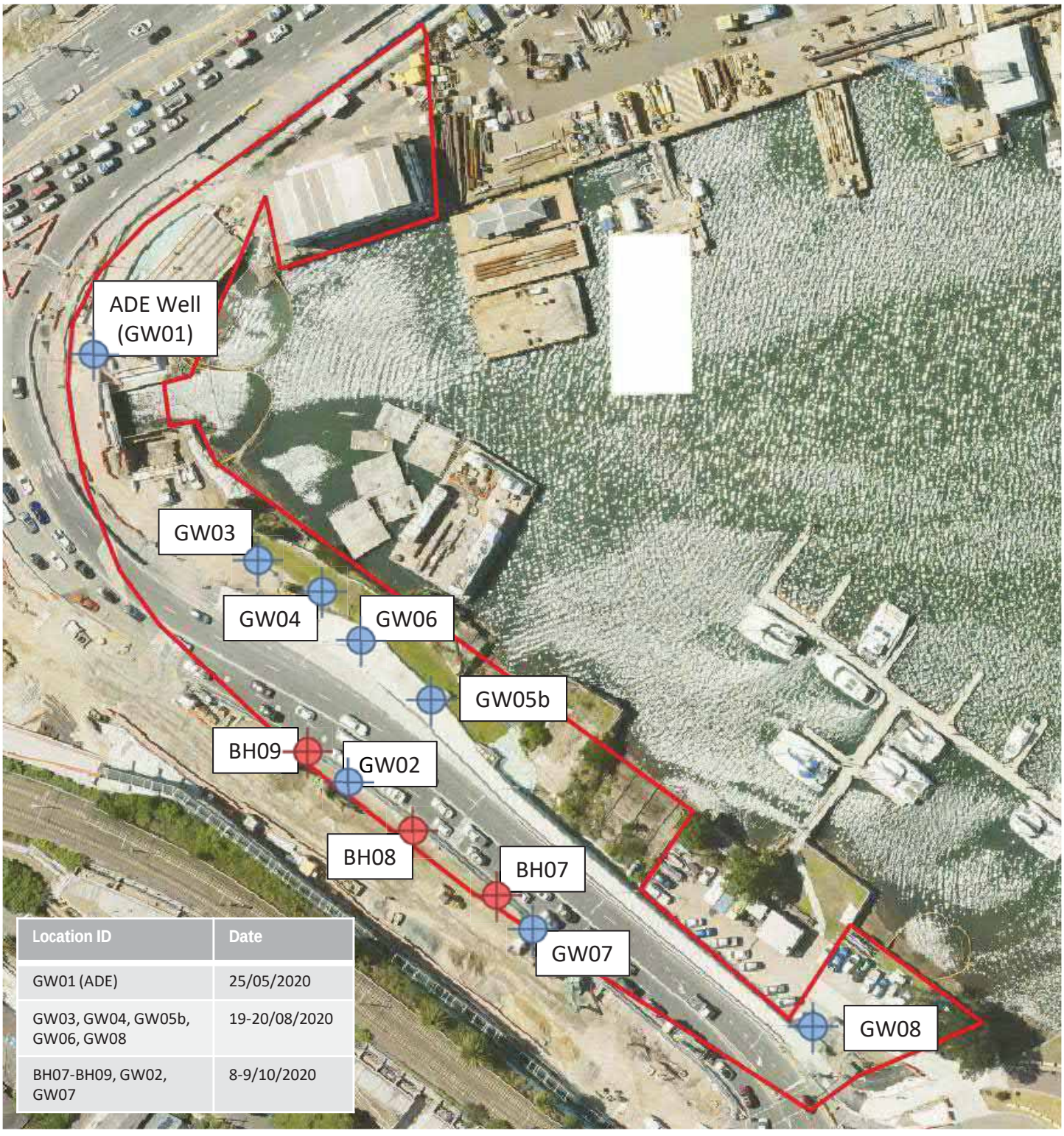
4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP



Approximate Site Boundary

Figure 1 – Site Location
Sub Site Area – Crescent Civil



Location ID	Date
GW01 (ADE)	25/05/2020
GW03, GW04, GW05b, GW06, GW08	19-20/08/2020
BH07-BH09, GW02, GW07	8-9/10/2020

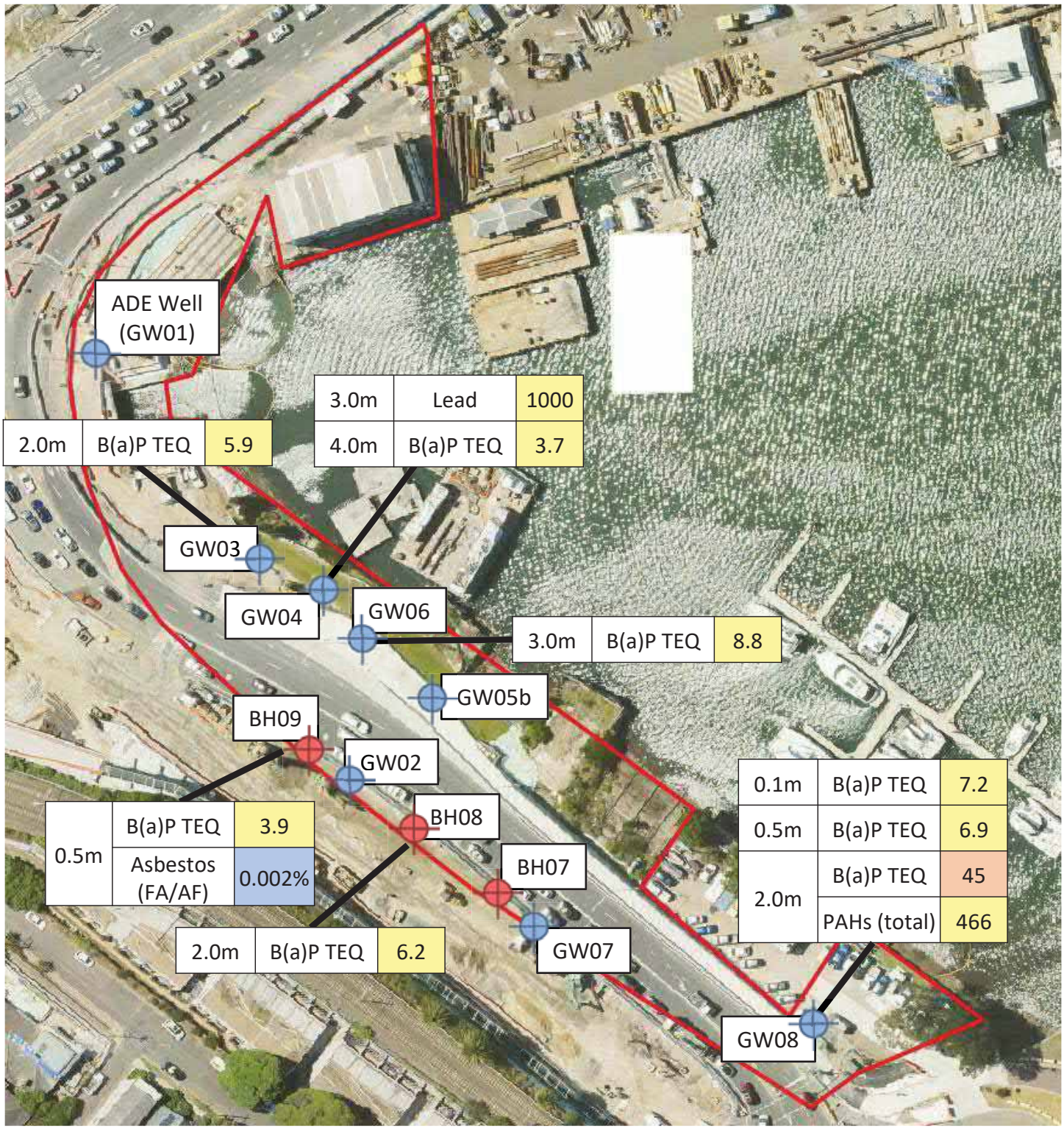
Approximate Site Boundary

Groundwater monitoring well

Borehole

Figure 2a – WSP intrusive locations
Sub Site Area – Crescent Civil

Figure 2b – WSP intrusive locations
Sub Site Area – Crescent Civil



Approximate Site Boundary

NEPM (2013) Table 1A(1) HILs Comm/Ind D Soil

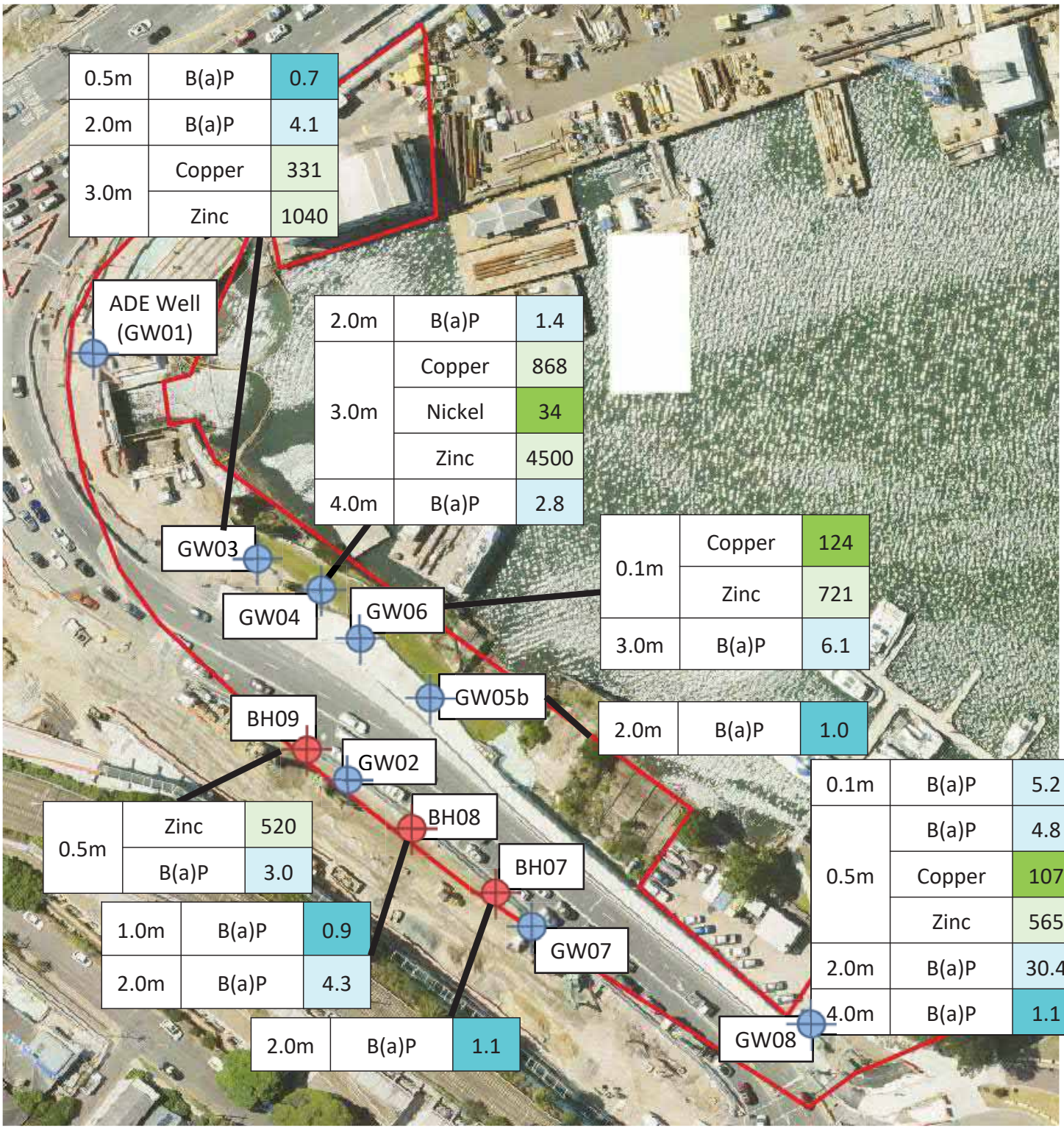
NEPM (2013) Table 1A(1) HILs Recreational C Soil

NEPM (2013) HSLs for Asbestos (all land uses)

Groundwater monitoring well

Borehole

Figure 4 – Soil human health criteria exceedances
Sub Site Area – Crescent Civil



Approximate Site Boundary

Groundwater monitoring well

Borehole

NEPM (2013) Table 1B(5) Site Specific EIL – Comm/Ind

NEPM (2013) Table 1B(5) Site Specific EIL – Urban Res & Public Open Space

NEPM (2013) Table 1B(6) ESLs for Comm/Ind, Coarse Soil

NEPM (2013) Table 1B(6) ESLs for Urban Residential/Public Open Space, Coarse Soil

N

Figure 5 – Soil ecological criteria exceedances
Sub Site Area – Crescent Civil

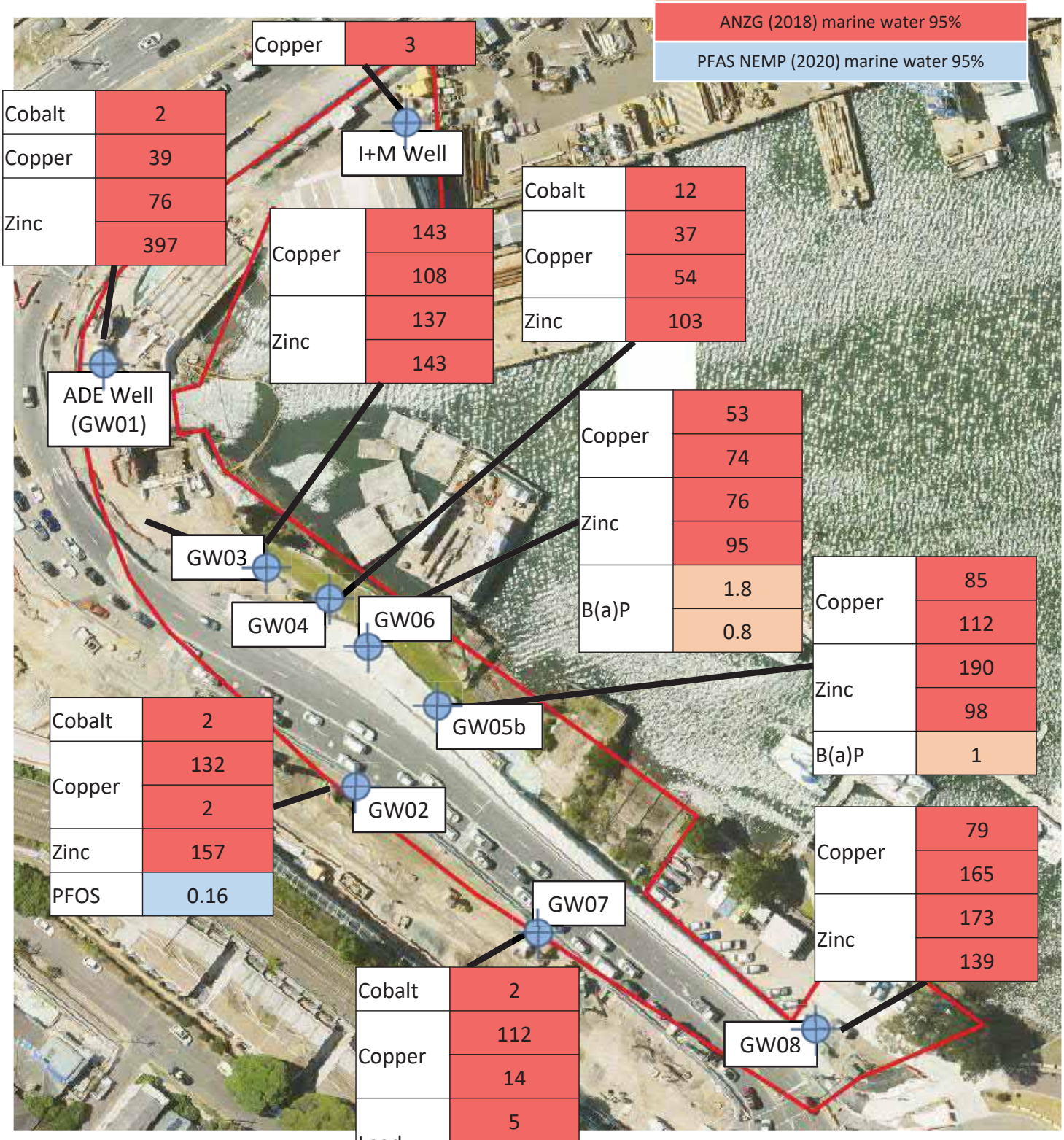
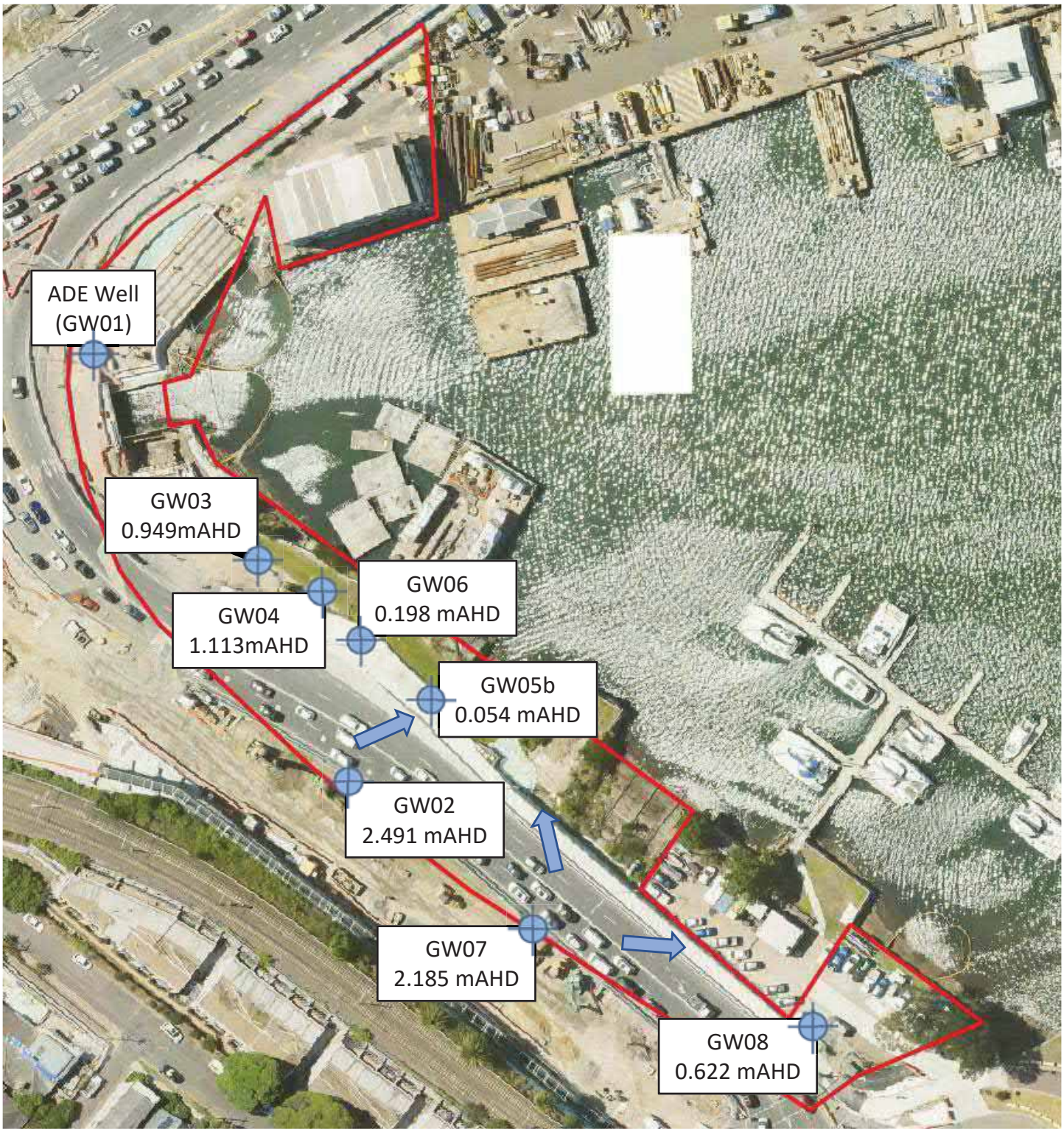


Figure 6 – Groundwater criteria exceedances
Sub Site Area – Crescent Civil



Measurements recorded 16 Oct 2020

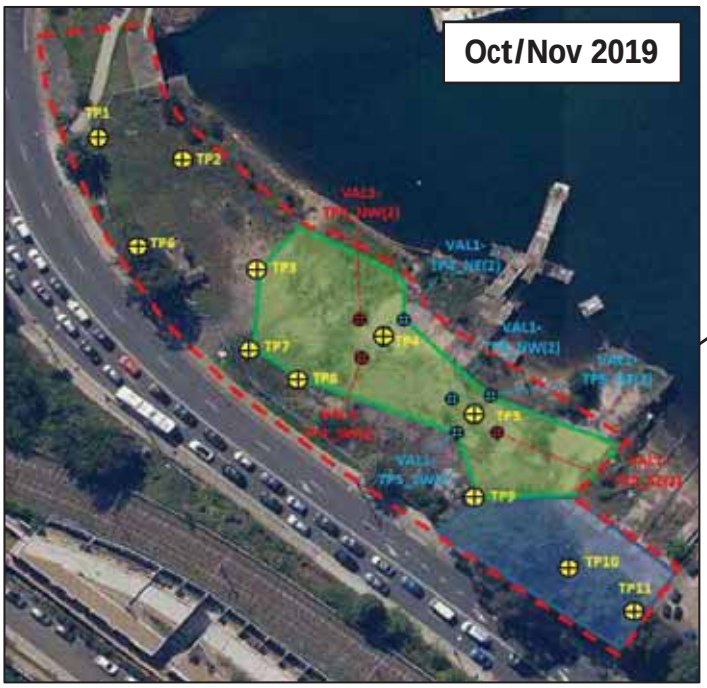
Approximate Site Boundary

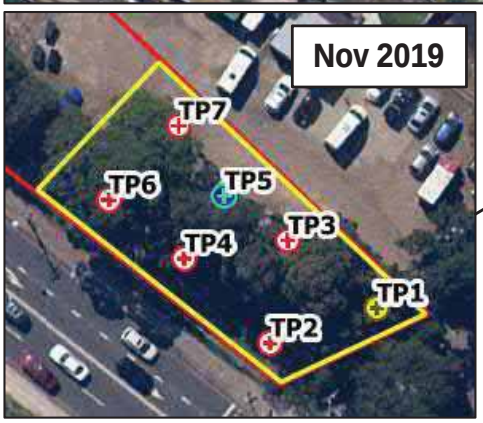
Inferred general groundwater flow direction

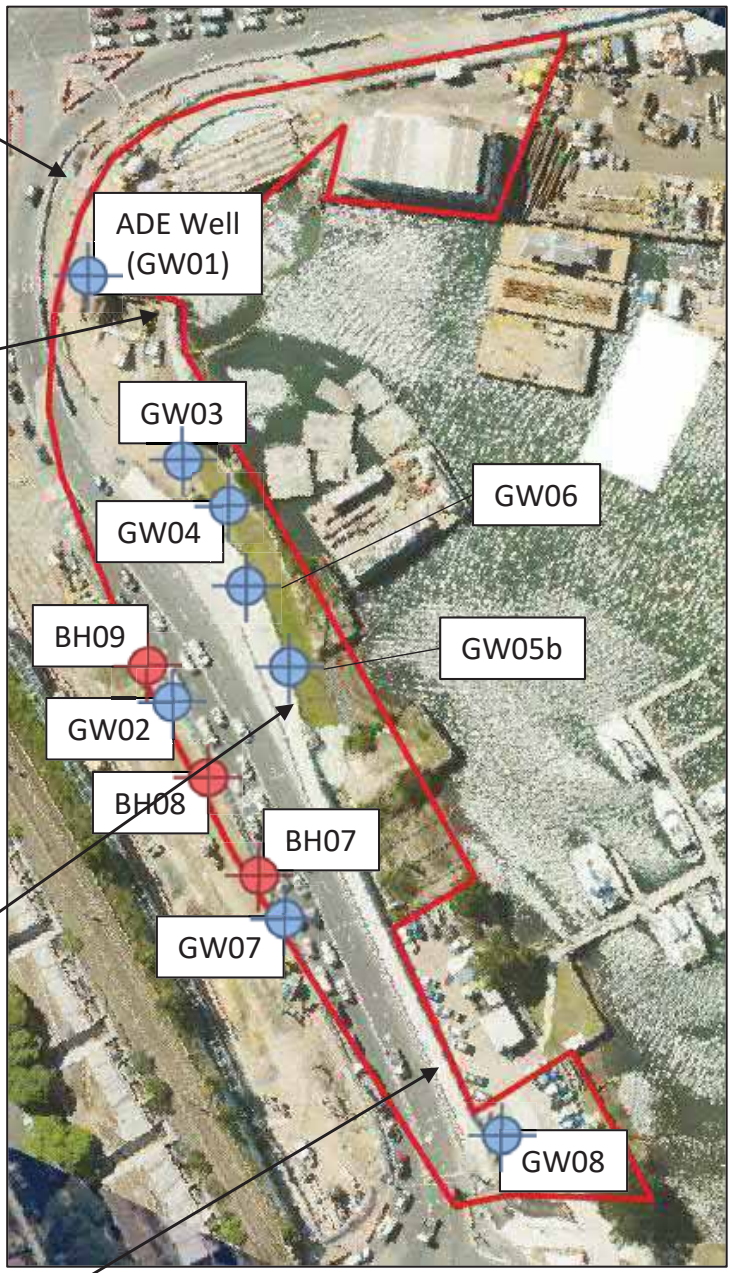
Groundwater monitoring well

Figure 7 – Groundwater flow direction
Sub Site Area – Crescent Civil

May/Jun 2020





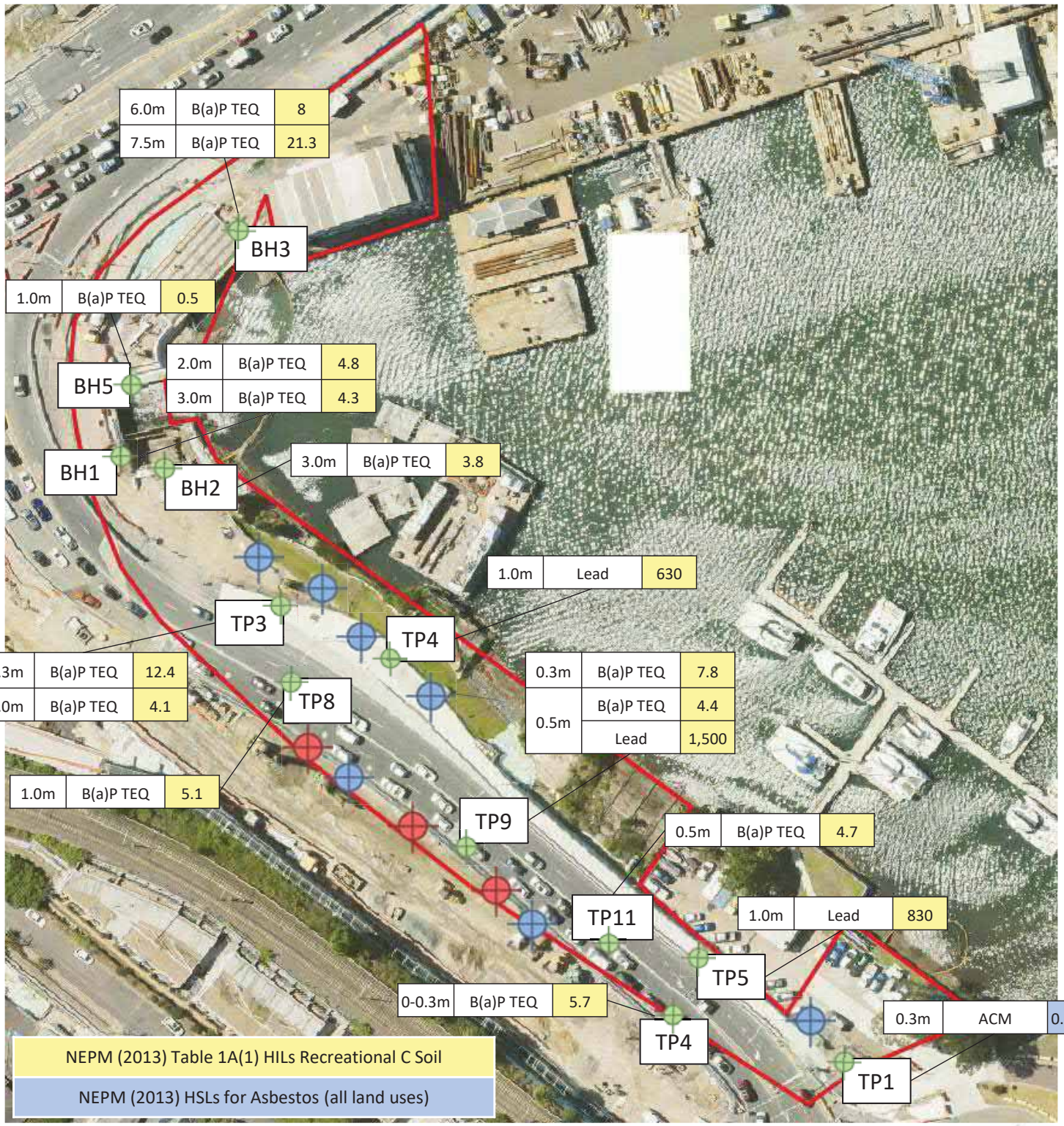


Approximate Site Boundary

Groundwater monitoring well

Borehole

Figure 8 – ADE waste classification
Sub Site Area – Crescent Civil



Approximate Site Boundary

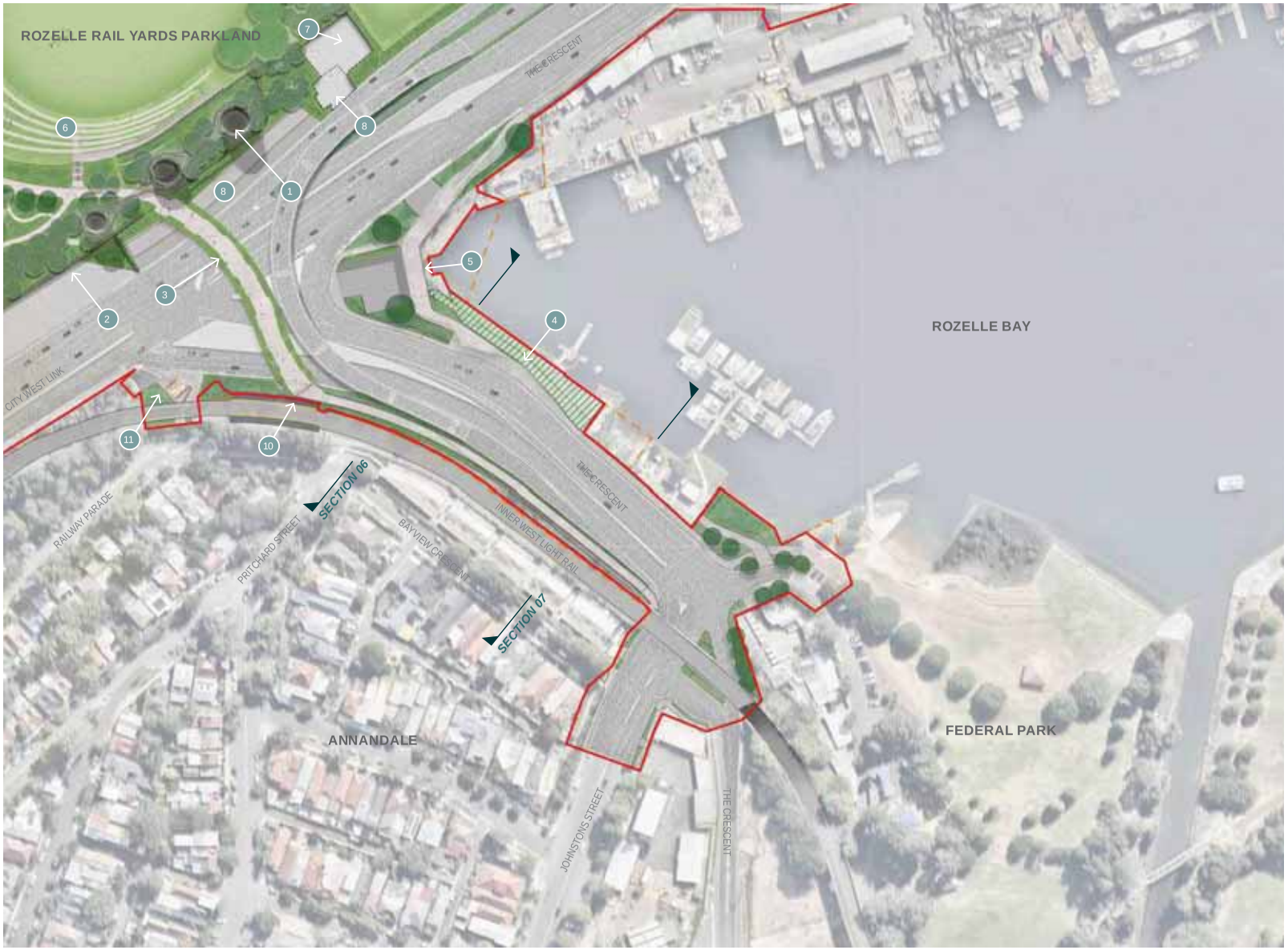
ADE borehole/test pit

Note – ADE locations are approximate only

WSP groundwater monitoring well

WSP borehole

Figure 9 – ADE waste classification Human health criteria exceedances
Sub Site Area – Crescent Civil



Key Project Elements

1. *Rozelle Ventilation Facility*
2. *Western Harbour Tunnel Portal*
3. *Green Link Bridge (subject to approval of modification SSI-7485-Mod-2)*
4. *Residual Land (subject to the Residual Land Management Plan)*
5. *Whites Creek Shared User Path Bridge*
6. *Landscape terraces*
7. *Sydney Trains Switching Station*
8. *Maintenance access and hardstand area*
9. *Western drainage channel*
10. *Rozelle Bay Light Rail Stop connection*
11. *Street pocket parks and landscaping*

LEGEND

- *Proposed tree planting*
- *Sand ground cover for play areas*
- *Gravel paths*
- *Publicly accessible turf areas*
- *Landscape revegetation areas*
- *Constructed wetland*
- *Concrete Path*
- *Softfall ground cover areas for fitness and play*
- *Project Boundary*

Note: further detail description for parkland elements in Rozelle Rail Yards parkland is provided in Section 4.6

0 20 40 80m

Figure 4-14: Rozelle - Concept Plan - Drawing 4 of 4

BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH07

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	**E 331125 N 6250521**

Borehole Information							Field Material Description				
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS					PID=1.4 ppm	J+B+P			FILL Gravelly SAND; dark brown, f-c grained sand, m-c grained sandstone gravels, R-SR, dry	D		CC_BH07_0.2
									Some fine A shale gravel inclusions			
					PID=1.3 ppm	J+B+P						CC_BH07_1.0 (QA04/QA04-A)
				1.00 -1					FILL SAND; yellow/light brown, m grianed, well sorted, minor black inclusions, dry			
				1.50					Becoming black and yellow/light brown, minor SR-SA gravel inclusions, inclusions of roots			
					PID=0.4 ppm	J+B+P						CC_BH07_2.0
				2.00 -2					[FILL] Gravelly SAND; black/light brown, A-R shale and sandstone gravels,			
				2.50					Clayey SAND; black/dark grey, m-c grained, l-m plasticity, moist, alluvial	M		
		▽							Becoming wet	W		
				2.90	PID=0.5 ppm	J+B+P			Weathered SANDSTONE; moist	M		CC_BH07_3.0
				-3								
				3.40					SANDSTONE; recovered as sandy silt, cream/light brown, f-m grained, dry	D		
					PID=1.4 ppm	J+B+P						CC_BH07_4.0 Target depth reached
				-4					END OF BOREHOLE AT 4.00 m			

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BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH08

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**9/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**9/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	

Borehole Information							Field Material Description					
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS									[SANDSTONE FILL] Gravelly SAND; brown, m-c grained, R-SR sandstone gravels, SA grey/dark grey shale gravels, dry	D		
					PID=6.8 ppm	J+B+P			Coarse shale gravel inclusions			CC_BH08_0.5
					PID=35.9 ppm	J+B+P						CC_BH08_1.0
				1.00 -1					[FILL] Gravelly SAND; black, broken anthropogenic inclusions (possible ACM tiles), possible coal tar inclusions	M		
				1.40					[FILL] Increased sand content Gravelly SAND; light brown/black, sandstone and shale gravel inclusions			
					PID=2.0 ppm	J+B+P						CC_BH08_2.0
				-2								
				2.10					[NATURAL] SANDSTONE; recovered as silty sand, brown/white with black mottles, minor inclusions of SR gravels, slightly moist	M		
				2.80					Increased silt content, white/grey, becoming harder			
					PID=4.0 ppm	J+B+P						CC_BH08_3.0 Target depth reached
				-3					END OF BOREHOLE AT 3.00 m			

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BOREHOLE NO.

BOREHOLE ENVIRONMENTAL LOG

BH09

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Hole Angle:	**90°**	Surface RL:	
Borehole Diameter:	**150 mm**	Bearing:	**---**	Co-ords:	

Borehole Information							Field Material Description					
METHOD	SUPPORT	WATER	RL(m)	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
SFA									FILL Sandy gravelly CLAY; black with grey gravels, m-h plasticity, m-c grained sand, SA-A gravels, slightly moist	M		
					PID=0.3 ppm	J+B+P			Inclusions of roots and anthropogenic material (soft plastic)			CC_BH09_0.5
				0.60					Gravelly SAND; black/light brown/cream mottled, m-c grained, SR-A sandstone and shale gravels, slightly moist			
					PID=0.7 ppm	J+B+P						CC_BH09_1.0 Borehole terminated at 1.0 mBGL - Refusal.
				-1					END OF BOREHOLE AT 1.00 m			

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW02

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**9/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**9/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Driller:	**Mac Geotech**	Surface RL:	
Borehole Diameter:	**150 mm**	Driller Lic No:		Co-ords:	

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Monument and casing Backfill		0.7	J+B+P		[SANDSTONE FILL] SAND; yellow/light brown, m-c grained, f-c grained R-SR gravel inclusions, slightly moist		M		CC_GW02_0.5
				0.60				[FILL] Gravelly SAND; light brown/grey, m-c grained, R-SR coarse gravels Becoming dark brown, anthropogenic inclusions (metal wire), slightly moist		M		CC_GW02_1.0
			Bentonite seal	-1	0.8	J+B+P						
				1.20				SANDSTONE; recovered as silty sand, white/light grey/cream, minor sandstone gravels				
			Sand									
					1.8	J+B+P		Increased silt content Water added to borehole, very stiff				CC_GW02_2.0
			1mm uPVC slotted screen	-2								
					1.4	J+B+P						CC_GW02_3.0
				3.00 -3				Silty SAND; brown, soft				
				3.50				Sandy SILT; white/light grey, hard				
					2.0	J+B+P						CC_GW02_4.0
				-4								
			Bottom cap		1.9	J+B+P						CC_GW02_5.0 Target depth reached
				5.00 -5				END OF BOREHOLE AT 5.00 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW03

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**19/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**19/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.253 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331080.014 N 6250585.732**

Borehole Information | **Field Material Description**

2 METHOD	3 SUPPORT	4 WATER	5 WELL CONSTRUCTION	6 RL(m)	7 DEPTH(m)	8 Field PID (ppm)	9 SAMPLE	10 GRAPHIC LOG	11 SOIL/ROCK MATERIAL FIELD DESCRIPTION	12 Field pH	13 MOISTURE	14 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST / FB VL L MD D VD H)	15 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up; Grout			0.2	B&J		FILL: Gravels, crushed gravels, grey, dry, road base		D		High tide during installation WSP_CCS_GW03_0.1 Roadbase for future footpath
						2.1	B&J		Crushed gravels, concrete inclusions				WSP_CCS_GW03_0.5 QA01/QA01A
				3	-1	2.0	B&J		Very hard, compacted fill, clay percentage of fill increases, mixed fill material				WSP_CCS_GW03_1.0
			Bentonite										
			Sand - (2mm)	2	-2	1.8	B&J						WSP_CCS_GW03_2.0
			2mm Machine Slotted Screen										
				1	-3	2.3	B&J		Dark in colour, clay percentage in fill inceased				WSP_CCS_GW03_3.0
				0	-4	1.9	B&J		Alternating layers of hard and soft material				WSP_CCS_GW03_4.0
									Very wet and 'sloppy' fill material encountered		W		
				-1	-5								
			Bottom cap		5.50				Target depth reached, hard sandstone layer encountered END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW04

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**19/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**19/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.516 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331092.577 N 6250579.151**

Borehole Information / Field Material Description

METHOD	SUPPORT	WATER	WELL CONSTRUCTION	RL(m)	DEPTH(m)	Field PID (ppm)	SAMPLE	GRAPHIC LOG	SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up Grout			0.8	B&J		FILL: Gravel road base, grey, dry.		D		High tide during installation WSP_CCS_GW04_0.1 Plastic material noted in fill material
						1.4	B&J		Clayey sandy fill material, black				WSP_CCS_GW04_0.5 Plastic fragments noted
				4	-1	2.3	B&J		Very hard and compacted layer				WSP_CCS_GW04_1.0 Nails and clinker noted in fill material
			Bentonite										
			Sand - (2mm)	3	-2	2.1	B&J						WSP_CCS_GW04_2.0
			2mm Machine Slotted Screen										
				2	-3	2.0	B&J		Very wet material encountered. Fill continued, higher percentage of clayey sand.		W		WSP_CCS_GW04_3.0
				1	-4	2.3	B&J		Very wet				WSP_CCS_GW04_4.0 Low recovery of material for samples
				0	-5	2.0	B&J		Very wet, "sloppy" brown material				WSP_CCS_GW04_5.0
			Bottom cap		5.50				Target depth reached, hard sandstone layer encountered END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05 (1)

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:		Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 151.174057 N -33.871855**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS					0.1	B&J		FILL: Road base, gravels, crushed gravels, grey, dry.		D		Low tide during drilling WSP_CCS_GW05_0.1
				0.50	0.0	B&J		Clayey SAND; with grey gravels, brown sand				WSP_CCS_GW05_0.5
				-1	1.7	B&J		Very hard, compacted material clay percentage increases.				WSP_CCS_GW05_1.0
				-2	2.3	B&J						WSP_CCS_GW05_2.0 Samples put on hold
				2.10				Refusal on potential former slab END OF BOREHOLE AT 2.10 m -				Struck a very large and very hard layer - Potential former slab from historical buildings that were present on the site. Hole moved 2m to south (GW05a)
				-3								
				-4								
				-5								

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05a (2)

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:		Surface RL:	
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 151.173979 N -33.87184**

Borehole Information							Field Material Description						
1	2	3	4	5	6	7	8	9	10		11	12	13
METHOD	SUPPORT	WATER	WELL CONSTRUCTION	RL(m) / DEPTH(m)	Field PID (ppm)	SAMPLE	GRAPHIC LOG	SOIL/ROCK MATERIAL FIELD DESCRIPTION		Field pH	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST / FB VL L MD D VD H)	STRUCTURE AND ADDITIONAL OBSERVATIONS
AS					0.1	B&J		FILL: Road base, gravels, crushed gravels, grey, dry. Clayey sandy fill material, black			D		High tide during drilling WSP_CCS_GW05a_0.1
					3.3	B&J		Fill material continues, gravels present, very compacted, dry.					WSP_CCS_GW05a_0.5
				-1	3.1	B&J							WSP_CCS_GW05a_1.0
						B&J							WSP_CCS_GW05a_2.0
				2.00 -2				Refusal on potential former slab END OF BOREHOLE AT 2.00 m -					Struck a very large and very hard layer - Potential former slab from historical buildings that were present on the site. Hole moved 1m to south (GW05b)
				-3									
				-4									
				-5									

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW05b

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.939 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331114.408 N 6250557.582**

Borehole Information

Field Material Description

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST | FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			0.4m stick up Grout						FILL: Gravel road base, grey, dry.		D		Samples from GW05a renamed and analysed as GW05b
									Clayey sandy fill material, black				
				4	-1				Very hard and compacted layer				
			Bentonite										
			Sand - (2mm)	3	-2	2.8	J+B						WSP_CCS_GW05b_2.0
			2mm Machine Slotted Screen										
				2	-3	3.1	J+B		Very wet material encountered. Fill continued, higher percentage of clayey sand.				WSP_CCS_GW05b_3.0
				1	-4	3.2	J+B		Very wet		W		WSP_CCS_GW05b_4.0
				0	-5	3.6	J+B		Very wet, "sloppy" brown material				WSP_CCS_GW05b_5.0
			Bottom cap	5.50					Target depth reached END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW06

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**Western shore of Rozelle Bay**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**4.716 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331100.495 N 6250570.368**

Borehole Information

Field Material Description

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST / FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Top cap and gatic were placed on top of a 0.4 m stickup for the concreters to install Grout			0.1	B&J		FILL Gravel roadbase, grey gravels, rounded to angular		D		High tide during installation WSP_CCS_GW06_0.1
						0.6	B&J		Sandstone sands observed.				WSP_CCS_GW06_0.5
				4	-1	0.8	B&J		Slightly increase in clay percentage, gravelly fill continues, dark brown, very hard layer of concrete / rock				WSP_CCS_GW06_1.0
			Bentonite										
			Sand - (2mm)	3	-2	2.3	B&J						WSP_CCS_GW06_2.0
			2mm Machine Slotted Screen										
				2	3.00 -3	2.6	B&J		FILL Sandy CLAY; topsoil material present, no inclusion of gravels				WSP_CCS_GW06_3.0 QA02/QA02A
				1	-4	2.8	B&J		Very wet, 'sloppy' material		W		WSP_CCS_GW06_4.0
				0	-5	3.8	B&J						WSP_CCS_GW06_5.0
			Bottom cap		5.20				Target depth reached at 5.2 mbgl. END OF BOREHOLE AT 5.20 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW07

SHEET 1 OF 1

Client:	**John Holland/CPB Contractors Joint Venture**	Date Commenced:	**8/10/20**
Project:	**Rozelle Interchange**	Date Completed:	**8/10/20**
Borehole Location:	**Crescent Civil Site**	Recorded By:	**LB**
Project Number:	**PS117368**	Log Checked By:	**MV**

Drill Model/Mounting:	**Commachio Geo 305**	Driller:	**Mac Geotech**	Surface RL:	
Borehole Diameter:	**150 mm**	Driller Lic No:		Co-ords:	**E 331129 N 6250506**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m) / DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 SOIL/ROCK MATERIAL FIELD DESCRIPTION	10 Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
NDD			Monument and casing; Backfill					[SANDSTONE FILL] Gravelly SAND; yellow/light brown, m-c grained sand, m-c grained R-SR gravels (white/grey), dry		D		
					1.2	J+B+P						CC_GW07_0.5
								Becoming more brown, some SA gravels and anthropogenic inclusions (metal wires)				
					0.9	J+B+P		Becoming more compact				CC_GW07_1.0
			Bentonite seal	1.00 -1				FILL Clayey SAND; black, m-c grained, l-m plasticity clay, minor sandstone gravel and anthropogenic inclusions (tile)				
				1.20						M		
			Sand					FILL Sandy CLAY; brown with black mottles, l-m plasticity, m-c grained, minor gravels, slightly moist				
					1.1	J+B+P						CC_GW07_2.0
AS			1mm uPVC slotted screen	2.00 -2				FILL Silty Gravelly SAND; black/dark/brown, dry		D		
								Becoming very hard				
					3.4	J+B+P						CC_GW07_3.0
				3.00 -3				CONCRETE				
				3.10				Weathered SANDSTONE; grey/brown				
				3.50				Becoming very wet and hard. Recovered as sandy clay, m-h plasticity, white/light brown/dark grey mottles.		W		
					1.8	J+B+P						CC_GW07_4.0
				-4								
			Bottom cap		0.7	J+B+P		Hole collapse				CC_GW07_5.0 Target depth reached
				5.00 -5				END OF BOREHOLE AT 5.00 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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BOREHOLE ENVIRONMENTAL LOG

BOREHOLE NO.

GW08

SHEET 1 OF 1

Client:	**John Holland | CPB**	Date Commenced:	**20/8/20**
Project:	**Rozelle Interchange - Crescent Civil Site**	Date Completed:	**20/8/20**
Borehole Location:	**South-east of boat hire shed**	Recorded By:	**CW**
Project Number:	**PS117368**	Log Checked By:	**NG**

Drill Model/Mounting:	**Geoprobe 305**	Driller:	**Stratacore**	Surface RL:	**2.691 m**
Borehole Diameter:	**50 mm**	Driller Lic No:		Co-ords:	**E 331187.163 N 6250495.069**

Borehole Information | **Field Material Description**

1 METHOD	2 SUPPORT	3 WATER	4 WELL CONSTRUCTION	5 RL(m)	5 DEPTH(m)	6 Field PID (ppm)	7 SAMPLE	8 GRAPHIC LOG	9 10 SOIL/ROCK MATERIAL FIELD DESCRIPTION	Field pH	11 MOISTURE	12 RELATIVE DENSITY /CONSISTENCY (VS S F ST VST FB VL L MD D VD H)	13 STRUCTURE AND ADDITIONAL OBSERVATIONS
AS			Top cap and gatic						FILL material		D		
			Grout			0.2	B&J		Clayey silty SAND, dark brown, slightly moist, with sandstone gravels.				WSP_CCS_GW08_0.1
			Bentonite			2.4	B&J		Crushed sandstone fill material.				WSP_CCS_GW08_0.5 QA03/QA03A
			Sand - (2mm)	2	-1	1.6	B&J		Material slightly moist		M		WSP_CCS_GW08_1.0
			2mm Machine Slotted Screen	1	-2	1.6	B&J						WSP_CCS_GW08_2.0
									Very wet, 'sloppy' material		W		
				0	-3	2.2	B&J						WSP_CCS_GW08_3.0
				-1	-4	3.0	B&J						WSP_CCS_GW08_4.0
				-2	-5		B&J						WSP_CCS_GW08_5.0
			Bottom cap						Hole collapse to 5.3 mbgl, well install				
					5.50				Target depth reached at 5.5 mbgl. END OF BOREHOLE AT 5.50 m -				

This borehole log should be read in conjunction with WSP's accompanying standard notes.

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Borehole Log WAC2-BH1

CLIENT: JHCPBJV
PROJECT NAME: Westconnex Stage 3B
PROJECT NUMBER: WCX-08-17868
PROJECT LOCATION: Rozelle Interchange Site
DATE STARTED: 25.05.2020
COMPLETED: 25.05.2020
DRILLING COMPANY: ADE
LOCATION: 331046.848, 6250625.986
EQUIPMENT: Comacchio GEO 305
ELEVATION (RL) 3.600 m

NOTES:

LOGGED BY: Haneen Safadi
CHECKED BY: Benjamin Everingham

Drilling Method	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Test Remarks	Additional Observations	Well Details	Horizons
SFA	3.5	0.5		SC	Clayey SAND: fine to medium grained, well graded, grey / brown, with gravels, moist.	BH1 0.3			Horizon A - General Fill
	3	1			(Horizon A) Silty SAND: fine to medium grained, yellow / grey and brown, moderately graded, some gravels, moist.	BH1 1.0			
	2.5	1.5							
	2	2				BH1 2.0			
	1.5	2.5							
	1	3				BH1 3.0			
	0.5	3.5							
	0	4				BH1 4.0			
	-0.5	4.5							
	-1	5		CL	(Horizon B) Silty CLAY: low plasticity, black, moist to wet.	BH1 5.0	Natural Shells		Horizon B - Marine Sediment / Alluvium Material
	-1.5	5.5							
	-2				Termination Depth at: 5.5 m BGL - Target Depth Reached				

Disclaimer This bore log is intended for environmental not geotechnical purposes.
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Borehole ID

RIC-WAJ_PZ_BH002

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								Soil Description					Observations
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
DT		N								CONCRETE: 230 mm.				
Pothole		N								Pothole interval not observed.				0.23: The following comments are based on sidewall observations: PROBABLY FILL: Cobbley, gravelly SAND with Silt, brown to pale yellow, medium to coarse grained, gravel medium grained, angular, cobbles comprised of Sandstone up to 500 mm.
AD/T		N				2.7	1		SP	Gravelly SAND with silt trace cobbles: medium to coarse grained, brown and pale yellow; gravel fine to medium grained; cobbles sub-angular.				
				SPT 1.50-1.95 m 6,5,6 N=11		1.7	2		SP	SAND with clay trace gravel: medium to coarse grained, brown; clay low plasticity; gravel fine grained.	M	MD		
WB		C		SPT 3.00-3.45 m HW/270mm,0,1,0 N=1		0.7	3		CI	Silty CLAY with sand: medium plasticity, dark brown; sand fine to medium grained; with shell fragments.	w > PL	VS		2.80: POSSIBLY ALLUVIUM / MARINE
				SPT 4.00-4.45 m HW/300mm,0,0,4 N=4		-0.3	4		SC	Clayey SAND: medium grained, dark grey; clay medium plasticity; with shell and shell fragments, occasional clay band..	W	VL		

Method
AD/T - Auger drilling TC bit
AD/V - Auger drilling V bit
WB - Washbore
SPT - Standard penetration test
PT - Push tube
AS - Auger screwing
CT - Continuous push tube 1.5m long 76mm diameter

Penetration
No resistance
Refusal

Water
Inflow
Partial Loss
Complete Loss

Samples and Tests
U - Undisturbed Sample
D - Disturbed Sample
SPT - Standard Penetration Test
ES - Environmental Sample
TW - Thin Walled
LB - Large Disturbed Sample

Moisture Condition
D - Dry
M - Moist
W - Wet

Consistency/Relative Density
VS - Very soft
S - Soft
F - Firm
St - Stiff
VSt - Very stiff
H - Hard
VL - Very loose
L - Loose
MD - Medium dense
D - Dense
VD - Very dense
Ce - Cemented
C - Compact

Logged in accordance with AS 1726:2017 Geotechnical site investigations

PSM 3.02.2_LIB.GLB Log PSM AU NONCORE BH NZ AU PSM3797 MASTER DATABASE ADDEMENT 20200519_DH.GPJ <<DrawingFile>> 24/05/2020 21:57 10.00.00.69 Datgel Fence and Map Tool | Lib: PSM 3.02.1 2019-03-06 Prj: PSM 3.02.0 2019-02-24

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								*Soil Description*					*Observations*
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 5.00-5.45 m 1,0,0 N=0					SC	Clayey SAND: medium grained, dark grey; clay medium plasticity; with shell and shell fragments, occasional clay band.. *(continued)* 50 mm clay band, with shells.	W	VL		
				SPT 6.00-6.45 m HW/450mm		-2.3	6		CL	Silty CLAY with sand: low plasticity, dark grey; sand fine to medium grained; with shell fragments.				
				SPT 7.00-7.45 m HW/450mm		-3.3	7				w > PL	VS		
				SPT 8.00-8.45 m HW/450mm		-4.3	8		CI	CLAY with silt: medium plasticity, grey.				
				SPT 9.00-9.45 m HW/450mm		-5.3	9		SP	SAND with silt: medium grained, grey; silt low plasticity.	W	VL		

Method
AD/T - Auger drilling TC bit
AD/V - Auger drilling V bit
WB - Washbore
SPT - Standard penetration test
PT - Push tube
AS - Auger screwing
CT - Continuous push tube 1.5m long 76mm diameter

Penetration
No resistance
Refusal

Water
Inflow
Partial Loss
Complete Loss

Samples and Tests
U - Undisturbed Sample
D - Disturbed Sample
SPT - Standard Penetration Test
ES - Environmental Sample
TW - Thin Walled
LB - Large Disturbed Sample

Moisture Condition
D - Dry
M - Moist
W - Wet

Consistency/Relative Density
VS - Very soft
S - Soft
F - Firm
St - Stiff
VSt - Very stiff
H - Hard
VL - Very loose
L - Loose
MD - Medium dense
D - Dense
VD - Very dense
Ce - Cemented
C - Compact

Logged in accordance with AS 1726:2017 Geotechnical site investigations

PSM 3.02.2. LIB.GLB Log PSM AU NONCORE BH NZ AU PSM3797 MASTER DATABASE ADDEMENT 20200519_DH.GPJ <<DrawingFile>> 24/05/2020 21:57 10.00.00.69 Datgel Fence and Map Tool | Lib: PSM 3.02.1 2019-03-06 Prj: PSM 3.02.0 2019-02-24

Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								Soil Description					Observations
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 10.00-10.45 m HW/260mm,0,1,0 N=1					SC	Clayey SAND trace silt: medium grained, grey; clay low plasticity.		VL		
				SPT 11.00-11.45 m 4,5,6 N=11		-7.3	11		SP	SAND: medium to coarse grained, pale grey and brown; with occasional low plasticity clay band 20 mm.	W	MD		
									SC	Clayey SAND: medium grained, grey to dark grey; clay low plasticity.		VL		
				SPT 12.00-12.45 m 2,0,1 N=1		-8.3	12		CI	CLAY trace sand trace silt: medium plasticity, dark grey; sand fine to medium grained.				
				SPT 13.00-13.45 m 4,0,0 N=0		-9.3	13		CI	Sandy CLAY: medium plasticity, grey; sand fine to medium grained.	w > PL	VS		
				SPT 14.00-14.45 m 2,3,2 N=5		-10.3	14		SP	SAND trace silt: medium to coarse grained, dark grey. Silt content increasing.	W	L		

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Penetration
No resistance
Refusal

Water
Inflow
Partial Loss
Complete Loss

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Engineering Log - Non Cored Borehole

Project No.: PSM3797

Client:	JHCPB	Commenced:	10/12/2019
Project Name:	Rozelle Interchange Geotechnical Site Investigation	Completed:	10/12/2019
Hole Location:	Rozelle Railyard	Logged By:	DH
Hole Position:	330724.8 m E 6250467.2 m N MGA94 Zone 56	Checked By:	PW/KH

Drill Model and Mounting:	Comacchio Geo 305	Inclination:	-90°	RL Surface:	3.72 m		
Hole Diameter:	115 mm	Bearing:		Datum:	AHD	Operator:	AZ

Drilling Information								***Soil Description***					***Observations***
Method	Penetration	Support	Water	Samples Tests Remarks	Recovery	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations	Moisture Condition	Consistency / Relative Density	Hand Penetrometer UCS (kPa) 100 200 300 400 500	Structure, Zoning, Origin, Additional Observations
WB		C		SPT 15.00-15.45 m 2,2,4 N=6					SP	SAND trace silt: medium to coarse grained, dark grey. *(continued)* Trace shell fragments, and wood.				
									SP	SAND: medium to coarse grained, pale grey to grey.	W	L MD to D		15.57: POSSIBLY EXTREMELY WEATHERED SANDSTONE
				SPT 15.87-15.97 m HB/100 N=R		-12.3	16			Hole Terminated at 15.97 m Target depth. Standpipe installed. Hole grouted to surface and reinstated.				15.97: Standpipe installed: VWP installed free hanging at 14.85 m 0.0 m - 0.2 m Concrete 0.2 m - 9.90 m - Grout 9.90 m - 10.90 m - Bentonite 10.90 m - 14.85 m - Sand 11.85 m - 14.85 m - Slotted PVC 14.85 m - 15.97 m - Bentonite
						-13.3	17							
						-14.3	18							
						-15.3	19							

Method
AD/T - Auger drilling TC bit
AD/V - Auger drilling V bit
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No resistance
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Logged in accordance with AS 1726:2017 Geotechnical site investigations

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Table D1 - Groundwater Gauging Data

Well ID	Gauging Date	Screen Interval (mBGL)	T.O.C Elevation (mAHD)	Well Depth (mBTOC)	Depth to Water (mBTOC)	Depth to Product (mBTOC)	Apparent LNAPL Thickness (m)	Corrected Water Elevation (mAHD)
GW01	4/06/2020	1.0-5.0	3.60	5.00	3.119	NA	-	0.481
	1/09/2020				3.385	NA	-	0.215
	16/10/2020				Well destroyed			
	17/12/2020							
GW02	4/06/2020	2.0-5.0	5.321	5.00	Well not yet established			
	1/09/2020							
	16/10/2020				2.830	NA	-	2.491
	17/12/2020				2.843	NA	-	2.478
GW03	4/06/2020	2.5-5.5	4.478	5.50	Well not yet established			
	1/09/2020				3.842	NA	-	0.636
	16/10/2020				3.529	NA	-	0.949
	17/12/2020				Not sampled during GME 4			
GW04	4/06/2020	2.5-5.5	4.776	5.50	Well not yet established			
	1/09/2020				4.330	NA	-	0.446
	16/10/2020				3.663	NA	-	1.113
	17/12/2020				4.438	NA	-	0.338
GW05b	4/06/2020	2.5-5.5	4.880	5.50	Well not yet established			
	1/09/2020				4.808	NA	-	0.072
	16/10/2020				4.826	NA	-	0.054
	17/12/2020				Not sampled during GME 4			
GW06	4/06/2020	2.2-5.2	4.644	5.20	Well not yet established			
	1/09/2020				4.493	NA	-	0.151
	16/10/2020				4.446	NA	-	0.198
	17/12/2020				Not sampled during GME 4			
GW07	4/06/2020	2.0-5.0	4.991	5.00	Well not yet established			
	1/09/2020							
	16/10/2020				2.806	NA	-	2.185
	17/12/2020				2.390	NA	-	2.601
GW08	4/06/2020	2.0-5.5	2.587	5.50	Well not yet established			
	1/09/2020				2.339	NA	-	0.248
	16/10/2020				1.965	NA	-	0.622
	17/12/2020				Not sampled during GME 4			
I&M	2/12/2020	11.85-14.85	2.370	13.50	5.476	NA	-	-3.106

Table D2 - Water quality data

Well ID	Gauging Date	pH	Temperature (ºC)	Conductivity (µS/cm)	Redox (mV)	Dissolved Oxygen (mg/l)	Comments
GW01	4/06/2020	7.64	19.0	29003	377.4	1.73	Brown, turbid, no odours/sheens
	1/09/2020	7.78	16.9	26706	247.3	1.87	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	Well destroyed					
	17/12/2020						
GW02	4/06/2020	Well not yet established					
	1/09/2020						
	16/10/2020	7.37	19.4	852	156.5	1.69	Low turbidity, grey
	17/12/2020	6.46	25.1	850	201.2	1.80	Light brown, slightly cloudy, no odours/sheen
GW03	4/06/2020	Well not yet established					
	1/09/2020	7.86	17.5	48763	197.8	3.78	Cloudy, slightly brown, no HCO/odour, no sheen
	16/10/2020	7.53	20.0	44987	341.7	6.03	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
GW04	4/06/2020	Well not yet established					
	1/09/2020	7.74	18.2	47356	321.3	3.67	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	7.62	20.0	45902	329.8	5.15	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
GW05b	4/06/2020	Well not yet established					
	1/09/2020	7.69	17.7	46873	246.3	4.29	Turbid, brown, no HCO/odour, no sheen
	16/10/2020	7.74	20.0	42581	334.0	2.93	Very dark brown, highly turbid
	17/12/2020	Not sampled during GME 4					
GW06	4/06/2020	Well not yet established					
	1/09/2020	7.95	17.6	48385	244.3	4.08	Very turbid, brown/grey, no HCO, no sheen
	16/10/2020	7.09	20.1	42371	301.1	4.40	Dark brown, highly turbid
	17/12/2020	Not sampled during GME 4					
GW07	4/06/2020	Well not yet established					
	1/09/2020						
	16/10/2020	8.42	19.3	860	254.8	2.07	Low turbidity, grey
	17/12/2020	5.98	28.7	403	386.1	3.40	Colourless, slightly cloudy, no odours/sheen
GW08	4/06/2020	Well not yet established					
	1/09/2020	7.70	18.8	38863	252.4	3.25	Slightly turbid, light brown, no HCO, no sheen
	16/10/2020	7.46	19.6	31355	339.7	4.12	Light brown, moderate turbidity
	17/12/2020	Not sampled during GME 4					
I&M	2/12/2020	6.95	21.1	27014	314.5	1.82	Clear water, no odours, black suspended particles, no sheen

(1) Redox potential values collected in the field using a silver chloride electrode have been corrected to standard hydrogen electrode values by adding 199 mV to each reading.

Rozelle Interchange
WestConnex
JOHN HOLLAND | CPB CONTRACTORS

Project: Rozelle Interchange WCX3B
Construction: VW Piezometers
Location: BH002

GEODATA

Water Level - Time Related Diagram

30/01/2020
12/10/2020

Plan View

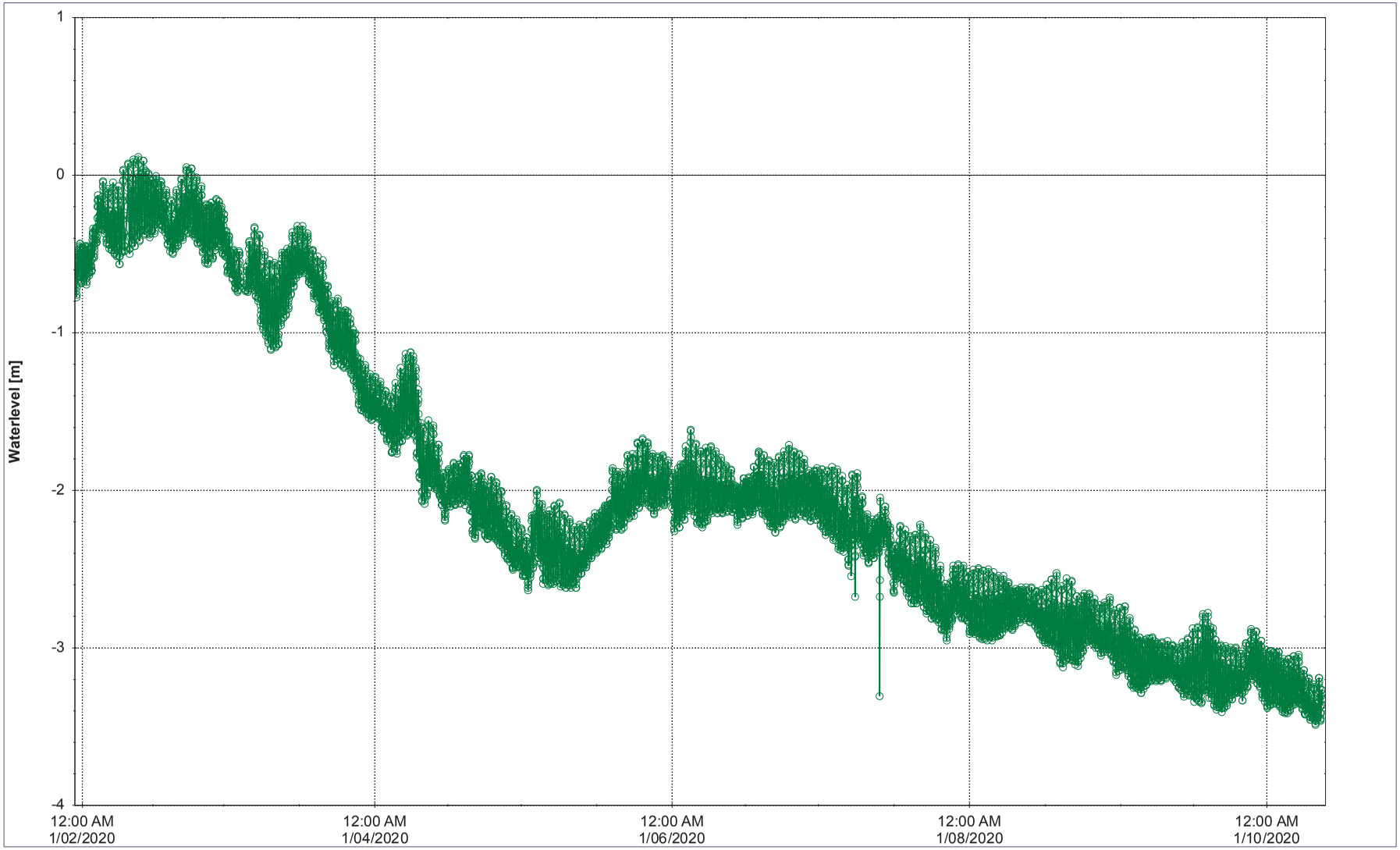
New zero measurements

- RIC-JV_PZ_BH002
  30/01/2020 11:00 AM

Remarks

- RIC-JV_PZ_BH002 Sensor RL = -10.5932

RIC-JV_PZ_BH002



wsp

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client:	Job Number: PS
Field Scientist: CW	Project Manager: MW

Well ID	GW08	Time	PM
Did well purge dry?	Y (N)	Volume removed (L)?	~ 20 L
Water Quality Meter Type		* Around 20 baiver loads removed. Put into the waste area.	

Water Quality Parameters

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

NO NEED TO DO

Well ID		Time	
Did well purge dry?	Y / N	Volume removed (L)?	
Water Quality Meter Type			

Water Quality Parameters

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client: JH / CPB - CV	Job Number:
Field Scientist: CW	Project Manager: MV

Well ID	GW04	Time	AM
Did well purge dry?	Y / (N)	Volume removed (L)?	~20 L
Water Quality Meter Type	N/A	* ~20 L removed in ~20 bailer loads.	
Water Quality Parameters		- Not dry but almost.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW06	Time	PM
Did well purge dry?	Y / (N)	Volume removed (L)?	~25-30 L
Water Quality Meter Type	N/A	* Between 25-30 L removed over 25-30 bailer loads.	
Water Quality Parameters			

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity
				DIDNT DO.			

Version: B	Reviewer: C. McKay	Date: 07/04/2016	Reviewer: C. McKay	Date: 07/04/2016

wsp

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 20/8/20	Time: Arrive AM Depart PM
Client: JH/CPB Rozelle-Crescent wells	Job Number:
Field Scientist: CW	Project Manager: MV

Well ID	GW03	Time	AM
Did well purge dry?	Y / (N)	Volume removed (L)?	~25
Water Quality Meter Type	N/A	*Removed approx. 25 bailer loads out.	
Water Quality Parameters		didn't go dry. Tipped water into the collection pond/dam on site.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW05b	Time	AM
Did well purge dry?	Y / (N)	Volume removed	~20L removed.
Water Quality Meter Type	N/A	* ~20L	in ~20 bailer loads.
Water Quality Parameters		*Not dry. Recharge rate too high.	

Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

*Met Roger on site - PM.

Contaminated Land Management

Standard Form 3.1: Groundwater Well Development Record

Job Information	
Date: 9/10/20	Time: Arrive Depart 2pm
Client: **JHCPB**	Job Number: **PS117368**
Field Scientist: **Leila Bowe**	Project Manager: **Matt Vanderheyden**

Well ID	GW02	Time	NR
Did well purge dry?	Y / N	Volume removed (L)?	20
Water Quality Meter Type	—		

Water Quality Parameters							
Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

Well ID	GW07	Time	NR
Did well purge dry?	Y / N	Volume removed (L)?	20
Water Quality Meter Type	—		

Water Quality Parameters							
Volume purged (L)	pH	EC (mS/cm)	Redox (mV)	DO (ppm)	Temperature (°C)	Colour/ odour	Turbidity

			TRH				Asbestos						TPH					BTEX			
			C6-C10 minus BTEX (F1)	C10-C16	C16-C34 (F3)	C34-C40 (F4)	Asbestos (Fines and Fibrous <7mm)	Asbestos (Trace)	Asbestos Containing Material	Asbestos Containing Material (as 15% Asbestos in A	Asbestos from FA & AF	Fibrous Asbestos >7mm	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylene Total
			mg/kg	mg/kg	mg/kg	mg/kg	g	Fibres	g	% (w/w)	% (w/w)	g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	100	100	0.0004	5	0.1		0.001	0.0004	10	50	100	100	50	0.2	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																					
NEPM 2013 Table 1A(1) HILs Rec C Soil																					
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand			260 [#8] | 370 [#8] | 630 [#8] | NL [#9]															3 | 3 | 3 | 3	NL [#9]	NL [#9]	230 | NL [#9] | NL [#9] | NL [#9]
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand			NL [#9]															NL [#9]	NL [#9]	NL [#9]	NL [#9]
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil				1,000 [#10]	2,500	10,000															
Lab Report	**Field ID**	**Date**																			
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<10	<50	**450**	**230**	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**270**	**260**	**530**	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	<10	<50	**700**	**340**	-	-	-	-	-	-	<10	<50	**410**	**460**	**870**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	<10	<50	**160**	**120**	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	**110**	**110**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	<10	<50	**580**	**280**	-	-	-	-	-	-	<10	<50	**290**	**390**	**680**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	<10	<50	**280**	**180**	-	-	-	-	-	-	<10	<50	**170**	**190**	**360**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_GW05b_0.5	20/08/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	<10	<50	**180**	**110**	-	-	-	-	-	-	<10	<50	**110**	**110**	**220**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	<10	<50	**260**	<100	-	-	-	-	-	-	<10	<50	**170**	**140**	**310**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_GW08_0.5	20/08/2020	<10	<50	**330**	**130**	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**200**	**190**	**390**	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	<10	**70**	**1,270**	**250**	-	-	-	-	-	-	<10	<50	**970**	**480**	**1,450**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	<0.2	<0.5	<0.5	-
	WSP_CCS_BH07_1.0	8/10/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH07_4.0	8/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH9_0.5	8/10/2020	<10	<50	**130**	<100	**0.0075**	0 [#11]	<0.1	<0.01	**0.002**	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH9_1.0	8/10/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_0.5	8/10/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	<10	<50	**120**	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH08_2.0	9/10/2020	<10	<50	**180**	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	**110**	<100	**110**	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	<10	<50	<100	<100	<0.0004	0 [#11]	<0.1	<0.01	<0.001	<0.0004	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_4.0	9/10/2020	<10	<50	<100	<100	-	-	-	-	-	-	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7) BaP TEQ calc by multiplying the conc of each carc. PAH in sample by its BaP TEF (ref Table 1A(1)) & summing
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application should consider presence of carcinogenic PAHs (should meet BaP TEQ HIL) & naphthalene (should meet relevant HSL)
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe important and should be considered where appropriate (refer Schedule B7).
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for where 50% bioavailability considered. Site-specific bioavailability should be considered where appropriate.
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessment should be considered if elemental mercury is present, or suspected to be present.
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspected at a site, a site-specific assessment of exposure to all PCBs (inc dioxin like PCBs) should be undertaken
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should not be subtracted from the relevant fractions to obtain F1 & F2
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			MAH									PAH																							
			1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																	40[#1]	4,000[#2]
NEPM 2013 Table 1A(1) HILs Rec C Soil																																	3[#1]	300[#2]
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														NL [#9]				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														NL [#9]				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																																		
Lab Report	**Field ID**	**Date**																																	
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.6**
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.8**	**0.7**	-	-	-	**0.7**	-	**2.0**	-	-	-	**1.2**	**1.9**	**0.9**	**8.3**
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	**0.9**	**1.7**	**3.7**	**4.1**	**5.1**	**2.3**	**1.6**	**3.4**	**0.5**	**9.0**	**0.8**	**2.1**	<0.5	**6.4**	**8.6**	**5.9**	**50.2**
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	**0.5**	**0.6**	**0.7**	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5	<0.5	<0.5	**1.3**	**0.7**	**4.3**
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	**1.1**	**1.4**	**1.6**	**0.9**	**0.5**	**1.1**	<0.5	**2.4**	<0.5	**0.9**	<0.5	**1.2**	**2.5**	**1.8**	**13.6**
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	**0.9**	**2.5**	**2.8**	**3.2**	**1.7**	**1.1**	**2.4**	<0.5	**4.9**	<0.5	**1.4**	**0.9**	**3.2**	**5.2**	**3.7**	**30.2**
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	**0.6**	**1.1**	**1.0**	**1.1**	**0.5**	<0.5	**1.1**	<0.5	**3.5**	<0.5	<0.5	<0.5	**3.5**	**3.4**	**1.2**	**15.8**
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	**0.6**	**1.4**	**6.0**	**6.1**	**7.5**	**3.9**	**2.3**	**5.4**	**0.7**	**12.0**	<0.5	**3.0**	<0.5	**4.3**	**12.0**	**8.8**	**65.2**
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	**4.9**	**5.2**	-	**3.0**	-	**4.2**	**0.5**	**7.5**	<0.5	**2.3**	<0.5	**3.5**	**7.7**	**7.2**	**46.4**
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	**0.6**	**1.1**	**4.6**	**4.8**	**5.3**	**3.0**	**2.2**	**4.3**	**0.6**	**9.7**	<0.5	**2.2**	**0.7**	**4.8**	**8.6**	**6.9**	**52.5**
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**10.8**	**2.2**	**10.1**	**37.3**	**30.4**	**40.3**	**14.9**	**12.1**	**33.2**	**3.8**	**81.8**	**8.9**	**13.5**	**19.6**	**76.6**	**70.9**	**45.0**	**466**
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	**0.9**	**1.3**	**1.1**	**1.2**	**0.5**	<0.5	**1.1**	<0.5	**3.8**	<0.5	<0.5	**0.7**	**3.4**	**3.1**	**1.4**	**17.1**
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	**0.5**
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	**0.8**	**1.1**	**1.2**	**0.8**	**0.5**	**0.6**	<0.5	**1.4**	<0.5	**0.6**	<0.5	<0.5	**1.6**	**1.4**	**8.6**
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.3**	**3.0**	**3.1**	**2.5**	**1.3**	**2.1**	<0.5	**4.9**	<0.5	**2.2**	<0.5	**1.5**	**4.4**	**3.9**	**27.3**
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.6**
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.6**	-	**1.1**
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	**0.6**	**1.0**	**0.9**	**1.0**	**0.6**	<0.5	**0.9**	<0.5	**2.1**	<0.5	<0.5	<0.5	**2.0**	**2.2**	**1.1**	**11.3**
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	**1.2**	**4.5**	**4.3**	**4.8**	**2.1**	**2.1**	**3.8**	**0.5**	**8.5**	<0.5	**2.0**	<0.5	**4.0**	**7.1**	**6.2**	**44.9**
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	**1.0**
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Metals														Phenols											
			Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			5	10	1	50	1	2	2	5	5	5	0.1	2	5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil			3,000[#3]		500	300,000	900	3,600[#4]	4,000	240,000	1,500[#5]	60,000	730[#6]	6,000	10,000		400,000												660	240,000
NEPM 2013 Table 1A(1) HILs Rec C Soil			300[#3]		90	20,000	90	300[#4]	300	17,000	600[#5]	19,000	80[#6]	1,200	700		30,000												120	40,000
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																														
Lab Report	**Field ID**	**Date**																												
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	**6**	**70**	<1	<50	<1	**15**	**4**	**49**	**41**	**320**	<0.1	**8**	<5	**62**	**154**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	<5	**80**	<1	<50	<1	**16**	**7**	**49**	**40**	**407**	<0.1	**10**	<5	**55**	**87**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW03_3.0	**19/08/2020**	**16**	**140**	<1	<50	<1	**25**	**7**	**331**	**372**	**270**	**1.0**	**15**	<5	**27**	**1,040**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	**6**	**60**	<1	<50	<1	**11**	**4**	**36**	**46**	**229**	<0.1	**6**	<5	**21**	**137**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_1.0	**19/08/2020**	<5	**60**	<1	<50	<1	**9**	**4**	**30**	**49**	**210**	<0.1	**7**	<5	**18**	**124**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_3.0	**19/08/2020**	**26**	**210**	<1	<50	**2**	**57**	**16**	**868**	**1,000**	**361**	**0.9**	**34**	<5	**21**	**4,500**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<5	**80**	<1	<50	<1	**9**	**4**	**6**	**12**	**284**	<0.1	**4**	<5	**10**	**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW05b_1.0	**20/08/2020**	<5	**80**	<1	<50	<1	**10**	**5**	<5	**10**	**336**	<0.1	**4**	<5	**10**	**18**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW05b_4.0	**20/08/2020**	<5	**40**	<1	<50	<1	**12**	**3**	**30**	**57**	**208**	**1.2**	**4**	<5	**12**	**72**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_0.1	**20/08/2020**	<5	**60**	<1	<50	<1	**16**	**6**	**124**	**101**	**238**	**0.2**	**6**	<5	**18**	**721**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_1.0	**20/08/2020**	<5	**80**	<1	<50	<1	**24**	**6**	**54**	**40**	**542**	**0.1**	**6**	<5	**33**	**282**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	<5	**70**	<1	<50	<1	**12**	**5**	**42**	**76**	**243**	**0.3**	**6**	<5	**15**	**132**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW08_0.5	**20/08/2020**	**6**	**140**	<1	<50	<1	**14**	**3**	**107**	**406**	**138**	**0.9**	**6**	<5	**25**	**565**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	<5	**60**	<1	<50	<1	**8**	<2	**33**	**155**	**59**	**0.3**	**2**	<5	**17**	**168**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_3.0	**20/08/2020**	<5	**60**	<1	<50	<1	**9**	<2	**42**	**124**	**70**	**0.3**	**5**	<5	**16**	**164**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_BH07_1.0	**8/10/2020**	<5	**80**	<1	<50	<1	**8**	**5**	**11**	**17**	**290**	<0.1	**5**	<5	**16**	**36**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_2.0	**8/10/2020**	<5	**20**	<1	<50	<1	**4**	<2	**14**	**56**	**31**	<0.1	**2**	<5	**7**	**106**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_4.0	**8/10/2020**	<5	<10	<1	<50	<1	**5**	**10**	<5	**14**	**7**	<0.1	<2	<5	**6**	**26**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_0.5	**8/10/2020**	**24**	**140**	<1	<50	<1	**18**	**4**	**66**	**202**	**341**	**0.1**	**9**	<5	**28**	**520**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_1.0	**8/10/2020**	**37**	**20**	<1	<50	<1	**7**	<2	**17**	**29**	**54**	<0.1	<2	<5	**12**	**135**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_0.5	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_1.0	**8/10/2020**	<5	**160**	<1	<50	<1	**7**	**6**	**39**	**49**	**414**	<0.1	**5**	<5	**20**	**57**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	<5	**10**	<1	<50	<1	**9**	**14**	<5	<5	**38**	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_5.0	**8/10/2020**	<5	<10	<1	<50	<1	<2	**8**	<5	<5	<5	<0.1	<2	<5	<5	<5	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	<5	**60**	<1	<50	<1	**8**	**4**	**12**	**26**	**216**	<0.1	**5**	<5	**14**	**37**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_2.0	**9/10/2020**	<5	**100**	<1	<50	<1	**6**	**4**	**25**	**25**	**218**	<0.1	**7**	<5	**16**	**75**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_3.0	**9/10/2020**	<5	**20**	<1	<50	<1	**3**	**4**	<5	**6**	**33**	<0.1	<2	<5	<5	**10**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	<5	**40**	<1	<50	<1	**6**	**5**	<5	**9**	**179**	<0.1	**4**	<5	**8**	**19**	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW02_2.0	**9/10/2020**	**6**	<10	<1	<50	<1	**7**	**4**	**23**	<5	**10**	<0.1	<2	<5	**8**	**27**	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_4.0	**9/10/2020**	<5	<10	<1	<50	<1	**3**	**3**	<5	<5	<5	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Explosives				Organochlorine Pesticides																					
			1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.2
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil									45		530						3,600		2,000,000				100			50		2,500
NEPM 2013 Table 1A(1) HILs Rec C Soil									10		70						400		340,000				20			10		400
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																												
Lab Report	**Field ID**	**Date**																										
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	**0.07**	<0.05	**0.07**	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<1.0	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	<0.25[#12]	<0.25[#12]	<0.08[#12]	<0.25[#12]	<0.08[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<1.0[#12]	<0.08[#12]	<0.25[#12]	<150[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<250[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<1.0[#12]
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides																Herbicides	Pesticides						
			Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil													2,000																	
NEPM 2013 Table 1A(1) HILs Rec C Soil													250																	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																														
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																														
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																														
Lab Report	**Field ID**	**Date**																													
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	-	-	-	-
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_1.0	**19/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0003**	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<0.5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_1.0	**20/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0002**	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<0.25[#12]	<1.0[#12]	<1.0[#12]	<0.25[#12]	-	-	-	<0.25[#12]	<0.25[#12]	<1.0[#12]	<0.25[#12]
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH9_0.5	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_0.5	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH08_2.0	**9/10/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0025**	<0.0002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.0002	<0.0002	<0.0002	<0.0002	**0.0004**	<0.0002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
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#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Halogenated Hydrocarbons					Per- and Polyfluoroalkyl Subst	Perfluoroalkyl Sulfonamides							PFAS		Halogenated Benzenes									
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Sum of PFAS (WA DER List)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Sum of PFHxS and PFOS	Sum of PFAS	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	5	0.5	5	0.0002	0.0002	0.0005	0.0002	0.5	0.0005	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																											80	
NEPM 2013 Table 1A(1) HILs Rec C Soil																											10	
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																												
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																												
Lab Report	**Field ID**	**Date**																										
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	**0.0003**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0003**	**0.0003**	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	**0.0002**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0002**	**0.0002**	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	<0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25[#12]	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	**0.0175**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0025**	**0.0175**	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<5	<5	<0.5	<5	**0.0004**	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005	**0.0004**	**0.0004**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Chlorinated Hydrocarbons																																
			1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																																			
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NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																																			
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Lab Report	**Field ID**	**Date**																																	
ES2029196	**WSP_CCS_GW03_0.1**	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	**19/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	**19/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05b_0.1**	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	**20/08/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	**20/08/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_0.2**	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	**8/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	**8/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	**WSP_CCS_BH08_0.5**	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	**9/10/2020**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	**9/10/2020**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Perfluoroalkane Carboxylic Acids											VOCs			Solvents						
			Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																						
NEPM 2013 Table 1A(1) HILs Rec C Soil																						
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																						
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																						
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																						
Lab Report	**Field ID**	**Date**																				
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	20/08/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			SVOCs																		Amino Aliphatics				PCBs	Amino Aromatics	
			2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																								7 #7		
NEPM 2013 Table 1A(1) HILs Rec C Soil																								1 #7		
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																										
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																										
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																										
Lab Report	**Field ID**	**Date**																									
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
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#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

			Anilines						Nitroaromatics			Phthalates						Organotins		
			2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Tributyltin as Sn	Monobutyltin
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	µg/kg	mg/kg
EQL			1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	1	1	0.001
NEPM 2013 Table 1A(1) HILs Comm/Ind D Soil																				
NEPM 2013 Table 1A(1) HILs Rec C Soil																				
NEPM 2013 Table 1A(3) Comm/Ind D Soil HSL for Vapour Intrusion, Sand																				
NEPM 2013 Table 1A(3) Rec C Soil HSL for Vapour Intrusion, Sand																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																				
Lab Report	**Field ID**	**Date**																		
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.3	<0.001
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments

#1 Carcinogenic PAHs: HIL based on 8 carc. PAHs & their TEFs (rel to BaP ref Schedule 7)
#2 Total PAHs: Based on sum of 16 most common reported (WHO 98). HIL application sh
#3 Arsenic: HIL assumes 70% oral bioavailability. Site-specific bioavailability maybe impo
#4 As Chromium VI
#5 Lead: HILs A,B,C based on blood lead models (IEUBK & HIL D on adult lead model for
#6 Elemental mercury: HIL does not address elemental mercury. a site specific assessme
#7 PCBs: HIL refers to non-dioxin like PCBs only. Where PCB source is known, or suspecte
#8 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Derived soil HSL exceeds soil saturation concentraiton
#10 Separate management limits for BTEX & napthalene are not available hence should
#11 No
#12 Reported Analyte LOR is higher than Requested Analyte LOR

	Acid Sulphate Soils - Acid Base Accounting			Acid Sulphate Soils - Acidity Trail		Acid Sulphate Soils - ANC			Acid Sulphate Soils - Liming Rate		Acid Sulphate Soils - Potential Acidity		Inorganics							NA		Particle Size	TRH			
	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Actual Acidity	Acid Neutralising Capacity	Acid Neutralising Capacity (acidity units)_1	Acid Neutralising Capacity (sulfur units)	Liming Rate excluding ANC_	Liming Rate	Chromium Reducible Sulfur	Chromium Reducible Sulphur (acidity units)	Exchangeable Sodium Percent	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	pH (Lab)	Tributyltin as SN	Clay in soils <2um	Weight Used for % Calculation	DENSITY	TC6-C10 minus BTEX (F1)	C10-C16	C16-C34 (F3)	C34-C40 (F4)
	-	mole H+/t	%S	%S	mole H+/t	%CaCO3	mole H+/t	%S	kg CaCO3/t	kg CaCO3/t	%S	mole H+/t	mg/kg	meq/100g	meq/100g	meq/100g	meq/100g	pH Unit	mg/kg	%	kg	g/cm3	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	10	0.02	0.02	2	0.01	10	0.01	1	1	0.005	10	1,000	0.1	0.1	0.1	0.1	0.1	0.0005	1	0.0001	0.01	10	50	100	100
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																										
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																										
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																							215[#7]	170	1,700	3,300
0-2m																							215[#7]	170	1,700	3,300
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																							180[#8]	120[#9]	300	2,800
0-2m																							180[#8]	120[#9]	300	2,800
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.490	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.480	-	<10	<50	450	230
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	700	340
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.462	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0010	-	0.533	-	<10	<50	160	120
	WSP_CCS_GW04_1.0	19/08/2020	1.5	<10	<0.02	<0.02	<2	3.97	793	1.27	<1	<1	0.020	12	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	580	280
	WSP_CCS_GW04_3.0	19/08/2020	1.5	<10	<0.02	<0.02	<2	7.34	1,470	2.35	4	<1	0.091	57	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	280	180
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	194,000	2.1	2.5	1.1	1.4	8.8	0.0071	14	-	2.56	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.513	-	-	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.552	-	<10	<50	<100	<100
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	180	110
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.629	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0078	-	0.583	-	<10	<50	<100	<100
	WSP_CCS_GW06_1.0	20/08/2020	1.5	<10	<0.02	<0.02	<2	3.09	617	0.99	1	<1	0.031	19	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0026	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	1.5	<10	<0.02	<0.02	<2	1.70	340	0.54	1	<1	0.026	16	-	-	-	-	-	-	-	-	<10	<50	260	<100
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	153,000	3.8	<0.2	0.5	0.8	9.7	-	14	-	2.65	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0005	-	0.613	-	-	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.459	-	<10	<50	330	130
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	70	1,270	250
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	1.5	<10	<0.02	<0.02	<2	1.03	207	0.33	6	<1	0.119	74	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	299,000	1.2	1.9	0.5	1.5	8.8	<0.0005	19	-	2.65	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.331	-	-	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.272	-	-	-	<10	<50	<100	<100
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_BH9_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.296	-	-	-	<10	<50	130	<100
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.282	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW07_0.5	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.378	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.245	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.284	-	-	-	<10	<50	<100	<100
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	120	<100
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.304	-	-	-	<10	<50	180	<100
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	15,000	4.6	0.2	0.4	<0.1	6.7	-	13	-	2.59	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.275	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	1.5	<10	<0.02	<0.02	<2	1.57	314	0.50	<1	<1	0.021	13	-	-	-	-	-	-	0.0013	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.462	-	<10	<50	<100	<100
	WSP_CCS_GW02_4.0	9/10/2020	1.5	<10	<0.02	<0.02	<2	1.11	223	0.36	<1	<1	0.012	<10	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	89,000	<0.1	0.1	0.4	<0.1	7.1	-	13	-	2.66	-	-	-	-
Statistics																										
Number of Results			**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**20**	**5**	**27**	**27**	**27**	**27**
Minimum Detect			**1.5**	**ND**	**ND**	**ND**	**ND**	**1.03**	**207**	**0.33**	**1**	**ND**	**0.012**	**12**	**15,000**	**1.2**	**0.1**	**0.4**	**0.8**	**6.7**	**0.001**	**13**	**0.245**	**2.56**	**ND**	**70**	**120**	**110**
Maximum Concentration			**1.5**	**<10**	**<0.02**	**<0.02**	**<2**	**7.34**	**1,470**	**2.35**	**6**	**<1**	**0.119**	**74**	**299,000**	**4.6**	**2.5**	**1.1**	**1.5**	**9.7**	**0.0078**	**19**	**0.629**	**2.66**	**<10**	**70**	**1,270**	**340**
Average Concentration *			**1.5**	**5**	**0.01**	**0.01**	**1**	**2.8**	**566**	**0.91**	**1.9**	**0.5**	**0.046**	**28**	**150,000**	**2.4**	**0.96**	**0.58**	**0.76**	**8.2**	**0.0029**	**15**	**0.42**	**2.6**	**5**	**27**	**200**	**96**
95% UCL (Student's-t) *			**1.5**	**5**	**0.01**	**0.01**	**1**	**4.493**	**899.2**	**1.438**	**3.535**	**0.5**	**0.0763**	**47.41**	**252,342**	**4.123**	**2.059**	**0.861**	**1.429**	**9.429**	**0.00526**	**16.99**	**0.471**	**2.664**	**5**	**29.51**	**290.2**	**123.6**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c for < 2 years.
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1%. The ACL should be adjusted based on site-specific Clay content (when available). To calculate a site specific EIL, add the ABC to the ACL.
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be adjusted based on site-specific pH or CEC (when available). To calculate a site specific EIL, add the ABC to the ACL.
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the added background concentration (ABC) to this value.
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific CEC (when available). To calculate a site specific EIL, add the added background concentration (ABC) to the ACL.
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/100g. The ACL should be adjusted based on site-specific pH and CEC (when available). To calculate a site specific EIL, add the ABC to the ACL.
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			TPH					BTEX					PAH																											
			C6-C9	C10-C14	C15-C28	C29-C36	C10-C36 (Sum of total)	Benzene	Toluene	Ethylbenzene	Xylenes Total	Benzo[b+j+k]fluoranthene	2-chloronaphthalene	1-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo[b+j]fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ (LOR)_	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			10	50	100	100	50	0.2	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																														370									
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																														170									
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil								75	135	165	180										1.4																	
0-2m								75	135	165	180										1.4																	
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil								50	85	70	105										0.7																	
0-2m								50	85	70	105										0.7																	
Lab Report Number	**Field ID**	**Date**																																					
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<10	<50	270	260	530	<0.2	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	0.8	1.2	<0.5	1.6			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.7	-	-	-	0.7	-	2.0	-	-	-	1.2	1.9	1.4	0.9	8.3			
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	<10	<50	410	460	870	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	0.9	1.7	3.7	4.1	5.1	2.3	1.6	3.4	0.5	9.0	0.8	2.1	<0.5	6.4	8.6	5.9	5.9	50.2			
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	<10	<50	<100	110	110	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.5	0.6	0.7	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	1.3	1.3	0.7	4.3			
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	<10	<50	290	390	680	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	<0.5	1.1	1.4	1.6	0.9	0.5	1.1	<0.5	2.4	<0.5	0.9	<0.5	1.2	2.5	2.3	1.8	13.6			
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	<10	<50	170	190	360	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	0.9	2.5	2.8	3.2	1.7	1.1	2.4	<0.5	4.9	<0.5	1.4	0.9	3.2	5.2	4.2	3.7	30.2			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	-	-	-	<0.2	<0.5	<0.5	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW05b_0.5	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	<10	<50	110	110	220	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	0.6	1.1	1.0	1.1	0.5	<0.5	1.1	<0.5	3.5	<0.5	<0.5	<0.5	3.5	3.4	1.8	1.2	15.8			
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	<10	<50	170	140	310	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	0.6	1.4	6.0	6.1	7.5	3.9	2.3	5.4	0.7	12.0	<0.5	3.0	<0.5	4.3	12.0	8.8	8.8	65.2			
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	-	-	<0.2	<0.5	<0.5	-	7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	4.9	5.2	-	3.0	-	4.2	0.5	7.5	<0.5	2.3	<0.5	3.5	7.7	7.2	7.2	46.4			
	WSP_CCS_GW08_0.5	20/08/2020	<10	<50	200	190	390	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	0.6	1.1	4.6	4.8	5.3	3.0	2.2	4.3	0.6	9.7	<0.5	2.2	0.7	4.8	8.6	6.9	6.9	52.5			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	<10	<50	970	480	1,450	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	10.8	2.2	10.1	37.3	30.4	40.3	14.9	12.1	33.2	3.8	81.8	8.9	13.5		76.6	70.9	45.0	45.0	466			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.6	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	0.9	1.3	1.1	1.2	0.5	<0.5	1.1	<0.5	3.8	<0.5	<0.5	0.7	3.4	3.1	2.0	1.4	17.1			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	-	-	<0.2	<0.5	<0.5	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.2	<0.5	0.5			
	WSP_CCS_BH07_1.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_BH07_2.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	0.8	1.1	1.2	0.8	0.5	0.6	<0.5	1.4	<0.5	0.6	<0.5	<0.5	1.6	1.9	1.4	8.6			
	WSP_CCS_BH07_4.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_BH9_0.5	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	3.0	3.1	2.5	1.3	2.1	<0.5	4.9	<0.5	2.2	<0.5	1.5	4.4	4.4	3.9	27.3			
	WSP_CCS_BH9_1.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	0.8	1.2	<0.5	1.6			
	WSP_CCS_GW07_0.5	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW07_4.0	8/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	1.1			
	WSP_CCS_BH08_1.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.0	0.9	1.0	0.6	<0.5	0.9	<0.5	2.1	<0.5	<0.5	<0.5	2.0	2.2	1.7	1.1	11.3			
	WSP_CCS_BH08_2.0	9/10/2020	<10	<50	110	<100	110	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	1.2	4.5	4.3	4.8	2.1	2.1	3.8	0.5	8.5	<0.5	2.0	<0.5	4.0	7.1	6.2	6.2	44.9			
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.2	<0.5	1.0			
	WSP_CCS_GW02_2.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW02_4.0	9/10/2020	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5			
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																							
Number of Results			27	27	27	27	27	30	30	30	27	6	10	10	10	10	30	30	30	31	31	27	30	27	31	30	33	30	30	34	31	33	33	31	33			
Minimum Detect			ND	ND	110	110	110	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	10.8	0.6	0.6	0.5	0.6	0.7	0.5	0.5	0.6	0.5	0.5	0.8	0.6	0.7	1.2	0.5	1.2	0.7	0.5			
Maximum Concentration			<10	<50	970	480	1,450	<0.2	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	<0.5	<0.5	10.8	2.2	10.1	37.3	30.4	40.3	14.9	12.1	33.2	3.8	81.8	8.9	13.5	19.6	76.6	70.9	45	45	466			
Average Concentration *			5	25	133	120	202	0.1	0.25	0.25	0.25	1.7	0.25	0.25	0.25	0.25	0.25	0.6	0.36	0.8	2.5	2.3	2.9	1.4	1	2.2	0.42	4.9	0.56	1.2	0.89	3.9	4.5	3.7	3.2	26			
95% UCL (Student's-t) *			5	25	196.2	162.2	312.8	0.1	0.25	0.25	0.25	3.822	0.25	0.25	0.25	0.25	1.199	0.477	1.362	4.5	3.982	5.484	2.222	1.802	4.022	0.622	9.066	1.046	1.941	1.855	8.023	8.095	5.99	5.714	50.33			

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ax
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq.
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			MAH									Metals														Phenols													
			1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc	2&4-Methylphenol (o&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	3-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	10	1	50	1	2	2	5	5	5	0.1	2	5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind												160[#3]					770		140	1,800[#4]			50			420												
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space												100[#1]					460		100	1,100[#4]			30			290												
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																						
0-2m																																						
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																						
0-2m																																						
Lab Report Number	**Field ID**	**Date**																																				
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	6	70	<1	<50	<1	15	4	49	41	320	<0.1	8	<5	62	154	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	16	7	49	40	407	<0.1	10	<5	55	87	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	16	140	<1	<50	<1	25	7	331	372	270	1.0	15	<5	27	1,040	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6	60	<1	<50	<1	11	4	36	46	229	<0.1	6	<5	21	137	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	9	4	30	49	210	<0.1	7	<5	18	124	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	26	210	<1	<50	2	57	16	868	1,000	361	0.9	34	<5	21	4,500	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	80	<1	<50	<1	9	4	6	12	284	<0.1	4	<5	10	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	10	5	<5	10	336	<0.1	4	<5	10	18	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	40	<1	<50	<1	12	3	30	57	208	1.2	4	<5	12	72	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	16	6	124	101	238	0.2	6	<5	18	721	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	24	6	54	40	542	0.1	6	<5	33	282	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	70	<1	<50	<1	12	5	42	76	243	0.3	6	<5	15	132	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	6	140	<1	<50	<1	14	3	107	406	138	0.9	6	<5	25	565	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	8	<2	33	155	59	0.3	2	<5	17	168	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	9	<2	42	124	70	0.3	5	<5	16	164	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	80	<1	<50	<1	8	5	11	17	290	<0.1	5	<5	16	36	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	20	<1	<50	<1	4	<2	14	56	31	<0.1	2	<5	7	109	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	5	10	<5	14	7	<0.1	<2	<5	6	26	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	24	140	<1	<50	<1	18	4	66	202	341	0.1	9	<5	28	520	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	37	20	<1	<50	<1	7	<2	17	29	54	<0.1	<2	<5	12	135	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	160	<1	<50	<1	7	6	39	49	414	<0.1	5	<5	20	57	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	10	<1	<50	<1	9	14	<5	<5	38	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	<2	8	<5	<5	<5	<0.1	<2	<5	<5	<5	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	60	<1	<50	<1	8	4	12	26	216	<0.1	5	<5	14	37	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	100	<1	<50	<1	6	4	25	25	218	<0.1	7	<5	16	75	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	20	<1	<50	<1	3	4	<5	6	33	<0.1	<2	<5	<5	10	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	<5	40	<1	<50	<1	6	5	<5	9	179	<0.1	4	<5	8	19	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	6	<10	<1	<50	<1	7	4	23	<5	10	<0.1	<2	<5	8	27	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	<5	<10	<1	<50	<1	3	3	<5	<5	<5	<0.1	<2	<5	<5	<5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																						
Number of Results			10	10	10	10	10	10	10	10	10	29	29	29	29	29	29	3	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	6	10	ND	ND	ND	2	3	6	6	7	0.1	2	ND	6	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37	210	<1	<50	2	57	16	868	1,000	542	1.2	34	<5	62	4,500	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5
Average Concentration *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	6.2	68	0.5	25	0.55	12	5.1	70	102	198	0.22	5.8	2.5	17	318	0.45	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.9	0.25
95% UCL (Student's-t) *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	8.887	83.83	0.5	25	0.64	14.99	6.225	122.3	165.5	244.8	0.32	7.758	2.5	21.82	583.9	0.482	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.963	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 -C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

	Explosives				Organochlorine Pesticides																						Perfluoroalkane Sulfonic Acids					
	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorooctane sulfonic acid (PFOS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	1	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.05	0.05	50	0.05	0.05	0.05	0.05	50	0.05	0.05	0.05	0.2	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind														640																		
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space														180																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																
Lab Report Number	**Field ID**	**Date**																															
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<1.0	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<50	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	<0.25[9]	<0.25[9]	<0.08[9,11]	<0.25[9]	<0.08[9,11]	<0.25[9]	<0.25[9]	<0.25[9]	<1.0[9]	<0.08[9,11]	<0.25[9]	<150[9]	<0.25[9]	<0.25[9]	<0.25[9]	<0.25[9]	<250[9]	<0.25[9]	<0.25[9]	<0.25[9]	<1.0[9]	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.5	<0.5	-	<0.5	-	-	-	<0.5	<0.5	<1.0	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	<0.0002	<0.0002	<0.0002	<0.0002	0.0025	<0.0002
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.2	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																	
Number of Results			**10**	**10**	**10**	**10**	**30**	**30**	**27**	**30**	**27**	**27**	**27**	**30**	**30**	**30**	**27**	**30**	**27**	**30**	**30**	**30**	**30**	**27**	**30**	**30**	**30**	**27**	**5**	**5**	**5**	**5**	**5**	**5**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.07**	**ND**	**0.07**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.0002**	**ND**
Maximum Concentration			**<0.5**	**<1**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.08**	**<0.5**	**<0.08**	**<0.25**	**<0.25**	**<0.5**	**<0.5**	**<1**	**<0.08**	**<0.5**	**<150**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<250**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**0.0025**	**<0.0002**
Average Concentration *			**0.25**	**0.5**	**0.5**	**0.25**	**0.051**	**0.051**	**0.026**	**0.051**	**0.027**	**0.029**	**0.03**	**0.051**	**0.051**	**0.15**	**0.026**	**0.051**	**27**	**0.051**	**0.051**	**0.051**	**0.051**	**29**	**0.051**	**0.051**	**0.051**	**0.11**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0007**	**0.0001**
95% UCL (Student's-t) *			**0.25**	**0.5**	**0.5**	**0.25**	**0.0725**	**0.0725**	**0.0265**	**0.0725**	**0.0302**	**0.035**	**0.0372**	**0.0725**	**0.0725**	**0.196**	**0.0265**	**0.0725**	**30.01**	**0.0725**	**0.0725**	**0.0725**	**0.0725**	**35.02**	**0.0725**	**0.0725**	**0.0725**	**0.14**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.00167**	**0.0001**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ax
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Organophosphorous Pesticides															Herbicides	Pesticides						Halogenated Hydrocarbons					Per- and Polyfluoroalkyl Subst	Perfluoroalkyl Sulfonamides							
			Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Primophos-ethyl	1,2-dibromomethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Sum of PFAS (WA DER List)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	0.5	0.5	0.5	0.05	0.05	0.2	0.05	0.5	5	5	0.5	5	0.0002	0.0002	0.0005	0.0002	0.5	0.0005	0.0002	0.0005
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																					
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																					
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																					
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																					
Lab Report Number	**Field ID**	**Date**																																			
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.5	19/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0003	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW04_2.0	19/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.5	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW08_2.0	20/08/2020	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<0.25[11]	<1.0[11]	<1.0[11]	<0.25[11]	-	-	-	<0.25[11]	<0.25[11]	<1.0[11]	<0.25[11]	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_1.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_1.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	0.0175	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<0.5	<0.5	<0.5	<0.05	<0.05	<0.2	<0.05	<0.5	<5	<5	<0.5	<5	0.0004	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
	WSP_CCS_GW02_2.0	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	<0.05	<0.05	<0.2	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistics

Number of Results			27	27	27	30	30	30	30	30	30	30	30	30	27	27	30	10	10	10	27	27	27	30	10	10	10	10	10	5	5	5	5	5	5	5	5
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.25	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.25	<0.25	<1	<0.5	<0.5	<5	<5	<0.5	<5	0.0175	<0.0002	<0.0005	<0.0002	<0.5	<0.0005	<0.0002	<0.0005
Average Concentration *			0.029	0.029	0.029	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.11	0.11	0.051	0.25	0.25	0.25	0.029	0.029	0.11	0.051	0.25	2.5	2.5	0.25	2.5	0.0037	0.0001	0.00025	0.0001	0.25	0.00025	0.0001	0.00025
95% UCL (Student's-t) *			0.035	0.035	0.035	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.14	0.14	0.0725	0.25	0.25	0.25	0.035	0.035	0.14	0.0725	0.25	2.5	2.5	0.25	2.5	0.0111	0.0001	0.00025	0.0001	0.25	0.00025	0.0001	0.00025

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			PFAS		Chlorinated Hydrocarbons																																
			Sum of PFHxS and PFOS	Sum of PFAS	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	1,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.0002	0.0002	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	0.5	0.5	0.5	0.5	2.5	0.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																					
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																					
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																					
0-2m																																					
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																					
0-2m																																					
Lab Report Number	Field ID	Date																																			
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	0.0003	0.0003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	20/08/2020	0.0002	0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	0.0025	0.0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	0.0004	0.0004	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results			5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Minimum Detect			0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			0.0025	0.0175	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
Average Concentration *			0.0007	0.0037	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.25	2.5	0.25	0.25	0.25	0.25	0.25	1.2	0.25	0.25	0.25	0.25	0.25	2.5
95% UCL (Student's-t) *			0.00167	0.0111	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.25	2.5	0.25	0.25	0.25	0.25	0.25	1.25	0.25	0.25	0.25	0.25	0.25	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ax
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Halogenated Benzenes											Perfluoroalkane Carboxylic Acids											VOCs			Solvents						
			1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene	Pentachlorobenzene	Perfluorobutanoic acid (PFBA)	Perfluoroheanoic acid (PFHxA)	Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoi c acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-Hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.5	0.5	0.5	5	5	5	0.5	0.5	5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																		
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																		
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil																																		
0-2m																																		
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																		
0-2m																																		
Lab Report Number	**Field ID**	**Date**																																
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	<0.25[#11]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																		
Number of Results			10	10	10	10	10	10	10	10	10	31	10	5	5	5	5	5	5	5	5	5	5	5	5	10	10	10	10	10	10	10	10	10
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5
Average Concentration *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.09	0.25	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.25	0.25	0.25	2.5	2.5	2.5	0.25	0.25	2.5
95% UCL (Student's-t) *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.139	0.25	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.25	0.25	0.25	2.5	2.5	2.5	0.25	0.25	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the a
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			SVOCs																			Amino Aliphatics				PCBs	Amino Aromatics		Anilines						Nitroaromatics		
			2-(Acetylamino) fluorene	1,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Mestranol/prilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	PCBs (Sum of total)	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	4-Picoline	4-aminobiphenyl	Pentachloronitrobenzene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.1	0.5	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind																																					
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space																																					
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m																																					
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil 0-2m																																					
Lab Report Number	Field ID	Date																																			
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	27	10	10	10	10	10	10	10	10	10	10	10	10	10
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Average Concentration *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.05	0.25	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
95% UCL (Student's-t) *			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.05	0.25	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
#4 Generic ACL value from NEPM 2013 Table 1B(4). To calculate a site specific EIL, add the ax
#5 Generic ACL value from NEPM 2013 Table 1B(3) using a CEC of 5 meq/100g. The ACL shou
#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Phthalates						Organotins	
			Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimenthyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Monobutyltin
			mg/kg	mg/kg	mg/kg	mg/Kg	mg/kg	mg/kg	µg/kg	mg/kg
EQL			5	0.5	0.5	0.5	0.5	0.5	1	0.001
NEPM 2013 Table 1B(5) Generic EIL - Comm/Ind										
NEPM 2013 Table 1B(5) Generic EIL - Urban Res & Public Open Space										
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil 0-2m										
NEPM 2013 Table 1B(6) ESLs for Urban Res., Coarse Soil 0-2m										
Lab Report Number	**Field ID**	**Date**								
ES2029196	WSP_CCS_GW03_0.1	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_0.5	19/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_GW03_1.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_2.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW03_3.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_0.1	19/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_GW04_0.5	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_1.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_2.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_3.0	19/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW04_4.0	19/08/2020	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_GW04_5.0	19/08/2020	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05b_0.1	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_GW05b_0.5	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_1.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_2.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_4.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW05b_5.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.1	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_0.5	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_GW06_1.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_2.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_3.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW06_5.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_0.1	20/08/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_GW08_0.5	20/08/2020	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_GW08_1.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_2.0	20/08/2020	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_GW08_3.0	20/08/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW08_4.0	20/08/2020	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_GW08_5.0	20/08/2020	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_0.2	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_BH07_1.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_2.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_BH07_4.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_BH9_0.5	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_BH9_1.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_0.5	8/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
	WSP_CCS_GW07_1.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_2.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_3.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_4.0	8/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW07_5.0	8/10/2020	-	-	-	-	-	-	-	-
ES2035544	WSP_CCS_BH08_0.5	9/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	-
			-	-	-	-	-	-	-	-
	WSP_CCS_BH08_1.0	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_2.0	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_BH08_3.0	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_0.5	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_1.0	9/10/2020	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.001
	WSP_CCS_GW02_2.0	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_4.0	9/10/2020	-	-	-	-	-	-	-	-
	WSP_CCS_GW02_5.0	9/10/2020	-	-	-	-	-	-	-	-
Statistics										
Number of Results			**10**	**10**	**10**	**10**	**10**	**10**	**1**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<0.001**
Average Concentration *			**2.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**		
95% UCL (Student's-t) *			**2.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**		

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Aged values apply to arsenic contamination present in soil > 2 years. Refer Schedule B5c f
#2 As Chromium III. Generic ACL value from NEPM 2013 Table 1B(3) using a clay content of 1
#3 Generic ACL value from NEPM 2013 Table 1B(2) using a soil pH of 4.5. The ACL should be
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#6 Generic ACL value from NEPM 2013 Table 1B(1) using a soil pH of 4.0 and a CEC of 5 meq/
#7 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.
#8 Moderate reliability. To obtain F1 subtract the sum of BTEX concentrations from the C6 -
#9 Moderate reliability.
#10 No
#11 Reported Analyte LOR is higher than Requested Analyte LOR

			Inorganics	BTEX					TRH				MAH								
			Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	C6-C10_	C10-C16	C16-C34 (F3)	C34-C40 (F4)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.001	1	2	2	2	2	20	100	100	100	5	5	5	5	5	5	5	5	5
ANZG (2018) Marine water 95% toxicant DGVs				700[#1]																	
10 x ADWG 2011 (May 2019 Update) - Recreational Water			800	10	8000	3000		6000												300	
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																					
2-4m				5,000	NL	NL															
4-8m				5,000	NL	NL															
PFAS NEMP 2020 Table 1 Health Recreational Water																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m				NL	NL	NL															
4-8m				NL	NL	NL															
Lab Report Number	**Field ID**	**Date**																			
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	0.001	<1	4	3	6	3	20	<100	500	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW03	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW04	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW05b	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW06	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW08	**1/09/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	120	190	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW03	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW04	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW05B	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW06	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW07	**16/10/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW08	**16/10/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<0.004	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP-CCS-GW07	**17/12/2020**	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
Statistics																					
Number of Results			**6**	**17**	**18**	**18**	**18**	**18**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**0.001**	**ND**	**4**	**3**	**6**	**3**	**20**	**120**	**190**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<0.004**	**<1**	**4**	**3**	**6**	**3**	**20**	**120**	**500**	**<100**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<5**
Average Concentration *			**0.0018**	**0.5**	**1.3**	**1.2**	**1.6**	**1.2**	**11**	**54**	**85**	**50**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**
95% UCL (Student's-t) *			**0.00217**	**0.5**	**1.731**	**1.487**	**2.219**	**1.487**	**11.62**	**61.31**	**132.2**	**50**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers to experimental chronic values or geometric mean for species). Check toxicant DGV technical brief for spread of data and its significance.
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			PAH																		
			Benzo(b+j+k)fluoranthene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			4	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1
ANZG (2018) Marine water 95% toxicant DGVs										0.4[#11]		0.2[#11]				1.4[#11]			70[#1]	2.0[#11]	
10 x ADWG 2011 (May 2019 Update) - Recreational Water												0.1									
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																					
2-4m																			NL		
4-8m																			NL		
PFAS NEMP 2020 Table 1 Health Recreational Water																					
PFAS NEMP 2020 Table 5 Interim marine 95%																					
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																					
2-4m																			NL		
4-8m																			NL		
Lab Report Number	**Field ID**	**Date**																			
ES2019471	WSP_CC01_GW01	4/06/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2030732	WSP_CCS_GW01	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW03	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW04	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW05b	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_GW06	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	1.7	1.8	1.4	1.5	<1.0	2.9	<1.0	1.1	<1.0	<1.0	3.2
	WSP_CCS_GW08	1/09/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2036491	CRESCENT-GW02	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW03	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW04	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW05B	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	1	<1	<1	<1	1.2	<1	<1	<1	<1	1.4
	CRESCENT-GW06	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	0.8	<1	<1	<1	1.2	<1	<1	<1	<1	1.3
	CRESCENT-GW07	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-GW08	16/10/2020	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
ES2042721	WSP_CCS_I&M	2/12/2020	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ES2045287	WSP-CCS-GW02	17/12/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP-CCS-GW07	17/12/2020	<4	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Statistics																					
Number of Results			3	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.8	1.4	1.5	ND	1.2	ND	1.1	ND	ND	1.3
Maximum Concentration			<4	<2	<2	<2	<2	<1	<1	<1	1.7	1.8	1.4	1.5	<1	2.9	<1	1.1	<1	<1	3.2
Average Concentration *			2	1	1	1	1	0.5	0.5	0.5	0.57	0.42	0.55	0.56	0.5	0.72	0.5	0.54	0.5	0.5	0.76
95% UCL (Student's-t) *			2	1	1	1	1	0.5	0.5	0.5	0.694	0.594	0.645	0.662	0.5	0.98	0.5	0.597	0.5	0.5	1.051

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Metals																	Phenols												
			Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (O-cresol)	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	1	10	5	2	1	1	1	1	1	1	1	1	1	2	1
ANZG (2018) Marine water 95% toxicant DGVs							5.5[#2]		1[#3]	1.3[#4]	4.4[#5]		0.4[#4]	70[#3]				100[#3]	15[#4]												22	400[#5]
10 x ADWG 2011 (May 2019 Update) - Recreational Water			100	20000	600	40000	20	500		20000	100	5000	10	200	100	170	170					200	2000				3000				100	
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																
PFAS NEMP 2020 Table 1 Health Recreational Water																																
PFAS NEMP 2020 Table 5 Interim marine 95%																																
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																																
2-4m																																
4-8m																																
Lab Report Number	**Field ID**	**Date**																														
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<10[#10]	110	<10[#10]	2,150	<1.0[#10]	<10[#10]	<10[#10]	<10[#10]	<10[#10]	843	<0.1	<10[#10]	<100[#10]	<10[#10]	-	<100[#10]	76	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	1	73	<1	1,500	0.2	<1	2	39	1	110	<0.1	44	<10	-	-	<10	397	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW03	**1/09/2020**	<10[#10]	33	<10[#10]	4,100	<1.0[#10]	<10[#10]	<10[#10]	143	<10[#10]	56	<0.1	15	<100[#10]	-	-	<100[#10]	137	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW04	**1/09/2020**	<10[#10]	56	<10[#10]	4,040	<1.0[#10]	<10[#10]	12	37	<10[#10]	801	<0.1	<10[#10]	<100[#10]	-	-	<100[#10]	<50[#10]	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW05b	**1/09/2020**	<10[#10]	59	<10[#10]	3,850	<1.0[#10]	<10[#10]	<10[#10]	85	<10[#10]	615	<0.1	19	<100[#10]	-	-	<100[#10]	190	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW06	**1/09/2020**	<10[#10]	76	<10[#10]	4,170	<1.0[#10]	<10[#10]	<10[#10]	53	<10[#10]	789	<0.1	18	<100[#10]	-	-	<100[#10]	76	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP_CCS_GW08	**1/09/2020**	<10[#10]	37	<10[#10]	3,260	<1.0[#10]	<10[#10]	<10[#10]	79	<10[#10]	60	<0.1	15	<100[#10]	-	-	<100[#10]	173	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<1	-	-	-	0.1	<1	-	132	1	-	<0.1	15	-	-	2	-	157	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW03	**16/10/2020**	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	108	<10[#10]	-	<0.1	14	-	-	<10[#10]	-	143	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW04	**16/10/2020**	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	54	<10[#10]	-	<0.1	<10[#10]	-	-	<10[#10]	-	103	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW05B	**16/10/2020**	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	112	<10[#10]	-	<0.1	20	-	-	<10[#10]	-	98	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW06	**16/10/2020**	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	74	<10[#10]	-	<0.1	13	-	-	<10[#10]	-	95	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW07	**16/10/2020**	<1	-	-	-	<0.1	<1	-	112	5	-	<0.1	12	-	-	<1	-	128	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
	CRESCENT-GW08	**16/10/2020**	<10[#10]	-	-	-	<1[#10]	<10[#10]	-	165	<10[#10]	-	<0.1	12	-	-	<10[#10]	-	139	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<1	779	<1	2,540	<0.1	<1	<1	3	<1	72	<0.1	<1	<10	-	<1	<10	5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<1	42	<1	170	<0.1	<1	2	2	<1	194	<0.1	1	<10	-	3	<10	15	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
	WSP-CCS-GW07	**17/12/2020**	<1	61	<1	60	<0.1	<1	2	14	65	63	<0.1	2	<10	-	<1	<10	16	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Statistics																																
Number of Results			**17**	**10**	**10**	**10**	**17**	**17**	**10**	**17**	**17**	**10**	**17**	**17**	**10**	**1**	**10**	**10**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**1**	**33**	**ND**	**60**	**0.1**	**ND**	**2**	**2**	**1**	**56**	**ND**	**1**	**ND**	**ND**	**2**	**ND**	**5**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<10**	**779**	**<10**	**4,170**	**<1**	**<10**	**12**	**165**	**65**	**843**	**<0.1**	**44**	**<100**	**<10**	**<10**	**<100**	**397**	**<2**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<2**	**<1**
Average Concentration *			**3.4**	**133**	**3.2**	**2,584**	**0.35**	**3.4**	**4.4**	**72**	**7.5**	**360**	**0.05**	**13**	**32**		**3.2**	**32**	**116**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**
95% UCL (Student's-t) *			**4.364**	**264.9**	**4.547**	**3,502**	**0.441**	**4.35**	**6.204**	**93.42**	**13.85**	**564.8**	**0.05**	**17.04**	**45.47**		**4.365**	**45.47**	**155.1**	**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Explosives				Organochlorine Pesticides																					
			1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	4	4	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
ANZG (2018) Marine water 95% toxicant DGVs																						0.008[#5]						
10 x ADWG 2011 (May 2019 Update) - Recreational Water			300							3		20					90							100	3			
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																												
2-4m																												
4-8m																												
PFAS NEMP 2020 Table 1 Health Recreational Water																												
PFAS NEMP 2020 Table 5 Interim marine 95%																												
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																												
2-4m																												
4-8m																												
Lab Report Number	**Field ID**	**Date**																										
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW03	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW04	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW05b	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW06	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_CCS_GW08	**1/09/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW03	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW04	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW05B	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW06	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW07	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-GW08	**16/10/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP-CCS-GW07	**17/12/2020**	<2	<4	<4	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
Statistics																												
Number of Results			**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<4**	**<4**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**
Average Concentration *			**1**	**2**	**2**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**
95% UCL (Student's-t) *			**1**	**2**	**2**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides															Pesticides					
			Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimphos-ethyl
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	2	2	0.5	0.5	2	0.5
ANZG (2018) Marine water 95% toxicant DGVs													0.009[#5]																
10 x ADWG 2011 (May 2019 Update) - Recreational Water																													
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
PFAS NEMP 2020 Table 1 Health Recreational Water																													
PFAS NEMP 2020 Table 5 Interim marine 95%							0.13[#9]																						
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
Lab Report Number	**Field ID**	**Date**																											
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW03	**1/09/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW04	**1/09/2020**	<0.02	<0.02	0.02	<0.02	0.10	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW05b	**1/09/2020**	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW06	**1/09/2020**	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP_CCS_GW08	**1/09/2020**	<0.02	<0.02	<0.02	<0.02	0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2036491	**CRESCENT-GW02**	**16/10/2020**	0.03	-	0.21	-	0.12	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW03	**16/10/2020**	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW04	**16/10/2020**	<0.02	-	<0.02	-	0.03	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW05B	**16/10/2020**	<0.02	-	<0.02	-	0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW06	**16/10/2020**	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW07	**16/10/2020**	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
	CRESCENT-GW08	**16/10/2020**	<0.02	-	<0.02	-	0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<0.5	<0.5	<2	<0.5
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<0.02	<0.02	0.20	<0.02	0.16	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
	WSP-CCS-GW07	**17/12/2020**	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<0.5	<0.5	<2.0	<0.5
Statistics																													
Number of Results			**17**	**10**	**17**	**10**	**17**	**10**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**0.03**	**ND**	**0.02**	**ND**	**0.01**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**0.03**	**<0.02**	**0.21**	**<0.02**	**0.16**	**<0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<2**	**<0.5**	**<2**	**<2**	**<0.5**	**<0.5**	**<2**	**<0.5**
Average Concentration *			**0.011**	**0.01**	**0.034**	**0.01**	**0.031**	**0.01**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**1**	**0.25**	**1**	**1**	**0.25**	**0.25**	**1**	**0.25**
95% UCL (Student's-t) *			**0.0132**	**0.01**	**0.0609**	**0.01**	**0.0515**	**0.01**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**1**	**0.25**	**1**	**1**	**0.25**	**0.25**	**1**	**0.25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Herbicides	Halogenated Hydrocarbons					Halogenated Benzenes										Chlorinated Hydrocarbons										
			Pronamide	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	5	50	50	5	50	5	2	2	2	2	5	5	5	5	2	5	5	5	5	5	5	5	5	5	5	5	5
ANZG (2018) Marine water 95% toxicant DGVs										80[#6]												1,900[#7]							
10 x ADWG 2011 (May 2019 Update) - Recreational Water									300	300	15000		400				3000							300				30	
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
PFAS NEMP 2020 Table 1 Health Recreational Water																													
PFAS NEMP 2020 Table 5 Interim marine 95%																													
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
Lab Report Number	**Field ID**	**Date**																											
ES2019471	WSP_CC01_GW01	4/06/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2030732	WSP_CCS_GW01	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW03	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW04	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW05b	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW06	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_GW08	1/09/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2036491	CRESCENT-GW02	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW03	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW04	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW05B	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW06	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW07	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-GW08	16/10/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2042721	WSP_CCS_I&M	2/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
ES2045287	WSP-CCS-GW02	17/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP-CCS-GW07	17/12/2020	<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Statistics

Number of Results		17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<2	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *		1	2.5	25	25	2.5	25	2.5	1	1	1	1	2.5	2.5	2.5	2.5	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
95% UCL (Student's-t) *		1	2.5	25	25	2.5	25	2.5	1	1	1	1	2.5	2.5	2.5	2.5	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
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#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			Chlorinated Hydrocarbons																				Perfluoroalkane Carboxylic Acids	VOCs			Solv		
			1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50	0.01	5	5	5	50	50	50
ANZG (2018) Marine water 95% toxicant DGVs																													
10 x ADWG 2011 (May 2019 Update) - Recreational Water							30								7				500			3							
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
PFAS NEMP 2020 Table 1 Health Recreational Water																							10[#8]						
PFAS NEMP 2020 Table 5 Interim marine 95%																							220[#9]						
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																													
2-4m																													
4-8m																													
Lab Report Number	**Field ID**	**Date**																											
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW03	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW04	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW05b	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW06	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	WSP_CCS_GW08	**1/09/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	0.05	<5	<5	<5	<50	<50	<50
	CRESCENT-GW03	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW04	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW05B	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW06	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW07	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
	CRESCENT-GW08	**16/10/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	0.04	<5	<5	<5	<50	<50	<50
	WSP-CCS-GW07	**17/12/2020**	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50	<0.01	<5	<5	<5	<50	<50	<50
Statistics																													
Number of Results			**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.01**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<5**	**<5**	**<5**	**<5**	**<5**	**<5**	**<50**	**<5**	**<50**	**<5**	**<5**	**<5**	**<2**	**<10**	**<2**	**<5**	**<5**	**<5**	**<5**	**<50**	**0.05**	**<5**	**<5**	**<5**	**<50**	**<50**	**<50**
Average Concentration *			**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**25**	**2.5**	**25**	**2.5**	**2.5**	**2.5**	**1**	**5**	**1**	**2.5**	**2.5**	**2.5**	**2.5**	**25**	**0.01**	**2.5**	**2.5**	**2.5**	**25**	**25**	**25**
95% UCL (Student's-t) *			**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**25**	**2.5**	**25**	**2.5**	**2.5**	**2.5**	**1**	**5**	**1**	**2.5**	**2.5**	**2.5**	**2.5**	**25**	**0.0157**	**2.5**	**2.5**	**2.5**	**25**	**25**	**25**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
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#8 Recreational Water Quality Guideline Value (NHMRC 2019)
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#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

			ents			SVOCs																	Amino Aliphatics				Amino Aromatics		
			Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyriene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	2	4	4
ANZG (2018) Marine water 95% toxicant DGVs																														
10 x ADWG 2011 (May 2019 Update) - Recreational Water																														
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																														
2-4m																														
4-8m																														
PFAS NEMP 2020 Table 1 Health Recreational Water																														
PFAS NEMP 2020 Table 5 Interim marine 95%																														
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																														
2-4m																														
4-8m																														
Lab Report Number	**Field ID**	**Date**																												
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP_CCS_GW03	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP_CCS_GW04	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP_CCS_GW05b	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP_CCS_GW06	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP_CCS_GW08	**1/09/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW03	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW04	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW05B	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW06	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW07	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	CRESCENT-GW08	**16/10/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
	WSP-CCS-GW07	**17/12/2020**	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<4	<4
Statistics																														
Number of Results			**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<5**	**<2**	**<50**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<4**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<4**	**<4**
Average Concentration *			**2.5**	**1**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**
95% UCL (Student's-t) *			**2.5**	**1**	**25**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

	Anilines					Nitroaromatics			Phthalates						Organotins			
	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Monobutyltin as Sn	Tributyltin as SN	Tributyltin
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/L	ng/L	ngSn/L	ng/L
EQL	4	2	2	2	2	2	2	2	10	2	2	2	2	2	5	5		2
ANZG (2018) Marine water 95% toxicant DGVs																		6
10 x ADWG 2011 (May 2019 Update) - Recreational Water																		
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand																		
2-4m																		
4-8m																		
PFAS NEMP 2020 Table 1 Health Recreational Water																		
PFAS NEMP 2020 Table 5 Interim marine 95%																		
NEPM 2013 Table 1A(4) Rec HSL C GW for Vapour Intrusion, Sand																		
2-4m																		
4-8m																		
Lab Report Number	**Field ID**	**Date**																	
ES2019471	**WSP_CC01_GW01**	**4/06/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	2	<2	-	-	<2	-
ES2030732	**WSP_CCS_GW01**	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW03	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW04	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW05b	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW06	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
	WSP_CCS_GW08	**1/09/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
ES2036491	**CRESCENT-GW02**	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW03	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW04	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	7	6	6	-
	CRESCENT-GW05B	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW06	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW07	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
	CRESCENT-GW08	**16/10/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2	-
ES2042721	**WSP_CCS_I&M**	**2/12/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	<10[#10]	-
ES2045287	**WSP-CCS-GW02**	**17/12/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	<2
	WSP-CCS-GW07	**17/12/2020**	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-	-
Statistics																			
Number of Results			**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**7**	**7**	**9**	**1**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**2**	**ND**	**7**	**6**	**6**	**ND**
Maximum Concentration			**<4**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<2**	**<10**	**<2**	**<2**	**<2**	**2**	**<2**	**7**	**6**	**<10**	**<2**
Average Concentration *			**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**1**	**1.1**	**1**	**3.1**	**3**	**2**	
95% UCL (Student's-t) *			**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**1**	**1.162**	**1**	**4.392**	**3.972**	**3.24**	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Moderate reliability. DGV may not protect key test species from chronic toxicity (this
#2 High reliability. DGV may not protect key test species from chronic toxicity (this refers
#3 High reliability
#4 Very high reliability
#5 Low reliability
#6 Moderate reliability
#7 Very Low reliability
#8 Recreational Water Quality Guideline Value (NHMRC 2019)
#9 Australian and New Zealand Guidelines for marin and Marine Water Quality
#10 Reported Analyte LOR is higher than Requested Analyte LOR
#11 Unknown reliability

Environmental Standards

ANZG, 2018, ANZG (2018) Marine water 95% toxicant DGVs

				BTEX					TRH				NA	MAH									
				Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	C6-C10$_{F1}$	C10-C16	C16-C34 (F3)	C34-C40 (F4)	Weight Used for % Calculation	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.1	0.1	0.1	0.2	0.1	10	50	100	100	0.0001	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																			
ES2029196	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	450	230	0.480	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	QA01	19/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				0	0	0	0	0	0	0	127	79	-	0	0	0	0	0	0	0	0	0
ES2029196	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	450	230	0.480	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
739160	QA01A	19/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	-	<0.5	<0.5	<0.5	-	-	-	-	<0.5	-
RPD				0	0	0	0	0	0	0	127	79	-	0	0	0	-	-	-	-	0	-
ES2029197	WSP_CCS_GW06_1.0	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	260	<100	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA02	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	510	170	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	65	52	-	-	-	-	-	-	-	-	-	-
ES2029197	WSP_CCS_GW06_1.0	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	260	<100	-	-	-	-	-	-	-	-	-	-
739189	WSP_CCS_QA02A	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	3,100	660	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	171	147	-	-	-	-	-	-	-	-	-	-
ES2029197	WSP_CCS_GW08_0.5	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	330	130	0.499	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA03	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	270	110	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	20	17	-	-	-	-	-	-	-	-	-	-
ES2029197	WSP_CCS_GW08_0.5	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	330	130	0.499	-	-	-	-	-	-	-	-	-
739189	WSP_CCS_QA03A	20/08/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_1.0	8/10/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	0.272	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA04	8/10/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_1.0	8/10/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	0.272	-	-	-	-	-	-	-	-	-
749892	WSP_CCS_QA04A	8/10/2020	soil	<0.2	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-

Comments
#1 No
#2 A. SMYLIE
#3 -
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

*** RPDs have only been considered where a concentration is greater than 1 times the EQL.**
**** Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))**
***** Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

				PAH																			Metals														
				Benzo(b+j+k)fluoranthene	4-Chloronaphthalene	2-chloronaphthalene	2-methylnaphthalene	2a-methylacenaphthylene	7,12-Dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b,k,j)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Vanadium	Zinc
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	10	1	10	0.4	2	2	5	5	5	0.1	2	2	5	5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																			
ES2029196	**WSP_CCS_GW03_0.5**	**19/08/2020**	soil	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	QA01	**19/08/2020**	soil	<1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	**WSP_CCS_GW03_0.5**	**19/08/2020**	soil	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
739160	**QA01A**	**19/08/2020**	soil	<1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW05_3.0**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.6	1.4	6.0	6.1	3.9	5.4	0.7	12.0	<0.5	3.0	<0.5	4.3	12.0	<5	70	<1	<50	<1	12	5	42	76	243	0.3	6	<5	15	132
	WSP_CCS_QA02	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.8	1.8	7.2	7.3	4.5	6.4	0.9	14.0	<0.5	3.5	<0.5	5.2	14.1	<5	80	<1	<50	<1	17	6	77	113	243	0.5	10	<5	17	266
RPD				-	-	-	-	-	-	0	29	25	18	18	14	17	25	15	0	15	0	19	16	0	13	0	0	0	34	18	59	39	0	50	50	0	12	67
ES2029397	**WSP_CCS_GW05_3.0**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.6	1.4	6.0	6.1	3.9	5.4	0.7	12.0	<0.5	3.0	<0.5	4.3	12.0	<5	70	<1	<50	<1	12	5	42	76	243	0.3	6	<5	15	132
739589	**WSP_CCS_QA03A**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	0.8	5.7	5.9	3.4	5.5	1.1	11	<0.5	2.4	<0.5	3.7	12	5.2	110	<1	<50	<1	25	6.7	70	77	330	0.2	23	<5	23	180
RPD				-	-	-	-	-	-	0	18	55	5	3	14	2	44	9	0	22	0	15	0	4	44	0	0	0	70	29	50	1	30	40	117	0	42	31
ES2029397	**WSP_CCS_GW08_0.5**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.6	1.1	4.6	4.8	3.0	4.3	0.6	9.7	<0.5	2.2	0.7	4.8	8.6	6	140	<1	<50	<1	14	3	107	406	138	0.9	6	<5	25	565
	WSP_CCS_QA03	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.8	1.6	6.0	5.8	2.9	5.3	0.7	12.9	<0.5	2.6	0.8	6.4	11.7	5	130	<1	<50	<1	11	4	128	376	184	0.9	7	<5	24	450
RPD				-	-	-	-	-	-	0	29	37	26	19	3	21	15	28	0	17	13	29	31	18	7	0	0	0	24	29	18	8	29	0	15	0	4	23
ES2029397	**WSP_CCS_GW08_0.5**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	0.6	1.1	4.6	4.8	3.0	4.3	0.6	9.7	<0.5	2.2	0.7	4.8	8.6	6	140	<1	<50	<1	14	3	107	406	138	0.9	6	<5	25	565
739589	**WSP_CCS_QA03A**	**20/08/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	0.6	4.0	4.0	2.6	3.7	0.8	7.1	<0.5	2.2	<0.5	3.9	7.1	11	180	<1	<50	<1	22	<5	83	610	170	2.0	7.6	<5	33	610
RPD				-	-	-	-	-	-	0	18	59	14	18	14	15	29	31	0	0	33	21	19	59	25	0	0	0	44	0	25	40	21	76	24	0	28	8
ES2035543	**WSP_CCS_BH07_1.0**	**8/10/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	80	<1	<50	<1	8	5	11	17	290	<0.1	5	<5	16	36
	WSP_CCS_QA04	**8/10/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	100	<1	<50	<1	6	4	16	16	272	<0.1	4	<5	10	59
RPD				-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	29	22	37	6	6	0	22	0	46	48
ES2035543	**WSP_CCS_BH07_1.0**	**8/10/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	80	<1	<50	<1	8	5	11	17	290	<0.1	5	<5	16	36
749992	**WSP_CCS_QA04A**	**8/10/2020**	soil	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.5	130	<1	<50	<0.4	8.0	<5	7.6	19	470	<0.1	<5	<5	13	60
RPD				-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	37	11	47	0	0	0	21	92

Comments
#1 No
#2 A. SMYLIE
#3 -
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
****Elevated RPDs are highlighted as per QA/QC Profile settings (Acceptable RPDs for each EQL multiplier range a**
****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any me**

				Phenols																		Organochlorine Pesticides																													
				3&4-Methylphenol (m&p-cresol)	2,3,4,5-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (o-cresol)	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol	Phenols (Total chlorinated)	Phenols (Total Non chlorinated)	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
EQL				0.4	5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.2	0.5	5	20	0.5	5	1	0.5	1	20	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	90	0.05	0.05	0.05	0.05	90	0.05	0.05	0.05	0.05	0.2
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																														
ES2029196	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	QA01	19/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029196	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
739160	QA01A	19/08/2020	soil	<0.4	5	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.2	<0.5	5	20	<0.5	5	<1	<0.5	1	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029197	WSP_CCS_GW06_3.0	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_QA02	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029197	WSP_CCS_GW06_3.0	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
739159	WSP_CCS_QA02A	20/08/2020	soil	<0.4	5	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.2	<0.5	5	20	<0.5	5	<1	<0.5	1	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029197	WSP_CCS_GW08_0.5	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_QA03	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029197	WSP_CCS_GW08_0.5	20/08/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
739159	WSP_CCS_QA03A	20/08/2020	soil	<0.4	5	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.2	<0.5	5	20	<0.5	5	<1	<0.5	1	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2035143	WSP_CCS_BH07_1.0	8/10/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
	WSP_CCS_QA04	8/10/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2035143	WSP_CCS_BH07_1.0	8/10/2020	soil	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<1	<0.5	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
741992	WSP_CCS_QA04A	8/10/2020	soil	<0.4	-	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<0.5	<5	<20	<0.5	<5	<1	<0.5	<1	<20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<50	<0.05	<0.05	<0.05	<0.05	<0.2
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments
#1: No
#2: A. SMYLIE
#3: -
#4: Mid grey soil.
#5: C. OWLER
#6: Mid brown soil.

**RPDs have only been considered where a concentration is greater than 1 times the EQL.
** Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range a
** *Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met

				Explosives				Organophosphorous Pesticides														Herbicides			Pesticides						Halogenated Hydrocarbons					
				1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Pirimiphos	Dinosab	Pronamide	Trifluralin	Chlorbenzilate	Carbaryle	Dimethos-5-methyl	Fenamiphos	Parathion	Chlorpyrifos-ethyl	1,2-dibromoethane	Bromomethane	Dichlorodifluoromeh ane	Iodomethane	Trichlorofluoromeha ne
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	20	0.5	0.5	0.5	0.5	0.05	0.05	0.2	0.05	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																	
ES2021916	**WSP_CCS_GW03_0.5**	**19/08/2020**	**soil**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	-	<0.5	<0.05	<0.05	<0.05	<0.2	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
	QA01	19/08/2020	soil	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	-	<0.5	<0.05	<0.05	<0.05	<0.2	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0
ES2021916	**WSP_CCS_GW03_0.5**	**19/08/2020**	**soil**	<0.5	<1.0	<1.0	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	<0.5	-	<0.5	<0.05	<0.05	<0.05	<0.2	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
719360	**QA01A**	**19/08/2020**	**soil**	-	<0.5	<0.5	<0.5	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<0.5	<0.5	-	-	-	-	<0.2	-	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	-	-	0	-	0	0	0	0	0	0
ES2021917	**WSP_CCS_GW06_3.0**	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
	WSP_CCS_QA02	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
RPD				-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	0	0	0	0	-	-	-	-	-
ES2021917	**WSP_CCS_GW06_3.0**	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
719389	**WSP_CCS_QA02A**	**20/08/2020**	**soil**	-	-	-	-	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<0.5	-	-	-	-	-	<0.2	-	-	-	-	-	-
RPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-
ES2021917	**WSP_CCS_GW08_0.5**	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
	WSP_CCS_QA03	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
RPD				-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	0	0	0	0	-	-	-	-	-
ES2021917	**WSP_CCS_GW08_0.5**	**20/08/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
719389	**WSP_CCS_QA03A**	**20/08/2020**	**soil**	-	-	-	-	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<0.5	-	-	-	-	-	<0.2	-	-	-	-	-	-
RPD				-	-	-	-	0	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2033543	**WSP_CCS_BH07_1.0**	**8/10/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
	WSP_CCS_QA04	**8/10/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
RPD				-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	0	0	0	0	-	-	-	-	-
ES2033543	**WSP_CCS_BH07_1.0**	**8/10/2020**	**soil**	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	-	-	-	-	-	-	<0.05	<0.2	<0.05	-	-	-	-	-
741992	**WSP_CCS_QA04A**	**8/10/2020**	**soil**	-	-	-	-	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<0.5	-	-	-	-	-	<0.2	-	-	-	-	-	-
RPD				-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-

Comments
#1 No
#2 A SMYLIE
#3 -
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

**RPDs have only been considered where a concentration is greater than 1 times the EQL.
** Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range a
*** Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met

| | | | | Halogenated Benzenes | | | | | | | | | | | | | | Chlorinated Hydrocarbons | | | | | | | | | | | | | |

				VOCs						Solvents								SVOCs																Amino Aliphatics			
				Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,3-dichloropropene	cis-1,3-dichloropropene	Vinyl chloride	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Dibenzofuran	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Naphthalene	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	N-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	Hexachloropropene	Methapyrilene	n-nitrosomorpholine	N-nitrosopiperidine	n-nitrosopyrrolidine	Phenacetin	N-Nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																		
ES2029396	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<5	<5	<0.5	-	-	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	QA01	19/08/2020	soil	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<5	<5	<0.5	-	-	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
ES2029396	WSP_CCS_GW03_0.5	19/08/2020	soil	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<5	<5	<0.5	-	-	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
739160	QA01A	19/08/2020	soil	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	-	<5	<5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<0.5	-
RPD				0	0	0	0	0	0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-	-	0	0	-
ES2029397	WSP_CCS_GW05_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA02	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW05_3.0	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
739589	WSP_CCS_QA02A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW08_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA03	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	WSP_CCS_GW08_0.5	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
739589	WSP_CCS_QA03A	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_1.0	8/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA04	8/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	WSP_CCS_BH07_1.0	8/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
749992	WSP_CCS_QA04A	8/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
#1 No
#2 A. SMYLE
#3 -
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

**RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met

				PCBs							Amino Aromatics				Anilines							Nitroaromatics			Phthalates						
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	1-naphthylamine	2-naphthylamine	Diphenylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Benzotrichlorochloride	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																												
ES2029196	**WSP_CCS_GW03_0.5**	**19/08/2020**	**soil**	-	-	-	-	-	-	-	<0.5	-	-	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	QA01	19/08/2020	soil	-	-	-	-	-	-	-	<0.5	-	-	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2029196	**WSP_CCS_GW03_0.5**	**19/08/2020**	**soil**	-	-	-	-	-	-	-	<0.5	-	-	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
719160	QA01A	19/08/2020	soil	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
ES2029397	**WSP_CCS_GW06_3.0**	**20/08/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA02	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW06_3.0**	**20/08/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
719589	WSP_CCS_QA02A	20/08/2020	soil	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW08_0.5**	**20/08/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA03	20/08/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	**WSP_CCS_GW08_0.5**	**20/08/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
719589	WSP_CCS_QA03A	20/08/2020	soil	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_1.0**	**8/10/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_QA04	8/10/2020	soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	**WSP_CCS_BH07_1.0**	**8/10/2020**	**soil**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
749992	WSP_CCS_QA04A	8/10/2020	soil	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments
#1 No
#2 A. SMYLIE
#3 -
#4 Mid grey soil.
#5 C. OWLER
#6 Mid brown soil.

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**
**** Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range a**
**** *Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any met**

				Inorganics	BTEX					TRH				PFOS/PFOA	MAH								
				Cyanide Total	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	C6-C10_	C10-C16	C16-C34 (F3)	C34-C40 (F4)	Perfluorononanesulfonic acid (PFNS)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.001	1	1	1	2	1	20	50	100	100	0.01	1	1	1	5	5	5	5	1	5
Lab Report Number	Field ID	Date	Matrix Type																				
ES2019471	WSP_GC01_GW05	4/06/2020	water	0.001	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
	QA01	4/06/2020	water	0.001	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD				0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
ES2019471	WSP_GC01_GW05	4/06/2020	water	0.001	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
724158	QA01A	4/06/2020	water	<0.009	<1	<1	<1	<2	<1	<20	50	400	<100	<0.01	<1	<1	<1	-	-	-	<1	-	-
RPD				0	0	0	0	0	0	0	0	120	0	-	0	0	0	-	-	-	0	0	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_CCS_QA01	1/09/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
741649	WSP_CCS_QA01A	1/09/2020	water	-	<1	<1	<1	<2	<1	<20	70	200	<100	-	<1	<1	<1	-	-	-	<1	-	-
RPD				-	0	0	0	0	0	0	0	67	0	-	0	0	0	-	-	-	0	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
	CRESCENT-QA01	16/10/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	-	-	-	-	-	-	-	-	-
RPD				-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
751789	CRESCENT - QA01A	16/10/2020	water	-	<1	<1	<1	<1	<1	<20	<50	<100	<100	-	-	-	-	-	-	-	-	-	-
RPD				-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_QA03	2/12/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<5	<5	<5	<5	<5	<5	<5	<5	<5
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	water	-	<1	<2	<2	<2	<2	<20	<100	<100	<100	-	<1	<5	<5	<5	<5	<5	<5	<5	<5
761419	WSP_BWP_QA03A	2/12/2020	water	-	<1	<1	<1	<2	<1	<20	<50	<100	<100	-	<1	<1	<1	-	-	-	<1	-	-
RPD				-	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	0	-	-

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QA QC Profile settings (Acceptable RPDs for each EQL multiplier range are: 100 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))**

***** Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

				PAH																			
				Benzo[b+j+k]fluoranthene	1-Chloronaphthalene	2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-Dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(ghi)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				4	5	2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																				
ES2019471	**WSP_GC01_GW05**	**4/06/2020**	**water**	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	QA01	**4/06/2020**	**water**	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2019471	**WSP_GC01_GW05**	**4/06/2020**	**water**	<4	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
724158	**QA01A**	**4/06/2020**	**water**	-	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2030732	**WSP_CCS_GW04**	**1/09/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_CCS_QA01	**1/09/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2030732	**WSP_CCS_GW04**	**1/09/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
741649	**WSP_CCS_QA01A**	**1/09/2020**	**water**	-	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2036491	**CRESCENT-GW07**	**16/10/2020**	**water**	-	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	CRESCENT-QA01	**16/10/2020**	**water**	-	-	-	-	-	-	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD				-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2036491	**CRESCENT-GW07**	**16/10/2020**	**water**	-	-	<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
751789	**CRESCENT - QA01A**	**16/10/2020**	**water**	-	-	-	-	-	-	<1	<1	<1	<1	2	2	2	2	<1	2	<1	1	<1	2
RPD				-	-	-	-	-	-	0	0	0	67	120	67	67	0	67	0	0	0	0	67
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	WSP_BWP_QA03	**2/12/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	**water**	-	-	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
761419	**WSP_BWP_QA03A**	**2/12/2020**	**water**	-	<5	<5	<5	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RPD				-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 Quantification of linear and branched isomers has been conducted as a single total response using the relat

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range**

***** Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Metals																																	
				Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Beryllium	Beryllium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (hexavalent)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Chromium (Trivalent)	Cobalt	Cobalt (filtered)	Copper	Copper (filtered)	Lead	Lead (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium	Vanadium (filtered)	Zinc	Zinc (filtered)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				1	1	20	1	1	1	50	50	0.2	0.1	5	1	1	1	1	1	1	1	1	1	1	5	1	0.1	0.1	1	1	1	1	5	5	5	5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																		
ES2019471	**WSP_GC01_GW05**	**4/06/2020**	**water**	-	<1	-	37	-	<1	-	60	-	<0.1	-	-	<1	-	-	34	-	<1	-	<1	-	138	-	<0.1	-	2	<10	-	-	<10	-	25
	QA01	**4/06/2020**	**water**	-	<1	-	38	-	<1	-	90	-	<0.1	-	-	<1	-	-	35	-	<1	-	<1	-	137	-	<0.1	-	2	<10	-	-	<10	-	29
RPD				-	0	-	3	-	0	-	40	-	0	-	-	0	-	-	3	-	0	-	0	-	1	-	0	-	0	0	-	-	0	-	15
ES2019471	**WSP_GC01_GW05**	**4/06/2020**	**water**	-	<1	-	37	-	<1	-	60	-	<0.1	-	-	<1	-	-	34	-	<1	-	<1	-	138	-	<0.1	-	2	<10	-	-	<10	-	25
724158	**QA01A**	**4/06/2020**	**water**	3	-	100	-	<1	-	2,900	-	<0.2	-	<5	<1	-	<5	5	-	<1	-	<1	-	930	-	0.1	-	7	-	-	-	<5	-	32	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	**WSP_CCS_GW04**	**1/09/2020**	**water**	-	<10 [#1]	-	56	-	<10 [#1]	-	4,040	-	<1.0 [#1]	-	-	<10 [#1]	-	-	12	-	37	-	<10 [#1]	-	801	-	<0.1	-	<10 [#1]	<100 [#1]	-	-	<100 [#1]	-	<50 [#1]
	WSP_CCS_QA01	**1/09/2020**	**water**	-	<10 [#1]	-	59	-	<10 [#1]	-	4,040	-	<1.0 [#1]	-	-	<10 [#1]	-	-	12	-	79	-	<10 [#1]	-	814	-	<0.1	-	13	<100 [#1]	-	-	<100 [#1]	-	119
RPD				-	0	-	5	-	0	-	0	-	0	-	-	0	-	-	0	-	72	-	0	-	2	-	0	-	26	0	-	-	0	-	82
ES2030732	**WSP_CCS_GW04**	**1/09/2020**	**water**	-	<10 [#1]	-	56	-	<10 [#1]	-	4,040	-	<1.0 [#1]	-	-	<10 [#1]	-	-	12	-	37	-	<10 [#1]	-	801	-	<0.1	-	<10 [#1]	<100 [#1]	-	-	<100 [#1]	-	<50 [#1]
741649	**WSP_CCS_QA01A**	**1/09/2020**	**water**	-	3	-	50	-	<1	-	3,600	-	<0.2	-	-	<1	-	-	10	-	22	-	2	-	800	-	<0.1	-	7	2	-	-	<5	-	25
RPD				-	0	-	11	-	0	-	12	-	0	-	-	0	-	-	18	-	51	-	0	-	0	-	0	-	0	0	-	-	0	-	0
ES2036491	**CRESCENT-GW07**	**16/10/2020**	**water**	-	<1	-	-	-	-	-	-	-	<0.1	-	-	<1	-	-	-	-	112	-	5	-	-	-	<0.1	-	12	-	<1	-	-	-	128
	CRESCENT-QA01	**16/10/2020**	**water**	-	<10 [#1]	-	-	-	-	-	-	-	<1 [#1]	-	-	<10 [#1]	-	-	-	-	167	-	0	-	-	-	<0.1	-	<10 [#1]	-	-	-	-	-	<50 [#1]
RPD				-	0	-	-	-	-	-	-	-	0	-	-	0	-	-	-	-	167	-	0	-	-	-	0	-	18	-	-	-	-	-	88
ES2036491	**CRESCENT-GW07**	**16/10/2020**	**water**	-	<1	-	-	-	-	-	-	-	<0.1	-	-	<1	-	-	-	-	112	-	5	-	-	-	<0.1	-	12	-	<1	-	-	-	128
751789	**CRESCENT - QA01A**	**16/10/2020**	**water**	-	3	-	-	-	-	-	-	-	<0.2	-	-	<1	-	-	-	-	4	-	<1	-	-	-	<0.1	-	5	-	-	-	-	-	7
RPD				-	100	-	-	-	-	-	-	-	0	-	-	0	-	-	-	-	186	-	133	-	-	-	0	-	82	-	-	-	-	-	179
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	**water**	-	<1	-	64	-	<1	-	260	-	<0.1	-	-	<1	-	-	52	-	<1	-	<1	-	295	-	<0.1	-	45	<10	<1	-	<10	-	24
	WSP_BWP_QA03	**2/12/2020**	**water**	-	<1	-	65	-	<1	-	280	-	<0.1	-	-	<1	-	-	57	-	4	-	<1	-	278	-	<0.1	-	49	<10	<1	-	<10	-	29
RPD				-	0	-	2	-	0	-	7	-	0	-	-	0	-	-	9	-	120	-	0	-	6	-	0	-	9	0	0	-	0	-	19
ES2042721	**WSP_BWP_GW02**	**2/12/2020**	**water**	-	<1	-	64	-	<1	-	260	-	<0.1	-	-	<1	-	-	52	-	<1	-	<1	-	295	-	<0.1	-	45	<10	<1	-	<10	-	24
761419	**WSP_BWP_QA03A**	**2/12/2020**	**water**	-	1	-	60	-	<1	-	300	-	<0.2	-	-	<1	-	-	58	-	2	-	<1	-	290	-	<0.1	-	51	<1	<5	-	6	-	27
RPD				-	0	-	6	-	0	-	14	-	0	-	-	0	-	-	11	-	67	-	0	-	2	-	0	-	12	0	0	-	0	-	12

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 Quantification of linear and branched isomers has been conducted as a single total response using the relat

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Phenols																			Explosives				Perfluoroalkane Sulfonic Acids						
				3&4-Methylphenol (m&p-cresol)	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (o-cresol)	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	2	1	1	1	1	30	1	1	1	1	30	100	1	30	2	1	10	100	2	4	4	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																														
ES2019471	WSP_GCD1_GW05	4/06/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
	QA01	4/06/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0
ES2019471	WSP_GCD1_GW05	4/06/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
724158	QA01A	4/06/2020	water	<6	<10	<10	<10	<3	<3	<30	<3	<3	<5	<10	<30	<100	<10	<30	<10	<3	<10	<100	-	<5	<5	<5.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	0	0	0	-	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	0.02	<0.02	0.10	<0.02
	WSP_CCS_QA01	1/09/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	0.02	<0.02	0.07	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	35	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	0.02	<0.02	0.10	<0.02
741649	WSP_CCS_QA01A	1/09/2020	water	<6	<10	<10	<10	<3	<3	<30	<3	<3	<3	<10	<30	<100	<30	<30	<10	<3	<10	<100	-	<5	<5	<5.0	<0.01	<0.01	<0.01	0.02[#2]	<0.01	0.04[#2]	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	0	0	0	-	0	0	0	0	86	0
ES2036491	CRESCENT-GW07	16/10/2020	water	<2	-	<1	<1	<1	<1	-	<1	<1	<1	<1	-	-	<1	-	<2	<1	-	-	<2	<4	<4	<2	-	<0.02	-	<0.02	-	<0.01	-
	CRESCENT-QA01	16/10/2020	water	<2	-	<1	<1	<1	<1	-	<1	<1	<1	<1	-	-	<1	-	<2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<2	-	<1	<1	<1	<1	-	<1	<1	<1	<1	-	-	<1	-	<2	<1	-	-	<2	<4	<4	<2	-	<0.02	-	<0.02	-	<0.01	-
751789	CRESCENT - QA01A	16/10/2020	water	<6	-	<10	<10	<3	<3	<30	<3	<3	<3	<10	<30	<100	<30	<30	<10	<3	<10	<100	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
	WSP_BWP_QA03	2/12/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	0	0	0	0	-	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	water	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	<2.0	<1.0	-	-	<2	<4	<4	<2	-	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
761419	WSP_BWP_QA03A	2/12/2020	water	<6	<2	<10	<10	<3	<3	<30	<3	<3	<3	<10	<30	<100	<10	<30	<10	<3	<10	<100	-	<5	<5	<5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
RPD				0	-	0	0	0	0	-	0	0	0	0	-	-	0	-	0	0	-	-	-	0	0	0	-	0	0	0	0	0	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 Quantification of linear and branched isomers has been conducted as a single total response using the relat

***RPDs have only been considered where a concentration is greater than 1 times the EQL**
****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range**
*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Organochlorine Pesticides																						Pesticides						Herbicides		
				4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Chlorobenzilate	Carbazole	Demeton-S-methyl	Fenamiphos	Parathion	Pirimiphos-ethyl	Simazine	Pronamide	Trifluralin
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	0.5	0.5	2	0.5	100	2	5
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																															
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
	QA01	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
724158	QA01A	4/06/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	<2	-	<100	<5	<5
RPD				0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	0	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
	WSP_CCS_QA01	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
741649	WSP_CCS_QA01A	1/09/2020	water	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	<2	-	<100	<5	<5
RPD				0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	0	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<2	<0.5	<0.5	<2	<0.5	-	<2	-
	CRESCENT-QA01	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	-	-	<0.5	<0.5	<2	<0.5	-	-	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<2	<0.5	<0.5	<2	<0.5	-	<2	-
751789	CRESCENT - QA01A	16/10/2020	water	<0.1	<0.1	<0.1	<0.2	<0.1	<2	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	-	-	-	-	<2	-	<100	-	-
RPD				0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
	WSP_BWP_QA03	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2	<2	<0.5	<0.5	<2.0	<0.5	-	<2	-
761419	WSP_BWP_QA03A	2/12/2020	water	<0.1	<0.1	<0.1	<0.2	<0.1	<2	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	-	-	-	-	<2	-	<100	<5	<5
RPD				0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	-	-	0	-

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

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*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Organophosphorous Pesticides														Halogenated Hydrocarbons					Halogenated Benzenes												
				Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	1,2-dibromomethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3,4-tetrachlorobenzene	1,2,3,5-Tetrachlorobenzene	1,2,3-trichlorobenzene	1,2,4,5-tetrachlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3,5-Trichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	1	1	1	1	1	5	5	5	2	2	1	5	1	1	5	1	1	1	2
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																	
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	QA01	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
724158	QA01A	4/06/2020	water	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<1	<5	<1	<1	-	<1	<1	<1	<5
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_CCS_QA01	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
741649	WSP_CCS_QA01A	1/09/2020	water	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<1	<5	<1	<1	-	<1	<1	<1	<5
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	CRESCENT-QA01	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
751789	CRESCENT - QA01A	16/10/2020	water	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
	WSP_BWP_QA03	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	0	-	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<5	<50	<50	<5	<50	-	-	<5	-	<2	<2	-	<2	<2	<5	<5	<5	<5	<2
761419	WSP_BWP_QA03A	2/12/2020	water	<2	-	-	<2	<20	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<1	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5	<1	<5	<1	<1	-	<1	<1	<1	<5
RPD				0	-	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	0	-	0	0	-	0	0	-	0	0	0	0

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**** *Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any me**

				Chlorinated Hydrocarbons																																			
				Chlorinated hydrocarbons EPA Vic	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Benzyl chloride	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
				-	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.005	1	1	1	1	1	1	5	1	5	1	1	1	5	5	1	1	1	1	1	1	5	1	1	1	1	1	2	4	2	1	1	1	1	1
Lab Report Number	Field ID	Date	Matrix Type																																				
ES2019471	WSP_GC01_GW05	4/06/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	QA01	4/06/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD				-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2019471	WSP_GC01_GW05	4/06/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
724158	QA01A	4/06/2020	water	<0.005	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	-	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1
RPD				-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_CCS_QA01	1/09/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD				-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
741649	WSP_CCS_QA01A	1/09/2020	water	<0.005	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	-	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1
RPD				-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2036491	CRESCENT-GW07	16/10/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	CRESCENT-QA01	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
751789	CRESCENT - QA01A	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_QA03	2/12/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
RPD				-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	water	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	-	<2	<10	<2	<5	<5	<5	<5	<50
761419	WSP_BWP_QA03A	2/12/2020	water	<0.005	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	-	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1
RPD				-	0	0	0	0	0	0	-	0	-	0	0	0	-	-	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0

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***** Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

				Perfluoroalkane Carboxylic Acids	VOCs				Solvents							SVOCs																		
				Perfluorooctanoic acid (PFOA)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Dibenz[a,j]acridine	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Acetone	Ethyl chloride	Carbon disulfide	Isophorone	Vinyl acetate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	1-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	5-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.01	5	5	5	5	1	50	1	1	1	1	2	50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
Lab Report Number	Field ID	Date	Matrix Type																														
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	QA01	4/06/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD				0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2019471	WSP_GC01_GW05	4/06/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
724158	QA01A	4/06/2020	water	<0.01	-	-	<5	-	<1	-	<1	<1	<1	<1	-	-	-	<5	<5	<5	<5	-	<5	-	<5	-	<5	<5	-	-	-	<5	-	-
RPD				0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_CCS_QA01	1/09/2020	water	0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD				0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2030732	WSP_CCS_GW04	1/09/2020	water	0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
741649	WSP_CCS_QA01A	1/09/2020	water	<0.01	-	-	<5	-	<1	-	<1	<1	<1	<1	-	-	-	<5	<5	<5	<5	-	<5	-	<5	-	<5	<5	-	-	-	<5	-	-
RPD				0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	CRESCENT-QA01	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
751789	CRESCENT - QA01A	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_QA03	2/12/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
RPD				0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
ES2042721	WSP_BWP_GW02	2/12/2020	water	<0.01	<5	<5	-	<5	<50	<50	<50	-	-	<5	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<4	<2
761419	WSP_BWP_QA03A	2/12/2020	water	<0.01	-	-	<5	-	<1	-	<1	<1	<1	<1	-	-	-	<5	<5	<5	<5	-	<5	-	<5	-	<5	<5	-	-	-	<5	-	-
RPD				0	-	-	-	-	0	-	0	-	-	0	-	-	-	0	0	0	0	-	0	-	0	-	-	0	-	-	-	0	-	-

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***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m

				Amino Aliphatics				PCBs							Amino Aromatics				Anilines						Nitroaromatics			Phthalates						Organotins		
				N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	1-naphthylamine	2-naphthylamine	Diphenylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibutyltin as Sn	Monobutyltin as Sn	Tributyltin as SN
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/L	ng/L	ngSn/L
EQL				2	2	2	2	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	5	2	2	2	2	2	5	5	
Lab Report Number	**Field ID**	**Date**	**Matrix Type**																																	
ES2019471	WSP_GC01_GW05	4/06/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
	QA01	4/06/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ES2019471	WSP_GC01_GW05	4/06/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
724158	QA01A	4/06/2020	water	-	<5	<5	-	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	-	<5	-	-	-	-	<5	<5	<5	<5	6	<5	<5	<5	<5	<5	-	-	-
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
	WSP_CCS_QA01	1/09/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ES2030732	WSP_CCS_GW04	1/09/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
741649	WSP_CCS_QA01A	1/09/2020	water	-	<5	<5	-	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	-	<5	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2
	CRESCENT-QA01	16/10/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-GW07	16/10/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<5	<5	<2
751789	CRESCENT - QA01A	16/10/2020	water	-	-	-	-	<5	<1	<5	<5	<5	<5	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
	WSP_BWP_QA03	2/12/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
RPD				0	0	0	0	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ES2042721	WSP_BWP_GW02	2/12/2020	water	<2	<2	<2	<2	-	-	-	-	-	-	-	<2	-	-	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	-	-	-
761419	WSP_BWP_QA03A	2/12/2020	water	-	<5	<5	-	<5	<1	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	-	-	-	-	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	-	-	-
RPD				-	0	0	-	-	-	-	-	-	-	-	0	-	-	-	0	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-

Comments

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*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any m**

			BTEX										TRH					MAH									
			Benzene		Toluene		Ethylbenzene		Xylene (m & p)		Xylene (o)		C6-C10_		C10-C16	C16-C34 (F3)	C34-C40 (F4)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
			µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	0.2	2	0.5	2	0.5	2	0.5	2	0.5	20	10	100	100	100	5	5	5	5	5	5	5	5	5
Lab Report Number	**Field ID**	**Date**																									
ES2019471	WSP_GCD1_RB01	4/06/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	WSP_GCD1_TB01	4/06/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	<0.2	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
	WSP_BWP_TB03	1/12/2020	<1	-	<2	-	<2	-	<2	-	<2	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																											
Number of Results			10	3	10	3	10	3	10	3	10	3	10	3	6	6	6	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<1	<0.2	<2	<0.5	<2	<0.5	<2	<0.5	<2	<0.5	<20	<10	<100	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5
Average Concentration *			0.5	0.1	1	0.25	1	0.25	1	0.25	1	0.25	10	5	50	50	50									
95% UCL (Student's-t) *			0.5	0.1	1	0.25	1	0.25	1	0.25	1	0.25	10	5	50	50	50									

* A Non Detect Multiplier of 0.5 has been applied.

			PAH																			Metals																
			2-chloronaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene		Phenanthrene	Pyrene	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Chromium (iii+vi) (filtered)	Cobalt (filtered)	Copper (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Nickel (filtered)	Selenium (filtered)	Uranium (filtered)	Vanadium (filtered)	Zinc (filtered)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	2	2	2	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	50	0.1	1	1	1	1	1	0.1	1	10	1	10	5
Lab Report Number	**Field ID**	**Date**																																				
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<2	<2	<2	<2	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																						
Number of Results			1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	10	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<2	<2	<2	<2	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<50	<0.1	<1	<1	<1	<1	<1	<0.1	<1	<10	<1	<10	<5
Average Concentration *							0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	2.1	0.5	0.5	0.5																		
95% UCL (Student's-t) *							0.5	0.5	0.5	0.5	0.25	0.5	0.5	0.5	0.5	0.5	0.5	2.589	0.5	0.5	0.5																		

* A Non Detect Multiplier of 0.5 has been applied.

			Phenols												Organochlorine Pesticides																							
			3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol (o-cresol)	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	1	1	1	1	1	1	1	1	1	2	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2
Lab Report Number	**Field ID**	**Date**																																			
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																					
Number of Results			**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Minimum Detect			**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration			**<2**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<2**	**<1**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2**
Average Concentration *			**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**
95% UCL (Student's-t) *			**1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**1**	**0.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**1**

* A Non Detect Multiplier of 0.5 has been applied.

			Explosives				Perfluoroalkane Sulfonic Acids						Organophosphorous Pesticides														Herbicides	Pesticides								
			1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)	Azinophos-methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	Pronamide	Chlorobenzilate	Carbazole	Demeton-S-methyl	Ketamiphos	Parathion	Pirimphos-ethyl	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			2	4	4	2	0.02	0.02	0.02	0.02	0.01	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	2	0.5	2	2	2	0.5	0.5	2	0.5	5	5	5
Lab Report Number	**Field ID**	**Date**																																		
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	<0.02	-	<0.02	-	<0.01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	-	-	-	<0.5	<0.5	<2	<0.5	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<2	<4	<4	<2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<2.0	<0.5	<2	<2	<2	<0.5	<0.5	<2.0	<0.5	<5	<5	<5
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																				
Number of Results			1	1	1	1	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<2	<4	<4	<2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<0.5	<2	<2	<2	<0.5	<0.5	<2	<0.5	<5	<5	<5
Average Concentration *							0.01		0.01		0.005		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25				0.25	0.25	1	0.25			
95% UCL (Student's-t) *							0.01		0.01		0.005		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1	1	0.25				0.25	0.25	1	0.25			

* A Non Detect Multiplier of 0.5 has been applied.

			Chlorinated Hydrocarbons																													
			1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	5	50	5	5	5	2	10	2	5	5	5	5	50
Lab Report Number	**Field ID**	**Date**																												
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																														
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<50	<5	<5	<5	<2	<10	<2	<5	<5	<5	<5	<50
Average Concentration *																														
95% UCL (Student's-t) *																														

* A Non Detect Multiplier of 0.5 has been appllied.

			Halogenated Hydrocarbons					Halogenated Benzenes										Perfluoroalkane Carboxylic Acids	SVOCs															
			1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Pentachlorobenzene	Perfluorooctanoic acid (PFOA)	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Acetophenone	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	50	50	5	50	5	2	2	2	2	5	5	5	5	2	0.01	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2
Lab Report Number	**Field ID**	**Date**																																
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	Rinsate01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank01	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	Rinsate02	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip Blank02	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<0.01	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																		
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<50	<50	<5	<50	<5	<2	<2	<2	<2	<5	<5	<5	<5	<2	<0.01	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
Average Concentration *																		0.005																
95% UCL (Student's-t) *																		0.005																

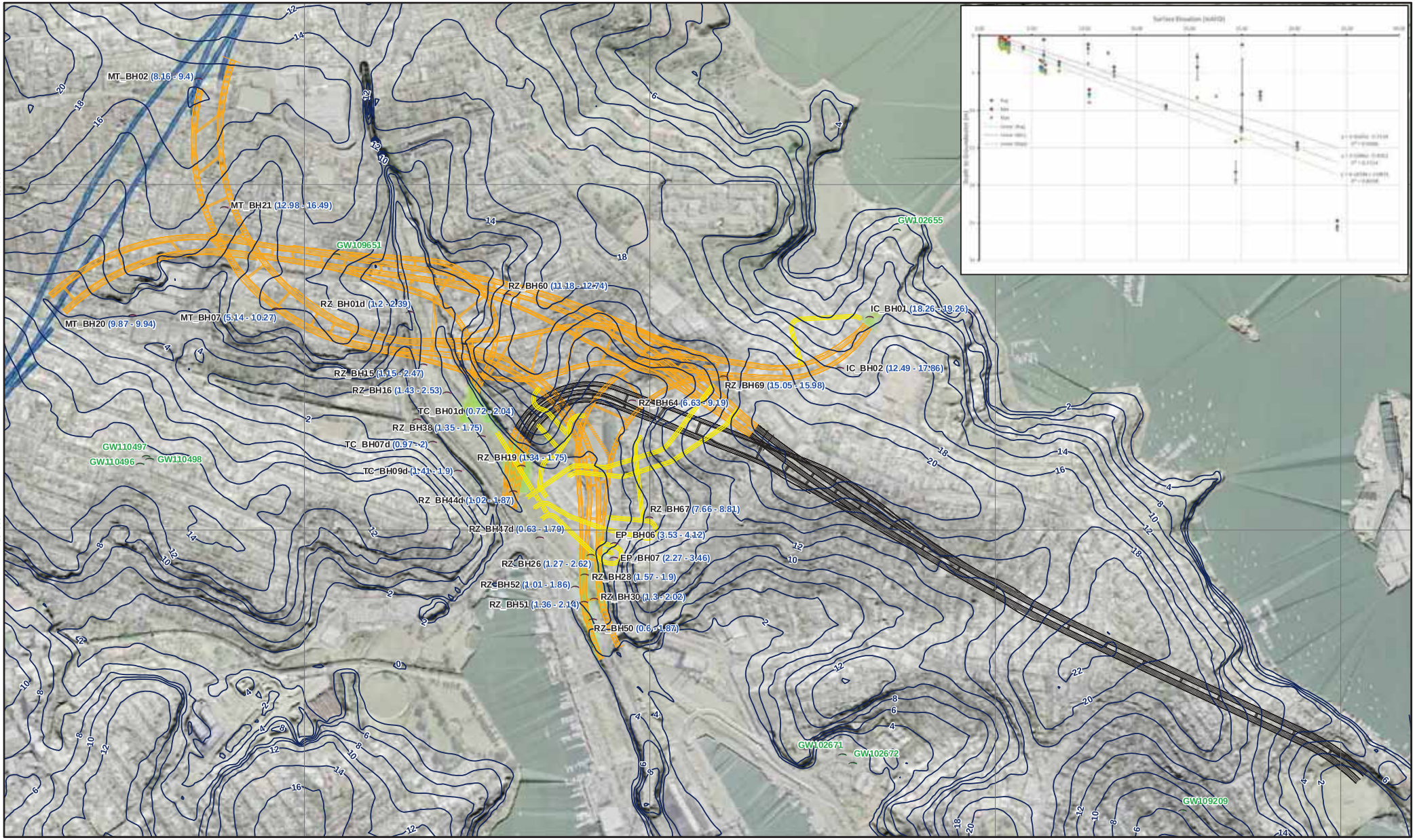
* A Non Detect Multiplier of 0.5 has been applied.

			VOCs			Solvents						Amino Aliphatics				Amino Aromatics		Anilines						Nitroaromatics			Phthalates					
			cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	5	5	50	50	50	5	2	50	2	2	2	2	2	4	4	4	2	2	2	2	2	2	2	10	2	2	2	2	2
Lab Report Number	**Field ID**	**Date**																														
ES2019471	WSP_GC01_RB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_GC01_TB01	4/06/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029196	RinsateD1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip BlankD1	19/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2029397	RinsateD2	20/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Trip BlankD2	17/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2030732	WSP_CCS_Rinsate	1/09/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WSP_CCS_Trip Blank	31/08/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2035543	TRIP BLANK 03	8/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2036491	CRESCENT-RINSATE	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CRESCENT-TRIP BLANK	16/10/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES2042721	WSP_BWP_RB03	2/12/2020	<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
	WSP_BWP_TB03	1/12/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistics																																
Number of Results			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<5	<5	<50	<50	<50	<5	<2	<50	<2	<2	<2	<2	<2	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
Average Concentration *																																
95% UCL (Student's-t) *																																

* A Non Detect Multiplier of 0.5 has been applied.

APPENDIX F

HISTORICAL INVESTIGATION DATA



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

P S M

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

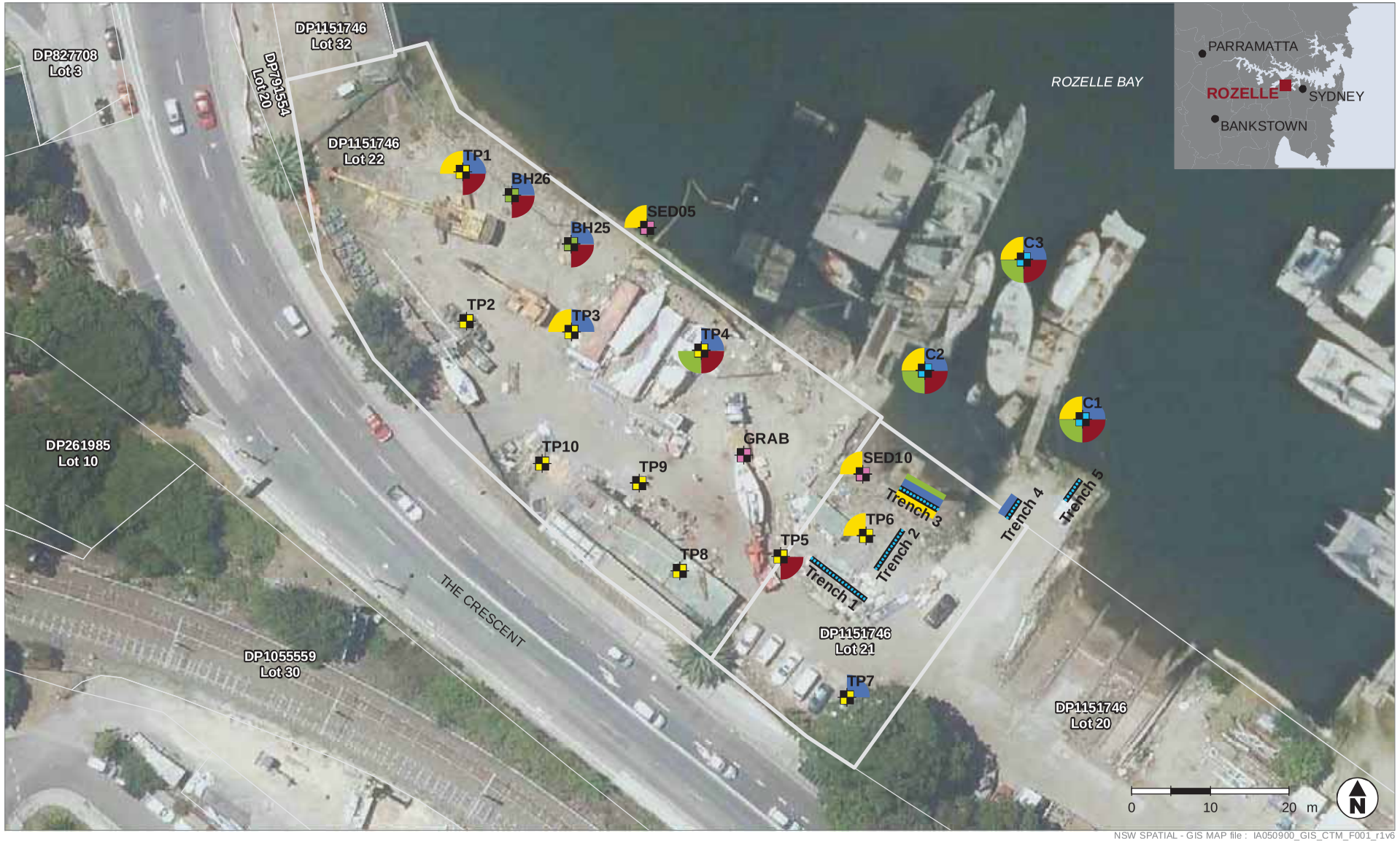
Rozelle Interchange & WHT Enabling Works Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\PSM3696\Eng\GIS\03_Figures\PSM3696-022R Final\Figure 4 Project Wide Interpreted Groundwater Level Contours.mxd



NSW SPATIAL - GIS MAP file : IA050900_GIS_CTM_F001_r1v6

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FIGURE 1 SITE LAYOUT, SAMPLING LOCATIONS AND CONTAMINANTS OF CONCERN IN EXCESS OF CRITERIA

DETAILED SITE INVESTIGATION
RMS Lots 21 and 22, DP1151746, Rozelle Bay

Site SKM 1998 sampling locations SKM 1998 site

NSW SPATIAL - GIS MAP file : IA050900_GIS_CTM_F002_r1v4

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FIGURE 2 SKM Assessment locations 1998

DETAILED SITE INVESTIGATION
RMS Lots 21 and 22, DP1151746, Rozelle Bay

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Field_ID	Grit-SA09	SED-SA05	SED-SA10	TP01-SA01	TP01-SA02	TP02-SA03	TP03-SA06	TP04-SA07	TP05-SA11	TP06-SA12	TP07-SA13	TP08-SA14	TP09-SA15	TP10-QA01
Sampled_Date-Time	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014

Method_Type	ChemName	Units	EQL	NEPM 2013 Table 1A(1) HIL's Column D Commercial/Industrial	NEPM 2013 Table 1A(1) HIL's Column C Recreational	NEPM 2013 Table 1B(6) TPH Management Limits (Coarse)	NEPM 2013 Table 1B(6) ESL's for TPH Urban Residential/Public Open Space (Coarse)														
Moisture Content	Moisture	%	1					<1	17.6	18.1	14.7	22	8.4	7.3	12.9	18.4	14.3	7.5	15.1	13.9	9.6
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5					<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.9	0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5					<0.5	<0.5	0.7	0.8	3.9	<0.5	1.6	0.9	0.8	0.6	2.8	0.6	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5					<0.5	1	1.3	3.7	14.6	0.5	3	2.5	1.5	1.5	12.3	2.4	1.8	0.7
	Benzo(a) pyrene	mg/kg	0.5				0.7	<0.5	1.2	1.1	4	12.9	0.6	2.3	2.5	1.8	1.4	10.1	2.3	1.7	0.7
	Benzo(b)fluoranthene	mg/kg	0.5					<0.5	1.4	1.7	5.8	18.4	0.8	3.2	3.7	2.6	1.9	16.1	3.3	2.6	0.9
	Benzo(g,h,i)perylene	mg/kg	0.5					<0.5	0.8	0.7	2.8	7	<0.5	1.2	1.8	1	0.8	5.7	1	0.7	<0.5
	Benzo(k)fluoranthene	mg/kg	0.5					<0.5	0.5	0.6	1.8	7.5	<0.5	1.3	1.3	1	0.6	5.6	1.2	1	<0.5
	Chrysene	mg/kg	0.5					<0.5	1.1	1.3	3.7	14	0.5	2.6	2.6	1.8	1.5	12.2	2.6	1.9	0.7
	Dibenz(a,h)anthracene	mg/kg	0.5					<0.5	<0.5	<0.5	0.6	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5					<0.5	2	3.2	7.5	33.5	1	6.8	4.9	4	3.4	20.1	5.6	3.9	1.3
	Fluorene	mg/kg	0.5					<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5					<0.5	0.6	0.6	2.3	6.3	<0.5	1.1	1.5	0.9	0.7	4.9	1	0.8	<0.5
	Naphthalene	mg/kg	0.5					<0.5	0.7	0.6	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	PAHs (Sum of total)	mg/kg	0.5	4000	300			<0.5	12.3	18.4	42.4	166	5.1	35.6	30.9	23.4	17.4	120	27.2	19.8	6.4
	Phenanthrene	mg/kg	0.5					<0.5	0.9	2.7	1.9	10.4	0.6	5	2.9	2.7	1.5	6.2	1.8	1.5	0.6
	Pyrene	mg/kg	0.5					<0.5	2.1	2.8	7.5	34.3	1.1	6.6	5.2	4.1	3.5	19.2	5.4	3.9	1.5
Total Mercury by FIMS	Mercury	mg/kg	0.1	730	80			<0.1	0.3	0.2	<0.1	0.2	0.1	0.1	1.2	1.8	0.4	0.2	0.2	0.2	0.4
Total Metals by ICP-AES	Arsenic	mg/kg	5	3000	300			<5	8	28	10	10	5	<5	17	26	24	25	5	5	7
	Cadmium	mg/kg	1	900	90			<1	<1	<1	<1	<1	<1	1	7	4	<1	2	<1	<1	<1
	Chromium (III+VI)	mg/kg	2					18	30	84	11	19	24	26	86	61	78	49	79	11	13
	Copper	mg/kg	5	240000	17000			8	327	836	176	143	113	321	1020	944	467	276	78	107	75
	Lead	mg/kg	5	1500	600			44	278	241	797	363	181	341	1650	801	299	553	192	340	173
	Nickel	mg/kg	2	6000	1200			<2	13	58	39	19	10	16	38	56	65	37	7	20	13
	Zinc	mg/kg	5	400000	30000			41	1680	1260	515	667	900	1940	13,200	1780	1110	1100	579	269	336
TRH - Semivolatile Fraction	C10-C16	mg/kg	50			1000	120	-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C16-C34	mg/kg	100			2500	300	-	-	-	280	-	-	220	-	-	490	770	-	-	-
	C34-C40	mg/kg	100			10000	2800	-	-	-	<100	-	-	<100	-	-	180	340	-	-	-
	F2-NAPHTHALENE	mg/kg	50					-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C10 - C14	mg/kg	50					-	-	-	<50	-	-	<50	-	-	<50	<50	-	-	-
	C15 - C28	mg/kg	100					-	-	-	190	-	-	130	-	-	320	490	-	-	-
	C29-C36	mg/kg	100					-	-	-	130	-	-	130	-	-	280	440	-	-	-
	+C10 - C36 (Sum of total)	mg/kg	50					-	-	-	320	-	-	260	-	-	600	930	-	-	-
	C10 - C40 (Sum of total)	mg/kg	50					-	-	-	280	-	-	220	-	-	670	1110	-	-	-
TRH Volatiles/BTEX	Benzene	mg/kg	0.2				50	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	-	-
	Ethylbenzene	mg/kg	0.5				70	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Naphthalene	mg/kg	1					-	-	-	<1	-	-	<1	-	-	<1	<1	-	-	-
	Toluene	mg/kg	0.5				85	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Total BTEX	mg/kg	0.2					-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	-	-
	C6 - C9	mg/kg	10					-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-
	Xylene (m & p)	mg/kg	0.5					-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Xylene (o)	mg/kg	0.5					-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	Xylene Total	mg/kg	0.5				105	-	-	-	<0.5	-	-	<0.5	-	-	<0.5	<0.5	-	-	-
	C6-C10 less BTEX (F1)	mg/kg	10					-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-
	C6-C10	mg/kg	10			700	180	-	-	-	<10	-	-	<10	-	-	<10	<10	-	-	-

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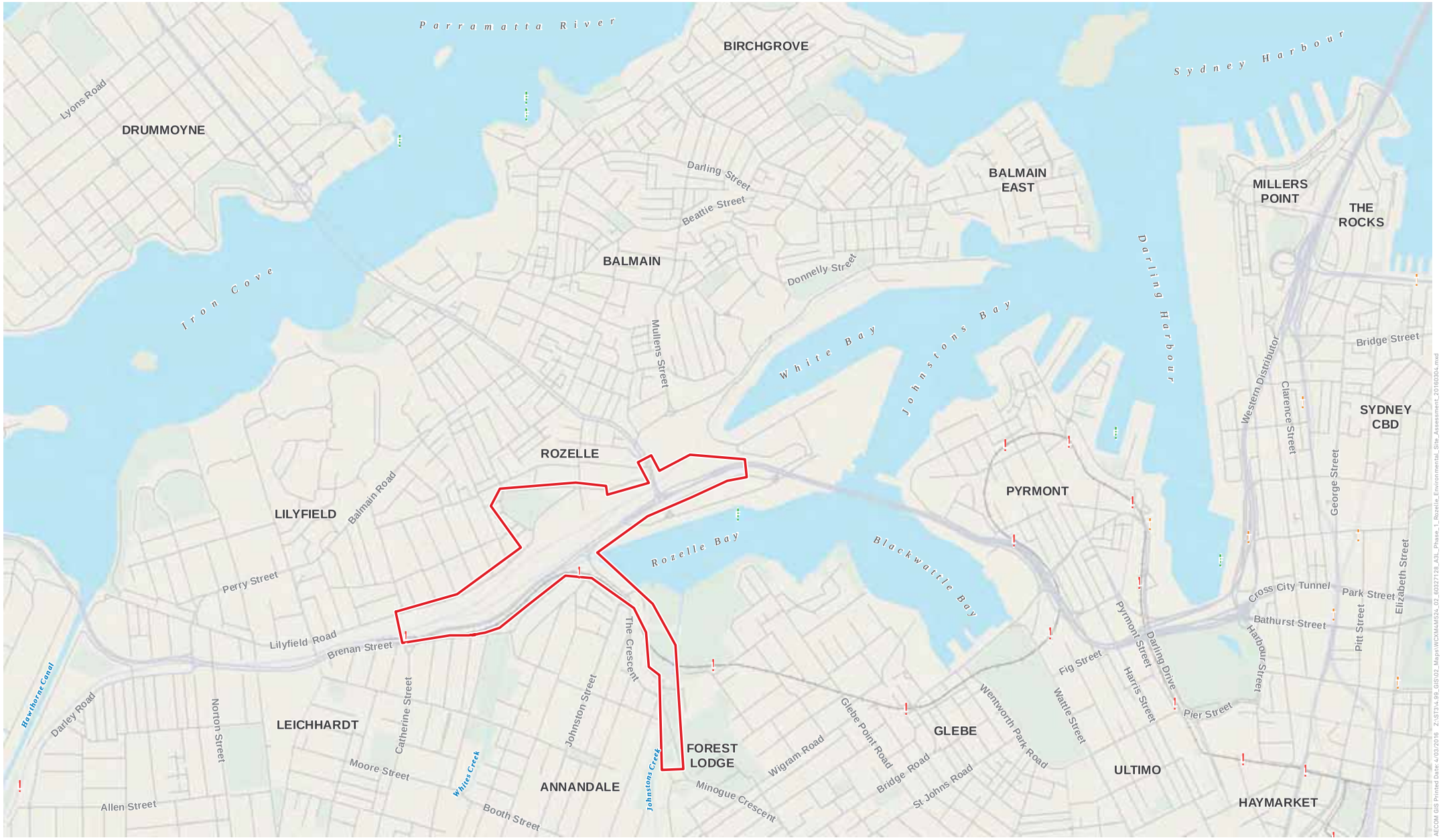
Field_ID	TP10-SA16
Sampled_Date-Time	10/10/2014

Method_Type	ChemName	Units	EQL	NEPM 2013 Table 1A(1) HIL's Column D Commercial/Industrial	NEPM 2013 Table 1A(1) HIL's Column C Recreational	NEPM 2013 Table 1B(6) TPH Management Limits (Coarse)	NEPM 2013 Table 1B(6) ESL's for TPH Urban Residential/Public Open Space (Coarse)	
Moisture Content	Moisture	%	1					8.9
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5					<0.5
	Acenaphthylene	mg/kg	0.5					<0.5
	Anthracene	mg/kg	0.5					<0.5
	Benz(a)anthracene	mg/kg	0.5					0.9
	Benzo(a) pyrene	mg/kg	0.5				0.7	1
	Benzo(b)fluoranthene	mg/kg	0.5					1.3
	Benzo(g,h,i)perylene	mg/kg	0.5					<0.5
	Benzo(k)fluoranthene	mg/kg	0.5					<0.5
	Chrysene	mg/kg	0.5					1
	Dibenz(a,h)anthracene	mg/kg	0.5					<0.5
	Fluoranthene	mg/kg	0.5					1.8
	Fluorene	mg/kg	0.5					<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5					<0.5
	Naphthalene	mg/kg	0.5					<0.5
	PAHs (Sum of total)	mg/kg	0.5	4000	300			8.8
	Phenanthrene	mg/kg	0.5					0.8
	Pyrene	mg/kg	0.5					2
Total Mercury by FIMS	Mercury	mg/kg	0.1	730	80			0.3
Total Metals by ICP-AES	Arsenic	mg/kg	5	3000	300			6
	Cadmium	mg/kg	1	900	90			1
	Chromium (III+VI)	mg/kg	2					28
	Copper	mg/kg	5	240000	17000			72
	Lead	mg/kg	5	1500	600			138
	Nickel	mg/kg	2	6000	1200			13
	Zinc	mg/kg	5	400000	30000			340
TRH - Semivolatile Fraction	C10-C16	mg/kg	50			1000	120	-
	C16-C34	mg/kg	100			2500	300	-
	C34-C40	mg/kg	100			10000	2800	-
	F2-NAPHTHALENE	mg/kg	50					-
	C10 - C14	mg/kg	50					-
	C15 - C28	mg/kg	100					-
	C29-C36	mg/kg	100					-
	+C10 - C36 (Sum of total)	mg/kg	50					-
	C10 - C40 (Sum of total)	mg/kg	50					-
TRH Volatiles/BTEX	Benzene	mg/kg	0.2				50	-
	Ethylbenzene	mg/kg	0.5				70	-
	Naphthalene	mg/kg	1					-
	Toluene	mg/kg	0.5				85	-
	Total BTEX	mg/kg	0.2					-
	C6 - C9	mg/kg	10					-
	Xylene (m & p)	mg/kg	0.5					-
	Xylene (o)	mg/kg	0.5					-
	Xylene Total	mg/kg	0.5				105	-
	C6-C10 less BTEX (F1)	mg/kg	10					-
	C6-C10	mg/kg	10			700	180	-



Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F1: Study area location

WestConnex
Building for the future

AECOM

0 250 500 m

KEY

Study area boundary

Disclaimer

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Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F2: Site locations within the study area

KEY

- Study area boundary
- Property locations within the study area
- 1m contour line
- Stormwater channel

WestConnex
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0 125 250 m

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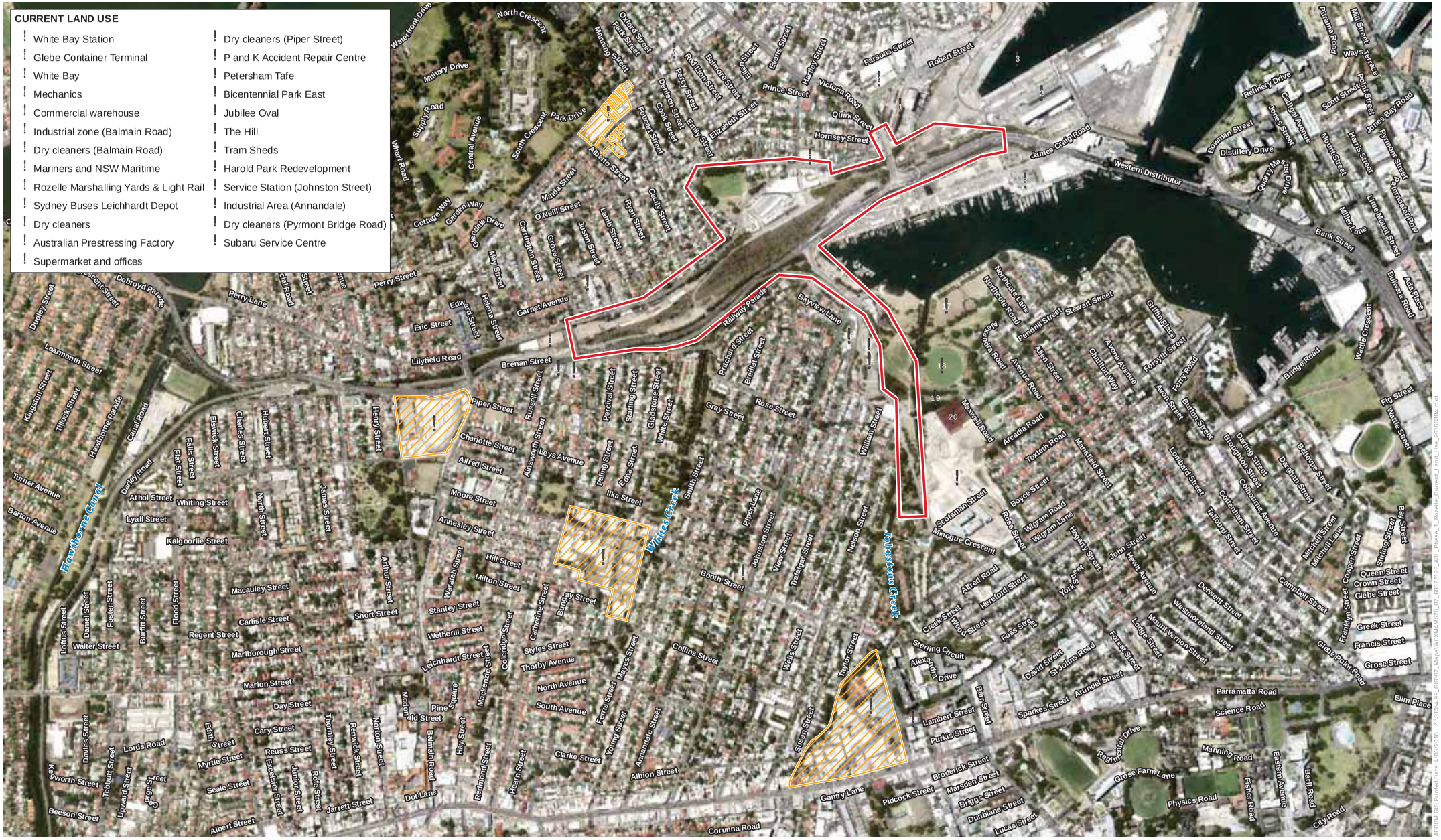
Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F2: Site locations within the study area



Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F3: Current surrounding land use

KEY

- Study area boundary
- Current surrounding land use
- Current surrouding land use area boundary

WestConnex
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0 250 500 m

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Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F4: Former land use

KEY

- 1970's reclamation area
- Pre 1930's reclaimed or filled land
- Former commercial/industrial buildings
- Rail line
- Tram lines
- Federal Road
- Study area boundary

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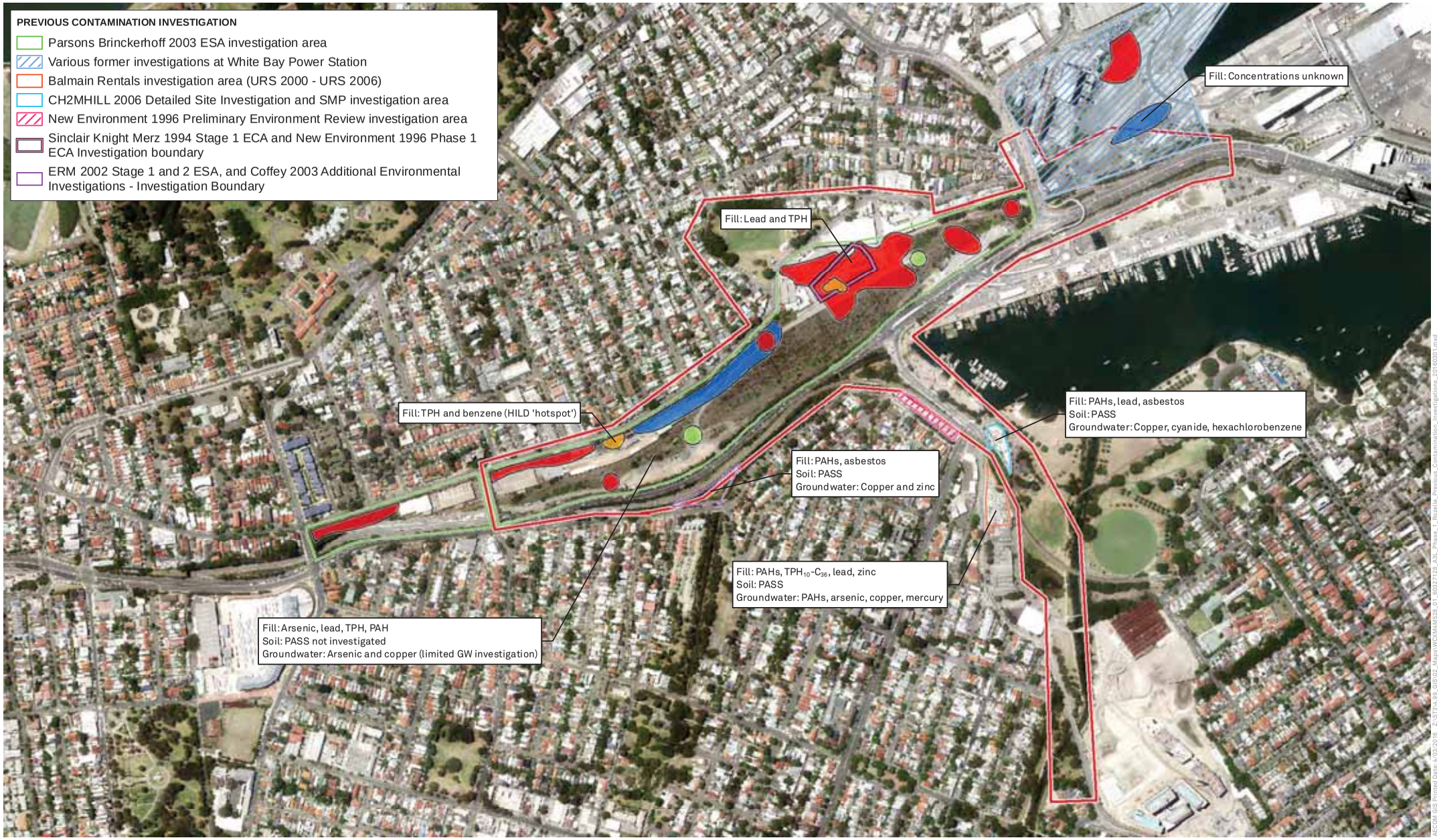

Westconnex M4-M5 Link, Rozelle Interchange, Phase 1 Environmental Site Assessment
Figure F5: Summary of Previous Contamination Investigations

KEY

- Areas exceeding HILC in RMY site for CPAHs
- Areas exceeding HILC in RMY site for Arsenic
- Areas exceeding HILC in RMY site for Lead
- Areas exceeding HILC in RMY site for TPH
- Study area boundary

HIL C - NEPM (2013) Health investigation level (HIL) for open space land use
HIL D - NEPM (2013) HIL for commercial/industrial land use

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0 100 200 m

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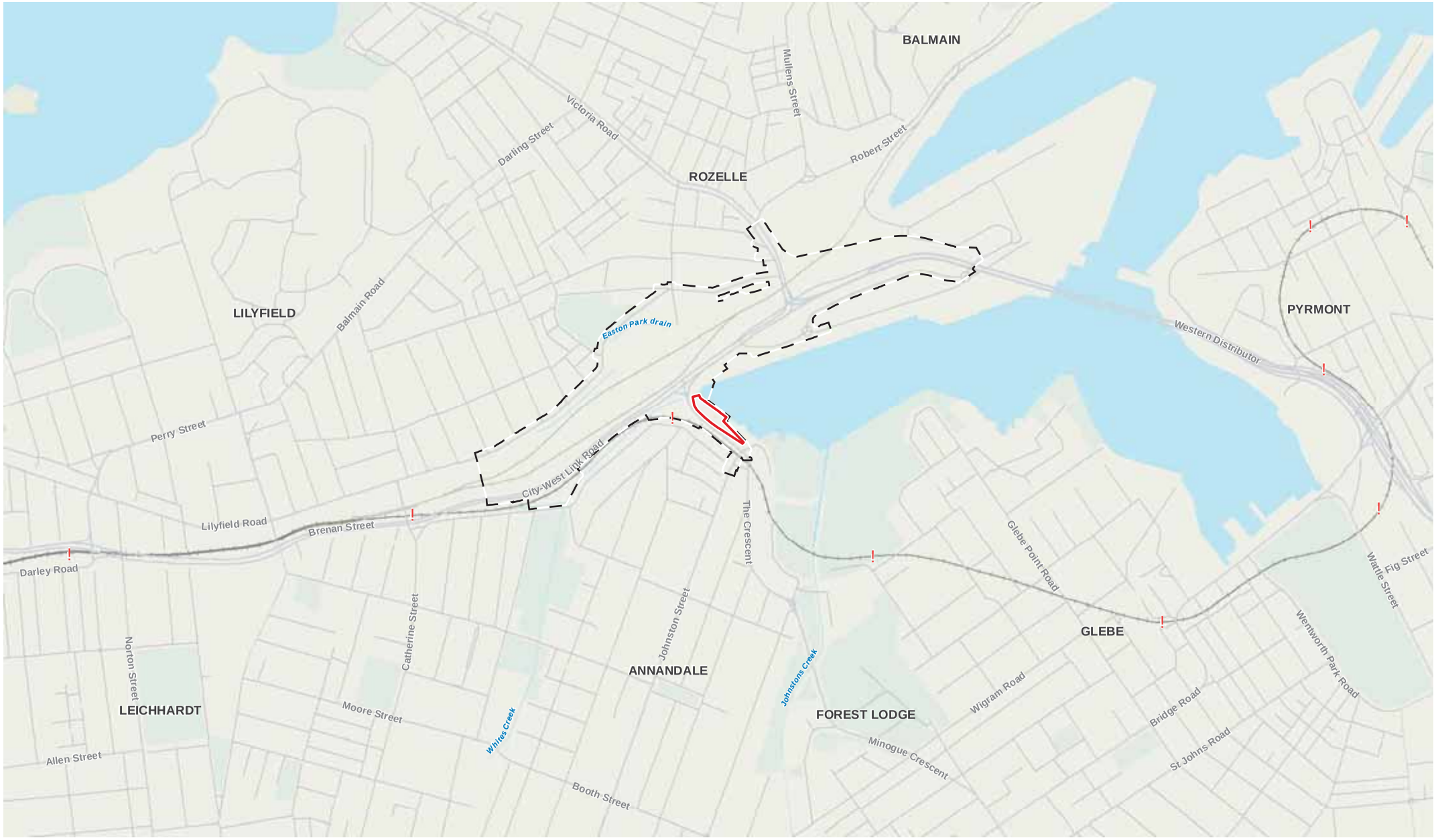

M4-M5 Link Contamination Site Investigation
Figure F1: Site Location Plan

KEY

- ! Light rail stop
- Railway
- Light rail
- Site boundary
- Construction footprint

WestConnex
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0 200 400 m

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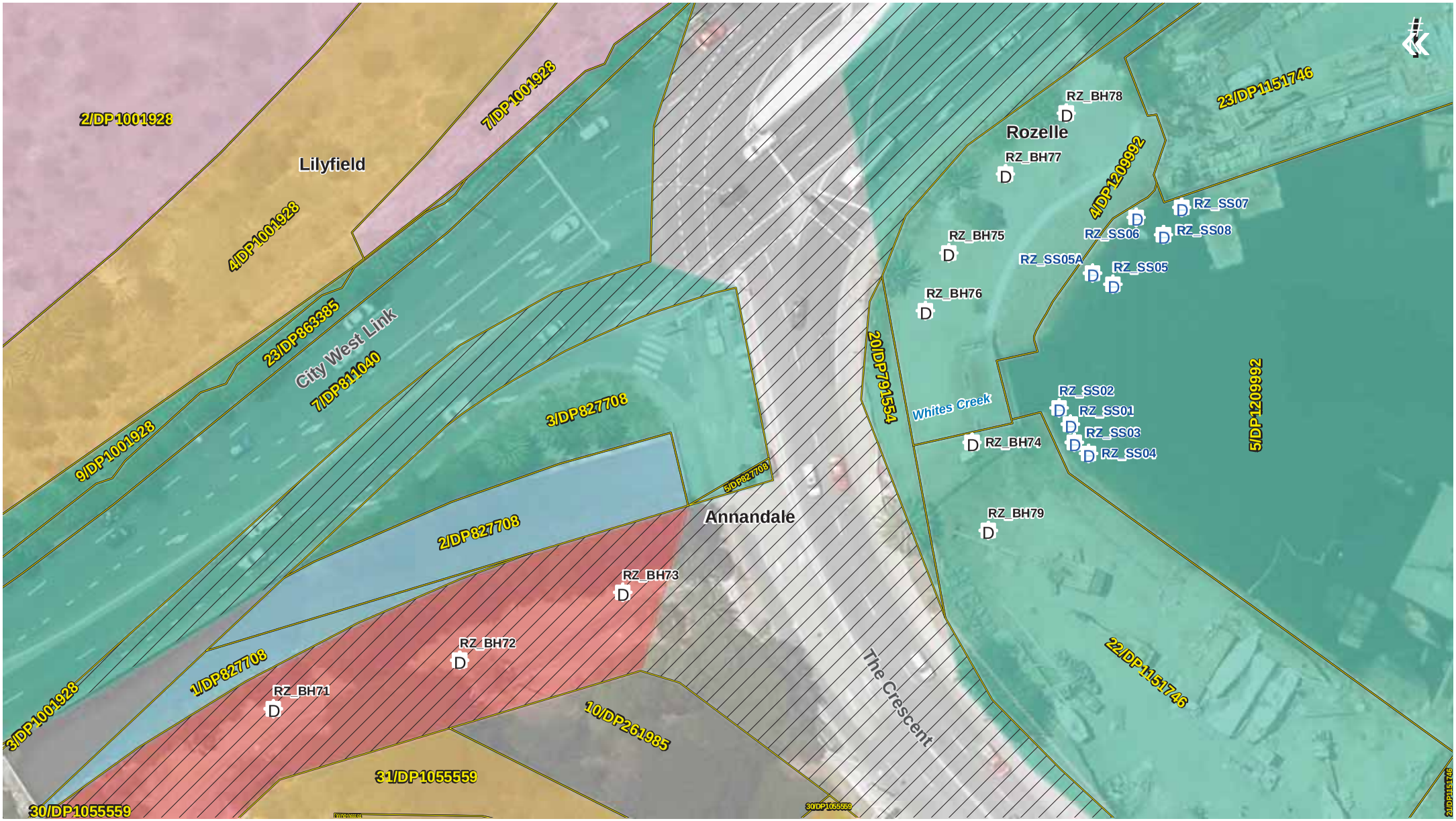

M4-M5 Link Contamination Site Investigation
Figure F2: Existing Property Ownership

KEY

Contamination site investigation

- D Borehole locations (subject to site inspection)
- D Sediment sampling location

Property Ownership Information

- Water Board
- Roads & Maritime Services
- Rail Corporation NSW
- Sydney Harbour Foreshore Authority
- The Minister Administering the Environmental Planning and Assessment Act, 1979
- Inner West Council

Existing Boundaries

- Indicative cadastre boundary
- Existing road corridor

0 8.5 17 m

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SCALE 1:500 | A3
SHEET Page 1 of 1 | COORDINATE SYSTEM GDA 1994 MGA Zone 56
TITLE
M4-M5 LINK SITE INVESTIGATION
CONTAMINATION SITE INVESTIGATION
AND EXISTING PROPERTY OWNERSHIP
PROJECT WESTCONNEX M4-M5 LINK
CLIENT SYDNEY MOTORWAY CORPORATION

DRAWN	PROJECT #	MAP #	REV	Project
SG	60491677			
CHECK	DATE 14/06/2017	WCXM4M5426 04 60491677		

WestConnex
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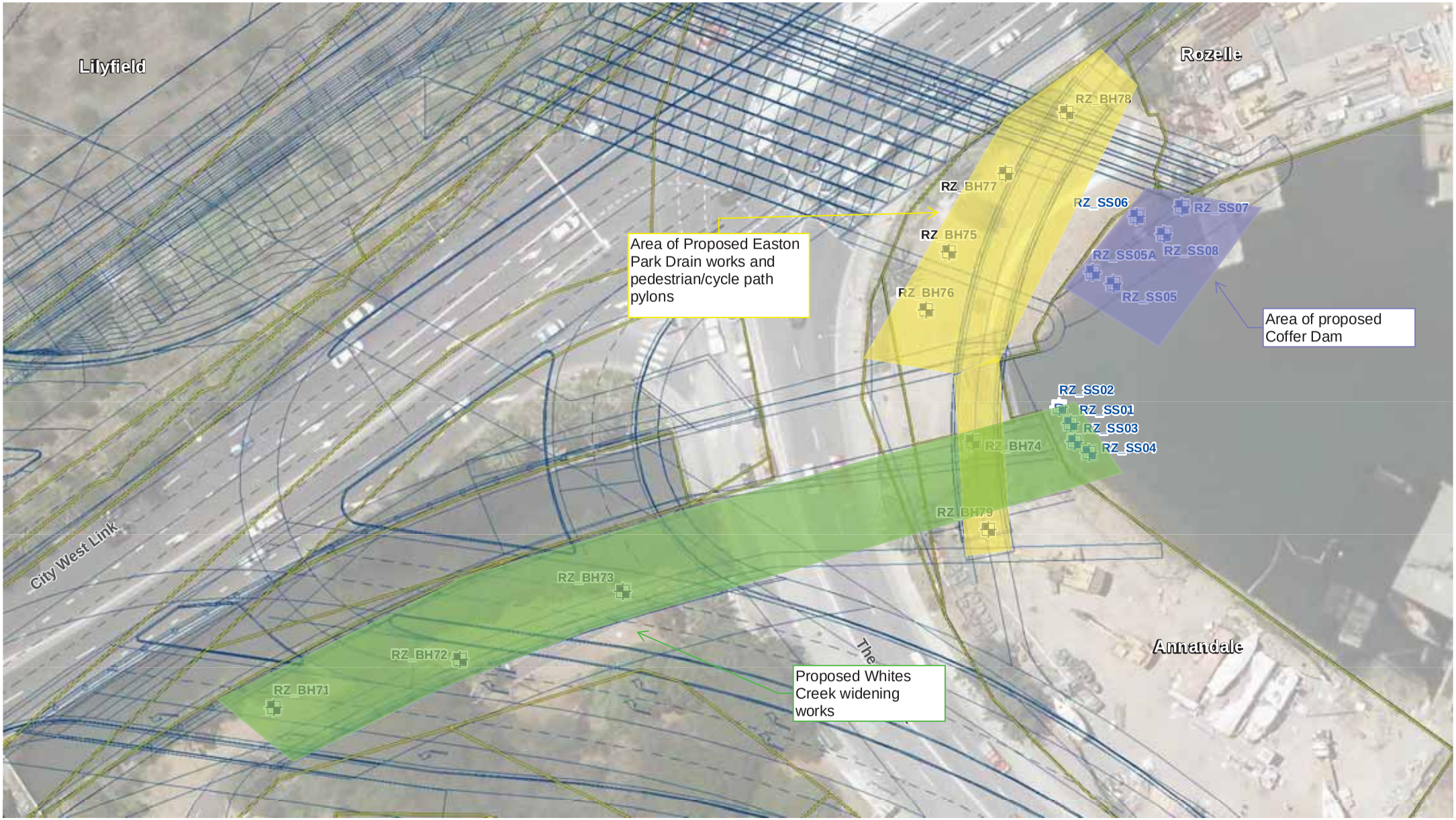

M4-M5 Link Contamination Site Investigation
Figure F3: Contamination Site Investigation Sample Locations

KEY

Contamination site investigation
- D Sediment sampling location
- D Borehole locations

Project features
- Proposed design

Indicative cadastre boundary

WestConnex
Building for the future

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0 8.5 17 m

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SCALE 1:500 | A3
SHEET Page 1 of 1 | COORDINATE SYSTEM GDA 1994 MGA Zone 56
TITLE
M4-M5 LINK SITE INVESTIGATION
CONTAMINATION SITE INVESTIGATION
PROJECT WESTCONNEX M4-M5 LINK
CLIENT SYDNEY MOTORWAY CORPORATION
DRAWN SG | PROJECT # 60491677 | MAP # | REV | Project
CHECK | DATE 14/06/2017 | WCXM4M5423 06 60491677

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AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH71

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Sandy Gravel TOPSOIL. Light brown, medium grained.	0.20
				0.4		FILL	Gravelly Sand FILL. Light brown, dry, medium grained. Contains shells (25%), gravels (10%), ballast gravels (10%) and trace grey with red mottling, low plasticity clay (<5%).	
0.4		RZ_BH71_0.5	✳	0.6				
				0.8				
0.4		RZ_BH71_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8			Piece of metal pipe 3 cm with copper wires 0.2 cm thickness observed at 1.7 m bgs	
0.6		RZ_BH71_2.0	✳	2.0				
				2.2		FILL	Sand FILL. Grey, coarse grained. Contains (20%) shells throughout. Black staining (15%), slight hydrocarbon odour.	2.20
				2.4			Becoming saturated from 2.4 m bgs	
				2.6				
				2.8				
				3.0		CH	CLAY. Black/dark grey, moist, high plasticity. Slight hydrocarbon odour.	2.90
0.5		QC201	✳					
		RZ_BH71_3.1	✳	3.2		SW	SAND. Dark grey, coarse grained. Contains shells (30%).	3.20
				3.4				3.50
							Borehole terminated at 3.5 m bgs; push-tube refusal. Total Depth: 3.50 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
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Sydney, NSW 2000

BOREHOLE LOG RZ_BH72

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Gravelly Sand TOPSOIL. Light brown, coarse grained. Organic odour.	0.20
				0.4		FILL	Gravelly Sand FILL. Light brown, coarse grained. Contains sandstone gravels (10-15 cm) (10%), ballast gravels (10%) and minor plastic fragments.	
0.6		RZ_BH72_0.5	✳	0.6			Increase in ballast gravels from 0.5 m bgs	
				0.8		FILL	Sand FILL. Light brown, dry, medium grained. Contains shells (25%), minor grey and red, medium plasticity clay (15%).	0.80
0.6		RZ_BH72_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8				
				2.0				
				2.2				
				2.4				
						FILL	Sand FILL. Dark grey, coarse grained, saturated. Contains shells (20%). Black staining (15%), slight sheen and hydrocarbon odour.	2.50
2.8		RZ_BH72_2.6	✳	2.6				
				2.8		CH	CLAY. Dark grey, high plasticity. Black staining (15%) and hydrocarbon odour.	2.80
						SW	SAND. Grey, coarse grained. Contains shells (30%).	2.90
0.8		QC101	✳	3.0				3.00
		RZ_BH72_3.0	✳				Borehole terminated at 3 m bgs; push-tube refusal. Total Depth: 3.00 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH73

PROJECT NUMBER 60491677 **DATE** 31 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Gravelly Sand TOPSOIL. Light brown.	0.20
				0.4		FILL	Gravelly Sand FILL. Light brown, coarse grained. Contains ballast gravels (30%).	
0.5		RZ_BH73_0.5	✳	0.6				0.70
				0.8		FILL	Clayey Sand FILL. Light brown, coarse grained. Contains light grey, medium plasticity clay with red mottling and minor ballast gravels (15%). Black staining (20%).	
0.5		RZ_BH73_1.0	✳	1.0				
				1.2				
				1.4				
				1.6				
				1.8				
				2.0				
				2.2				
				2.4				2.50
0.5		RZ_BH73_2.5	✳	2.6		CH	CLAY. Light grey, saturated, high plasticity. Contains shells (15%). Slight hydrocarbon odour.	2.70
				2.8		SW	SAND. Light brown/grey, coarse grained. Contains shells (30%). Becoming saturated from 2.8 m bgs	3.00
0.6		RZ_BH73_3.0	✳	3.0		CH	CLAY. Dark grey, high plasticity. Sheen (15%) and hydrocarbon odour noted.	3.20
				3.2		SW	SAND. Grey, coarse grained. Contains shells (25%). Slight hydrocarbon odour.	3.40
				3.4			Borehole terminated at 3.4 m bgs; push-tube refusal Total Depth: 3.40 m	

AECOM Australia Pty Ltd
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Sydney, NSW 2000

BOREHOLE LOG RZ_BH74

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained, dry. Contains minor fragments of brick, pottery and glass. Organic odour.	
				0.4		FILL		0.40
0.1		RZ_BH74_0.5	✳	0.6			Silty Sandy Gravel FILL. Dark brown/grey, medium grained, dry. Contains large sandstone and concrete boulders (approximately 15-20cm) Resistance with hand auger encountered at 0.7 m bgs. Commenced drilling with mechanical auger from 0.7 to 1.5 m bgs	
				0.8				
				1.0				
				1.2				
				1.4				
0.3		RZ_BH74_1.5	✳	1.6				1.60
				1.8		FILL	Clayey Sand FILL. Light brown, fine grained, slightly moist. Contians medium plasticity clay, gravels (25%), large sandstone and concrete boulders.	
				2.0				
				2.2				
				2.4				
0.3		RZ_BH74_2.5	✳	2.6				
				2.8				
				3.0				
				3.2				
				3.4				
0.9		RZ_BH74_3.5	✳	3.6				
				3.8				
				4.0	▽			
				4.2		FILL	Silty Sand FILL. Light grey, fine grained, saturated. Patches of black staining (15%) and slight hydrocarbon odour.	4.10
				4.4				
0.8		RZ_BH74_4.5		4.6				
				4.8				
				5.0				
				5.2				
				5.4		MLS	Sandy SILT: Black, very fine grained. Contains shells (30%). Black staining (15%) and slight hydrocarbon odour.	5.30
				5.6				
				5.8				
				6.0				
				6.2				6.20
							Borehole terminated at 6.2 m bgs; target depth reached. Total Depth: 6.20 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH75

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	Gravel TOPSOIL. Dark brown/grey, medium grained. Contains large sandstone boulders (15-20 cm) (50%) and minor ballast gravels, glass and pottery fragments. Organic odour.	
				0.4				0.50
				0.6		FILL	Gravel FILL. As above.	
0.2		RZ_BH75_0.8	✳	0.8			Resistance encountered with hand auger at 0.5 m bgs due to large boulders.	
				1.0				
				1.2				
				1.4				
				1.6		FILL	Clayey Sand FILL. Light brown, medium grained. Contains gravels (20%) and large sandstone boulders.	1.60
0.1		RZ_BH75_1.8	✳	1.8				
				2.0				
				2.2				
				2.4				
				2.6				
0.1		RZ_BH75_2.8	✳	2.8				
				3.0				
				3.2				
				3.4				
				3.6		FILL	Silty Sand FILL. Dark grey, fine grained. Patches of black staining (15%) and hydrocarbon odour noted.	3.50
0.9		RZ_BH75_3.8	✳	3.8				
				4.0				
				4.2				
				4.4				
				4.6				
				4.8	▽			
						FILL	Sandy Silt FILL. Dark grey, fine grained, saturated. Contains shale gravels (20%). Patches of black staining (15%).	4.80
				5.0		OLSH	Clayey SILT. Black. Contains shells (20%). Organic odour.	5.00
				5.2			Borehole terminated at 5.2 m bgs; target depth reached. Total Depth: 5.20 m	5.20

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH76

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains organic matter, gravels, glass and pottery fragments. Organic odour.	0.30
0.2		RZ_BH76_0.5	✳	0.4		FILL	Gravelly Sand FILL. As above. Contains large sandstone boulders (15-20 min) (50%) and minor ballast gravels.	
				0.6			Resistance with hand auger encountered at 0.7 m bgs.	
				0.8				
				1.0				1.10
				1.2		FILL	Clayey Sand FILL. Light brown, medium grained, slightly moist. Contains meidum plasticity clay, gravels (20%) and large sandstone boulders.	
0.3		RZ_BH76_1.3	✳	1.4				
				1.6				
				1.8				
		RZ_BH76_2.0	✳	2.0			Increase in clay content (30%) from 2.0 m bgs	
				2.2				
				2.4				
				2.6				
				2.8			Decrease in clay content (20%) from 2.8 m bgs	
1.0		RZ_BH76_3.0	✳	3.0			Black staining (10%) noted at 3.0 m bgs	
				3.2				
				3.4				
				3.6				
				3.8				
0.9		RZ_BH76_4.0		4.0				
				4.2				
				4.4				
				4.6				
				4.8		MLS	Gravelly Sandy Silt. Reworked natural. Black. Contains shale gravels (30%). Organic odour. Saturated.	4.80
0.2		RZ_BH76_5.0		5.0				
				5.2			Borehole terminated at 5.2 m bgs; target depth reached. Total Depth: 5.20 m	5.20

60491677_BOREHOLES_ZS.GPJ 17/8/17

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH77

PROJECT NUMBER 60491677 **DATE** 4 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains organic matter, gravels, small pieces of metal, ballast, glass and pottery. Organic odour.	
1.1		RZ_BH77_0.5	✳	0.4				
				0.6		FILL	Gravelly Sand FILL. As above. Contains large sandstone boulders (15-20 cm) (50%).	0.60
				0.8				
				1.0				
				1.2			Resistance with hand auger encountered at 1.3 m bgs. Contains minor small glass and metal fragments from 1.3 m bgs	
				1.4				
1.1		RZ_BH77_1.5	✳	1.6				
				1.8		FILL	Clayey Sand FILL. Light brown, medium grained. Contains minor gravels and large sandstone boulders.	1.80
				2.0				
				2.2				
				2.4				
1.9		RZ_BH77_2.5	✳	2.6				
				2.8		FILL	Sandy Clay FILL. light brown, minor gravel inclusions, large sandstone boulders continue, slightly moist, naphthalene odour.	2.70
				3.0				
				3.2				
				3.4				
4.3		RZ_BH77_3.5	✳	3.6 ▽				
				3.8		SM	Silty SAND. Reworked natural. Dark grey, fine grained, saturated, slight naphthalene odour.	3.60
1.8		RZ_BH77_4.0		4.0				
				4.2				4.20
							Borehole terminated at 4.2 m bgs; push-tube refusal on sandstone Total Depth: 4.20 m	

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH78

PROJECT NUMBER 60491677 **DATE** 4 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.1		RZ_BH78_0.2		0.2, 0.4		TOPSOIL	TOPSOIL. Brown, medium grained. Minor gravels (20%) and minor organic matter (20%). Organic odour.	
								0.50
				0.6		FILL	Gravelly Sand FILL. Brown, medium grained. Contain large sandstone boulders (15-20 cm) (50%) and minor ballast gravels (15%).	
0.1		RZ_BH78_0.8	✳	0.8, 1.0, 1.2, 1.4, 1.6, 1.8				
								1.80
						FILL	Clayey Sand FILL. Light brown, medium grained, slightly moist. Contains medium plasticity clay and minor gravels (15%).	
1.0		RZ_BH78_2.0	✳	2.0, 2.2, 2.4, 2.6, 2.8			Increase in clay content (30%) from 2.7 m bgs. Patches of black staining (10%) noted.	
1.4		RZ_BH78_3.0	✳	3.0, 3.2, 3.4, 3.6, 3.8				
								3.80
						SM	Silty SAND. Reworked natural. Dark brown, saturated, fine grained. Minor sandstone gravels (15%). Patches of black staining with high sheen and hydrocarbon odour (10%) noted.	
1.5		RZ_BH78_4.0	✳	4.0, 4.2, 4.4, 4.6, 4.8				
								4.80
						OL	Clayey SILT. Black, low plasticity, saturated. Slight sheen, slight hydrocarbon odour.	
				5.0				5.00
		RZ_BH78_5.0					Borehole terminated at 5.0 m bgs; target depth reached. Total Depth: 5.00 m	

AECOM Australia Pty Ltd
Level 21, 420 George Street
Sydney, NSW 2000

BOREHOLE LOG RZ_BH79

PROJECT NUMBER 60491677 **DATE** 5 May 17
PROJECT NAME M4/M5 Link - Borehole Logs
LOCATION City West Link and The Crescent Intersection
DRILLING METHOD Hand Auger and Push Tube
SAMPLING METHOD Hand Auger and Push Tube

LOGGED BY Zoe Smith
Site

PID (ppm)	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGS)	GRAPHIC LOG	USCS CLASS	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				0.2		TOPSOIL	TOPSOIL. Dark brown/grey, medium grained. Contains minor gravels, pottery, brick and glass fragments (20%).	0.30
				0.4		FILL	Gravelly Sand FILL. Dark brown/grey, medium grained. Sandstone and concrete boulders (15-20cm) (50%).	
0.2		RZ_BH79_0.5	✳	0.6				
				0.8			Resistance with hand auger encountered at 0.8 m bgs.	
0.3		RZ_BH79_1.0	✳	1.0				
				1.2				
				1.4		FILL	Clayey Sand FILL. Light brown, medium grained. Contains minor gravels, sandstone and concrete boulders.	1.40
				1.6				
				1.8				
0.3		RZ_BH79_2.0		2.0				
				2.2				
				2.4				
				2.6				
0.8		RZ_BH79_2.7	✳	2.8				
				3.0				
				3.2				
				3.4				
				3.6				3.70
				3.8		SM	Silty SAND. Reworked natural. Dark grey, fine grained.	3.90
0.6		RZ_BH79_3.8	✳	4.0		MLS	Sandy SILT. Black, fine grained, saturated. Black staining with sheen (15%) and organic odour noted.	
				4.2				
				4.4				
				4.6				
				4.8				
1.2		RZ_BH79_4.8		5.0				
				5.2				5.20
							Borehole terminated at 5.2 m bgs; push-tube refusal on sandstone. Total Depth: 5.20 m	

60491677_BOREHOLES_ZS.GPJ 17/8/17

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	EM	24/06/20

0 5 10 15 20 25
SCALE 1:500 @A3 METRES

drawn	MC
approved	MT
date	24/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC169 drawing no: Figure 1 rev: 0

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PLOT DATE: 10/7/2020 5:07:44 PM DWG FILE: C:\USERS\JIA.LIU\DESKTOP\SANTO CAD\GTF-04-1714B_DIL_DILKHUSHA SUP-DRAFT DRAWING RKC.DWG

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						TRHs				BTEX				Heavy Metals																					
						TPH C6-C10 (F1)	TPH C10-C16 (F2)	TPH C16-C34 (F3)	TPH C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (Total)	Chromium - TCLP	Cobalt	Copper	Lead	Lead - TCLP	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	Zinc
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						65.0		10,000		10	288	600	1,000	100	-	20	-	20	100		-	-	100	-	-	4	40	20		-	-	
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						2,600		40,000		40	1,152	2,400	4,000	400	-	80	-	80	400		-	-	400	-	-	16	160	80		-	-	
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						650		10,000		18	518	1,080	1,800	500	-	100	-	100	1,900		-	-	1,500	-	-	50	1,050	500		-	-	
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-		-		0.5	14.4	30	50	5	-	1	-	1	5		-	-	-	5	-	0.2	2	1		-	-	
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						2,600		40,000		23	2,073	4,320	7,200	2,000	-	400	-	400	7,600		-	-	6,000	-	-	200	4,200	200		-	-	
Acid Sulfate Soils Screening Criteria[2]						-		-		0.01	0.07	0.03	0.1	20	-	3	-	1	50		-	-	300	1	-	5	20	5		-	-	
Acid Sulfate Soils Screening Criteria[2]						-		-		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-		-	-	
VENM Background Ranges - ANZECC (1992)[3]						ND		ND		N D	N D	N D	N D	0.3-10	-	-	-	0.04-2	0.5 -110		-	1-190	<2 -200	-	-	0.001-0.1	2-400	-		-	2-180	
VENM Background Ranges - Northern (1995)[4]						ND		ND		N D	N D	N D	N D	1 -52	100-3000	-	-	1	5-1000		1-40	2-100	2-200	-	8-90	0.03	5-500	-		-	20-500	10-300
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type																														
HORIZON A - FILL (GSW)																																			
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	13	140	<5	205	<0.3	101	<0.2	<5	31	83	-	98	0.5	<1.0	<5	NT	26	96
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	69	<0.3	16	-	6	115	111	<0.5	290	0.2	<1.0	<5	NT	19	900
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<35	<50	385	<100	<0.5	<0.5	<1	<2	8	60	<5	99	<0.3	17	-	13	147	131	<0.5	282	0.2	33	<5	NT	10	845
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	35	<0.3	8	-	<5	39	29	-	107	<0.2	<1.0	<5	NT	11	97
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	<5	<0.3	<5	-	<5	<5	<10	-	52	<0.2	<1.0	<5	NT	15	10
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	<35	<50	340	<100	<0.5	<0.5	<1	<2	10	100	<5	50	<0.3	22	-	<5	74	126	<0.5	171	0.3	<1.0	<5	NT	33	380
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	<35	<50	186	<100	<0.5	<0.5	<1	<2	10	90	<5	93	<0.3	17	-	8	136	190	<0.5	439	0.2	10	<5	NT	37	1163
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	70	<5	18 1	<0.3	11	-	5	31	85	-	177	<0.2	18	<5	0.4	45	110
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	70	<0.3	5	-	<5	26	36	-	93	<0.2	<1.0	<5	0.2	10	48
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	38	<0.3	11	-	<5	31	121	<0.5	100	0.2	<1.0	<5	0.3	20	114
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<35	<50	109	239	<0.5	<0.5	<1	<2	7	80	<5	88	<0.3	14	-	<5	7	30	-	31	<0.2	<1.0	<5	0.3	23	37
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	54	<0.3	7	-	<5	7	55	-	60	<0.2	<1.0	<5	0.3	16	47
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	47	60	<5	72	<0.3	12	-	<5	31	121	-	117	<0.2	<1.0	<5	0.4	20	247
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.1	84	<2	<1.0	<0.4	11	-	<5	22	100	-	64	0.1	<5	<2	<10	23	94
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.4	10	<2	<1.0	<0.4	<5	-	<5	-	15	-	15	<1	<5	<2	<10	<10	11
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	<20	<20	120	<100	<0.1	<0.1	<0.1	<0.2	7.5	90	<2	<1.0	<0.4	17	-	<5	34	140	-	130	0.2	<5	<2	<10	42	72
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	5.1	41	<2	<1.0	<0.4	9.5	-	<5	20	55	-	64	<1	<5	<2	<10	28	35
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	41	<2	<1.0	<0.4	10	-	<5	21	39	-	52	<1	<5	<2	<10	27	27
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.4	47	<2	<1.0	<0.4	17	-	<5	21	60	-	49	<1	<5	<2	<10	40	240
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	0.3	13	-	NT	19	55	-	NT	0.16	4.8	NT	NT	NT	74
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	4	NT	NT	NT	<0.3	8.3	-	NT	13	59	-	NT	0.05	2.5	NT	NT	NT	51
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill			-						5	NT	NT	NT	<0.3	9.3	-	NT	15	40	-	NT	0.08	1.9	NT	NT	NT	28
ADE	WAC3L-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	<35	<50	566	114	<0.5	<0.5	<1	<2	5	NT	NT	NT	<0.3	6	-	NT	35	58	-	NT	0.3	<1.0	NT	NT	NT	56
ADE	WAC3(1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	8	-	NT	8	12	-	NT	<0.2	<1.0	NT	NT	NT	103
ADE	WAC3(1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	5	-	NT	<5	<10	-	NT	<0.2	<1.0	NT	NT	NT	17
ADE	WAC3(1-TP2 (3.0)	In-Situ	3.0	03.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	9	-	NT	12.2	201	<0.5	NT	0.3	<1.0	NT	NT	NT	307
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	93.8	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					0	0	340	274	0	0	0	0	47	0	ND	205	ND	101		13	147	201	ND	439	0.5	33	0		0	1163
HORIZON B - GSW PASS																																			
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	<35	<50	140	<100	<0.5	<0.5	<1	<2	7	90	<5	58	<0.3	9	-	<5	80	197	-	66	0.5	<1.0	<5	NT	55	287
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	20	<5	50	<0.3	9	-	<5	52	83	-	162	0.2	<1.0	<5	NT	25	344
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	10	<5	32	<0.3	9	-	<5	29	33	-	111	0.2	<1.0	<5	NT	22	150
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	14	20	<5	48	<0.3	15	-	<5	40	65	-	128	0.2	<1.0	<5	NT	23	226
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	10	<5	7	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	14	7
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	10	<5	48	<0.3	10	-	<5	<5	<10	-	13	<0.2	<1.0	<5	0.2	12	<5
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	34	<0.3	5	-	<5	<5	<10	-	17	<0.2	<1.0	<5	1.3	18	14
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	7	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<1.0	<5	1.5	9	<5
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	1.10	<5	<5	<0.3	<5	-	<5	33	<10	-	11	<0.2	<1.0	<5	0.8	96	<5
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	9	10	<5	35	<0.3	5	-	<5	<5	<10	-	24	<0.2	<1.0	<5	0.4	10	8
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	<1.0	<5	10	<0.3	<5	-	<5	<5	<10	-	7	<0.2	<1.0	<5	5.6	14	<5
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	13	<0.3	<5	-	<5	<5	<10	-	30	<0.2	<1.0	<5	1.7	18	<5
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	5	<0.2	<1.0	<5	0.2	<5	<5
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<5	<5	<0.3	10	-	<5	6	18	-	6	0.2	<1.0	<5	0.8	<5	<5
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	32	<0.3	<5	-	<5	7	11	-	104	<0.2	<1.0	<5	0.5	11	32
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	46	<0.3	9	-	<5	10	15	-	142	<0.2	<1.0	<5	0.5	14	75
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	20	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	0.9	7	<5
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<35	<50	<100	130	<0.5	<0.5	<1	<2	<5	50	<5	62	<0.3	9	-	<5	11	38	-	84	<0.2	<1.0	<5	0.3	20	39
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	0.8	9	<5
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	10	20	<5	103	<0.3	12	-	<5	9	21	-	21	<0.2	<1.0	<5	1.8	40	47
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	<35	<50	100	274	<0.5	<0.5	<1	<2	22	90	<5	64	<0.3	9	-	<5	32	48	-	146	<0.2	<1.0	<5	0.6	19	95
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	30	<0.3	<5	-	<5	<5	<10	-	71	<0.2	<1.0	<5	0.4	10	6
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	21	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	1.1	16	<5
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	46	<0.3	8	-	<5	5	<10	-	86	<0.2	<1.0	<5	1.6	17	18
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	7.1	65	<2	<1.0	<0.4	16	-	<5	27	110	-	63	0.2	<5	<2	<10	35	160
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.5	20	<2	<1.0	<0.4	5.4	-	<5	10	21	-	67	<1	5.7	<2	<10	14	32
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	3.2	<1.0	<2	<1.0	<0.4	<5	-	<5	11	18	-	7.6	<1	<5	<2	<10	<10	7.8
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	<20	340	810	<100	<0.1	<0.1	<0.1	<0.2	15	39	<2	20	<0.4	16	-	<5	16	42	-	35	0.2	<5	<2	<10	38	63
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.9	11	<2	<1.0	<0.4	6.5	-	<5	11	12	-	43	<1	<5	<2	<10	19	10
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	9.1	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	9.5	<1	<5	<2	<10	<10	<5
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	9.1	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	5.8	-	13	<1	<5	<2	<10	<10	5.8
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.4	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	13	<1	<5	<2	<10	<10	<5
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	1.8	<1.0	<2	<1.0	<0.4	<5	-	<5	<5	6.6	-	22	<1	<5	<2	<10	14	7.4
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	6.5	10	<2	<1.0	<0.4	<5	-	<5	<5	<5	-	8.2	<1	<5	<2	<10	<10	<5
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	1.0	20	<2	<1.0	<0.4	5.1	-	<5	<5	22	-	24	<1	<5	<2	<10	16	24
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	<20	<20	<50	<100	<0.1	<0.1	<0.1	<0.2	4.4	<1.0	<2	<1.0	<0.4	<5	-	<5	15	8.2	-	16	<1	<5	<2	<10	<10	6.9
ADE	WAC3(1-TP2 (3.5)	In-Situ	3.5	03.03.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	<5	NT	NT	<5	<10	NT	NT	<0.2	<1.0	NT	NT	NT	10
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					ND	ND	140	130	ND	ND	ND	ND	14	1.10	ND	103	ND	15		ND	80	197	ND	162	0.5	ND	ND		56	344
HORIZON C - VENM																																			
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	<5	<5
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	7	8
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	10	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	18	<5
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	7	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	10
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	15
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	<5
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	<0.1	<5	5
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<1.0	<5	<5	<0.3	<5	-	<5	<5	<10	-	8	<0.2	<1.0	<5	<0.1	<5	9
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	22	1.10	ND	103	ND	16		0	80	197	NT	162	ND	ND	ND		56	344
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<5	<5	<0.3	<5	-	<5	<5	<10	-	<5	<0.2	<1.0	<5	NT	NT	<5
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	NT	<5	103	<0.3	13	-	<5	13	31	-	26	<0.2	<1.0	<5	NT	NT	58
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<1.0	<50	<1.00	<100	<0.2	<0.5	<0.5	<0.5	1.6	NT	NT	NT	<1	1.2	-	NT	1.2	7.0	-	NT	0.2	4	NT	NT	NT	102
	% UCL					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Maximum Concentration (mg/kg)					ND	ND	81.0	274	ND	ND	ND	ND	22				0	16		0		197	0		0.5	5.7				344	

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Beerman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						PAHs				PCBs	OCPs					Cyanide	Phenols	VOCs / SVOCs		Organotins (TBT)	PFAS	
						Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(a)pyrene - TCLP	Total PAHs (Total)	Total PCBs	Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Cyanide Total	Phenols Total	Sum of + VOCs	Sum of + SVOCs	Tributyltin (ug/kg)	PFOS + PFHxS	PFOA
ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169																						
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						0.8	-	-	200	<50	<5.0	6.0	-	-	-	-	-	-	-	10	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						3.2	-	-	800	<50	<5.0	240	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						10	-	-	200	<50	<5.0	1.08	-	-	-	-	-	-	-	-	0.05	0.2
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	0.04	-	-	-	3	-	-	-	-	-	-	-	-	-	7.2
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						23	-	-	800	<50	<5.0	432	-	-	-	-	-	-	-	-	0.5	2
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	0.16	-	-	-	10	-	-	-	-	-	-	-	-	-	30
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENM Background Ranges - ANZECC (1992)[3]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VENM Background Ranges - Ikerfman (1989)[3]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-situ	Depth (m BGL)	Date	Material Type																	
HORIZON A - FILL/SOIL																						
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	<0.3	0.7	-	3.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	3.4	4.8	<0.005	33	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.5	NT	NT
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	<0.3	0.7	-	0.7	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.0	NT	NT
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.0	NT	NT
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	4.1	6	<0.005	40.2	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	2.7	3.8	<0.005	29.1	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<3.5	NT	NT
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	0.8	1.3	-	6.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	0.7	1.2	-	5.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	0.4	1	-	4.1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	<0.5	-	-	<0.5	<0.1	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	1.2	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	1.4	-	-	12.4	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	0.1	-	-	<0.8	NT	-	<0.2	<0.2	<0.1	<0.3	NT	NT	NT	NT	NT	NT	NT
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	0.4	-	-	2.6	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill	0.4	-	-	4	NT	-	<0.2	<0.2	<0.1	<0.3	NT	NT	NT	NT	NT	NT	NT
ADE	WAC3IL-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	14.3	-	<0.005	185.1	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	<0.3	-	-	2.5	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(2.0)	In-Situ	2.0	02.03.2020	SAND	<0.3	-	-	0	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(3.0)	In-Situ	3.0	03.03.2020	Silty SAND	0.3	-	-	2.9	ND	ND	NT	NT	NT	NT	<1	<1	NT	NT	NT	NT	NT
			% UCL			3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			4.1	6	0	40.2	0	0	0	0	0	0	0	0	0	0	0	0	0
HORIZON B - GSW PASS																						
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	3	4.3	<0.005	29.9	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0.6	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	0.4	0.8	-	2.8	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.6	<5	<5
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<1.5	NT	NT
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	<5	<5
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	0.6	1.1	-	4.7	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	<0.3	0.7	-	0.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	0.5	1	-	7.8	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	0.3	0.7	-	1.3	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	0.3	1	-	3.5	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	<0.3	0.7	-	1	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	<0.3	0.7	-	0	ND	ND	<0.2	<0.1	<0.1	<0.1	NT	<1	ND	ND	NT	NT	NT
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	3.4	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	<0.5	-	-	-	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	<0.5	-	-	<0.5	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	<0.5	-	-	<0.5	<0.1	-	<0.05	<0.05	<0.05	<0.05	NT	<0.5	<0.5	<0.5	NT	NT	NT
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	-	-	-	-	NT	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC3(1-TP2(3.5))	In-Situ	3.5	03.03.2020	Silty SAND	<0.3	-	-	ND	ND	-	<0.2	<0.1	<0.1	<0.1	<1	<1	NT	NT	NT	NT	NT
			% UCL			0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			3	4.3	ND	29.9	0	0	0	0	0	0	0	1	0	0	0	0	0
HORIZON C - VENM																						
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	<0.3	0.7	-	<0.3	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
			Maximum Concentration (mg/kg)			ND	4.3	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	<0.3	0.7	-	ND	ND	ND	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	NT	NT	NT
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	<0.3	0.7	-	ND	MD	ND	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	0.7	-	-	7.1	ND	ND	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT
			% UCL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			3.4	4.3	0	29.9	0	0	0	0	0	0	0	1	0	0	0	0	0

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Ikerfman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Ikerkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC169

						Acid Sulfate Soils[4]								Asbestos
						pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[5]	Net Acidity (Excluding Acid Neutralising Capacity) (%S)	Net Acidity (Excluding Acid Neutralising Capacity) (moles H+/t)	Net Acidity (mole H+/t)	Net Acidity (%S)		Asbestos (g/kg)[4]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-				-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-				-
Acid Sulfate Soils Screening Criteria[5]						<5.5	≤4.5	-	0.05	36				-
VENM Background Ranges - ANZECC (1992)[3]						ND	ND	ND	ND	ND				ND
VENM Background Ranges - Ilerbman (1989)[3]						ND	ND	ND	ND	ND				ND
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type									
HORIZON A - FILL (GSW)														
ADE	WAC1-BH1 0.3	In-Situ	0.3	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 1.0	In-Situ	1.0	20.05.2020	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH1 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 0.3	In-Situ	0.3	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 1.0	In-Situ	1.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 2.0	In-Situ	2.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH2 3.0	In-Situ	3.0	20.05.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC1-BH3 0.3	In-Situ	0.3	10.06.2020	Sandy CLAY	7.9	6	2	NT	NT	-	-	NAD	
ADE	WAC1-BH3 1.0	In-Situ	1.0	10.06.2020	Sandy CLAY	8.3	6.1	1	NT	NT	-	-	NAD	
ADE	WAC1-BH4 0.3	In-Situ	0.3	10.06.2020	Silty SAND	8.4	6.1	3	NT	NT	-	-	NAD	
ADE	WAC1-BH5 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.7	6.2	1	NT	NT	-	-	NAD	
ADE	WAC1-BH6 0.3	In-Situ	0.3	11.06.2020	Clayey SAND	8.5	6	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 0.3	In-Situ	0.3	12.06.2020	Clayey SAND	9.3	6.1	2	NT	NT	-	-	NAD	
WSP	TP01_0.5	In-Situ	0.5	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP02_0.5	In-Situ	0.5	29.11.2019	silty CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP03_0.5	In-Situ	0.5	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP04_0.5	In-Situ	0.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP05_0.6	In-Situ	0.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NAD	
WSP	TP06_0.6	In-Situ	0.6	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NAD	
	TC_BH04	In-Situ	1-1.1	27.04.2016	Fill	6.3	7.4	0	NT	NT	-	-	NT	
	TC_BH05	In-Situ	0.1-0.2	05.05.2016	Fill	NT	NT	NT	NT	NT	-	-	NT	
	TC_BH05	In-Situ	0.5-0.6	05.05.2016	Fill	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC3L-TP2 (0.0-0.3)	In-Situ	0.0-0.3	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3-TP2 (1.0)	In-Situ	1.0	02.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3 (1-TP2 (2.0)	In-Situ	2.0	02.03.2020	SAND	NT	NT	NT	NT	NT	-	-	NAD	
ADE	WAC3 (1-TP2 (3.0)	In-Situ	3.0	03.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			% UCL			-	-	-	-	-	-	-	-	
			Maximum Concentration (mg/kg)							NA				
HORIZON B - GSW PASS														
ADE	WAC1-BH1 3.0	In-Situ	3.0	20.05.2020	Silty CLAY	8.4	6.2	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.5	6.1	2	NT	NT	-	-	NT	
ADE	WAC1-BH1 5.2	In-Situ	5.2	20.05.2020	Silty SAND	8.5	6.1	1	**0.17**	8	-	-	NT	
ADE	WAC1-BH2 4.0	In-Situ	4.0	20.05.2020	Sandy CLAY	8.4	6	1	NT	NT	-	-	NT	
ADE	WAC1-BH2 5.0	In-Situ	5.0	20.05.2020	Sandy CLAY	8.9	6.1	1	**1.87**	14	-	-	NT	
ADE	WAC1-BH3 2.2	In-Situ	2.2	10.06.2020	Silty SAND	9.2	6.4	1	NT	NT	-	-	NAD	
ADE	WAC1-BH3 3.0	In-Situ	3.0	10.06.2020	Silty CLAY	8.5	2.3	4	**1.06**	**664**	-	-	NT	
ADE	WAC1-BH3 4.0	In-Situ	4.0	10.06.2020	Silty SAND	8.1	5.7	3	**0.22**	**138**	-	-	NT	
ADE	WAC1-BH4 1.0	In-Situ	1.0	10.06.2020	Silty SAND	8.4	6.4	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 2.2	In-Situ	2.2	10.06.2020	Clayey SAND	8.4	5.3	3	**0.31**	**191**	-	-	NT	
ADE	WAC1-BH4 3.0	In-Situ	3.0	10.06.2020	Clayey SAND	8.1	1.9	3	**0.29**	**182**	-	-	NT	
ADE	WAC1-BH4 4.0	In-Situ	4.0	10.06.2020	Clayey SAND	7.9	5.9	3	**0.34**	**209**	-	-	NT	
ADE	WAC1-BH4 5.0	In-Situ	5.0	10.06.2020	Clayey SAND	6.7	3.3	1	NT	NT	-	-	NT	
ADE	WAC1-BH4 6.0	In-Situ	6.0	10.06.2020	Clayey SAND	6.9	3.9	1	NT	NT	-	-	NT	
ADE	WAC1-BH5 0.7	In-Situ	0.7	11.06.2020	Silty SAND	10.3	7.1	3	0.03	18	-	-	NAD	
ADE	WAC1-BH5 2.3	In-Situ	2.3	11.06.2020	Silty SAND	10.6	7.5	2	**0.03**	**19**	-	-	NAD	
ADE	WAC1-BH5 3.0	In-Situ	3.0	11.06.2020	Silty SAND	9	6.3	2	**0.41**	**256**	-	-	NT	
ADE	WAC1-BH6 0.7	In-Situ	0.7	11.06.2020	Silty SAND	8.6	6.1	1	NT	NT	-	-	NAD	
ADE	WAC1-BH6 2.3	In-Situ	2.3	11.06.2020	Silty SAND	9	6.5	1	**<0.02**	**13**	-	-	NT	
ADE	WAC1-BH6 3.0	In-Situ	3.0	11.06.2020	Silty CLAY	8.5	4.9	2	**1.07**	**670**	-	-	NT	
ADE	WAC1-BH7 0.7	In-Situ	0.7	12.06.2020	Silty SAND	10	6.7	2	NT	NT	-	-	NAD	
ADE	WAC1-BH7 2.3	In-Situ	2.3	12.06.2020	Silty SAND	9.4	6.4	1	<0.02	11	-	-	NAD	
ADE	WAC1-BH7 3.0	In-Situ	3.0	12.06.2020	Silty SAND	9.1	6.2	1	**0.13**	**84**	-	-	NT	
ADE	WAC1-BH7 4.0	In-Situ	4.0	12.06.2020	Silty CLAY	9.7	5.5	2	**0.57**	**354**	-	-	NT	
WSP	TP01_1.2	In-Situ	1.2	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP01_2.2	In-Situ	2.2	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_1.2	In-Situ	1.2	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP02_2.6	In-Situ	2.6	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP03_2.0	In-Situ	2	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP04_2.3	In-Situ	2.3	29.11.2019	Sandy CLAY	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_1.0	In-Situ	1	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP05_1.9	In-Situ	1.9	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.0	In-Situ	1	29.11.2019	Clayey SAND	NT	NT	NT	NT	NT	-	-	NT	
WSP	TP06_1.6	In-Situ	1.6	29.11.2019	SAND	NT	NT	NT	NT	NT	-	-	NT	
ADE	WAC3 (1-TP2 (3.5)	In-Situ	3.5	03.03.2020	Silty SAND	NT	NT	NT	NT	NT	-	-	NAD	
			% UCL			-	-	-	-	-	-	-	-	
			Maximum Concentration (mg/kg)							NA				
HORIZON C - VENM														
ADE	WAC1-BH2 7.5	In-Situ	7.5	20.05.2020	SANDSTONE	7	5.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 8.5	In-Situ	8.5	20.05.2020	SANDSTONE	7	5.4	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH2 9.5	In-Situ	9.5	20.05.2020	SANDSTONE	6.7	5.3	1	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 5.0	In-Situ	5.0	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH3 6.5	In-Situ	6.5	10.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 3.5	In-Situ	3.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH5 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 4.5	In-Situ	4.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 5.5	In-Situ	5.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH6 6.5	In-Situ	6.5	11.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 4.7	In-Situ	4.7	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 5.5	In-Situ	5.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BH7 6.5	In-Situ	6.5	12.06.2020	SANDSTONE	NT	NT	NT	NT	NT	NT	NT	NT	
			Maximum Concentration (mg/kg)							NA				
ADE	WAC-BR1	In-Situ	7.0	20.05.2020	Replicate of WAC1-BH2 7.0	NT	NT	NT	NT	NT	NT	NT	NT	
ADE	WAC1-BR1	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	8.6	3.4	2	NT	NT	NT	NT	NT	
ADE	WAC1-BR5	In-Situ	3	11.06.2020	Replicate of WAC1-BH6 3.0	NT	NT	NT	NT	NT	NT	NT	NT	
			% UCL											
			Maximum Concentration (mg/kg)							NA				

All units in mg/kg unless specified otherwise

NT - Not Tested

NO - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Ilerbman, Third Edition 1989. Published – The Australasian Institute of Mining & Metallurgy.* (Ilerbman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

LEGEND

- BH — BORE HOLE LOCATIONS
- TP — TEST PIT LOCATION
- SUBJECT AREA
- SECTION LINE

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 01 JUN 2020.

BH	EASTING	NORTHING	RL
BH1	331046.85	6250625.99	3.6
BH2	331060.01	6250647.48	3.573
BH3	331075.49	6250649.99	3.562
BH4	331064.73	6250642.51	3.575
BH5	331053.51	6250621.90	3.606
BH6	331050.99	6250626.34	3.525
BH7	331055.03	6250612.43	3.301
BH8	331054.31	6250617.21	3.567

revision

no.	description	drawn	approved	date
A	FIRST ISSUE	MC	BE	18/06/20

0 4 8 12 16 20
SCALE 1:400 @A3 METRES

drawn	MC
approved	EM
date	22/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND BORE HOLE LOCATION PLAN

project no: WCX-08-17868_WAC170 figure no: FIGURE 1 rev: A

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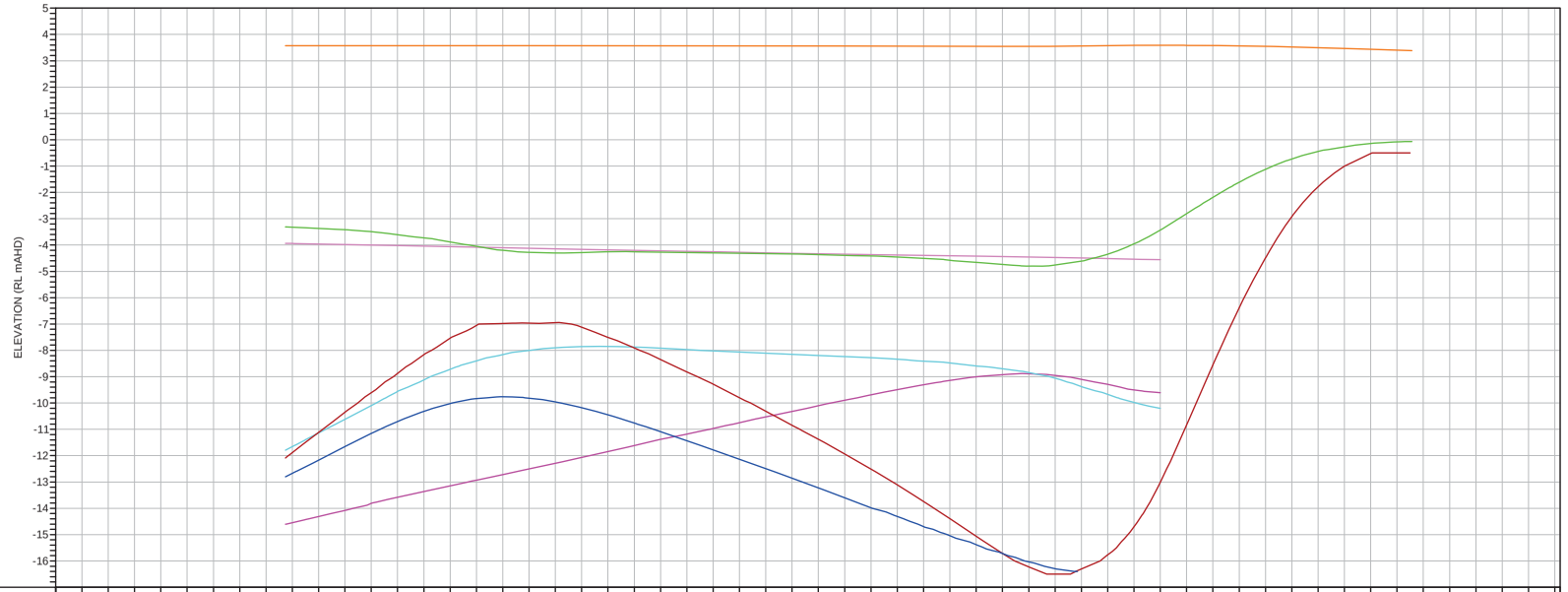
PLOT DATE: 23/06/2020 1:54:58 PM DWG FILE: W:\WCX_RLJV WEST CONNEX\WCX-08 WESTCONNEX 3B (ROZELLE)- ENVIRO WORKS\WCX-08-17868 WAC (THE CRESCENT DRILLING) 20.05.2020 MT\4-WORKING DOCUMENTS\5-CAD (MC)\WCX-08-17868_WAC170.DWG

LEGEND

- REDUCED LEVEL (RL)
- PROPOSED EXCAVATION DEPTH
- HORIZON A - FILL
- HORIZON B - MARINE SEDIMENTS
- HORIZON C - RESIDUAL / BEDROCK



CHAINAGE (m)	DESIGN LEVEL (mAHD)	EXISTING LEVEL(mAHD)
0.000		
1.000		
2.000		
3.000		
4.000		
5.000		
6.000		
7.000		
8.000		
9.000	3.571	3.571
10.000	3.571	3.571
11.000	3.572	3.572
12.000	3.572	3.572
13.000	3.572	3.572
14.000	3.572	3.572
15.000	3.572	3.572
16.000	3.572	3.572
17.000	3.572	3.572
18.000	3.572	3.572
19.000	3.572	3.572
20.000	3.572	3.572
21.000	3.571	3.571
22.000	3.570	3.570
23.000	3.569	3.569
24.000	3.567	3.567
25.000	3.566	3.566
26.000	3.565	3.565
27.000	3.563	3.563
28.000	3.562	3.562
29.000	3.560	3.560
30.000	3.559	3.559
31.000	3.557	3.557
32.000	3.556	3.556
33.000	3.553	3.553
34.000	3.551	3.551
35.000	3.549	3.549
36.000	3.548	3.548
37.000	3.548	3.548
38.000	3.552	3.552
39.000	3.562	3.562
40.000	3.574	3.574
41.000	3.583	3.583
42.000	3.587	3.587
43.000	3.584	3.584
44.000	3.577	3.577
45.000	3.564	3.564
46.000	3.547	3.547
47.000	3.526	3.526
48.000	3.497	3.497
49.000	3.469	3.469
50.000	3.434	3.434
51.000	3.401	3.401
52.000		
53.000		
54.000		
55.000		
56.000		
57.000		
57.293		

SECTION A-A'

revision no.	description	drawn	approved	date
A	FIRST ISSUE	MC	EM	22/06/20

SCALE 0 2 4 6 8 10 1:200 @A3 METRES

drawn	MC
approved	EM
date	22/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: CROSS SECTION PLAN SHOWING HORIZON DEPTH BELOW GROUND SURFACE

project no: WCX-08-17868_WAC170 | figure no: FIGURE 2 | rev: A

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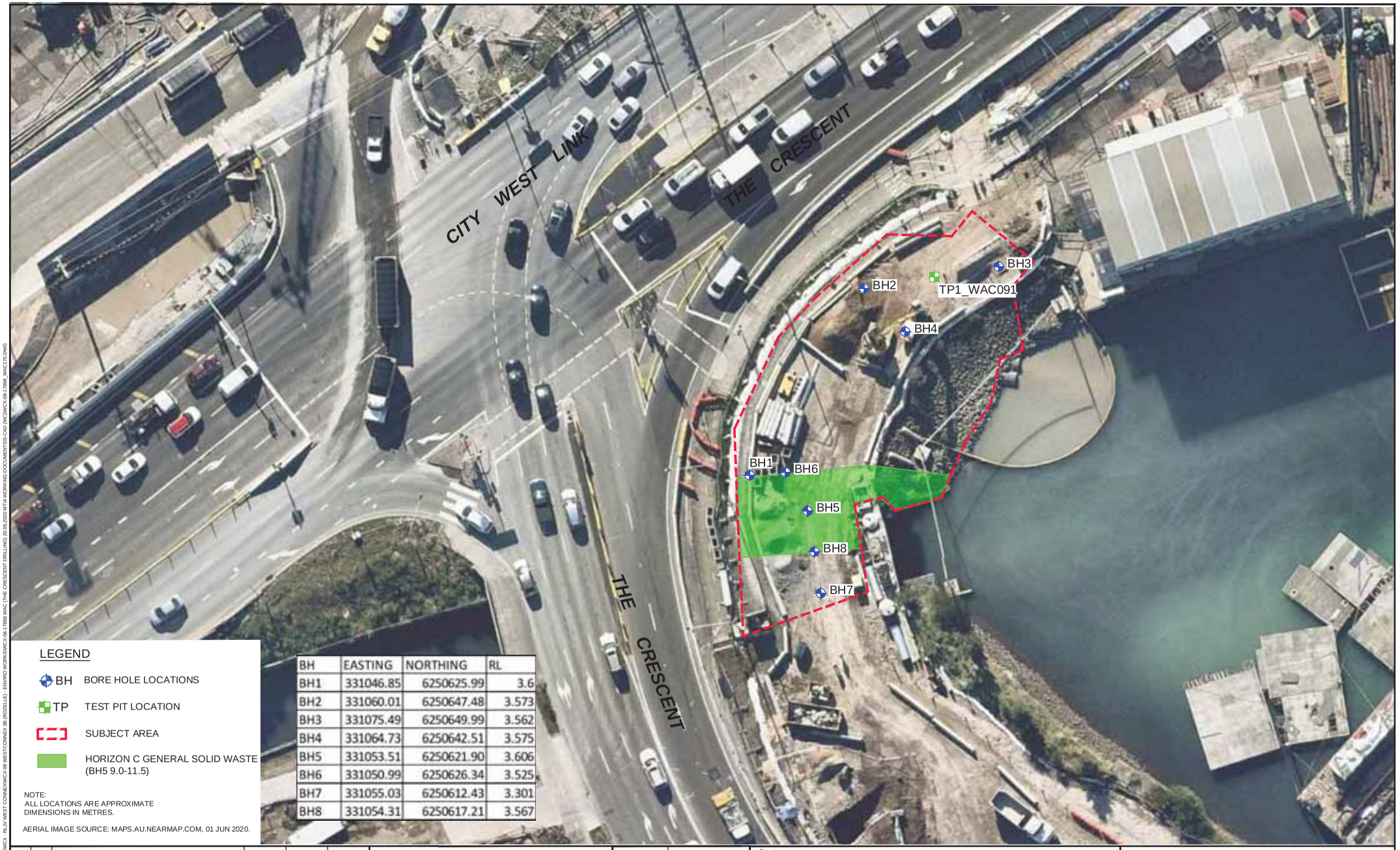
PLOT DATE: 23/06/2020 2:16:27 PM DWG FILE: W:\WCX_RLJV WEST CONNEX\WCX 08 WESTCONNEX 3B (ROZELLE)- ENVIRO WORKS\WCX-08-17868 WAC (THE CRESCENT DRILLING) 20.05.2020 MT14-WORKING DOCUMENTS\6-CAD (MC)\WCX-08-17868_WAC170.DWG



LEGEND

- BH — BORE HOLE LOCATIONS
- TP — TEST PIT LOCATION
- SUBJECT AREA
- HORIZON C GENERAL SOLID WASTE (BH5 9.0-11.5)

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 01 JUN 2020.

BH	EASTING	NORTHING	RL
BH1	331046.85	6250625.99	3.6
BH2	331060.01	6250647.48	3.573
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BH4	331064.73	6250642.51	3.575
BH5	331053.51	6250621.90	3.606
BH6	331050.99	6250626.34	3.525
BH7	331055.03	6250612.43	3.301
BH8	331054.31	6250617.21	3.567

revision

no.	description	drawn	approved	date
A	FIRST ISSUE	MC	EM	22/06/20

0 4 8 12 16 20
SCALE 1:400 @A3 METRES

drawn	MC
approved	EM
date	22/06/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND GSW HOTSPOT WITHIN HORIZON C

project no: WCX-08-17868_WAC170 | figure no: FIGURE 3 | rev: A

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PLOT DATE: 23/06/2020 1:55:37 PM DWG FILE: W:\WCX_RLJV WEST CONNEX\WCX 08 WESTCONNEX 3B (ROZELLE)- ENVIRO WORKS\WCX-08-17868 WAC (THE CRESCENT DRILLING) 20.05.2020 MT\4.WORKING DOCUMENTS\5-CAD (MC)\WCX-08-17868_WAC170.DWG

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC170

						TRHs				BTEX				Heavy Metals																	
						C6-C10 (F1)	C10-C16 (F2)	C16-C34 (F3)	C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (Total)	Cobalt	Copper	Lead	Lead - TCLP	Manganese	Mercury	Nickel	Nickel - TCLP	Selenium	Vanadium	Zinc
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						65.0		10,000		10	288	600	1,000	100	-	20	-	20	100	-	-	100	-	-	4	40		20	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						2,600		40,000		40	1,152	2,400	4,000	400	-	80	-	80	400	-	-	400	-	-	16	160		80	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						650		10,000		18	518	1,080	1,800	500	-	100	-	100	1,900	-	-	1,500	-	-	50	1,000		500	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-		-		0.5	14.4	30	50	5	-	1	-	1	5	-	-	-	5	-	0.2	2		1	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						2,600		40,000		23	2,073	4,320	7,200	2,000	-	400	-	400	7,600	-	-	6,000	-	-	200	4,000		200	-	-
Soil Vapour Intrusion Health Screening Criteria[2]						-		-		0.08	160	130	140	500	-	100	-	100	3,800	-	-	1,500	10	-	15	400		100	-	-
Acid Sulfate Soils Screening Criteria[3]						-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
VENM Background Ranges - ANZECC (1992)[4]						ND		ND		ND	ND	ND	ND	0.3-30	-	-	-	0.04-2	0.5 -110	-	1-190	<2-200	-	-	0.001-0.1	2-400	-	-	-	2-180
VENM Background Ranges - Northern (1995)[5]						ND		ND		ND	ND	ND	ND	1 -50	100-3000	-	-	1	5-1000	1-40	2-200	2-200	-	850	0.03	5-500	-	-	20-500	10-300
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type																										
HORIZON A - FILL (SOW)																															
ADE	WAC2-BH1 0.3	In-situ	0.3	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	27	<0.3	6	<5	35	52	-	180	0.3	<10	-	<5	28	87
ADE	WAC2-BH1 1.0	In-situ	1.0	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	<5	<5	<10	-	5	<0.2	<10	-	<5	<5	<5
ADE	WAC2-BH1 2.0	In-situ	2.0	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	<5	<0.3	<5	<5	<5	<10	-	96	<0.2	<10	-	<5	15	6
ADE	WAC2-BH1 3.0	In-situ	3.0	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	40	<5	35	<0.3	6	<5	5	<10	-	253	<0.2	<10	-	<5	16	28
ADE	WAC2-BH1 4.0	In-situ	4.0	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	25	<0.3	7	<5	6	<10	-	199	<0.2	<10	-	<5	12	24
ADE	WAC2-BH2 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	<5	<0.3	5	<5	<5	<10	-	66	<0.2	<10	-	<5	6	<5
ADE	WAC2-BH2 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	4	<5	135	<0.3	7	19	117	<10	-	583	<0.2	41	<0.2	<5	46	65
ADE	WAC2-BH2 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	171	<0.3	13	30	41	<10	-	562	<0.2	105	<0.2	<5	24	47
ADE	WAC2-BH2 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<1	<0.5	<0.5	<1	<2	<5	60	<5	62	<0.3	9	7	10	<10	-	319	<0.2	17	-	<5	18	48
ADE	WAC2-BH2 4.0	In-situ	4.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	23	<0.3	8	<5	5	<10	-	160	<0.2	<10	-	<5	12	23
ADE	WAC2-BH3 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	28	<0.3	5	<5	<5	<10	-	290	<0.2	<10	-	<5	9	18
ADE	WAC2-BH3 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<5	15	<0.3	6	<5	<5	<10	-	153	<0.2	<10	-	<5	16	19
ADE	WAC2-BH3 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	40	<5	11	<0.3	8	<5	8	<10	-	111	<0.2	<10	-	<5	16	25
ADE	WAC2-BH3 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	<35	<50	<100	<1	<0.5	<0.5	<1	<2	<5	50	<5	36	<0.3	6	5	5	<10	-	239	<0.2	11	-	<5	14	26
ADE	WAC2-BH4 0.3	In-situ	0.3	27.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	110	<5	57	<0.3	5	<5	5	<10	-	313	<0.2	<10	-	<5	9	20
ADE	WAC2-BH4 1.0	In-situ	1.0	27.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	175	<0.3	10	33	51	<10	-	521	<0.2	107	<0.2	<5	17	45
ADE	WAC2-BH4 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	87	<0.3	8	8	12	<10	-	343	<0.2	22	-	<5	18	36
ADE	WAC2-BH4 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	50	<5	58	<0.3	7	<5	6	<10	-	240	<0.2	<10	-	<5	18	25
ADE	WAC2-BH4 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	80	<5	61	<0.3	9	<5	7	<10	-	229	<0.2	<10	-	<5	14	31
ADE	WAC2-BH4 5.0	In-situ	5.0	27.05.2020	FILL - Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	66	<0.3	8	<5	7	<10	-	269	<0.2	10	-	<5	16	31
ADE	WAC2-BH5 0.3	In-situ	0.3	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	50	<5	68	<0.3	6	<5	68	177	<0.5	257	0.6	<10	-	<5	34	119
ADE	WAC2-BH5 1.0	In-situ	1.0	27.05.2020	FILL - Clayey SAND	<35	<50	157	<100	<0.5	<0.5	<1	<2	12	60	<5	70	<0.3	7	<5	79	217	<0.5	182.0	0.4	<10	-	<5	27	122
ADE	WAC2-BH5 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	50	<5	80	<0.3	8	7	12	<10	-	354.0	<0.2	15	-	<5	18	43
ADE	WAC2-BH5 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	9	40	<5	69	<0.3	8	<5	14	20	-	314.0	<0.2	<10	-	<5	14	89
ADE	WAC2-BH5 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	70	<5	27	<0.3	6	<5	<5	<10	-	125.0	<0.2	<10	-	<5	11	19
ADE	WAC2-BH6 0.3	In-situ	0.3	29.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	48	<0.3	7	<5	13	13	-	340	<0.2	<10	-	<5	23	31
ADE	WAC2-BH6 1.0	In-situ	1.0	29.05.2020	FILL - Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	74	<0.3	<5	6	1.15	39	-	409	<0.2	<10	-	<5	57	45
ADE	WAC2-BH6 2.0	In-situ	2.0	29.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	50	<5	95	<0.3	12	8	20	1.4	-	394	<0.2	21	-	<5	23	44
ADE	WAC2-BH6 3.0	In-situ	3.0	29.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	70	<5	66	<0.3	8	5	<5	<10	-	326	<0.2	<10	-	<5	24	37
ADE	WAC2-BH6 4.0	In-situ	4.0	29.05.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	70	<5	72	<0.3	11	6	19	1.7	-	321	<0.2	14	-	<5	12	40
ADE	WAC2-BH7 0.3	In-situ	0.3	03.06.2020	FILL - Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	70	<5	89	<0.3	19	<5	5	<10	-	15	<0.2	<10	-	<5	41	10
ADE	WAC2-BH8 0.2	In-situ	0.2	03.06.2020	FILL - Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	1.4	40	<5	79	<0.3	12	<5	<5	3.3	-	31	<0.2	<10	-	<5	22	69
ADE	WAC91-TP1 (0.0-0.3)	In-situ	0.0-0.3	02.03.2020	FILL - Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	14	NT	27	67	-	NT	<0.2	<10	-	NT	NT	155
ADE	WA291-TP1 (1.0)	In-situ	1.0	02.03.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	8	NT	<5	<10	-	NT	<0.2	<10	-	NT	NT	42
ADE	WA291-TP1 (2.0)	In-situ	2.0	02.03.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	8	NT	31	<10	-	NT	<0.2	72	<0.2	NT	NT	42
ADE	WA291-TP1 (3.0)	In-situ	3.0	02.03.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	7	NT	<5	<10	-	NT	<0.2	<10	-	NT	NT	18
ADE	WA291-TP1 (4.0)	In-situ	4.0	02.03.2020	FILL - Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	NT	NT	<0.3	6	NT	6	<10	-	NT	<0.2	<10	-	NT	NT	27
		%U.C.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.25	-	-	-	20.72	-	-	-	-
		Maximum Concentration (mg/kg)				0	0	157	0	0	0	0	0	14	110	ND	175	ND	19	33	117	217	ND	583	0.6	107	0	0	57	122
HORIZON B - GSW PASS																															
ADE	WAC2-BH1 5.0	In-situ	5.0	25.05.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	30	<5	121	<0.3	15	<5	16	25	-	60	0.2	<10	-	<5	38	168
ADE	WAC2-BH3 4.0	In-situ	4.0	25.05.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	100	<5	12	<0.3	9	<5	75	153	<0.5	205	0.4	<10	-	<5	19	337
ADE	WAC2-BH3 5.0	In-situ	5.0	25.05.2020	Sandy CLAY	<35	<50	118	<100	<0.5	<0.5	<1	<2	<5	60	<5	27	<0.3	10	<5	23	41	-	162	0.2	<10	-	<5	15	128
ADE	WAC2-BH3 6.0	In-situ	6.0	25.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	70	<5	<5	<0.3	9	<5	34	70	-	82	0.3	<10	-	<5	15	347
ADE	WAC2-BH3 7.5	In-situ	7.5	26.05.2020	Sandy CLAY	<35	<50	1,091	157	<0.5	<0.5	<1	<2	<5	70	<5	35	<0.3	<5	<5	27	77	-	116	<0.2	<10	-	<5	19	128
ADE	WAC2-BH3 9.5	In-situ	9.5	26.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	<5	<5	<10	-	17	<0.2	<10	-	<5	5	<5
ADE	WAC2-BH3 12.0	In-situ	12.0	26.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	<5	<5	<10	-	8	<0.2	<10	-	<5	<5	<5
ADE	WAC2-BH3 13.5	In-situ	13.5	26.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	8	<0.3	<5	<5	<5	<10	-	14	<0.2	<10	-	<5	8	<5
ADE	WAC2-BH3 15.0	In-situ	15.0	26.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	<5	<0.3	<5	<5	<5	<10	-	5	<0.2	<10	-	<5	10	<5
ADE	WAC2-BH5 5.0	In-situ	5.0	27.05.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	31	80	<5	239	<0.3	35	<5	119	174	<0.5	125.0	0.2	<10	-	<5	27	564
ADE	WAC2-BH5 6.0	In-situ	6.0	27.05.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	15	20	<5	130	<0.3	22	<5	46	46	-	85	<0.2	<10	-	<5	33	207
ADE	WAC2-BH5 7.0	In-situ	7.0	27.05.2020	Silty CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	66	<0.3	9	<5	18	<10	-	47	<0.2	<10	-	<5	30	60
ADE	WAC2-BH5 8.0	In-situ	8.0	28.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	27	<0.3	11	<5	<5	<10	-	<5	0.2	<10	-	<5	15	<5
ADE	WAC2-BH5 9.0	In-situ	9.0	28.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	<10	<5	67	<0.3	11	<5	<5	<10	-	13	0.2	<10	-	<5	25	<5
ADE	WAC2-BH6 5.0	In-situ	5.0	29.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	60	<5	44	<0.3	8	<5	15	15	-	212	<0.2	<10	-	<5	19	42
ADE	WAC2-BH6 6.0	In-situ	6.0	29.05.2020	Silty SAND	<35	<50	473	115	<0.5	<0.5	<1	<2	8	<10	<5	37	<0.3	7	<5	30	89	-	136	<0.2	<10	-	<5	24	27
ADE	WAC2- BH6 7.0	In-situ	7.0	29.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	<10	<5	39	<0.3	6	<5	<5	<10	-	5	<0.2	<10	-	<5	22	<5
		%U.C.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67.88	-	-	-	-	-	-	-	-
		Maximum Concentration (mg/kg)				ND	ND	1,091	157	ND	ND	ND	ND	31	100	ND	239	ND	35	ND	119	174	ND	212	0.4	ND	ND	ND	38	564
HORIZON C - VENM																															
ADE	WAC2-BH2 (6.0)	In-situ	6.0	25.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	<5	<0.3	<5	<5	5	<10	-	19	<0.2	<10	-	<5	11	20
ADE	WAC2-BH3 16.5	In-situ	16.5	26.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	56	<0.3	5	<5	<5	<10	-	67	<0.2	<10	-	<5	<5	27
ADE	WAC2-BH3 17.5	In-situ	17.5	26.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	46	<0.3	5	<5	<5	<10	-	58	<0.2	<10	-	<5	6	16
ADE	WAC2-BH5 10.0	In-situ	10.0	28.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	30	<5	12	<0.3	5	<5	<5	<10	-	<5	0.2	<10	-	<5	<5	<5
ADE	WAC2-BH5 11.5	In-situ	11.5	28.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	25	<0.3	8	<5	<5	<10	-	<5	<0.2	<10	-	<5	10	<5
ADE	WAC2-BH5 12.5	In-situ	12.5	28.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	13	<0.3	5	<5	<5	<10	-	<5	<0.2	<10	-	<5	9	<5
ADE	WAC2-BH5 14.0	In-situ	14.0	28.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	10	<0.3	<5	<5	<5	<10	-	6	<0.2	<10	-	<5	8	<5
ADE	WAC2-BH5 15.0	In-situ	15.0	28.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	10	<5	127	<0.3	9	5	<5	<10	-	282	<0.2	<10	-	<5	9	42
ADE	WAC2-BH5 16.0	In-situ	16.0	28.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	94	<0.3	5	<5	<5	<10	-	184	<0.2	<10	-	<5	13	30
ADE	WAC2-BH6 8.0	In-situ	8.0	29.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	20	<5	134	<0.3	16	<5	<5	<10	-	<5	<0.2	<10	-	<5	77	6
ADE	WAC2-BH6 9.0	In-situ	9.0	29.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	<5	<0.3	<5	<5	<5	<10	-	<5	<0.2	<10	-	<5	15	<5
ADE	WAC2-BH6 10.0	In-situ	10.0	29.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	20	<5	<5	<0.3	<5	<5	<5	<10	-	<5	<0.2	<10	-	<5	20	<5
ADE	WAC2-BH6 12.5	In-situ	12.5	29.05.2020	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<5	<5	<0.3	7	<5	<5	<10	-	<5	<0.2	<10	-	<5	NT	<5
ADE	WAC2-BH6 13.0	In-situ	13.0	29.05.2020	SANDSTONE	<35	<50	<100	<1	<0.5	<0.5	<1	<2	<5	<10	<5	95	<0.3	<5	<5	<5	11	-	<5	<0.2	<10	-	<5	5	<5
ADE	WAC2-BH6 15.0	In-situ	15.0	29.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<10	<5	77	<0.3	5	<5	<5	16	-	<5	<0.2	<10	-	<5	8	5
ADE	WAC2-BH6 16.5	In-situ	16.5	29.05.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	270	<5	132	<0.3	6	<5	<5	<10	-	267	<0.2	<10	-	<5	17	26
		Maximum Concentration (mg/kg)				ND	ND	ND	ND	ND	ND	ND	ND	6	270	ND	134	ND	16	5	0	16	NT	282	0.2	ND	NT	ND	77	42
QA/QC																															
ADE	WAC2-SR2	In-situ	6.0	25.05.2020	Replicate of WAC2-BH3 6.0	<10	<50	590	170	<0.2	<0.5	<0.5	<0.5	5	NT	NT	NT	<1	11	NT	38	78	NT	NT	0.2	8	NT	NT	NT	342
ADE	WAC2-SR3	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<5	NT	NT	NT	<1	9	NT	14	13	NT	NT	<0.1	23	NT	NT	NT	NT	39
ADE	WAC2-BR2	In-situ	6	25.05.2020	Replicate of WAC2-BH3 6.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	6	NT	<5	18	<0.3	10	<5	47	86	-	126	0.4	<10	-	<5	NT	420
ADE	WAC2-BR3a	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	7	NT	<5	91	<0.3	9	9	15	<10	-	360	<0.2	23	-	<5	NT	39
ADE	WAC2-BR4	In-situ	9	29.05.2020	Replicate of WAC2-BH6 9.0	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	NT	<5	<5	<0.3	5	<5	<5	<10	-	<5	<0.2	<10	-	<5	NT	<5
		%U.C.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Maximum Concentration (mg/kg)				ND	ND	1,091	170	ND	ND	ND	ND	31				0	35	9		174	0		0.4	23				

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy: Berkman, 1989*

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC170

						PAHs																		
						Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(a)pyrene - TCLP	Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)
ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC170																								
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	200
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	800
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	200
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	800
Soil Vapour Intrusion Health Screening Level (mg/kg)[2]						-	-	-	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM Background Ranges - ANZECC (1992)[2]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM Background Ranges - Sydney Basin (1995)[3]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type																			
HORIZON A - FILL (SOW)																								
ADE	WAC2-BH1 0.3	In-situ	0.3	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	0.3	0.6	0.6	1.1	-	0.3	-	0.4	0.3	0.6	<0.3	1.4	<0.3	0.5	<0.3	1.3	1.4	7.7
ADE	WAC2-BH1 1.0	In-situ	1.0	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH1 2.0	In-situ	2.0	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH1 3.0	In-situ	3.0	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH1 4.0	In-situ	4.0	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH2 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH2 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH2 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH2 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH2 4.0	In-situ	4.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 0.3	In-situ	0.3	27.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 1.0	In-situ	1.0	27.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH4 5.0	In-situ	5.0	27.05.2020	FILL - Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 0.3	In-situ	0.3	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	1	1.1	1.7	<0.005	1.2	-	0.7	0.5	0.9	<0.3	2.1	<0.3	0.5	<0.3	0.6	2	10.6
ADE	WAC2-BH5 1.0	In-situ	1.0	27.05.2020	FILL - Clayey SAND	<0.3	0.3	1.2	3.4	3.3	5	<0.005	3.9	-	2.5	1.7	2.9	0.4	7.8	0.3	1.7	<0.3	4.6	6.5	40.7
ADE	WAC2-BH5 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.5	<0.3	<0.3	<0.3	0.3	0.4	1.2
ADE	WAC2-BH5 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	0.4	0.3	0.7	-	0.3	-	<0.3	<0.3	0.3	<0.3	0.8	<0.3	<0.3	<0.3	0.6	0.8	3.5
ADE	WAC2-BH5 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 0.3	In-situ	0.3	29.05.2020	FILL - Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 1.0	In-situ	1.0	29.05.2020	FILL - Silty SAND	<0.3	<0.3	0.4	1.2	1.3	2.0	-	1.5	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 2.0	In-situ	2.0	29.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	0.4	0.4	0.9	-	0.5	-	0.8	0.6	1.1	<0.3	2.9	<0.3	0.7	<0.3	1.5	2.5	14.5
ADE	WAC2-BH6 3.0	In-situ	3.0	29.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	0.3	<0.3	0.4	<0.3	1.2	<0.3	<0.3	<0.3	0.8	1.1	5.1
ADE	WAC2-BH6 4.0	In-situ	4.0	29.05.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3
ADE	WAC2-BH7 0.3	In-situ	0.3	03.06.2020	FILL - Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	0.3
ADE	WAC2-BH8 0.2	In-situ	0.2	03.06.2020	FILL - Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC91-TP1 (0.0-0.3)	In-situ	0.0-0.3	02.03.2020	FILL - Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WA91-TP1 (1.0)	In-situ	1.0	02.03.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WA91-TP1 (2.0)	In-situ	2.0	02.03.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WA91-TP1 (3.0)	In-situ	3.0	02.03.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WA91-TP1 (4.0)	In-situ	4.0	02.03.2020	FILL - Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
			%UCL			-	-	-	-	0.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			0	0.3	1.2	3.4	3.3	5	0	3.9		2.5	1.7	2.9	0.4	7.8	0.3	1.7	0	4.6	6.5	40.7
HORIZON B - GSW PASS																								
ADE	WAC2-BH1 5.0	In-situ	5.0	25.05.2020	Silty CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH3 4.0	In-situ	4.0	25.05.2020	Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH3 5.0	In-situ	5.0	25.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	0.4	0.7	1	-	0.3	-	0.6	0.3	0.4	<0.3	0.8	<0.3	0.6	<0.3	0.3	1	5.4
ADE	WAC2-BH3 6.0	In-situ	6.0	25.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	0.3	0.5	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	0.4	1
ADE	WAC2-BH3 7.5	In-situ	7.5	26.05.2020	Sandy CLAY	2.2	1.7	8.5	18.2	14.6	21.3	<0.005	15.3	-	8.8	5.5	13.6	1.7	45.7	4.2	8.9	0.6	33.6	41.4	224.5
ADE	WAC2-BH3 9.5	In-situ	9.5	26.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH3 12.0	In-situ	12.0	26.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH3 13.5	In-situ	13.5	26.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH3 15.0	In-situ	15.0	26.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BH5 5.0	In-situ	5.0	27.05.2020	Clayey SAND	<0.3	<0.3	0.3	1	1.1	1.7	<0.005	1.1	-	0.8	0.3	1	<0.3	2.3	<0.3	0.5	0.4	1.4	2.1	12.3
ADE	WAC2-BH5 6.0	In-situ	6.0	27.05.2020	Silty CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.6	<0.3	<0.3	<0.3	0.3	0.5	1.4
ADE	WAC2-BH5 7.0	In-situ	7.0	27.05.2020	Silty CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC2-BH5 8.0	In-situ	8.0	28.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC2-BH5 9.0	In-situ	9.0	28.05.2020	Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC2-BH6 5.0	In-situ	5.0	29.05.2020	Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	0.3	0.3	1.0
ADE	WAC2-BH6 6.0	In-situ	6.0	29.05.2020	Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC2- BH6 7.0	In-situ	7.0	29.05.2020	Silty SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	0.5	0.3	1.1
			%UCL			-	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			2.2	1.7	8.5	18.2	14.6	21.3	ND	15.3		8.8	5.5	13.6	1.7	45.7	4.2	8.9	0.6	33.6	41.4	224.5
HORIZON C - VENM																								
ADE	WAC2-BH2 (6.0)	In-situ	6.0	25.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 16.5	In-situ	16.5	26.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH3 17.5	In-situ	17.5	26.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 10.0	In-situ	10.0	28.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 11.5	In-situ	11.5	28.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 12.5	In-situ	12.5	28.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 14.0	In-situ	14.0	28.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 15.0	In-situ	15.0	28.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH5 16.0	In-situ	16.0	28.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 8.0	In-situ	8.0	29.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 9.0	In-situ	9.0	29.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 10.0	In-situ	10.0	29.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 12.5	In-situ	12.5	29.05.2020	Clayey SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 13.0	In-situ	13.0	29.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 15.0	In-situ	15.0	29.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
ADE	WAC2-BH6 16.5	In-situ	16.5	29.05.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	ND
			Maximum Concentration (mg/kg)			ND	ND	ND	ND	ND	0.7	NT	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
QA/QC																								
ADE	WAC2-SR2	In-situ	6.0	25.05.2020	Replicate of WAC2-BH3 6.0	<0.5	<0.5	0.9	3.1	5.9	8	-	-	6.5	3.8	2.3	2.9	0.6	7.2	<0.5	2.9	<0.5	2.7	8.2	47
ADE	WAC2-SR3	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC2-BR2	In-situ	6	25.05.2020	Replicate of WAC2-BH3 6.0	<0.3	<0.3	<0.3	0.4	0.7	1	-	0.3	-	0.5	0.3	0.3	<0.3	0.7	<0.3	0.6	<0.3	<0.3	0.8	4.6
ADE	WAC2-BR3a	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0
ADE	WAC2-BR4	In-situ	9	29.05.2020	Replicate of WAC2-BH6 9.0	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
			%UCL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Maximum Concentration (mg/kg)			2.2	1.7	8.5	18.2	14.6	21.3	0	15.3		8.8	5.5	13.6	1.7	45.7	4.2	8.9	0.6	33.6	41.4	224.5

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy: Berkman, 1989.*

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, Rozelle Interchange: WCX-08-17868 / WAC170

						PCBs	OCP's					Cyanide	Phenols	VOCs / SVOCs		Organotins (TBT)	PFAS		Acid Sulfate Soils[2]						Asbestos
						Total PCBs	Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Cyanide Total	Phenols Total	Sum of + VOCs	Sum of + SVOCs	Tributyltin (ug/kg)	PFOS + PFHxS	PFOA	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Net Acidity (Excluding Acid Neutralising Capacity)	Net Acidity (Excluding Acid Neutralising Capacity) (moles H+/t)	Acid Neutralising Capacity (moles H+/t)	Asbestos (g/kg)[5]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						<50	<50	60	-	-	-	-	-	-	-	72	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						<50	<50	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						<50	<50	108	-	-	-	-	-	-	-	-	0.05	0.2	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	3	-	-	-	-	-	-	-	-	-	7.2	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						<50	<50	432	-	-	-	-	-	-	-	-	0.5	2	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	12	-	-	-	-	-	-	-	-	-	28	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	<5.5	>4.5	-	0.06	36	-	-
NEPM Background Ranges - ANZECC (1992)[2]						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEPM Background Ranges - Bertram et al (1815)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Consultant	Sample I.D	In-situ / Ex-Situ	Depth (m BGL)	Date	Material Type																				
HORIZON A - FILL (SOW)																									
ADE	WAC2-BH1 0.3	In-situ	0.3	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9	6.5	2	NT	NT	NAD
ADE	WAC2-BH1 1.0	In-situ	1.0	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.4	6.5	1	NT	NT	NAD
ADE	WAC2-BH1 2.0	In-situ	2.0	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.3	6.4	1	NT	NT	NAD
ADE	WAC2-BH1 3.0	In-situ	3.0	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9	6.3	1	NT	NT	NAD
ADE	WAC2-BH1 4.0	In-situ	4.0	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.5	6.6	1	NT	NT	NAD
ADE	WAC2-BH2 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	7.9	5.6	1	NT	NT	NAD
ADE	WAC2-BH2 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.4	6.5	2	NT	NT	NAD
ADE	WAC2-BH2 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.4	7	4	NT	NT	NAD
ADE	WAC2-BH2 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.4	6.4	2	NT	NT	NAD
ADE	WAC2-BH2 4.0	In-situ	4.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9	6.3	1	NT	NT	NAD
ADE	WAC2-BH3 0.3	In-situ	0.3	25.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9	6.3	2	NT	NT	NAD
ADE	WAC2-BH3 1.0	In-situ	1.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.2	6.8	3	NT	NT	NAD
ADE	WAC2-BH3 2.0	In-situ	2.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.3	6.5	2	NT	NT	NAD
ADE	WAC2-BH3 3.0	In-situ	3.0	25.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.1	6.3	1	NT	NT	NAD
ADE	WAC2-BH4 0.3	In-situ	0.3	27.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	7.6	6.3	1	NT	NT	NAD
ADE	WAC2-BH4 1.0	In-situ	1.0	27.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.5	7.1	1	NT	NT	NAD
ADE	WAC2-BH4 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.3	6.6	1	NT	NT	NAD
ADE	WAC2-BH4 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.9	6.3	1	NT	NT	NAD
ADE	WAC2-BH4 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	7.7	6.3	1	NT	NT	NAD
ADE	WAC2-BH4 5.0	In-situ	5.0	27.05.2020	FILL - Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.6	6.8	1	0.02	15	NAD
ADE	WAC2-BH5 0.3	In-situ	0.3	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.9	6.7	2	NT	NT	NAD
ADE	WAC2-BH5 1.0	In-situ	1.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	9.4	6.8	1	NT	NT	NAD
ADE	WAC2-BH5 2.0	In-situ	2.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.3	9.2	4	NT	NT	NAD
ADE	WAC2-BH5 3.0	In-situ	3.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.6	6.7	1	NT	NT	NAD
ADE	WAC2-BH5 4.0	In-situ	4.0	27.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.3	5.8	1	NT	NT	NAD
ADE	WAC2-BH6 0.3	In-situ	0.3	29.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.7	6.4	1	NT	NT	NAD
ADE	WAC2-BH6 1.0	In-situ	1.0	29.05.2020	FILL - Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.8	6.6	1	NT	NT	NAD
ADE	WAC2-BH6 2.0	In-situ	2.0	29.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.4	7.3	1	NT	NT	NAD
ADE	WAC2-BH6 3.0	In-situ	3.0	29.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.9	6.4	1	NT	NT	NAD
ADE	WAC2-BH6 4.0	In-situ	4.0	29.05.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.6	5.8	1	NT	NT	NAD
ADE	WAC2-BH7 0.3	In-situ	0.3	03.06.2020	FILL - Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.8	8.5	1	NT	NT	NAD
ADE	WAC2-BH8 0.2	In-situ	0.2	03.06.2020	FILL - Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.4	6	1	NT	NT	NAD
ADE	WAC9L-TP1_(0.0-0.3)	In-situ	0.0-0.3	02.03.2020	FILL - Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NAD
ADE	WA3(1-TP1 (1.0)	In-situ	1.0	02.03.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NAD
ADE	WA3(1-TP1 (2.0)	In-situ	2.0	02.03.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NAD
ADE	WA3(1-TP1 (3.0)	In-situ	3.0	02.03.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NAD
ADE	WA3(1-TP1(4.0)	In-situ	4.0	02.03.2020	FILL - Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NAD
	%'s/0.					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					0	0	0	0	0	0	0	0	0	0	0	0	0	NA						
HORIZON B - GSW PASS																									
ADE	WAC2-BH1 5.0	In-situ	5.0	25.05.2020	Silty CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.5	1.7	4	1.54	959	NAD
ADE	WAC2-BH1 4.0	In-situ	4.0	25.05.2020	Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.6	3.9	3	0.06	34	NT
ADE	WAC2-BH3 5.0	In-situ	5.0	25.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	8.9	6.2	2	NT	NT	NT
ADE	WAC2-BH3 6.0	In-situ	6.0	25.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	8.5	2	3	0.2	128	NT
ADE	WAC2-BH3 7.5	In-situ	7.5	26.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	3	2.2	1.4	<0.5	NT	NT	7.1	3.9	1	0.08	51	NT
ADE	WAC2-BH3 9.5	In-situ	9.5	26.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	2	ND	ND	<0.5	<5	<5	7.5	1.9	1	1.15	719	NT
ADE	WAC2-BH3 12.0	In-situ	12.0	26.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	7	3.2	1	0.22	140	NT
ADE	WAC2-BH3 13.5	In-situ	13.5	26.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	6.9	1.5	2	0.25	157	NT
ADE	WAC2-BH3 15.0	In-situ	15.0	26.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	6.6	4	1	0.09	58	NT
ADE	WAC2-BH5 5.0	In-situ	5.0	27.05.2020	Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	9	6.6	2	NT	NT	NT
ADE	WAC2-BH5 6.0	In-situ	6.0	27.05.2020	Silty CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	2	ND	ND	<0.5	<5	<5	8.9	2.1	3	0.91	568	NT
ADE	WAC2-BH5 7.0	In-situ	7.0	27.05.2020	Silty CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	1	ND	ND	<0.5	<5	<5	8.7	5.3	3	0.45	283	NT
ADE	WAC2-BH5 8.0	In-situ	8.0	28.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	6.9	5.6	1	0.03	21	NT
ADE	WAC2-BH5 9.0	In-situ	9.0	28.05.2020	Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	8.9	6.2	1	0.11	70	NT
ADE	WAC2-BH6 5.0	In-situ	5.0	29.05.2020	Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	8.7	6.3	1	<0.02	11	NT
ADE	WAC2-BH6 6.0	In-situ	6.0	29.05.2020	Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	8.5	6.2	1	0.02	15	NT
ADE	WAC2- BH6 7.0	In-situ	7.0	29.05.2020	Silty SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	7.7	5.6	1	0.02	15	NT
	%'s/0.					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					0	0	0	0	0	0	0	3	2.2	1.4	0	0	0	NA						
HORIZON C - VENM																									
ADE	WAC2-BH2 (6.0)	In-situ	6.0	25.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	9	5.4	1	NT	NT	NT
ADE	WAC2-BH3 16.5	In-situ	16.5	26.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH3 17.5	In-situ	17.5	26.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH5 10.0	In-situ	10.0	28.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	8.2	5.8	1	<0.02	12	NT
ADE	WAC2-BH5 11.5	In-situ	11.5	28.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	7.4	5.4	1	<0.02	<10	NT
ADE	WAC2-BH5 12.5	In-situ	12.5	28.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	7.2	5.6	1	NT	NT	NT
ADE	WAC2-BH5 14.0	In-situ	14.0	28.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH5 15.0	In-situ	15.0	28.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH5 16.0	In-situ	16.0	28.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH6 8.0	In-situ	8.0	29.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	7.2	4.7	1	<0.02	10	NT
ADE	WAC2-BH6 9.0	In-situ	9.0	29.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	7	5.4	1	NT	NT	NT
ADE	WAC2-BH6 10.0	In-situ	10.0	29.05.2020	Sandy CLAY	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	<5	<5	6.8	5.2	1	NT	NT	NT
ADE	WAC2-BH6 12.5	In-situ	12.5	29.05.2020	Clayey SAND	ND	<0.2	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH6 13.0	In-situ	13.0	29.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH6 15.0	In-situ	15.0	29.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BH6 16.5	In-situ	16.5	29.05.2020	SANDSTONE	ND	<0.2	<0.2	<0.1	<0.1	<0.1	<1	<1	ND	ND	<0.5	NT	NT	NT	NT	NT	NT	NT	NT
	Maximum Concentration (mg/kg)					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA						
QA/QC																									
ADE	WAC2-SR2	In-situ	6.0	25.05.2020	Replicate of WAC2-BH3 6.0	ND	ND	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-SR3	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	ND	ND	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BR2	In-situ	6	25.05.2020	Replicate of WAC2-BH3 6.0							NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BR3a	In-situ	2	27.05.2020	Replicate of WAC2-BH4 2.0	ND	<0.2	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC2-BR4	In-situ	9	29.05.2020	Replicate of WAC2-BH6 9.0	ND	<0.2	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	%'s/0.					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum Concentration (mg/kg)					0	0	0	0	0	0	0	3	2.2	1.4	0	0	0	NA						

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

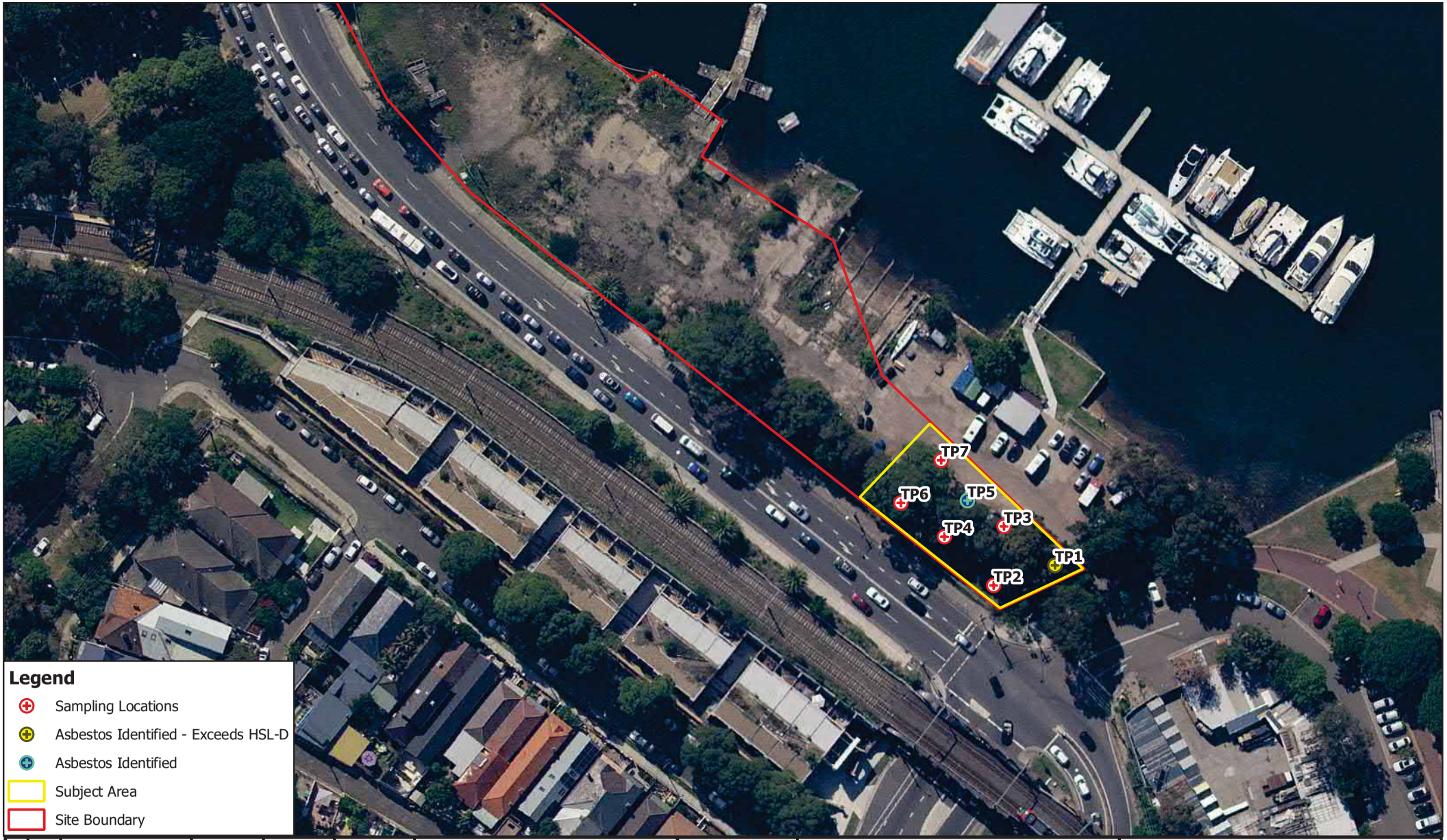
1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy: Berkman, 1989*

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP



Revision	no.	Description	Drawn	Approved	Date
	A	FIRST ISSUE	CZ	BE	13.12.2019

Coordinate System: WGS84 / UTM 56S

N

0 15 30 m

1:700

Drawn: CZ

Approved: BE

Date: 13.12.2019

Reference:

Client: JOHN HOLLAND CPB JV

Project: Waste Classification & Analysis

Title: Approximate Locations of the Subject Area, Sampling Points and Site Boundary

Project no: WCX-08-17049 | Figure no: 1 | Rev: 1

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SOLUTIONS THROUGH INNOVATION

Revision	no.	Description	Drawn	Approved	Date
	A	FIRST ISSUE	CZ	BE	13.12.2019

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Date: 13.12.2019

Reference:

Client: JOHN HOLLAND CPB JV

Project: Waste Classification & Analysis

Title: Inferred Extent of Asbestos Contamination Exceeds HSL-D

Project no: WCX-08-17049 | Figure no: 2 | Rev: 1

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ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						TRHs				BTEX				Heavy Metals										
						C6-C10 (F1)	C10-C16 (F2)	C16-C34 (F3)	C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	TCLP - Lead	Mercury	Nickel	TCLP - Nickel	Zinc	Acenaphthene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						650		10,000		10	288	600	1,000	100	20	100	-	100	-	4	40		-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						2,600		40,000		40	1,152	2,400	4,000	400	80	400	-	400	-	16	160		-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						650		10,000		18	518	1,080	1,800	500	100	1,900	-	1,500	-	50	1,050		-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-		-		0.5	14.4	30	50	5	1	5	-	-	5	0.2	2		-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						2,600		40,000		23	2,073	4,320	7,200	2,000	400	7,600	-	6,000	-	200	4,200		-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-		-		0.16	57.6	120	200	20	4	20	-	-	20	0.8	8		-	-
Acid Sulfate Soils Screening Criteria[5]						-		-		-	-	-	-	-	-	-	-	-	-	-	-		-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000		400,000	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200		30,000	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-		-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						800	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Direct Contact (HSL-D)						26,000	20,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-		-	-
Direct Contact (HSL-C)						5,100	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-		-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						250	NL	-	-	4	4	NL	NL	-	-	-	-	-	-	-	-		-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						NL	NL	-	-	NL	NL	-	NL	-	-	-	-	-	-	-	-		-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-		-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																			
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<35	<50	134	106	<0.5	<0.5	<1	<2	<5	<0.3	21	670	370	<0.5	0.4	33	-	700	<0.3
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	16	68	-	<0.2	<10	-	79	<0.3
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	181	157	<0.5	<0.5	<1	<2	5	<0.3	17	67	390	<0.5	0.3	23	-	430	<0.3
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	130	48	-	1	<10	-	46	<0.3
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	121	152	<0.5	<0.5	<1	<2	<5	<0.3	80	250	260	<0.5	0.3	85	<0.2	1200	<0.3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<35	<50	<100	155	<0.5	<0.5	<1	<2	<5	<0.3	25	310	260	<0.5	0.2	20	-	1000	<0.3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	244	228	<0.5	<0.5	<1	<2	<5	<0.3	10	220	260	<0.5	0.3	10	-	370	<0.3
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<35	<50	155	280	<0.5	<0.5	<1	<2	<5	<0.3	20	110	330	<0.5	0.2	18	-	510	<0.3
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	108	125	<0.5	<0.5	<1	<2	<5	<0.3	32	140	590	<0.5	0.3	21	-	1100	<0.3
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<35	<50	112	128	<0.5	<0.5	<1	<2	10	0.3	29	270	830	2.6	0.5	19	-	1200	<0.3
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	16	98	-	2.7	<10	-	200	<0.3
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<35	<50	<100	107	<0.5	<0.5	<1	<2	<5	<0.3	8	10	55	-	0.5	<10	-	67	<0.3
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	8	68	240	<0.5	0.9	<10	-	210	<0.3
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	11	23	-	0.2	<10	-	59	<0.3
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	87	36	-	<0.2	<10	-	40	<0.3
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	<10	<50	<100	<100	<0.5	<0.5	<1	<0.5	6	<0.3	5	106	55	-	<0.1	2	-	52	<0.5
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	380.6	-	-	43.72	-	-	-
Maximum Concentration (mg/kg)						ND	ND	244	280	ND	ND	ND	ND	10	0.3	80	670	830	2.6	2.7	85	ND	1200	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						PAHs							PAHs													PCBs
						Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene TEQ (half PQL)	Benzo[a]pyrene	TCLP - Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)	Total PCBs
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	200	<50
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-	800	<50
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	200	<50
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	800	<50
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000	7
NEPM 2013 HIL-C (Public Open Space)						-	-	-	3	-	-	-		-	-	-	-	-	-	-	-	-	300	1
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,900	-	-	-	
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																			
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	0.3	0.3	1	1.9	1.3	<0.005	1.5	1	0.5	1	<0.3	1.8	<0.3	1	<0.3	0.5	2	12.2	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	0.5	1.1	0.7	-	0.8	0.5	0.3	0.5	<0.3	0.8	<0.3	0.6	<0.3	<0.3	1	5.7	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.5	0.8	0.5	-	0.6	0.5	<0.3	0.4	<0.3	0.9	<0.3	0.4	<0.3	0.4	1	5.2	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	<0.3	0.4	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.7	1.3	0.9	<0.005	1	0.7	0.4	0.7	<0.3	1.4	<0.3	0.7	<0.3	0.5	1.5	8.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.3	<0.3	0.3	0.7	0.4	-	0.5	0.3	<0.3	0.3	<0.3	0.5	<0.3	0.3	<0.3	<0.3	0.6	3.2	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	0.5	1	3.4	5.7	3.9	<0.005	4.3	2.3	1.6	3.1	0.5	5.9	<0.3	2.7	<0.3	2.1	6.3	37.6	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.3	0.3	1.3	2.3	1.6	<0.005	1.8	1	0.7	1.2	<0.3	2.2	<0.3	1.1	<0.3	0.6	2.5	14.3	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	0.3	0.4	1.5	2.8	1.9	<0.005	2.1	1.2	0.8	1.5	0.3	2.7	<0.3	1.3	<0.3	1.1	2.9	18.0	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.3	0.4	1.4	2.1	1.5	<0.005	1.7	0.9	0.6	1.2	<0.3	2.4	<0.3	1	<0.3	1	2.6	14.7	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.3	<0.3	0.4	0.8	0.5	-	0.6	0.3	<0.3	0.4	<0.3	0.8	<0.3	0.3	<0.3	<0.3	0.9	4.2	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.3	<0.3	0.3	0.6	0.3	-	0.4	<0.3	<0.3	0.3	<0.3	0.5	<0.3	<0.3	<0.3	<0.3	0.6	2.4	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.3	<0.3	0.4	0.7	0.4	-	0.5	<0.3	<0.3	0.3	<0.3	0.7	<0.3	<0.3	<0.3	0.3	0.7	3.3	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.3	<0.3	0.4	0.7	0.4	-	0.5	<0.3	<0.3	0.3	<0.3	0.6	<0.3	<0.3	<0.3	0.3	0.7	3.2	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	<0.3	<0.3	<0.3	0.4	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	<0.5
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	<0.5	<0.5	<0.5	1.2	<0.5	-	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	0.8	0.9	2.7	<0.1
95% UCL						-	-	-	2.2	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						0.5	1	3.4	5.7	3.9	ND	4.3	2.3	1.6	3.1	1	5.9	ND	2.7	ND	2.1	6.3	37.6	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						OCPs					OPPs	Chlorinated Hydrocarbons													
						Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Chlorpyrifos	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						<50	60	-	-	-	4	200	600	26	24	-	14	-	-	-	10	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						<50	240	-	-	-	16	360	1,080	46.8	43.2	-	0.7	-	-	-	0.5	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						<50	108	-	-	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	3	-	-	-	0.2	800	2,400	104	96	-	56	-	-	-	40	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						<50	432	-	-	-	30	1,440	4,320	187	173	-	100	-	-	-	72	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	12	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	3,600	40	530	3,600	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	340	10	70	400	250	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)												-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)												-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT												-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																			
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

	Chlorinated Hydrocarbons																		
	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]	-	-	10	-	-	120	-	-	-	-	-	-	-	10	14	-	-	4
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]	-	-	18	-	-	126	-	-	-	-	-	-	-	18	25.2	-	-	7.2
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]	-	-	40	-	-	480	-	-	-	-	-	-	-	40	56	-	-	16
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]	-	-	72	-	-	864	-	-	-	-	-	-	-	72	101	-	-	28.8
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						Halogenated Benzenes									Halogenated Hydrocarbons				
						1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	86	-	150	-	-	-	2,000	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	344	-	600	-	-	-	8,000	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**														
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						Inorganics									MAH								
						Exchangeable Calcium	Exchangeable Sodium Percent	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	CEC	Tributyltin (ug/kg)	Cyanide Total	pH (Lab)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	70	320	-	-	-	-	-	-	-	-	60	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	108	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	1,280	-	-	-	-	-	-	-	-	240	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	23,600	-	-	-	-	-	-	-	-	432	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																		
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	5.4	5	0.6	0.4	0.3	6.8	<1	<1	8.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	2.8	10.3	<0.2	<0.2	0.3	3.2	<0.5	<1	7.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	7.3	<0.2	<0.2	0.3	<0.2	7.6	<0.6	<1	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	2.1	<0.2	<0.2	<0.2	<0.2	2.1	<0.5	<1	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	10.2	6.2	1.8	0.3	0.8	13.1	10.8	<1	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	9.3	7	1.8	0.4	0.9	12.3	41.3	<1	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.5	7.3	0.6	0.2	0.5	6.9	<0.6	<1	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	8.2	8	0.9	0.4	0.8	10.4	1.6	<1	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.4	<0.2	0.5	<0.2	<0.2	6.1	<1.3	2	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	5.2	4.5	0.5	0.2	0.3	6.1	7.1	1	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	5.1	6.2	<0.2	0.3	0.4	5.7	<0.5	<1	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	4.2	6.2	<0.2	<0.2	0.3	4.7	<0.5	<1	7.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	3.5	25.7	0.4	0.2	1.4	5.7	<0.5	<1	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	1.7	37.7	0.8	<0.2	1.6	4.2	<0.5	<1	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	8.1	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						10.2	37.7	1.8	0.4	1.6	13.1	41.3	2	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						Solvents								Phenols							
						Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	Clay in soils <2um %	DENSITI(g/cm3)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						28,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	10	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<5	<5	<5	<0.5	<0.5	<5	5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	17	2.47	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<5	<5	<5	<0.5	<0.5	<5	10	2.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	10	2.55	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	9	2.52	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	8	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<5	<5	<5	<0.5	<0.5	<5	11	2.34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	11	2.49	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<5	<5	<5	<0.5	<0.5	<5	11	2.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5	<5	<5	<0.5	<0.5	<5	10	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<5	<5	<5	<0.5	<0.5	<5	14	2.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<5	<5	<5	<0.5	<0.5	<5	6	2.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<5	<5	<5	<0.5	<0.5	<5	3	2.55	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	17	2.6	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						Phenols					Amino Aliphatics				Amino Aromatics		Anilines					
						2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																	
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<3.0	<6.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						Explosives				Halogenated		Herbicides	Nitroaromatics			Other	Pesticides		
						1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Hexachlorobenzene	Pentachlorobenzene	Pronamide	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Acetophenone	Chlorobenzilate	Carbazole	Pirimphos-ethyl
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**														
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<1.0	<1.0	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	<1	<0.5	NT	NT	NT	NT	NT	<0.5	<0.5	<0.5
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	<0.05	<0.5	NT	NT	NT	NT	NT	<0.5	<0.5	<0.05
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

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						Phthalates						SVOCs											
						Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																	
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<5.0	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-17049 / WAC023

						SVOCs				VOCs			Acid Sulfate Soils[3]			Asbestos
						N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Asbestos (g/kg)[2]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]						-	-	-	-	-	-	-	<5.5	≤4.5	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	0.05%
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	0.02%
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**											
ADE	WAC023-TP1 (0-0.3)	In-situ	0.0-03	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.7	5.7	2	0.417%
ADE	WAC023-TP1 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.6	5.7	1	NAD
ADE	WAC023-TP2 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.0	5.7	2	NAD
ADE	WAC023-TP2 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.1	5.4	2	NAD
ADE	WAC023-TP3 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<3	<3	<3	<3	<0.5	<0.5	<0.5	7.5	5.2	2	NAD
ADE	WAC023-TP3 (0.5)	In-situ	0.5	27.11.2019	Silty SAND	<3	<3	<3	<3	<0.5	<0.5	<0.5	7.9	5.6	2	NAD
ADE	WAC023-TP4 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.4	6.5	2	NAD
ADE	WAC023-TP4 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.4	6.3	1	NAD
ADE	WAC023-TP5 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.4	7.6	1	NAD
ADE	WAC023-TP5 (1.0)	In-situ	1.0	27.11.2019	Gravelly SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.3	7.5	1	0.004%
ADE	WAC023-TP6 (0-0.3)	In-situ	0.0-0.3	27.11.2019	Silty SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.5	6.8	1	NAD
ADE	WAC023-TP6 (0.8)	In-situ	0.8	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.9	7.2	1	NAD
ADE	WAC023-TP7 (0-0.3)	In-situ	0.0-0.3	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	8.2	1	NAD
ADE	WAC023-TP7 (1.0)	In-situ	1.0	27.11.2019	SAND	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.3	7.4	1	NAD
ADE	WAC023 BR	In-situ	-	27.11.2019	Blind Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	8.1	6.8	1	NT
ADE	WAC023 SR	In-situ	-	27.11.2019	Split Replicate - TP2 (1.0)	NT	NT	NT	NT	NT	NT	NT	-	-	-	NT
95% UCL						-	-	-	-	-	-	-	NA			
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND				

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

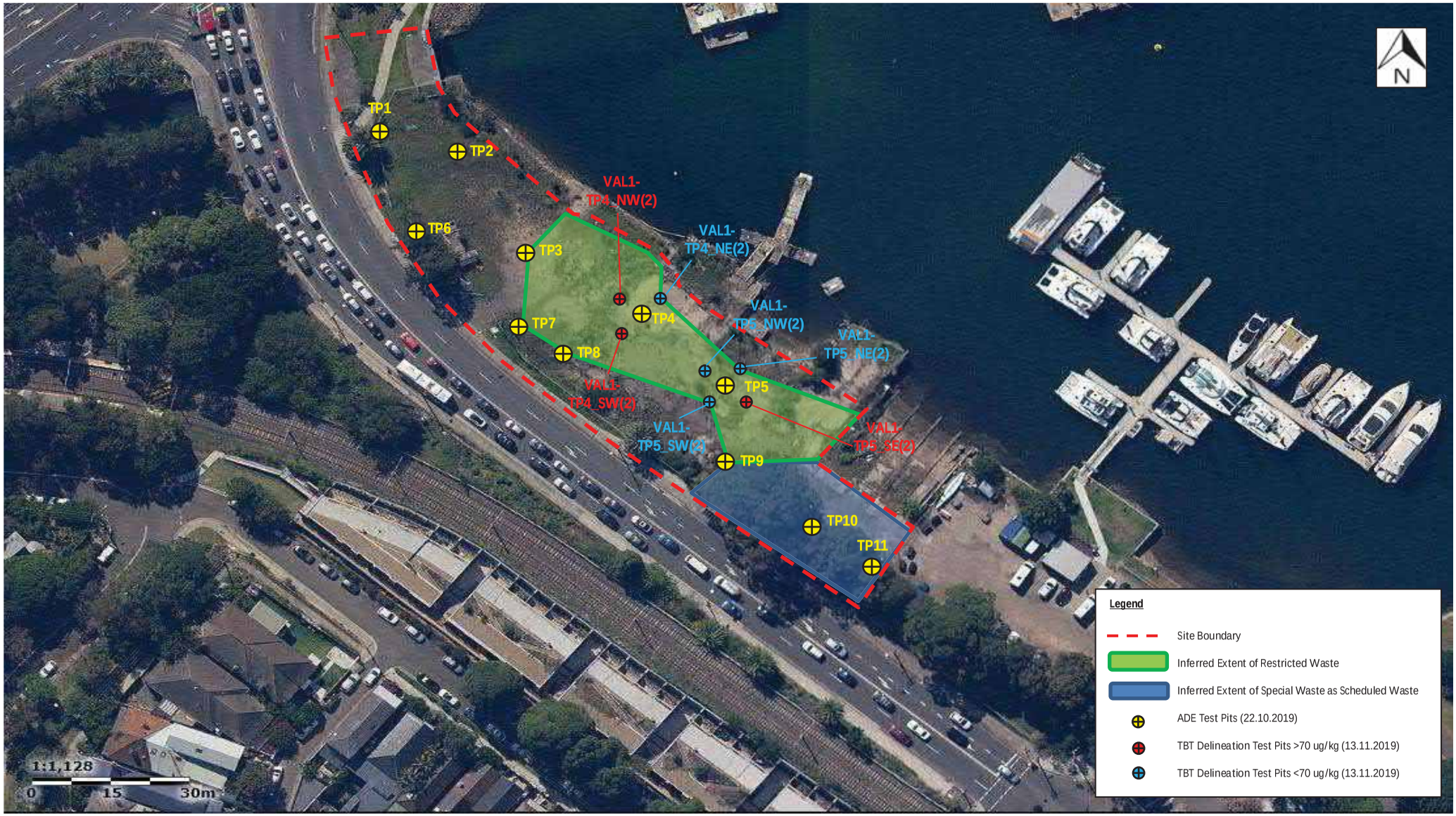
1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP



drawn	BE	client:	John Holland CPB Joint Venture
approved	MT	project:	Westconnex Stage 3B, The Crescent, Annandale NSW
date	19.12.2019		
scale	AS SHOWN	title:	Site Location and Exceedances Against the NSW EPA Waste Classification Guidelines
Original size	A4	project no: WCX-08-16890 / WAC004.v3f	figure no: FIGURE 1

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drawn	BE	client:	John Holland CPB Joint Venture
approved	EM	project:	Westconnex Stage 3B, The Crescent, Annandale NSW
date	04.12.2019		
scale	AS SHOWN	title:	Site Location and Exceedances of Public Open Space Land-use Criteria
Original size	A4	project no: WCX-08-16890 / WAC004.v3f	figure no: FIGURE 2

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ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

	TRHs				BTEX				Heavy Metals								PAHs								PAHs					
	C6-C10 (F1)	C10-C16 (F2)	C16-C34 (F3)	C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	TCLP - Lead	Mercury	Nickel	Zinc	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene TEQ	Benzo[a]pyrene	TCLP - Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[j,k]fluoranthene	Benzo[g,h,i]perylene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]	650	10,000			10	288	600	1,000	100	20	100	-	100	-	4	40	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]	2,600	40,000			40	1,152	2,400	4,000	400	80	400	-	400	-	16	160	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]	650	10,000			18	518	1,080	1,800	500	100	1,900	-	1,500	-	50	1,050	-	-	-	-	-	10	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]	-	-			0.5	14.4	30	50	5	1	5	-	-	5	0.2	2	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]	2,600	40,000			23	2,073	4,320	7,200	2,000	400	7,600	-	6,000	-	200	4,200	-	-	-	-	-	23	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP1 (mg/L)[1]	-	-			0.10	57.6	120	200	20	4	20	-	-	20	0.8	8	-	-	-	-	-	-	NA	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000	400,000	-	-	-	-	40	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)	-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200	30,000	-	-	-	-	3	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)	700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)	800	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)	26,000	20,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)	5,100	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT	250	NL	-	-	4	4	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT	NL	NL	-		NL	NL	-	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)	82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																										
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	14	<0.3	18	14	73	NT	<0.2	<10	120	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	6	31	NT	<0.2	<10	51	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	0.7	29	220	240	<0.5	0.3	30	1600	<0.3	<0.3	<0.3	<0.3	0.8	<0.3	NT	0.6	0.4	<0.3	0.3	<0.3	0.5	<0.3
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	0.3	23	170	240	<0.5	0.2	<10	1400	<0.3	<0.3	<0.3	0.3	0.8	0.3	NT	0.8	0.6	0.3	0.4	<0.3	0.9	<0.3
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	930	530	<0.5	<0.5	<1	<2	9	<0.3	6	31	35	NT	<0.2	<10	94	1.1	0.7	5	1.1	12.4	6.4	<0.005	9.5	6.4	8	7.3	2.2	15	1
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	390	320	<0.5	<0.5	<1	<2	<5	0.3	16	110	140	<0.5	<0.2	<10	710	0.3	0.3	1.5	5.2	4.1	0.7	NT	10	7.5	3.4	3.6	0.6	9.2	0.3
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<35	<50	570	270	<0.5	<0.5	<1	<2	<5	0.5	50	380	420	<0.5	0.5	27	1300	0.3	0.7	1.3	4.1	2.3	0.5	NT	3.7	2.5	1.9	3	0.5	6.3	<0.3
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	850	320	<0.5	<0.5	<1	<2	7	1.6	79	680	630	<0.5	0.6	34	4500	0.5	0.7	2	6.3	2.9	0.6	NT	3.9	3.3	2.3	3.7	0.6	9.2	0.4
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	140	140	<0.5	<0.5	<1	<2	<5	<0.3	33	230	130	<0.5	0.2	23	590	<0.3	<0.3	0.3	0.9	0.9	<0.3	NT	0.8	0.6	0.4	0.7	<0.3	1.6	<0.3
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<35	<50	240	200	<0.5	<0.5	<1	<2	<5	<0.3	190	470	300	<0.5	0.3	37	840	<0.3	<0.3	<0.3	0.7	0.8	<0.3	NT	0.5	0.5	0.3	0.5	<0.3	1.3	<0.3
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	13	20	74	NT	<0.2	10	69	<0.3	<0.3	<0.3	<0.3	0.7	0.3	NT	0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	14	73	99	NT	0.2	37	270	<0.3	<0.3	0.5	0.7	1.4	0.8	NT	1	0.4	0.3	0.7	<0.3	1.5	<0.3
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	9	15	74	NT	<0.2	<10	130	<0.3	<0.3	<0.3	0.4	1.1	0.6	NT	0.7	<0.3	0.3	0.4	<0.3	0.5	<0.3
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<35	<50	180	230	<0.5	<0.5	<1	<2	<5	0.4	25	170	360	<0.5	0.3	16	1500	<0.3	<0.3	<0.3	0.4	1.2	0.7	NT	0.7	0.3	0.4	0.5	<0.3	0.7	<0.3
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	120	110	<0.5	<0.5	<1	<2	11	0.6	67	280	520	<0.5	<0.2	16	4600	<0.3	<0.3	<0.3	0.6	1.7	1.1	<0.005	1.2	0.4	0.6	0.7	<0.3	1	<0.3
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<35	<50	190	<100	<0.5	<0.5	<1	<2	<5	0.4	21	140	240	<0.5	0.8	<10	1700	<0.3	0.4	0.9	2.9	5.1	3.7	<0.005	3.9	1.5	1.6	2.7	<0.3	5	<0.3
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	460	280	<0.5	<0.5	<1	<2	6	0.3	45	280	390	<0.5	0.3	21	1400	<0.3	0.7	1.2	4.1	7.8	5.8	<0.005	6.5	2.4	3.4	3.8	<0.3	6.4	0.3
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<35	<50	140	110	<0.5	<0.5	<1	<2	<5	<0.3	12	180	1500	0.7	0.4	23	360	<0.3	0.3	0.4	2.2	4.4	3.2	<0.005	3.5	1.2	1.5	2	<0.3	3.2	<0.3
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	25	<0.3	8	100	94	NT	0.3	<10	180	<0.3	<0.3	<0.3	0.3	0.9	0.4	NT	0.6	0.6	<0.3	0.3	<0.3	0.4	<0.3
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	11	110	440	2.2	0.9	11	280	<0.3	<0.3	<0.3	0.7	1.6	1.0	<0.005	1.1	0.4	0.4	0.7	<0.3	1.2	<0.3
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<35	<50	<100	100	<0.5	<0.5	<1	<2	<5	<0.3	10	9	25	NT	<0.2	<10	45	<0.3	<0.3	<0.3	<0.3	0.7	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<35	<50	200	<100	<0.5	<0.5	<1	<2	<5	<0.3	6	29	85	NT	0.3	<10	130	<0.3	0.6	1	3.5	6.7	5.0	<0.005	5.2	1.8	2.4	3.6	<0.3	6.1	<0.3
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	47	-	426	-	-	-	-	-	-	-	-	4.3	3.3	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	930	530	ND	ND	ND	ND	25	1.6	190	680	1500	2.2	0.9	37	4600	1.1	0.7	5.0	11.0	12.4	6.4	<0.005	10	7.5	8	7.3	2.2	15	1

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

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ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

						Hydrocarbons											
						Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	10	14	-	-	4
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	18	25.2	-	-	7.2
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	40	56	-	-	16
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	72	101	-	-	28.8
Waste Classification Guidelines - Restricted Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type												
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

	Halogenated Benzenes									Halogenated Hydrocarbons					Inorganics								
	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Chlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane	Exchangeable Calcium	Exchangeable Sodium Percent	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	CEC	Tributyltin (ug/kg)	Cyanide Total	pH (Lab)
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]	-	-	86	-	150	-	-	-	2,000	-	-	-	-	-	-	-	-	-	-	-	70	320	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]	-	-	4.3	-	7.5	-	-	-	3,600	-	-	-	-	-	-	-	-	-	-	-	-	16	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]	-	-	344	-	600	-	-	-	8,000	-	-	-	-	-	-	-	-	-	-	-	-	1,280	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]	-	-	620	-	1,080	-	-	-	14,400	-	-	-	-	-	-	-	-	-	-	-	-	23,600	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)																							
Direct Contact (HSL-D)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																				
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	10.1	1.6	0.8	0.1	0.2	11.2	<0.5	<1	7.2
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.2	13.8	1.6	0.2	0.6	4.7	<0.5	<1	8.5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.5	8.7	0.9	0.3	0.4	5.1	4.8	<1	8.3
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.1	10.2	<0.2	<0.2	0.3	2.6	7.5	<1	8.2
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.2	11.5	<0.2	<0.2	0.3	2.7	1.8	<1	8.8
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.7	6.1	0.4	0.2	0.2	3.6	9.8	<1	8.6
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	8.4	<0.2	0.5	0.3	<0.2	9.2	**1400**	<1	8.3
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	5.3	<0.2	<0.2	<0.2	<0.2	5.4	64.7	<1	8.1
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	8.6	3	0.4	0.8	0.3	10.2	**468**	<1	8.9
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	8.8	<0.2	<0.2	0.6	<0.2	9.3	**230**	<1	8.5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	4.2	9.4	0.6	<0.2	0.5	5.2	<0.5	<1	7.4
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.8	10.8	1.4	0.2	0.7	6.2	0.8	<1	8.6
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.6	<0.2	<0.2	0.3	<0.2	3.9	8.4	<1	8.4
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.2	5.4	0.5	0.2	0.2	4.2	0.6	<1	8.4
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	4.8	<0.2	<0.2	0.2	<0.2	5	<0.5	<1	8.5
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.2	<0.2	<0.2	<0.2	<0.2	3.4	<0.5	<1	8.5
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	5.5	3.6	0.5	0.4	0.2	6.6	12.8	<1	8.6
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	4.6	4.9	<0.2	0.3	0.2	5.1	3.2	<1	8.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.5	10.7	<0.2	<0.2	0.3	2.9	2.9	<1	8.7
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.9	9.5	<0.2	0.2	0.4	4.5	3.3	<1	8.7
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	2.8	<0.2	0.9	0.2	<0.2	3.9	2	<1	8.4
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<5	3.8	6.6	0.6	0.2	0.3	5	<0.5	<1	8.6
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**157**	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**885**	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**85**	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**714**	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**83**	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	13.8	1.6	0.8	0.7	11.2	**1400**	ND	8.9

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1					MAH									Solvents								Phenols												Phenols					
					1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	4-isopropylbenzene	n-Butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	Methyl Ethyl ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Carbon disulfide	Isophorone	Vinyl acetate	Clay in soils <2um %	DENSITY(g/cm3)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4-chloro-3-methylphenol	Pentachlorophenol	Phenol	Phenolics Total	N-nitrosodiethylamine
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]					-	-	-	-	-	-	-	60	-	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]					-	-	-	-	-	-	-	108	-	7,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]					-	-	-	-	-	-	-	240	-	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]					-	-	-	-	-	-	-	432	-	28,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP1 (mg/L)[1]																																						
Acid Sulfate Soils Screening Criteria[5]					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)																																						
Direct Contact (HSL-D)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	Sample I.D	In-situ	Depth (m BGL)	Date	Soil Type																																		
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	26	2.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1	<0.5
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	10	2.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	12	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	6	2.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	11	2.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	12	2.55	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6	<3.0	<1	<3.0
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	18	2.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	6	2.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	9	2.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	6	2.46	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	8	2.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	<0.5	<0.5	<5	7	2.47	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.5
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	2.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

						Amino Aliphatics			Amino Aromatics		Anilines					Explosives				Halogenated		Herbicides	Nitroaromatics			Other	Pesticides			Phthalates				
						N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	1-naphthylamine	N-Nitrosodiphenyl & Diphenylamine	2-nitroaniline	3-nitroaniline	4-chloroaniline	4-nitroaniline	2-methyl-5-nitroaniline	Aniline	1,3,5-Trinitrobenzene	2,4-Dinitrotoluene	2,6-dinitrotoluene	Nitrobenzene	Hexachlorobenzene	Pentachlorobenzene	Pronamide	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene	Acetophenone	Chlorobenzilate	Carbazole	Pirimphos-ethyl	Bis(2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[5]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)																																	
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																												
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	0.5
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, The Crescent: WCX-08-16890 / WAC1

						SVOCs														SVOCs				VOCs			Acid Sulfate Soils[4]			Asbestos
						Di-n-octyl phthalate	2-(acetylamino) fluorene	3,3-Dichlorobenzidine	4-(dimethylamino) azobenzene	4-bromophenyl phenyl ether	4-chlorophenyl phenyl ether	4-Nitroquinoline-N-oxide	Azobenzene	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Dibenzofuran	Hexachloropropene	Methapyrilene	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Phenacetin	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Pentachloroethane	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Asbestos (g/kg)[4]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[4]						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.5	≤4.5	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05%
NEPM 2013 HIL-C (Public Open Space)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02%
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)																														
Direct Contact (HSL-D)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**In-situ**	**Depth (m BGL)**	**Date**	**Soil Type**																									
ADE	WAC1-TP1 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	7.1	5.1	1	NAD
ADE	WAC1-TP1 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.6	7.0	2	NAD
ADE	WAC1-TP2 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.7	6.3	3	NAD
ADE	WAC1-TP2 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.6	6.0	3	NAD
ADE	WAC1-TP3 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.5	7.0	3	NAD
ADE	WAC1-TP3 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	6.2	3	NAD
ADE	WAC1-TP4 (0.3)	In-situ	0.3	22.10.2019	Gravelly SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	5.8	3	NAD
ADE	WAC1-TP4 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.5	<0.5	<0.5	8.7	6.1	3	NAD
ADE	WAC1-TP5 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	8.5	3	NAD
ADE	WAC1-TP5 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.2	6.8	4	NAD
ADE	WAC1-TP6 (0.3)	In-situ	0.3	22.10.2019	Sandy CLAY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.7	6.6	3	NAD
ADE	WAC1-TP6 (1.0)	In-situ	1.0	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.1	7.5	2	NAD
ADE	WAC1-TP7 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	6.4	2	NAD
ADE	WAC1-TP7 (1.0)	In-situ	1.0	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	7.0	4	NAD
ADE	WAC1-TP8 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	6.3	3	NAD
ADE	WAC1-TP8 (1.0)	In-situ	1.0	22.10.2019	Clayey SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.8	6.8	3	NAD
ADE	WAC1-TP9 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	8.9	7.2	4	NAD
ADE	WAC1-TP9 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	6.6	2	NAD
ADE	WAC1-TP10 (0.3)	In-situ	0.3	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	7.2	2	NAD
ADE	WAC1-TP10 (0.5)	In-situ	0.5	22.10.2019	Gravelly SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.5	7.3	3	NAD
ADE	WAC1-TP11 (0.3)	In-situ	0.3	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.0	8.1	1	NAD
ADE	WAC1-TP11 (0.5)	In-situ	0.5	22.10.2019	SAND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	9.3	7.2	2	NAD
ADE	VAL1-TP4_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_NW(2)_1.0	In-situ	1.0	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_SW(2) 0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP4_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_NW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SW(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0 - 0.3	In-situ	0.0-0.3	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADE	VAL1-TP5_SE(2)_0.5	In-situ	0.5	13.11.2019	Silty SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95% UCL						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	
Maximum Concentration (mg/kg)						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

LEGEND

SUBJECT AREA

TP TEST PIT LOCATION

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 18 APR 2020.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	BE	20/05/20

N

0 4 8 12 16 20

SCALE 1:400 @A3 METRES

drawn	MC
approved	BE
date	20/05/2020
scale	AS SHOWN
original size	A3

client: JOHN HOLLAND CPB JOINT VENTURE

project: WASTE ANALYSIS AND CLASSIFICATION REPORT
CITY WEST LINK SITE
THE CRESENT, ANNANDALE, NSW

title: SUBJECT AREA AND SITE LOCATION PLAN

project no: WCX-08-17708_WAC144 figure no: FIGURE 1 rev: A

ADE CONSULTING GROUP

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ADE Consulting Group Pty Ltd
Unit 6 / 7 Millennium Court, Silverwater, NSW 2128
www.ADE.group | info@ade.group | 1300 976 922

PLOT DATE: 20/05/2020 12:52:51 PM DWG FILE: \\10.100.0.9\NSW WORKING\WCX - RLN WEST CONNEX\WCX-08 WEST CONNEX 3B (ROZELLE) - ENVIRO WORKS\WCX-08-17708 WAC (THE CRESCENT) 20-04-2020 MT\E-CAD\WCX-08-17708_WAC144.DWG

ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144				TRHs				BTEX				Heavy Metals								
				C6-C10 (F1)	C10-C16 (F2)	C16-C34 (F3)	C34-C40 (F4)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Lead - TCLP	Mercury	Nickel	Zinc
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				650	10,000			10	288	600	1,000	100	20	100	-	100	-	4	40	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				2,600	40,000			40	1,152	2,400	4,000	400	80	400	-	400	-	16	160	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				650	10,000			18	518	1,080	1,800	500	100	1,900	-	1,500	-	50	1,050	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-	-			0.5	14.4	30	50	5	1	5	-	-	5	0.2	2	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				2,600	40,000			23	2,073	4,320	7,200	2,000	400	7,600	-	6,000	-	200	4,200	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]				-	-			0.16	57.6	120	200	20	4	20	-	-	20	0.8	8	-
Acid Sulfate Soils Screening Criteria[3]				-	-			-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)				-	-	-	-	-	-	-	-	3000	900	3600	240,000	1,500	-	730	6000	400,000
NEPM 2013 HIL-C (Public Open Space)				-	-	-	-	-	-	-	-	300	90	300	17,000	600	-	80	1,200	30,000
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)				700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)				800	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)				26,000	20,000	27,000	38,000	430	99,000	27,000	81,000	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)				5,100	3,800	5,300	7,400	120	18,000	5,300	15,000	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				250	NL	-	-	4	4	NL	NL	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				NL	NL	-	-	NL	NL	-	NL	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				82,000	62,000	85,000	120,000	77	120,000	85,000	130,000	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**Date**	**Material Type**																	
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<35	<50	552	153	<0.5	<0.5	<1	<2	15	0.3	35	268	**588**	<0.005	0.8	33	8513
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	<35	<50	502	151	<0.5	<0.5	<1	<2	18	<0.3	33	328	**664**	<0.005	0.6	19	898
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<35	<50	963	143	<0.5	<0.5	<1	<2	6	<0.3	5	113	**414**	<0.005	<0.2	<10	1080
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	31	<0.3	26	198	**621**	<0.005	<0.2	36	1506
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<35	<50	<100	138	<0.5	<0.5	<1	<2	10	<0.3	8	33	16	NT	<0.2	<10	65
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	<5	<10	NT	<0.2	<10	<5
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<35	<50	112	<100	<0.5	<0.5	<1	<2	17	<0.3	40	141	**186**	<0.005	0.3	16	520
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<35	<50	145	<100	<0.5	<0.5	<1	<2	11	<0.3	13	90	**232**	<0.005	0.4	13	629
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	5	<0.3	7	59	**185**	<0.005	<0.2	<10	273
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	11	<0.3	12	94	**263**	<0.005	<0.2	12	425
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	<5	<10	NT	<0.2	<10	<5
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	32	69	NT	<0.2	<10	120
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<35	<50	265	124	<0.5	<0.5	<1	<2	13	0.8	31	143	**455**	<0.005	0.5	24	1191
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	7	36	**105**	<0.005	0.2	<10	233
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	5	23	59	NT	0.2	<10	144
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<35	<50	<100	<100	<0.5	<0.5	<1	<2	<5	<0.3	<5	13	<10	NT	<0.2	<10	43
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<35	<50	414	121	<0.5	<0.5	<1	<2	14	<0.3	31	223	**506**	NT	0.6	19	2735
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	<10	<50	540	530	<0.2	<0.5	<0.5	<0.5	16	<1	30	221	**538**	NT	0.4	18	1280
% UCL				-	-	-	-	-	-	-	-	-	-	-	-	371	-	-	-	-
Maximum Concentration (mg/kg)				0	0	963	530	0	0	0	0	31	0.8	40	328	**664**	0	0.8	36	8513

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

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4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144				PAHs																		
				Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[a]pyrene TEQ	Benzo[a]pyrene - TCLP	Benzo[b]fluoranthene	Benzo[b+j]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Total)
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				-	-	-	-	0.8	-	-	-		-	-	-	-	-	-	-	-	-	-	200
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				-	-	-	-	3.2	-	-	-		-	-	-	-	-	-	-	-	-	-	800
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				-	-	-	-	10	-	-	-		-	-	-	-	-	-	-	-	-	-	200
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-	-	-	-	-	-	0.04	-		-	-	-	-	-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				-	-	-	-	23	-	-	-		-	-	-	-	-	-	-	-	-	-	800
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]				-	-	-	-	-	-	0.16	-		-	-	-	-	-	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[2]				-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)				-	40	-	-	-	40	-	-		-	-	-	-	-	-	-	-	-	-	4,000
NEPM 2013 HIL-C (Public Open Space)				-	3	-	-	-	3	-	-		-	-	-	-	-	-	-	-	-	-	300
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)				-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)				-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)				-	-	-	-	-		-	-		-	-	-	-	-	-	-	11,000	-	-	-
Direct Contact (HSL-C)				-	-	-	-	-		-	-		-	-	-	-	-	-	-	1,900	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**Date**	**Material Type**																			
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<0.3	0.5	0.7	3.6	**4.1**	6	ND	5.2	NT	3.2	1.8	3.7	0.5	6.9	<0.3	3.1	<0.3	1.8	6.8	41.9
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	0.4	0.5	0.8	2.9	**3.9**	**5.6**	ND	4.3	NT	3	1.2	2.9	0.5	5.2	0.3	3	<0.3	2.3	5.5	36.7
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<0.3	0.3	1.8	11.2	**11.1**	**16**	ND	12.7	NT	7	4.8	10.6	1.3	22.6	<0.3	5.4	<0.3	5.9	22.4	117.1
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<0.3	<0.3	<0.3	0.7	**0.8**	**1.3**	NT	0.9	NT	0.5	0.3	0.6	<0.3	1.2	<0.3	0.4	<0.3	0.4	1.4	7.2
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<0.3	<0.3	<0.3	0.8	**1.1**	1.8	ND	1.3	NT	0.8	0.5	0.9	<0.3	1.6	<0.3	0.8	<0.3	0.6	1.6	10.0
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<0.3	<0.3	<0.3	1.2	**1.5**	2.3	ND	1.7	NT	1.1	0.6	1.2	<0.3	2.2	<0.3	1	<0.3	0.7	2.1	13.3
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<0.3	<0.3	<0.3	0.7	**0.8**	1.4	NT	0.9	NT	0.5	0.4	0.7	<0.3	1.2	<0.3	0.4	<0.3	<0.3	1.3	6.9
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	0.5	<0.3	<0.3	<0.3	0.5	0.5	1.5
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<0.3	<0.3	0.4	1.2	**1.7**	2.5	ND	1.8	NT	1.2	0.5	1.3	<0.3	2.4	<0.3	1.1	<0.3	1.4	2.5	15.5
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<0.3	<0.3	<0.3	0.3	0.4	0.8	NT	0.4	NT	0.3	<0.3	0.3	<0.3	0.6	<0.3	0.3	<0.3	<0.3	0.6	3.2
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	0.3
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<0.3	<0.3	<0.3	<0.3	<0.3	0.7	NT	<0.3	NT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.0
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<0.3	0.5	0.7	2.4	**3.3**	**4.7**	NT	3.7	NT	2.5	1.3	2.5	0.4	4.6	<0.3	2.4	<0.3	1.8	4.8	30.9
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	<0.5	0.8	1.9	6.2	**6.9**	**10**	NT	NT	8.3	4.8	2.8	5.9	0.9	12.2	<0.5	3.6	<0.5	5.3	12.8	72.4
% UCL				-	-	-	-	**5.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum Concentration (mg/kg)				0.4	0.8	1.9	11.2	**11.1**	16	0	12.7	8.3	7	4.8	10.6	1.3	22.6	0.3	5.4	0	5.9	22.4	117.1

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

2 - Assessment criteria extracted from the *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A* (ANZECC, 1992)

3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

ADE - Westconnex Stage 3B, City West Link Site: WCX-08-17896 / WAC144

				PCBs	OCPs					Cyanide	Phenols	VOCs / SVOCs		Organotins	PFAS			Physical Parametre		Acid Sulfate Soils[3]			Asbestos
				Total PCBs	Scheduled Chemicals	Endosulfan	Aldrin + Dieldrin	Chlordane	DDT+DDE+DDD	Cyanide Total	Phenols Total	Sum of + VOCs	Sum of + SVOCs	Tributyltin (ug/kg)	PFOS + PFHxS	PFOS + PFHxS - TCLP	PFOA	Clay in soils <2um %	Cation Exchange Capacity (CEC)	pH Field (pH Units)	pH Field Peroxide (pH Units)	Rate of Reaction (No Units)[4]	Asbestos (g/kg)[2]
Waste Classification Guidelines - General Solid Waste CT1 (mg/kg)[1]				<50	<50	60	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste CT2 (mg/kg)[1]				<50	<50	240	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste SCC1 (mg/kg)[1]				<50	<50	108	-	-	-	-	-	-	-	-	0.05		0.2	-	-	-	-	-	-
Waste Classification Guidelines - General Solid Waste TCLP1 (mg/L)[1]				-	-	3	-	-	-	-	-	-	-	-	-	1.8	7.2	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste SCC2 (mg/kg)[1]				<50	<50	432	-	-	-	-	-	-	-	-	0.5		2	-	-	-	-	-	-
Waste Classification Guidelines - Restricted Solid Waste TCLP2 (mg/L)[1]				-	-	12	-	-	-	-	-	-	-	-	-	18	72	-	-	-	-	-	-
Acid Sulfate Soils Screening Criteria[3]				-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	<5.5	≤4.5	-	-
NEPM 2013 HIL-D & HSL-D (Commercial/Industrial)				7	2,000	100	45	530	3,600	-	-	-	-	-	20	-	50	-	-		-	-	0.05%
NEPM 2013 HIL-C (Public Open Space)				1	340	20	10	70	400	-	-	-	-	-	1	-	10	-	-		-	-	0.02%
NEPM 2013 - Management Limits HIL-D (Commercial/Industrial)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 - Management Limits HIL-C (Residential, Parkland and Public Open Space)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-D)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Direct Contact (HSL-C)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-D) - SILT				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vapour Intrusion - 0 m to <1 m (HSL-C) - SILT				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HSL Intrusive Maintenance Worker (Shallow Trench)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant	**Sample I.D**	**Date**	**Material Type**																				
ADE	WAC144-TP1-0.3m	09.05.2020	Sandy SILT	<35	0.1	<0.4	0.1	<0.1	<0.3	2	<1	ND	ND	4.1	0.0054	NT	0.0004	12	13.6	7.8	5.8	3	Y
ADE	WAC144-TP1-0.8m	09.05.2020	Sandy SILT	<35	0.1	<0.4	0.1	<0.1	<0.3	<1	<1	ND	ND	7.1	0.0065	NT	0.0004	13	12.2	8.1	6	3	ND
ADE	WAC144.TP1.2.0	25.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	2	ND	ND	<0.5	0.0015	NT	<0.0002	8	7.6	6.9	5.7	1	ND
ADE	WAC144.TP1.3.0	25.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0003	NT	<0.0002	8	5.7	7.4	5.7	1	ND
ADE	WAC144-TP1-4.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	23	9.5	8.5	5.9	1	ND
ADE	WAC144-TP1-6.0m	04.06.2020	SANDSTONE	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	NT	2.4	5.7	4.6	1	NT
ADE	WAC144-TP2-0.3m	09.05.2020	Sandy SILT	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	1	ND	ND	1.3	0.0027	NT	0.0004	19	9.1	8.4	6.3	3	ND
ADE	WAC144-TP2-0.9m	09.05.2020	Sandy SILT	<35	0.2	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0014	NT	0.0003	13	8.7	8.8	6.3	2	Y
ADE	WAC144.TP2.2.0	25.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0008	NT	<0.0002	10	5.9	8.2	5.7	2	ND
ADE	WAC144.TP2.3.0	25.05.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0006	NT	<0.0002	11	6.2	7.7	6.7	4	ND
ADE	WAC144-TP2-4.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	19	4.5	8.3	5.8	1	ND
ADE	WAC144-TP2-5.5m	04.06.2020	Sandy CLAY	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0002	NT	<0.0002	12	5.1	8.7	6.2	1	ND
ADE	WAC144-TP3-0.5m	09.05.2020	Silty SAND	<35	<0.1	<0.4	0.1	0.1	<0.3	<1	<1	ND	ND	<0.5	0.0014	NT	<0.0002	10	8.6	8.5	6.4	3	ND
ADE	WAC144-TP3-1.7m	09.05.2020	Silty SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0005	NT	<0.0002	14	7.4	8.4	6.3	2	ND
ADE	WAC144-TP3-2.8m	09.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	0.0006	NT	<0.0002	9	5.6	8.5	6.3	2	ND
ADE	WAC144-TP3-3.2m	09.05.2020	SAND	<35	<0.1	<0.4	<0.1	<0.1	<0.3	<1	<1	ND	ND	<0.5	<0.0002	NT	<0.0002	8	3.2	8.5	6	1	ND
ADE	WAC144-BR	09.05.2020	BR of TP1 0.8	<35	0.1	<0.4	0.1	<0.1	<0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	-	9.2	6.1	3	NT
ADE	WAC144-SR	09.05.2020	SR of TP1 0.8	0.1	0.9	<0.05	<0.05	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	-	NT	NT	NT	NT
% UCL				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA			
Maximum Concentration (mg/kg)				0.1	0.9	0	0.1	0.1	0	2	2	0	0	7.1	0.0065	0	0.0004	23	13.6				

All units in mg/kg unless specified otherwise

NT - Not Tested

ND - Not Detected / Below Practical Quantitation Limit

NAD - No Asbestos Detected above detection limit of 0.1 g/kg

1 - Assessment criteria extracted from NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014)

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3 - Assessment criteria extracted from *Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy* (Berkman, 1989)

4 - AS4964-2004: Method for the qualitative identification of asbestos in bulk samples

5 - Adopted Site Assessment Criteria as per the Site's ASSMP

APPENDIX A

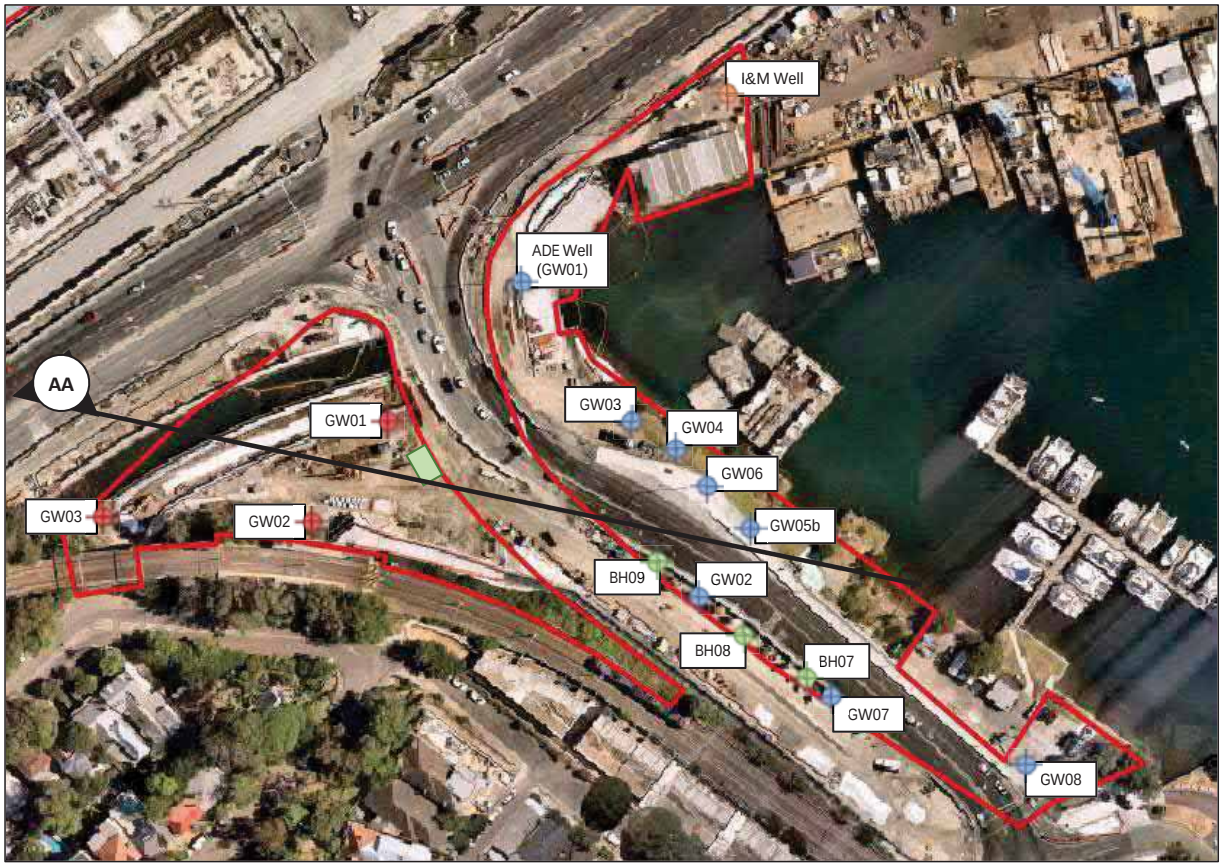
SITE FIGURES

Approximate audit boundary

Approximate moderate risk investigation area

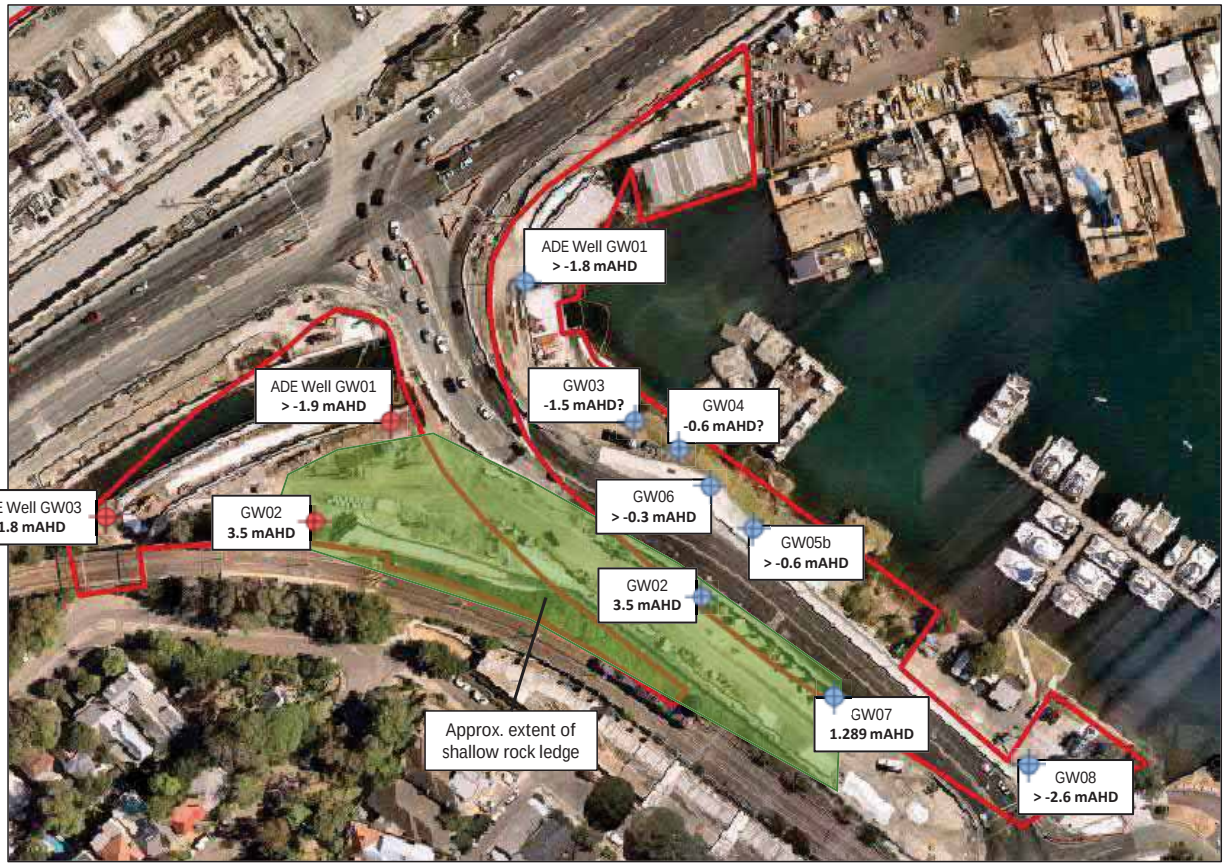
Residual land

Figure 1 – Site location
Sub-Site Areas Buruwan Park and Crescent Civil



Approximate site boundary | Groundwater well – Crescent Civil | Groundwater well – Buruwan Park | Borehole | Service trench excavation

Figure 2 – WSP DSI investigation locations
Sub-Site Areas Buruwan Park and Crescent Civil



Approximate site boundary

Groundwater monitoring well – Crescent Civil

Groundwater monitoring well – Buruwan Park

ADE Waste Classification (October 2020, WAC223)

Figure 3 – Encountered depth to rock
Sub-Site Areas Buruwan Park and Crescent Civil

Approximate sub-site boundary

Service trench excavation

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

Groundwater monitoring well

ADE Waste Classification (June 2020, WAC169)

WSP (2020) CLM & HHRA

AECOM (2018)

AECOM (2017)

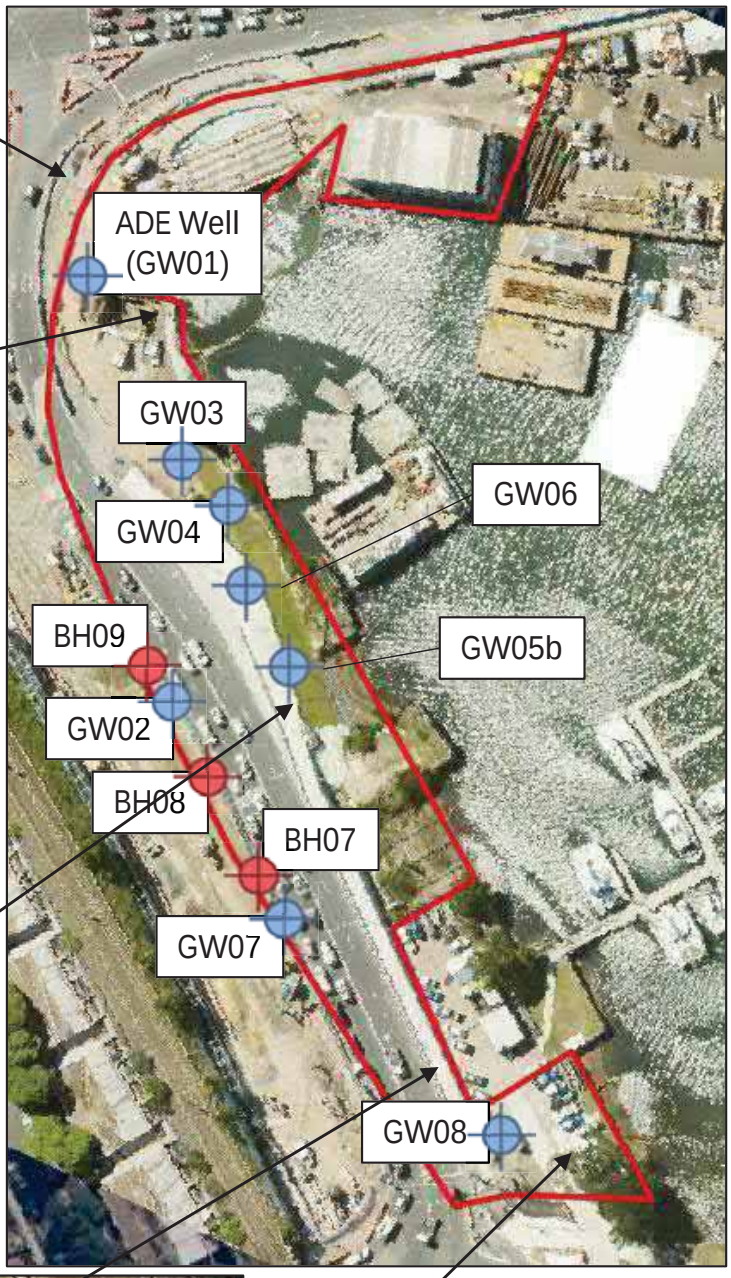
Figure 4 – WSP DSI and historical intrusive sampling locations
Sub-Site Area – Buruwan Park

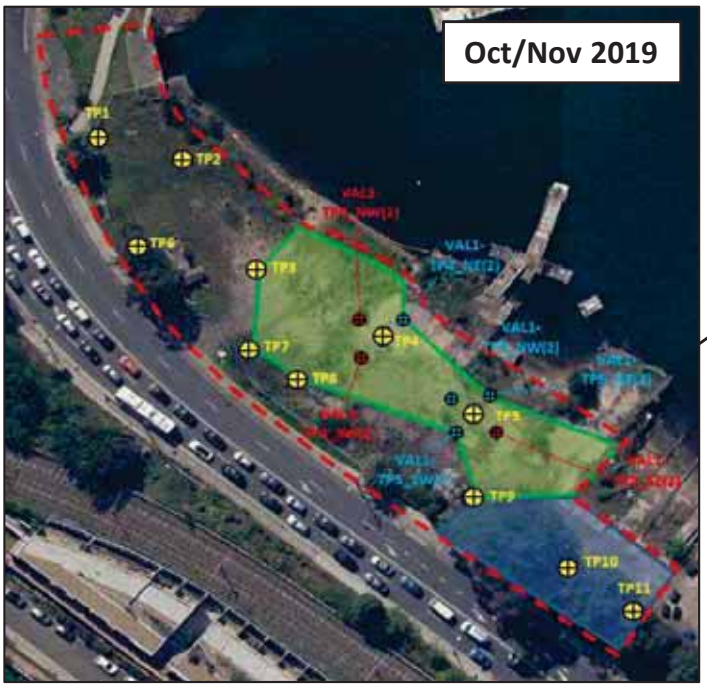
May/Jun 2020

Approximate sub-site boundary

Groundwater monitoring well

Borehole





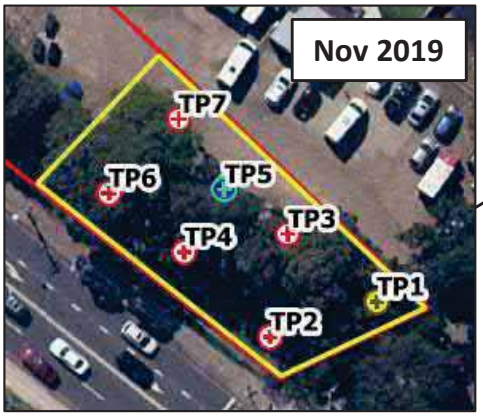
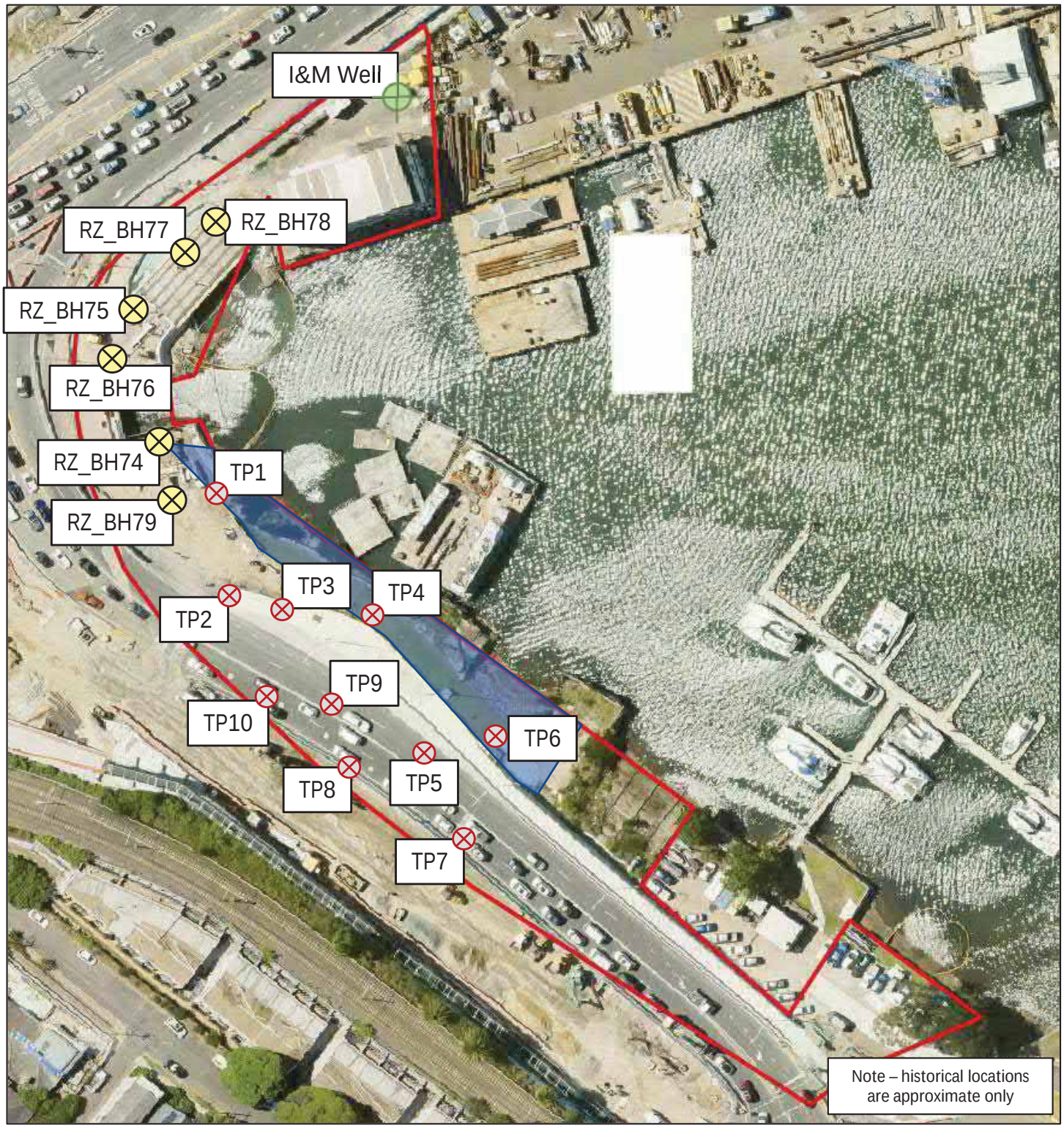


Figure 5A – WSP and ADE intrusive sampling locations
Sub-Site Area – Crescent Civil



Approximate sub-site boundary

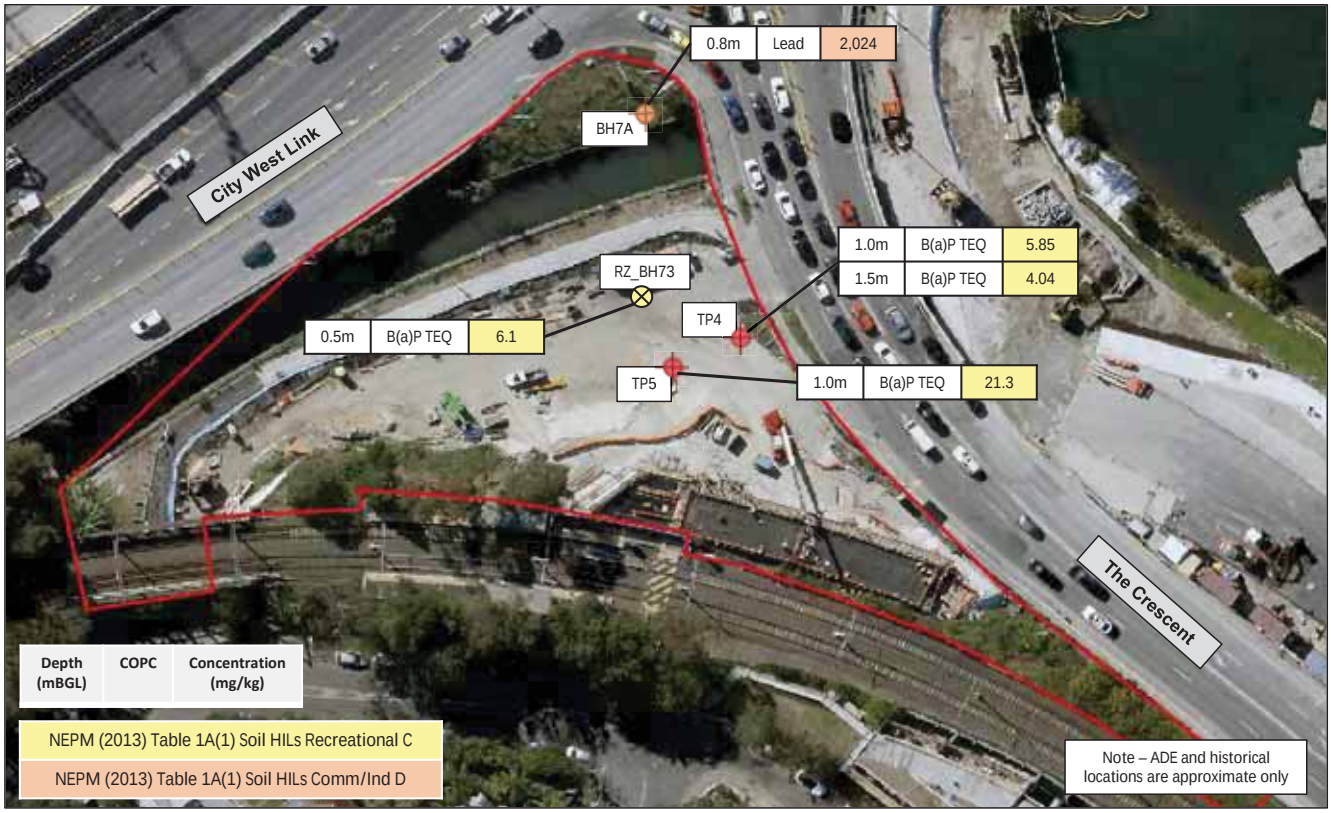
AECOM (2018) borehole

I&M well

Jacobs (2014) test pit

Residual land

Figure 5B – Historical investigation intrusive sampling locations
Sub-Site Area – Crescent Civil



Approximate sub-site boundary

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

AECOM (2018)

Figure 6A – WSP DSI and historical soil human health criteria exceedances
Sub-Site Area – Buruwan Park

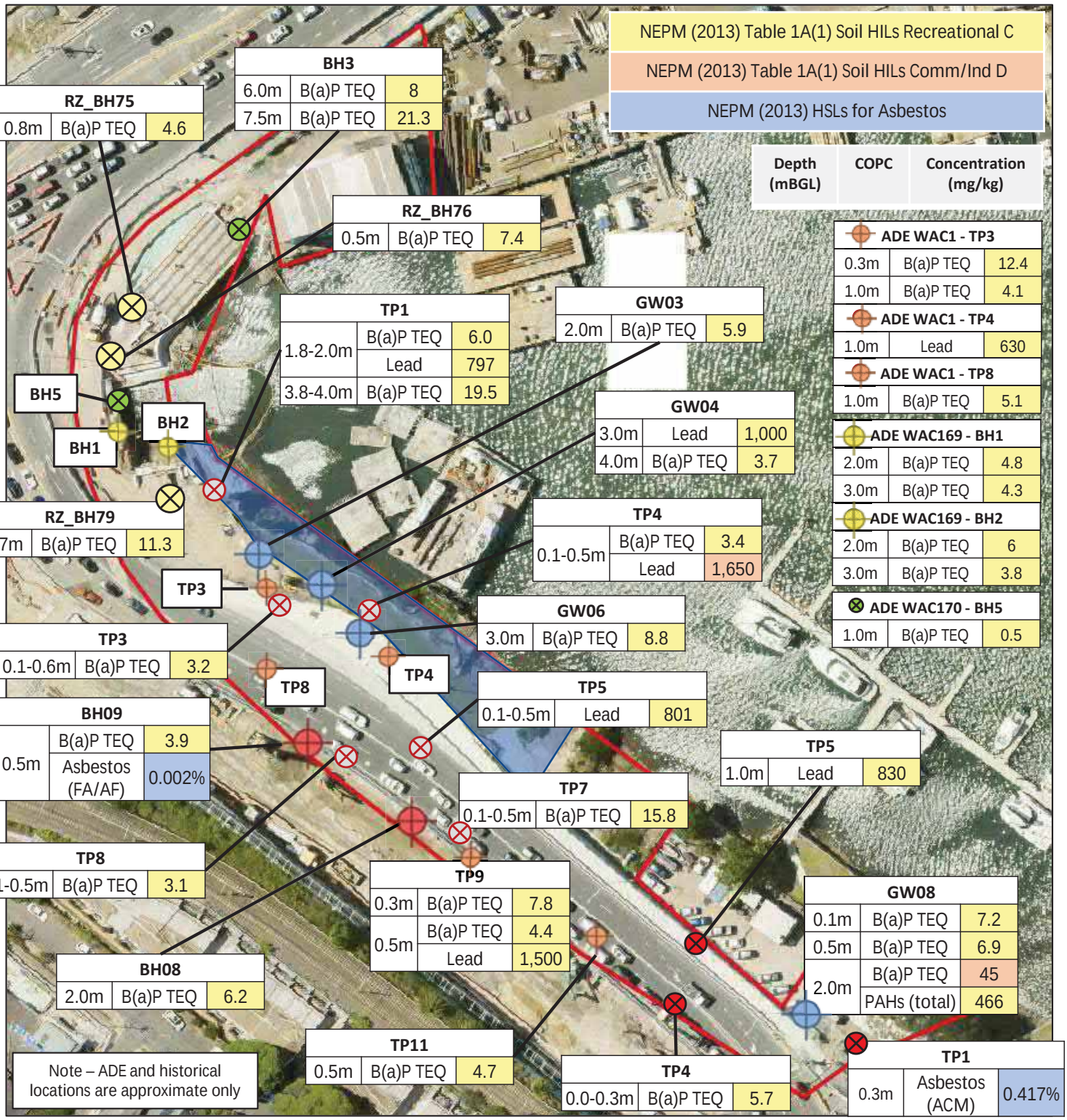


Figure 6B – WSP DSI and historical soil human health criteria exceedances
Sub-Site Area Crescent Civil

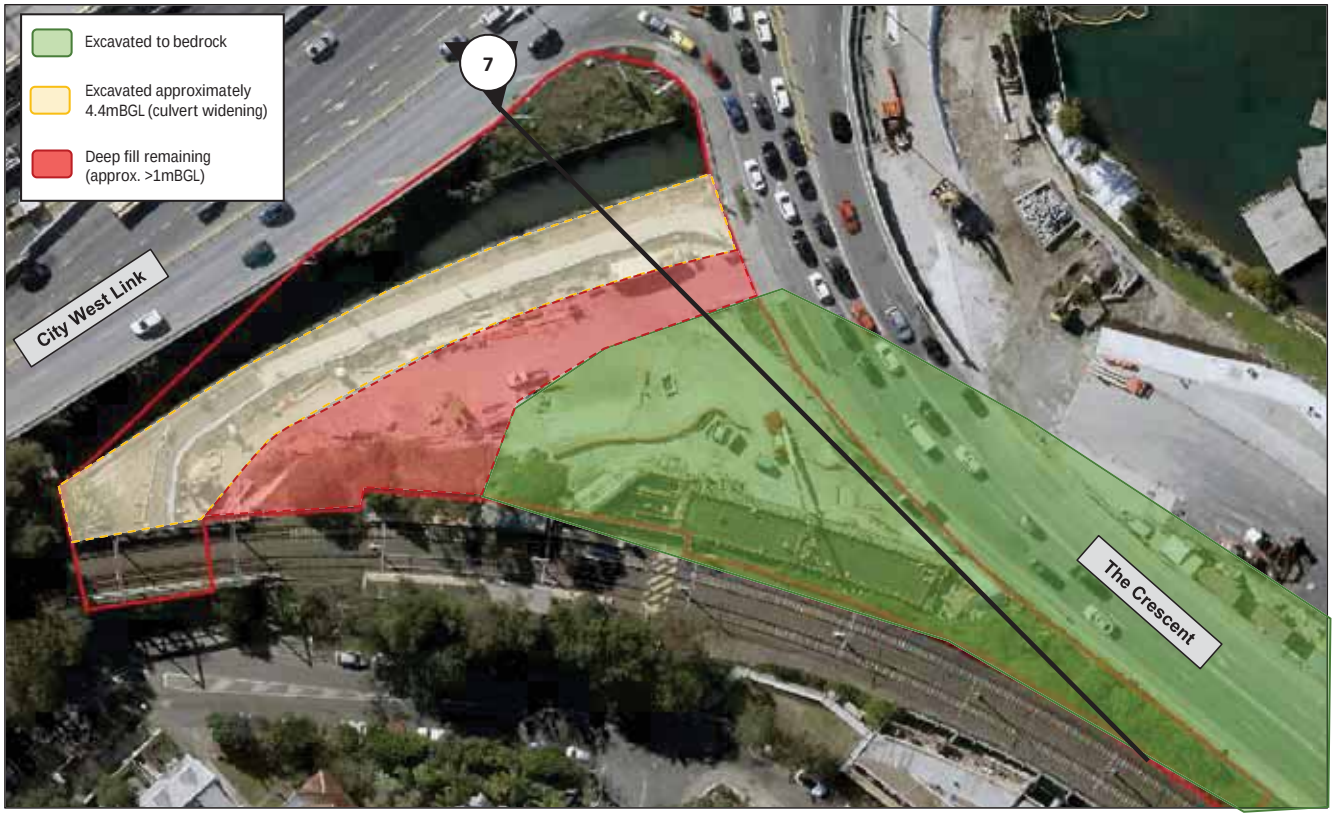
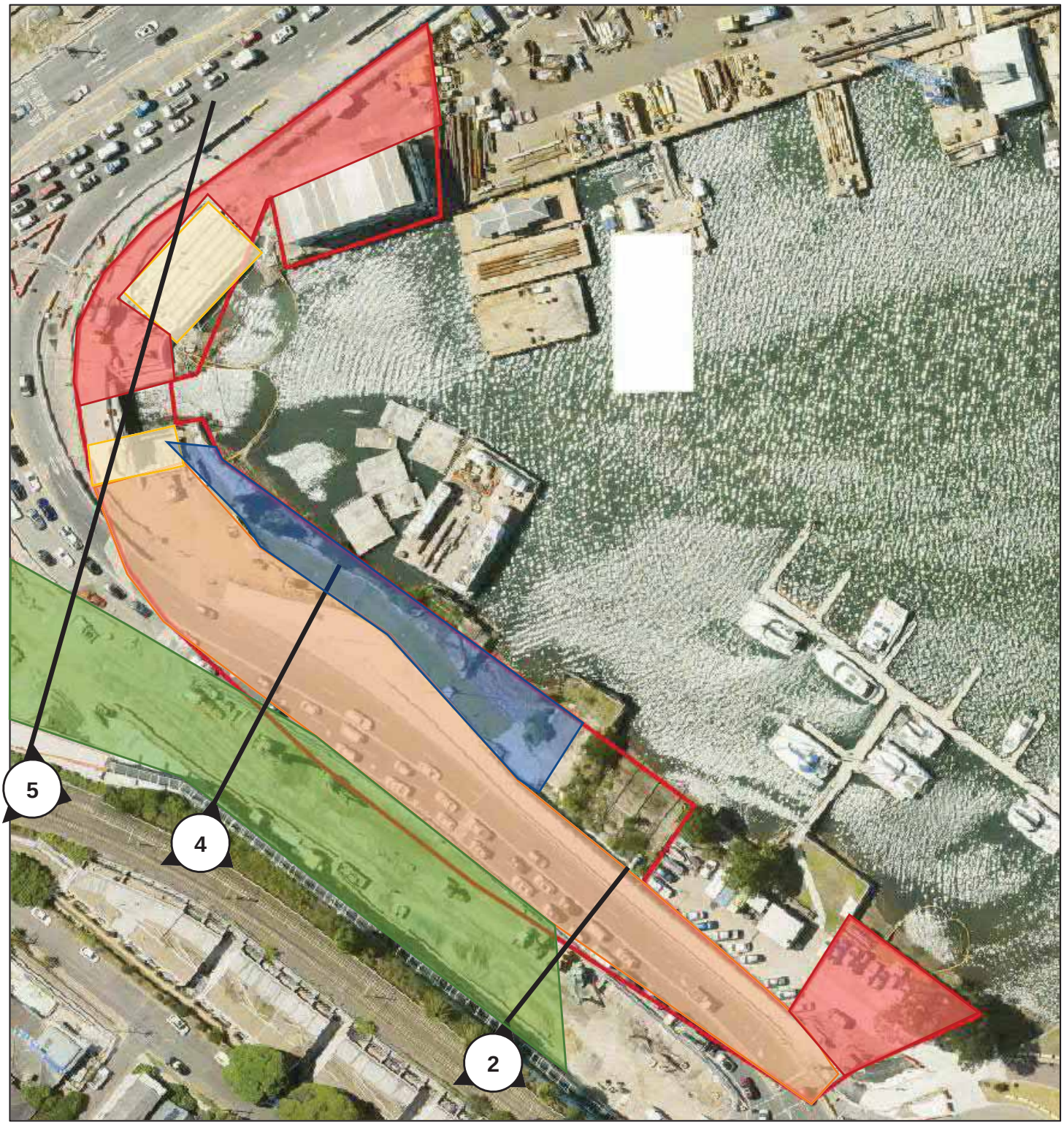


Figure 7A – Site Excavation Zone Map
Sub-Site Area – Buruwan Park



Approximate sub-site boundary

Residual land

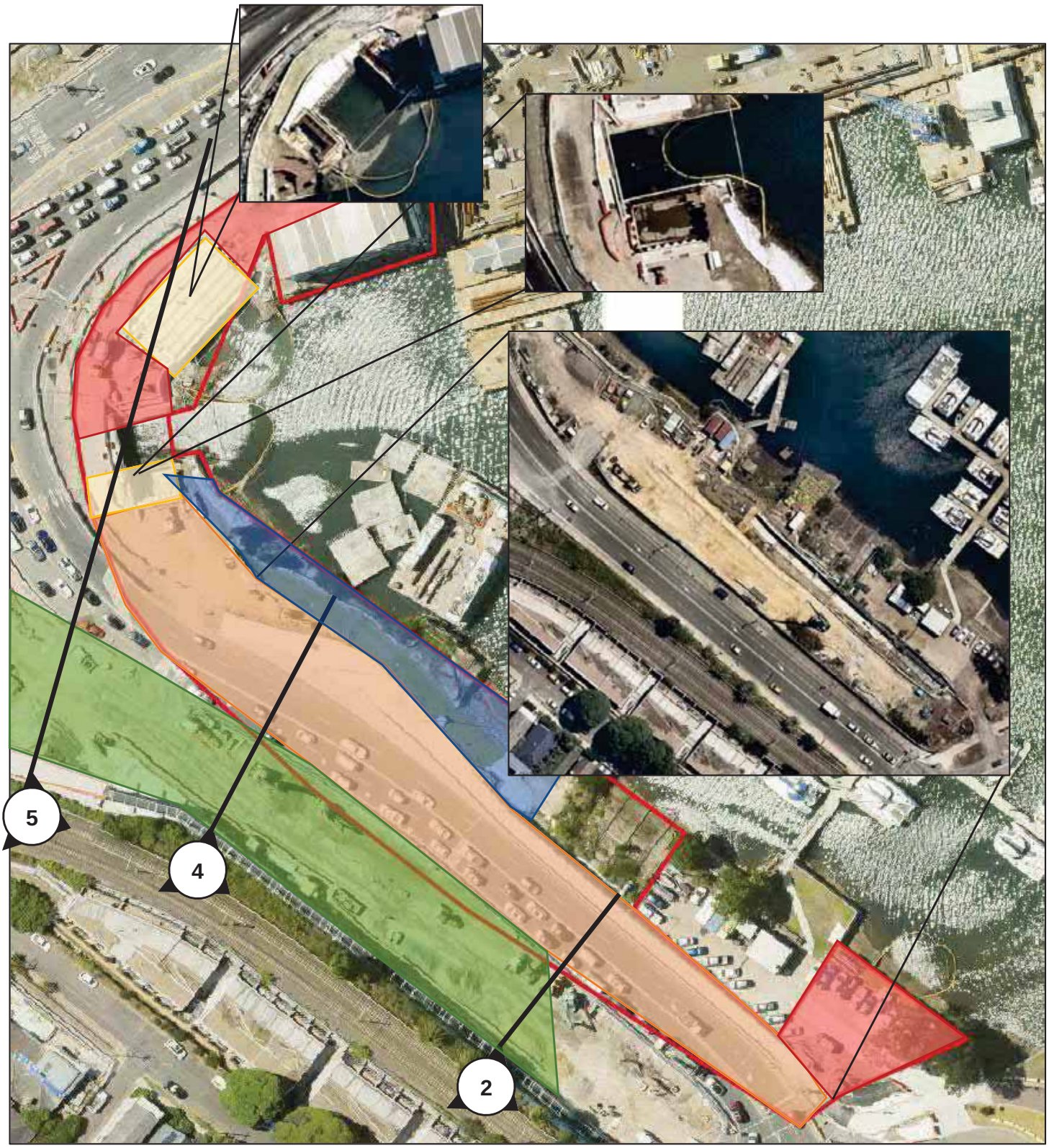
Excavated approximately 4mBGL

Limited excavation

Excavated to bedrock

Excavated to approximately 1.5mBGL

Figure 7B – Site excavation zone map
Sub-Site Area Crescent Civil



Approximate sub-site boundary

Residual land

Excavated approximately 4mBGL

Limited excavation

Excavated to bedrock

Excavated to approximately 1.5mBGL

Figure 7C – Site excavation zone map
Sub-Site Area Crescent Civil

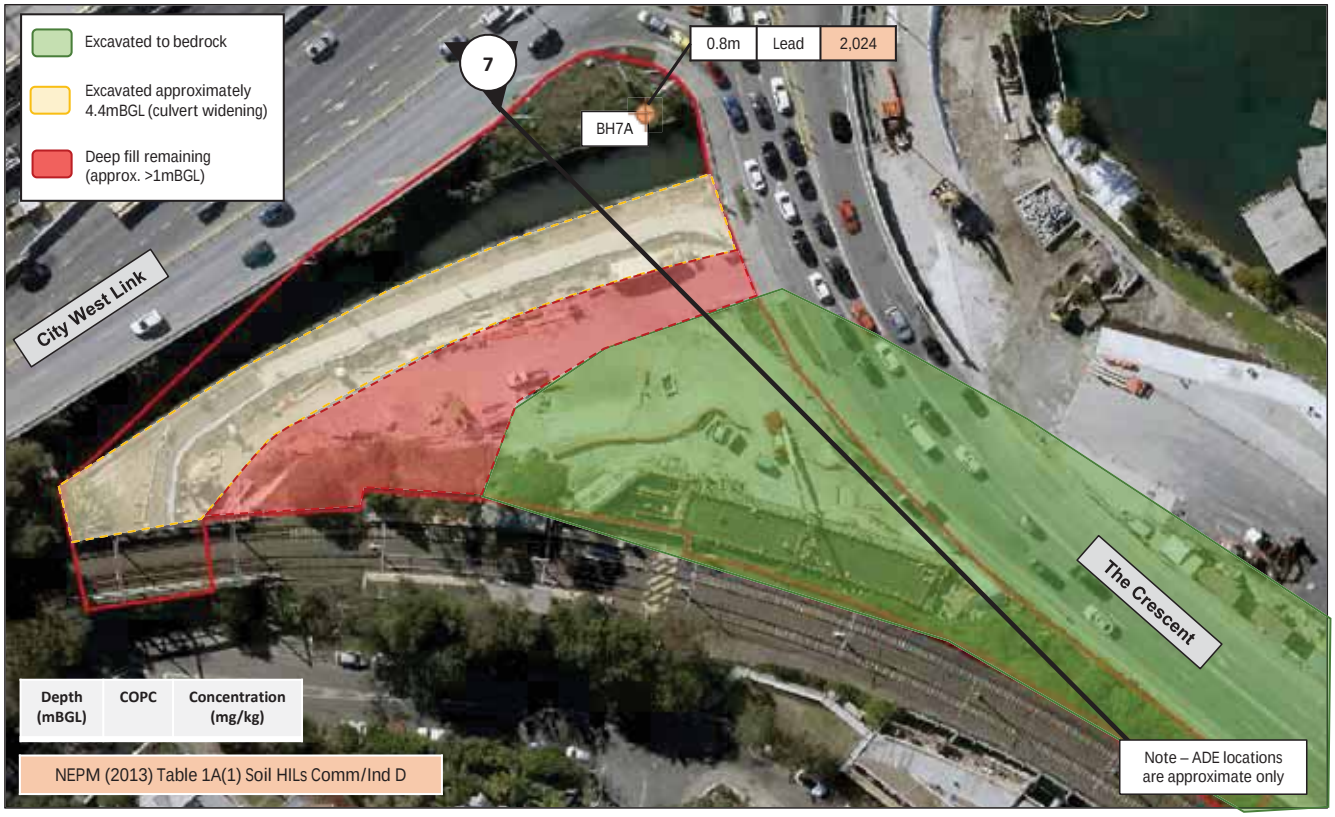


Figure 8A – Site Excavation Zone Map
Sub-Site Area – Buruwan Park

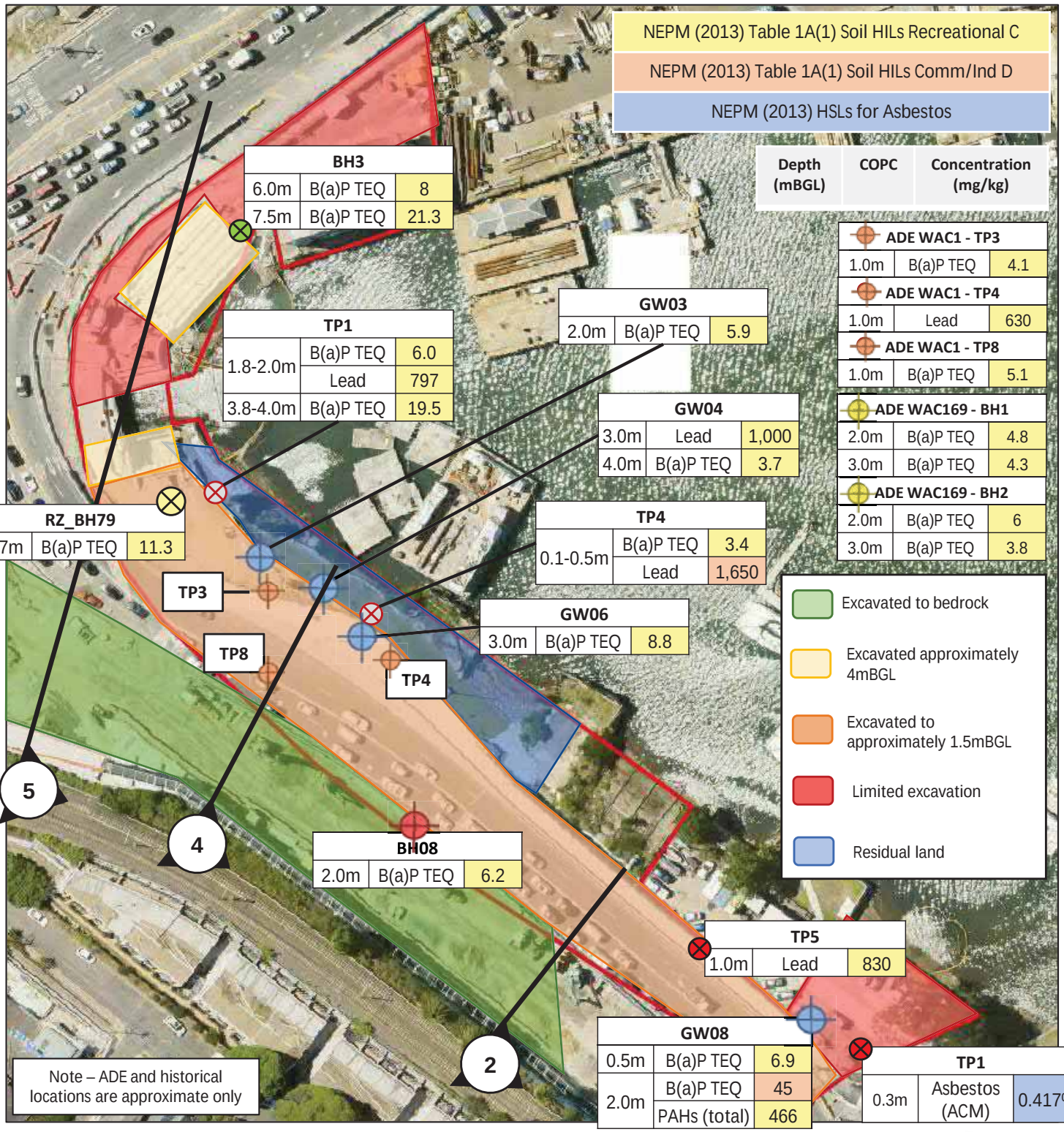


Figure 8B – Site excavation zone map
Sub-Site Area Crescent Civil

Approximate site boundary

Groundwater well – Crescent Civil

Groundwater well – Buruwan Park

Figure 9 – WSP (2021a & 2021b) groundwater criteria exceedances - PFOS & benzo(a)pyrene
Sub-Site Areas Buruwan Park and Crescent Civil

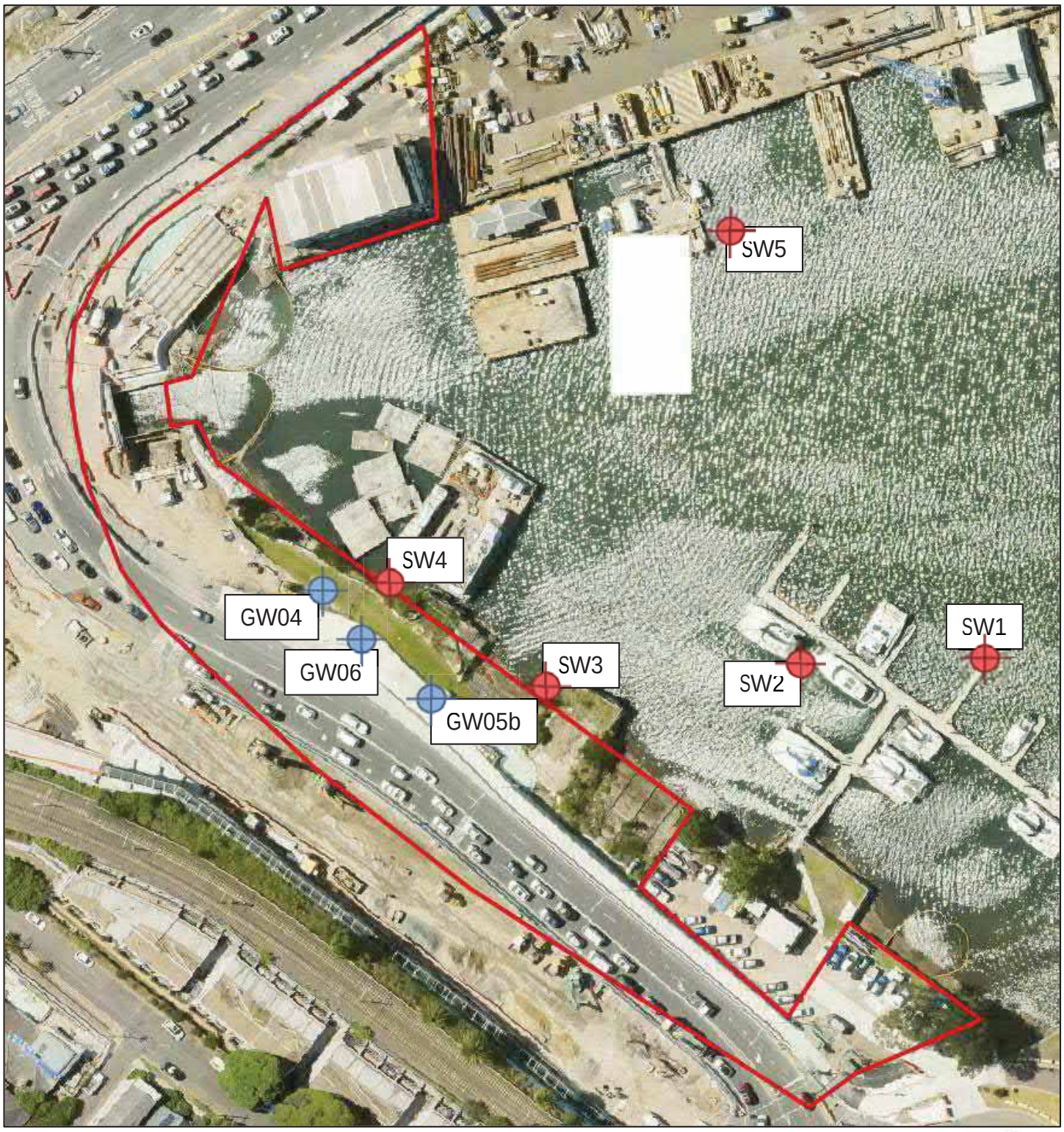


Figure 10 – May and July 2021 groundwater and surface water sampling locations
Sub-Site Area – Crescent Civil

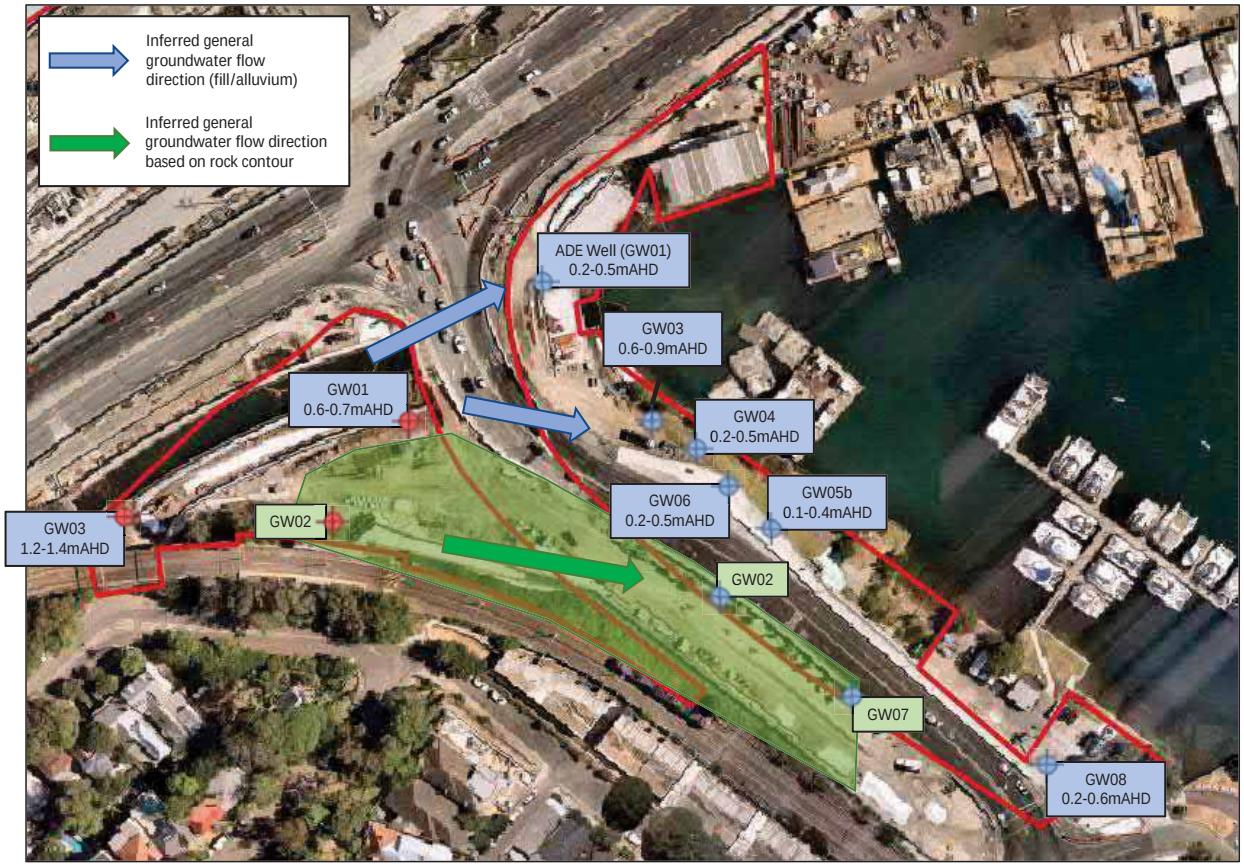


Figure 11 – Inferred groundwater flow direction
Sub-Site Areas Buruwan Park and Crescent Civil

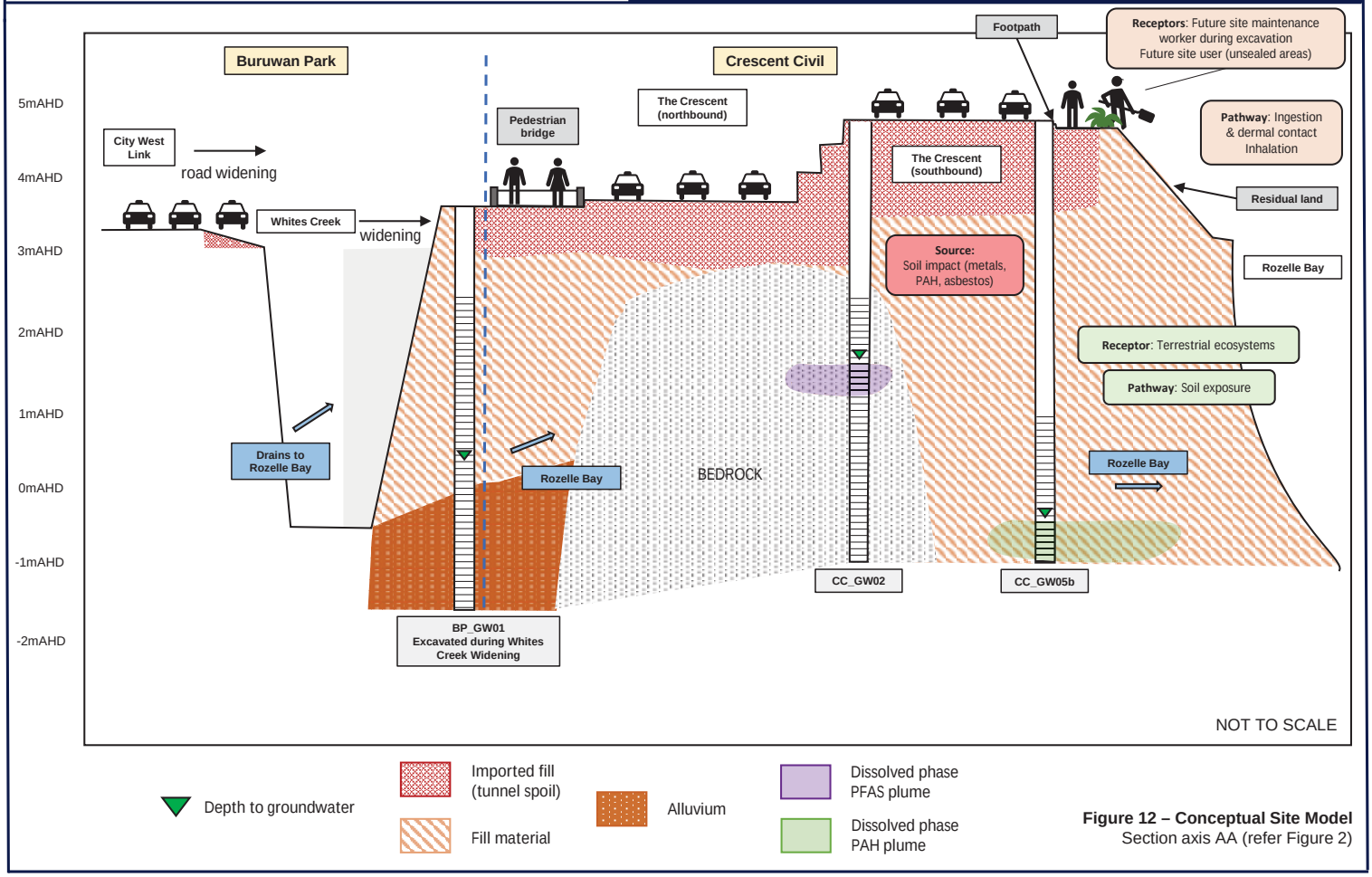
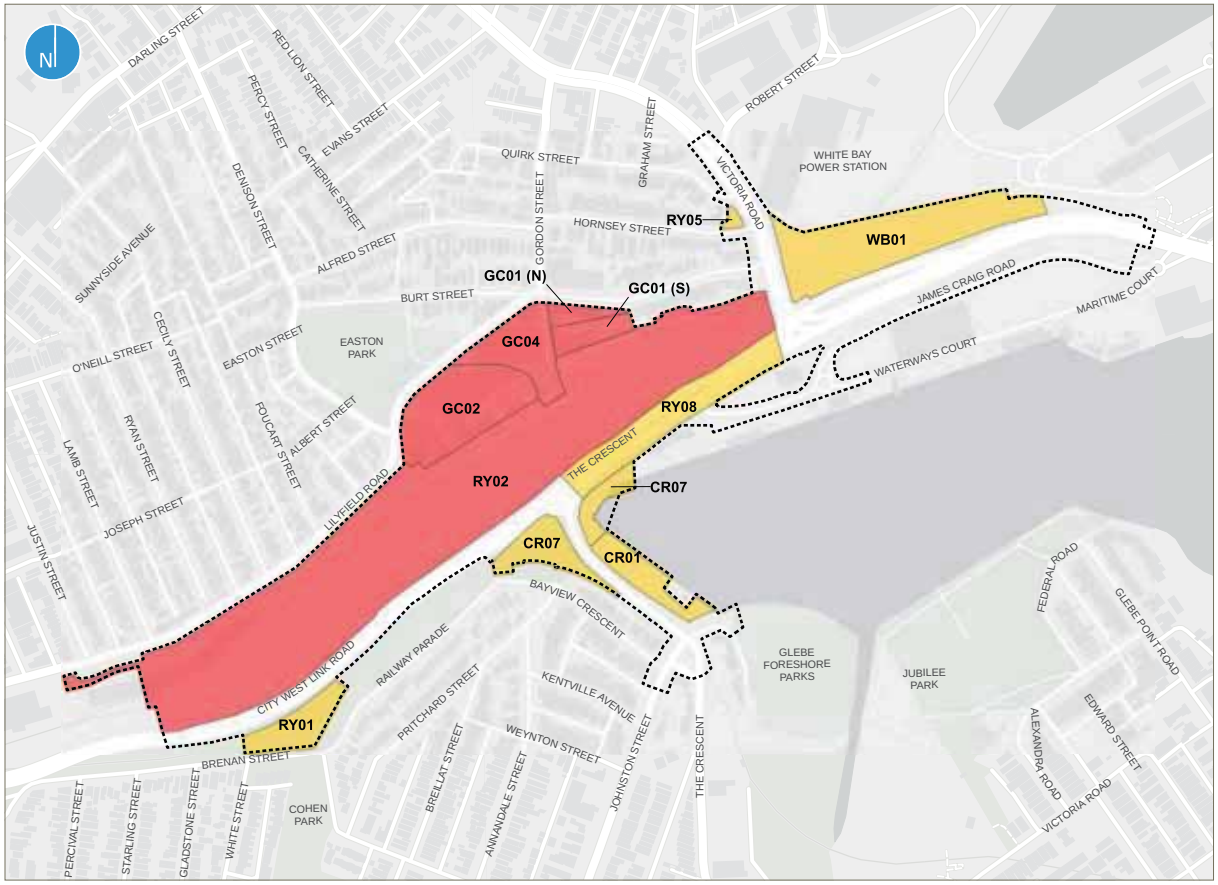


Figure 12 – Conceptual Site Model
Section axis AA (refer Figure 2)



Legend

- Project boundary
- High Risk Site
- Moderate Risk Site

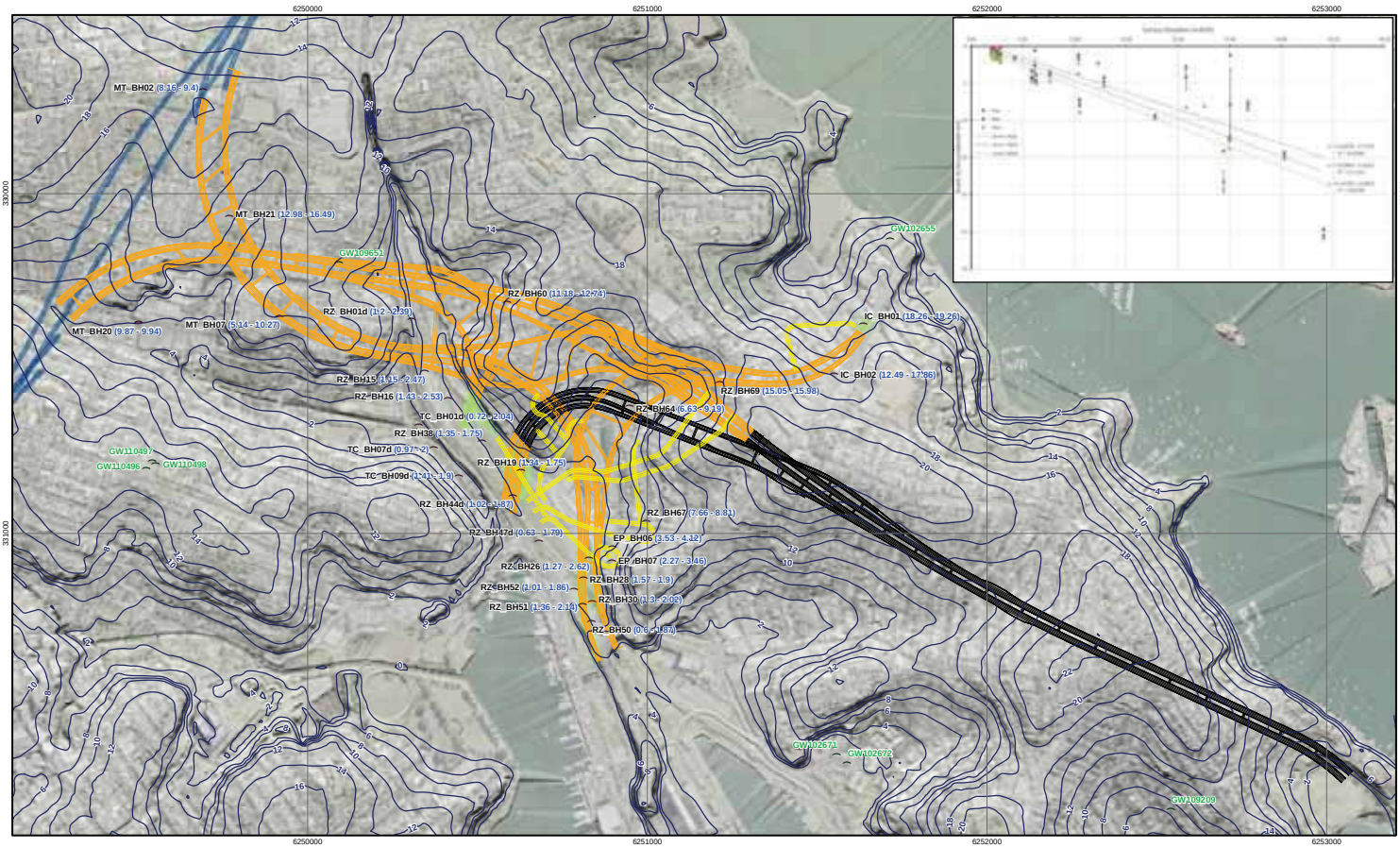
RAMBOLL

Figure 1 – Rozelle Interchange SAQP Site Locations

Overarching Sample Analysis and Quality Plan

PROJECT: WestConnex Stage 3B - Rozelle Interchange			CLIENT: JHCPB
SCALE: 1:5,000	A3	DRAWN BY: jchen	PROJECT #: 318000500
PAGE: 01 of 01	COORDINATE SYSTEM: GDA 1994 MGA Zone 56	REVIEW: VW	DATE: 30/07/2019
			MAP #: F001 VER: 1

RAMBOLL AUSTRALIA - GIS MAP file : JHCPB3BRozelle_GIS_P006_OverarchingSAQP_F001_SAQPSiteLocations_R1_v1 | Z:\Projects\JHCPB 3B Rozelle\Spatial



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

OVERVIEW

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

Rozelle Interchange & WHT
Enabling Works
Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\P3M3958\gis\Grid\3_Figures\P3M3958_Figure4 Project Wide Interpreted Groundwater Level Contours.mxd

Key Project Elements

1. Rozelle Ventilation Facility
2. Western Harbour Tunnel Portal
3. Green Link Bridge (subject to approval of modification SSI-7485-Mod-2)
4. Residual Land (subject to the Residual Land Management Plan)
5. Whites Creek Shared User Path Bridge
6. Landscape terraces
7. Sydney Trains Switching Station
8. Maintenance access and hardstand area
9. Western drainage channel
10. Rozelle Bay Light Rail Stop connection
11. Street pocket parks and landscaping

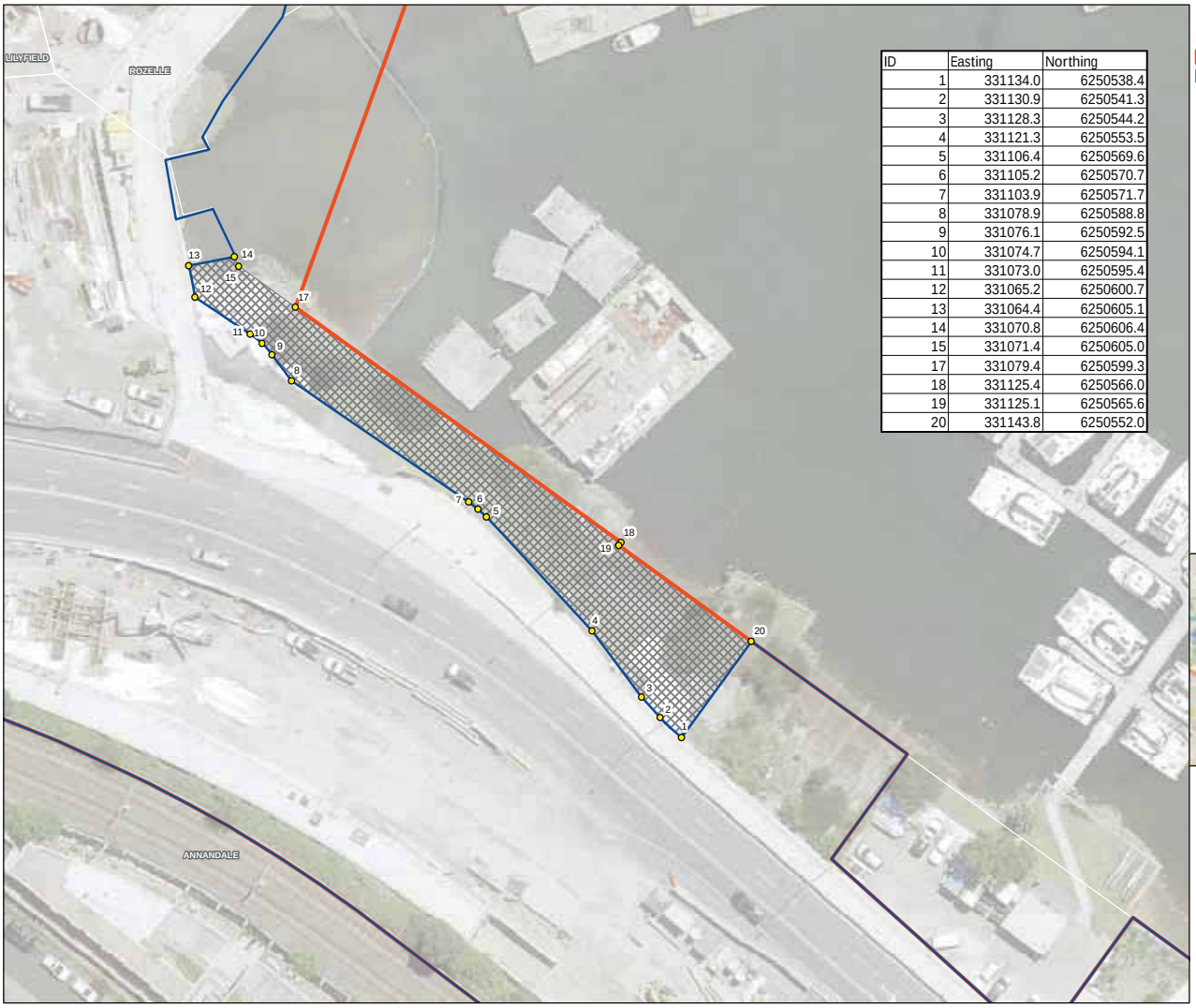
LEGEND

- Proposed tree planting
- Sand ground cover for play areas
- Gravel paths
- Publicly accessible turf areas
- Landscape revegetation areas
- Constructed wetland
- Concrete Path
- Softfall ground cover areas for fitness and play
- Project Boundary

Note: further detail description for parkland elements in Rozelle Rail Yards parkland is provided in Section 4.6

0 20 40 80m

Figure 4-14: Rozelle - Concept Plan - Drawing 4 of 4



ID	Easting	Northing
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2	331130.9	6250541.3
3	331128.3	6250544.2
4	331121.3	6250553.5
5	331106.4	6250569.6
6	331105.2	6250570.7
7	331103.9	6250571.7
8	331078.9	6250588.8
9	331076.1	6250592.5
10	331074.7	6250594.1
11	331073.0	6250595.4
12	331065.2	6250600.7
13	331064.4	6250605.1
14	331070.8	6250606.4
15	331071.4	6250605.0
17	331079.4	6250599.3
18	331125.4	6250566.0
19	331125.1	6250565.6
20	331143.8	6250552.0

Legend

- Residual Land
- Site Access Schedule boundary
- Contam Land Audit Areas

FINAL

ROZELLE INTERCHANGE
RESIDUAL LAND - CWL
SHEET 1 of 1

0 2.5 5 10 15 20 Metres

All coordinates quoted in MGA Zone 56 - GDA94 datum

This map is shown for reference purposes only. John Holland CPB Contractors Joint Venture provide this information "as-is" with the undertsanding that it is not guaranteed to be accurate, correct or complete and conclusions drawn from such information are the responsibility of the user. While every effort is made to ensure the information displayed is as accurate and current as possible, John Holland CPB Contractors Joint Venture will not be held responsible for any loss, damage or inconvenience caused as a result of reliance on such information or data.

Rozelle Interchange
WestConnex
JOHN HOLLAND
CPB

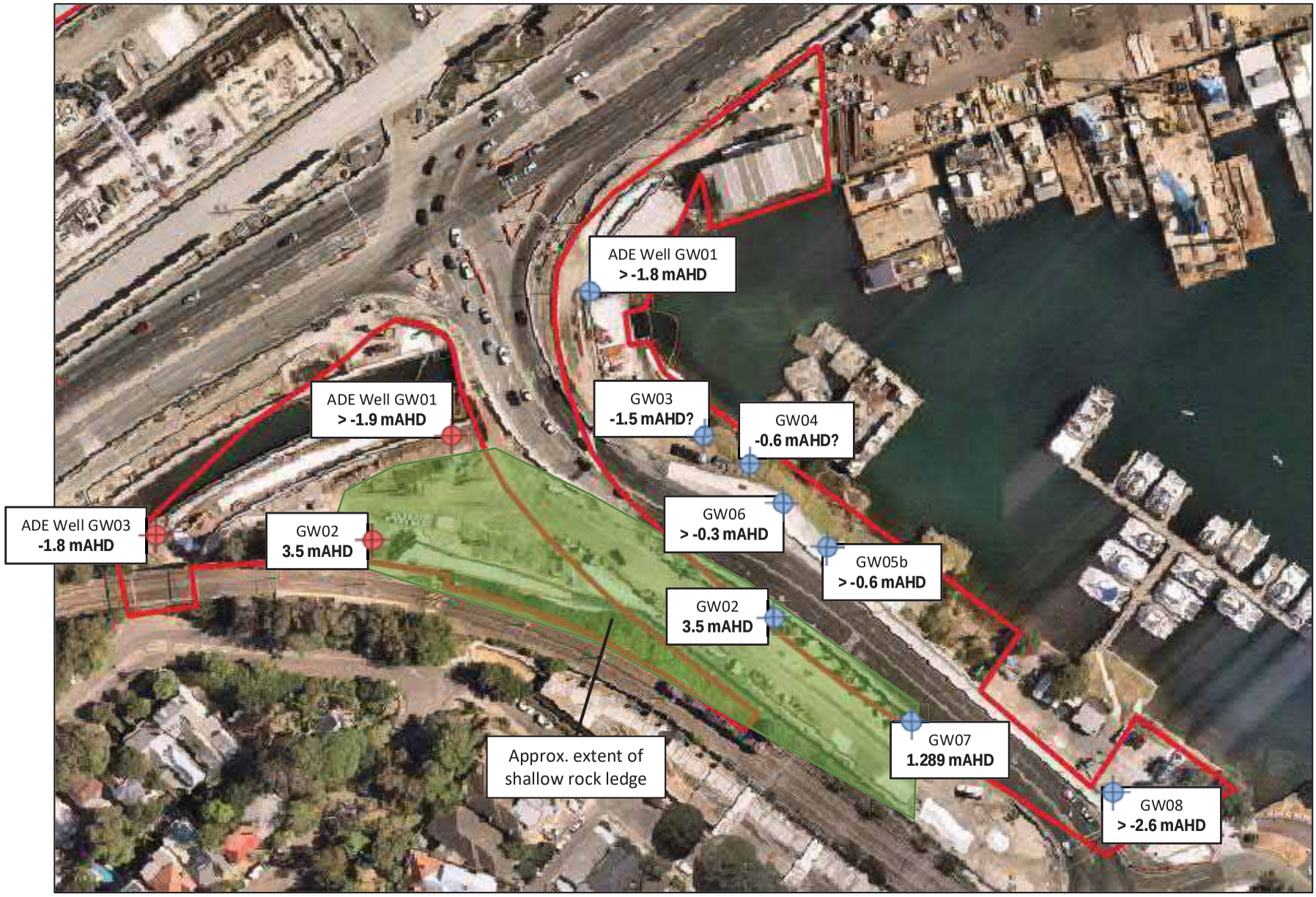
APPENDIX A

SITE FIGURES

Figure 1 – Site location
Sub-Site Areas Buruwan Park and Crescent Civil

Approximate site boundary | Groundwater well – Crescent Civil | Groundwater well – Buruwan Park | Borehole | Service trench excavation

Figure 2 – WSP DSI investigation locations
Sub-Site Areas Buruwan Park and Crescent Civil



Approximate site boundary

Groundwater monitoring well – Crescent Civil

Groundwater monitoring well – Buruwan Park

ADE Waste Classification (October 2020, WAC223)

Figure 3 – Encountered depth to rock
Sub-Site Areas Buruwan Park and Crescent Civil

Approximate sub-site boundary

Service trench excavation

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

ADE Waste Classification (October 2020, WAC223)

Groundwater monitoring well

ADE Waste Classification (June 2020, WAC169)

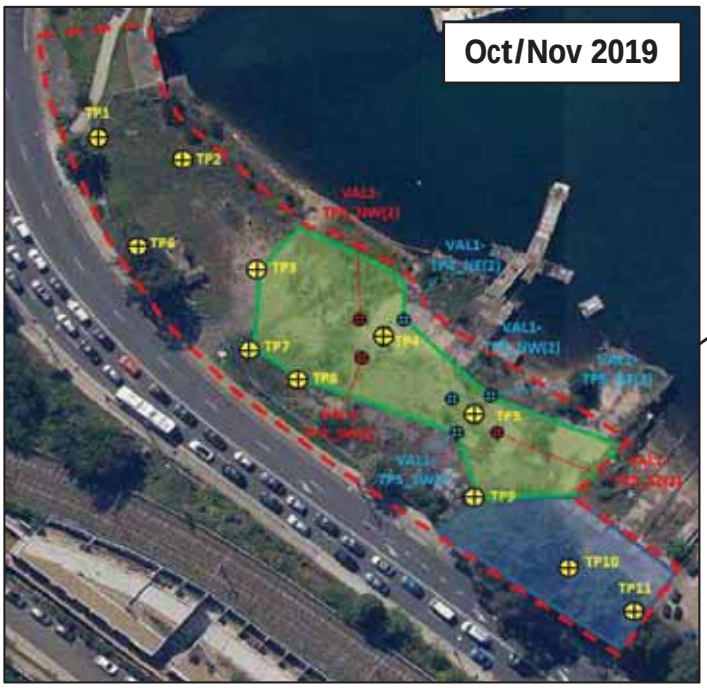
WSP (2020) CLM & HHRA

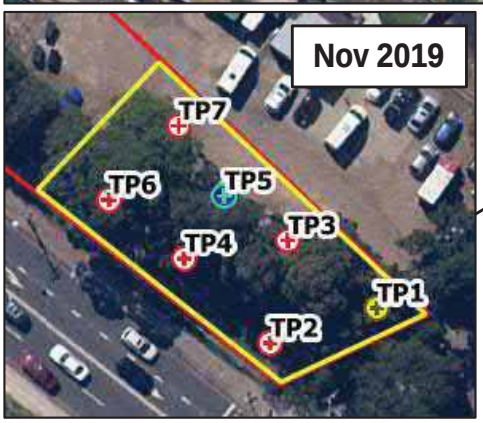
AECOM (2018)

AECOM (2017)

Figure 4 – WSP DSI and historical intrusive sampling locations
Sub-Site Area – Buruwan Park

May/Jun 2020





Approximate sub-site boundary

Groundwater monitoring well

Borehole

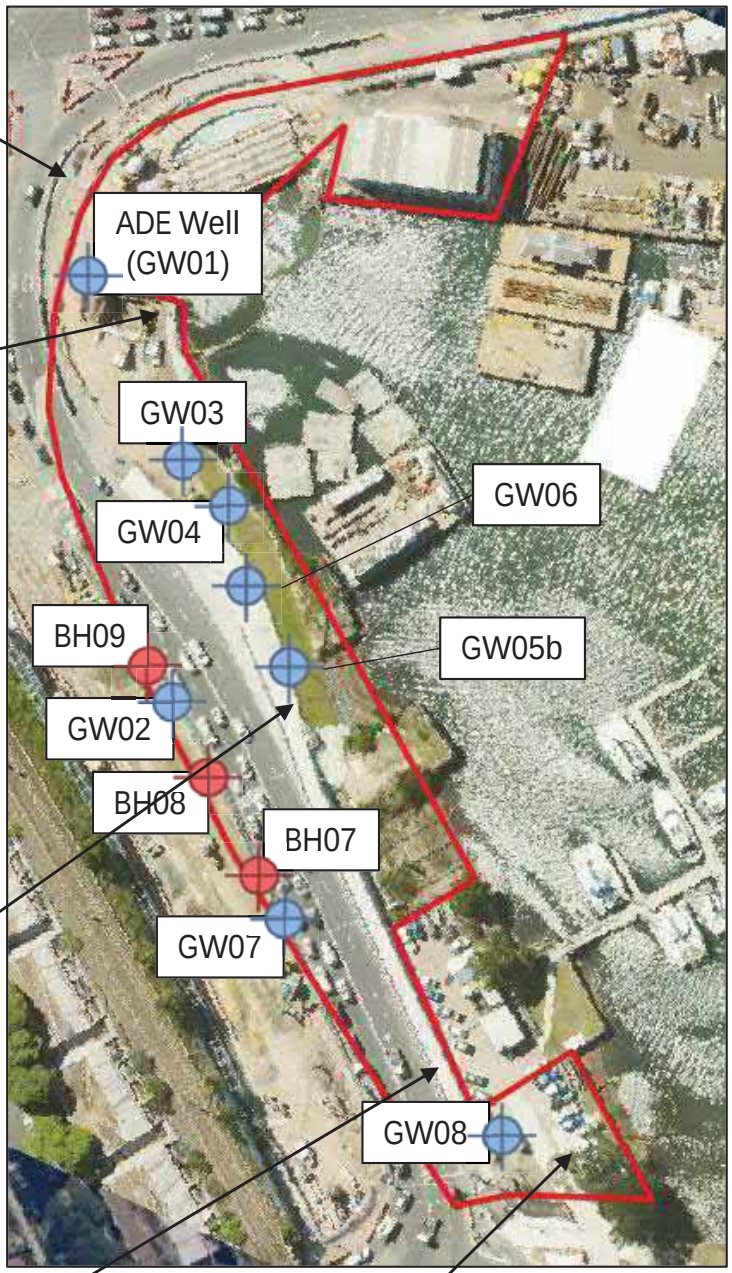
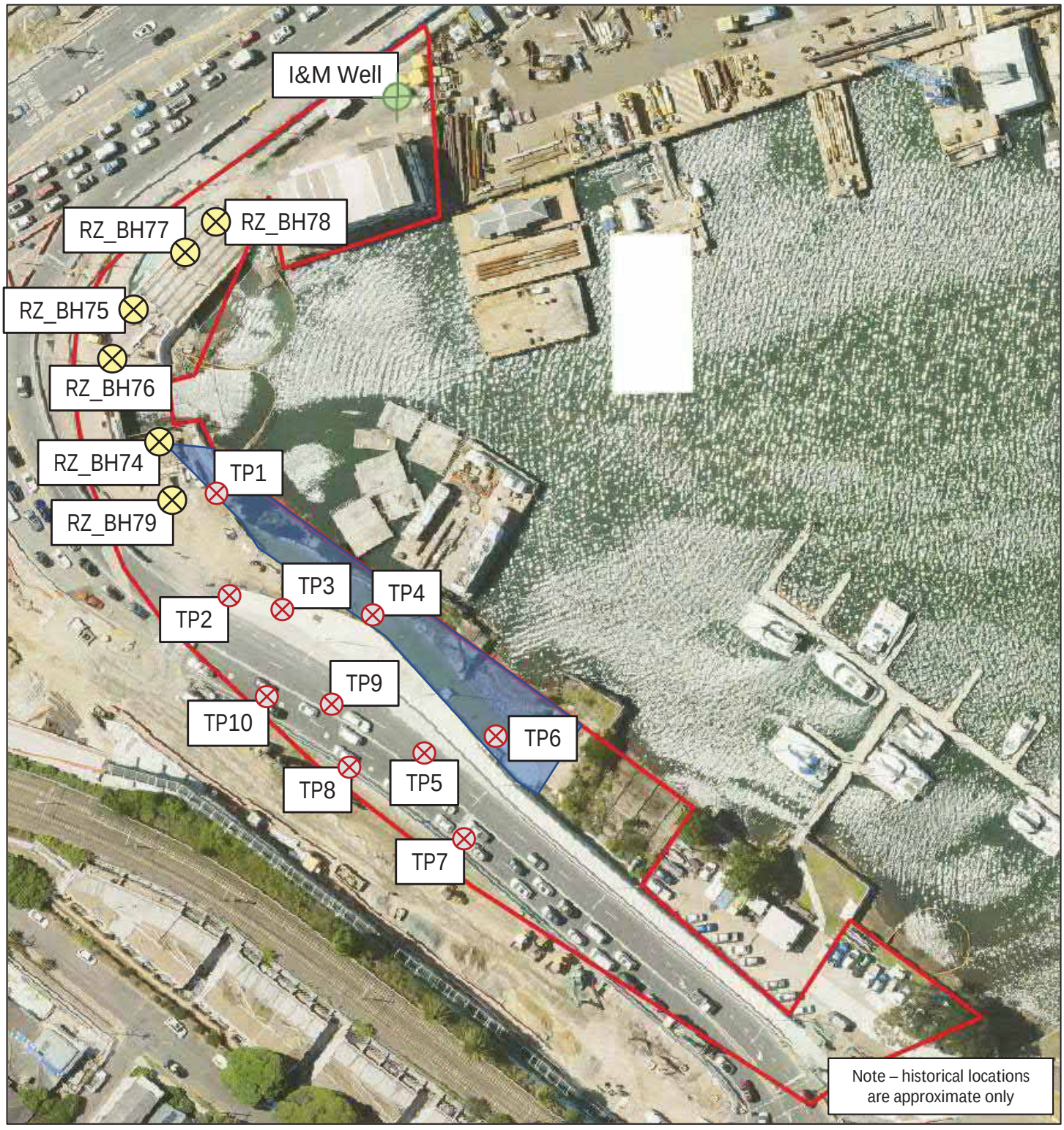


Figure 5A – WSP and ADE intrusive sampling locations
Sub-Site Area – Crescent Civil



Approximate sub-site boundary

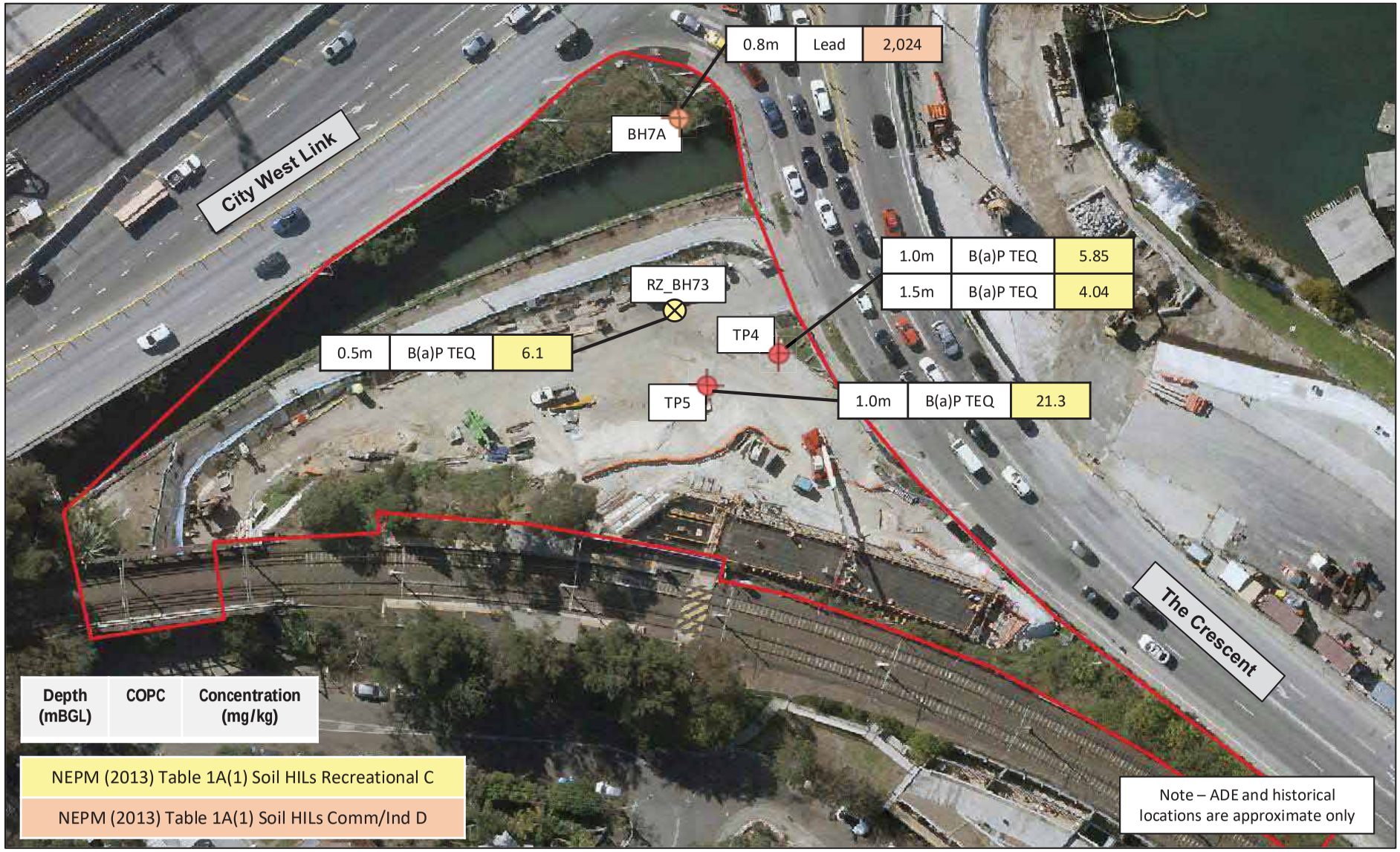
AECOM (2018) borehole

I&M well

Jacobs (2014) test pit

Residual land

Figure 5B – Historical investigation intrusive sampling locations
Sub-Site Area – Crescent Civil



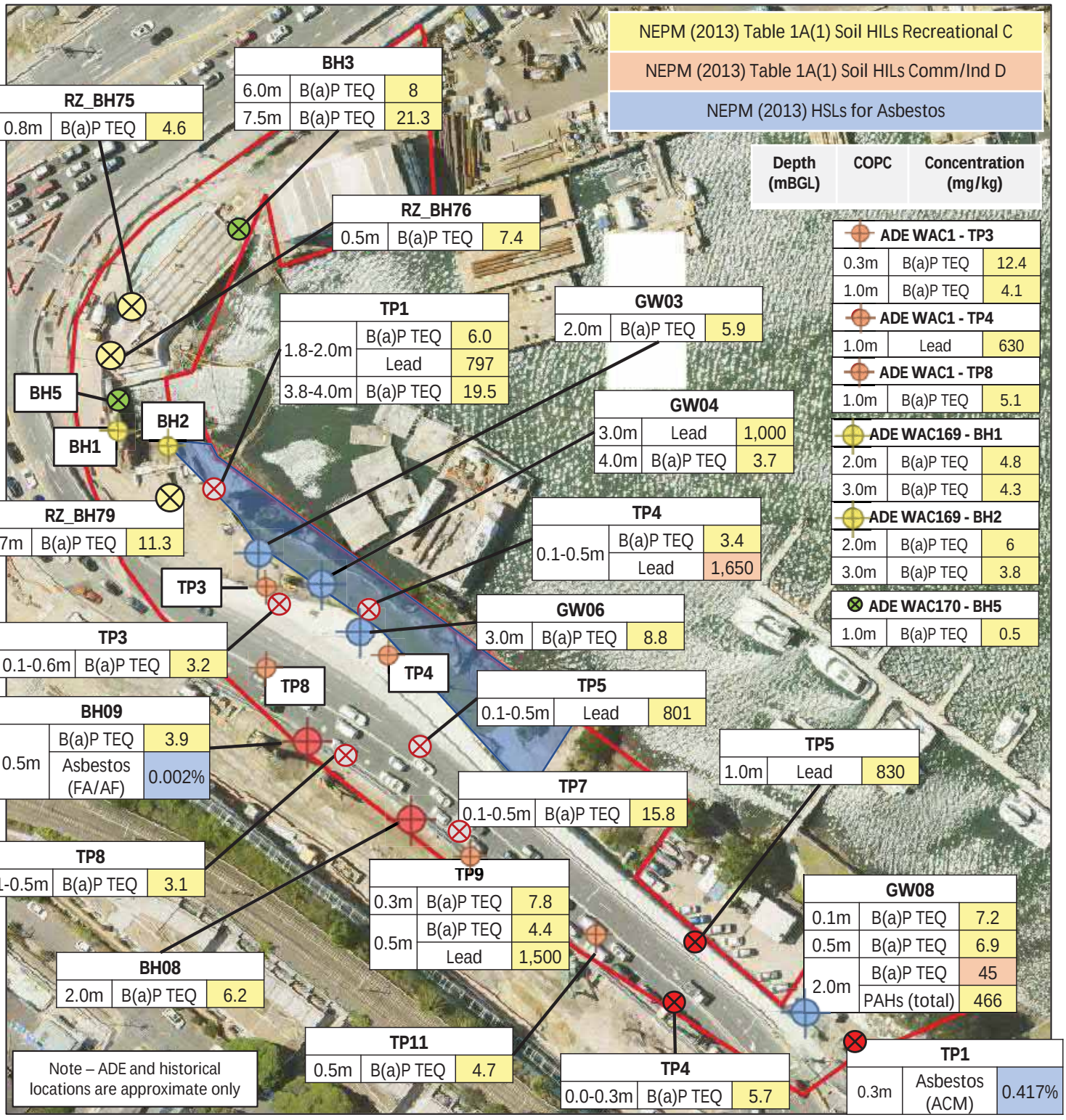
Approximate sub-site boundary

ADE Waste Classification (November 2020, WAC236)

ADE Waste Classification (September 2020, WAC208)

AECOM (2018)

Figure 6A – WSP DSI and historical soil human health criteria exceedances
Sub-Site Area – Buruwan Park



Approximate sub-site boundary

AECOM (2018) borehole

Jacobs (2014) test pit

ADE (Nov 2019, WAC023)

WSP groundwater monitoring well

WSP borehole

ADE (Oct 2019, WAC1)

ADE (Jun 2020, WAC169)

ADE (May 2020, WAC170)

Figure 6B – WSP DSI and historical soil human health criteria exceedances
Sub-Site Area Crescent Civil

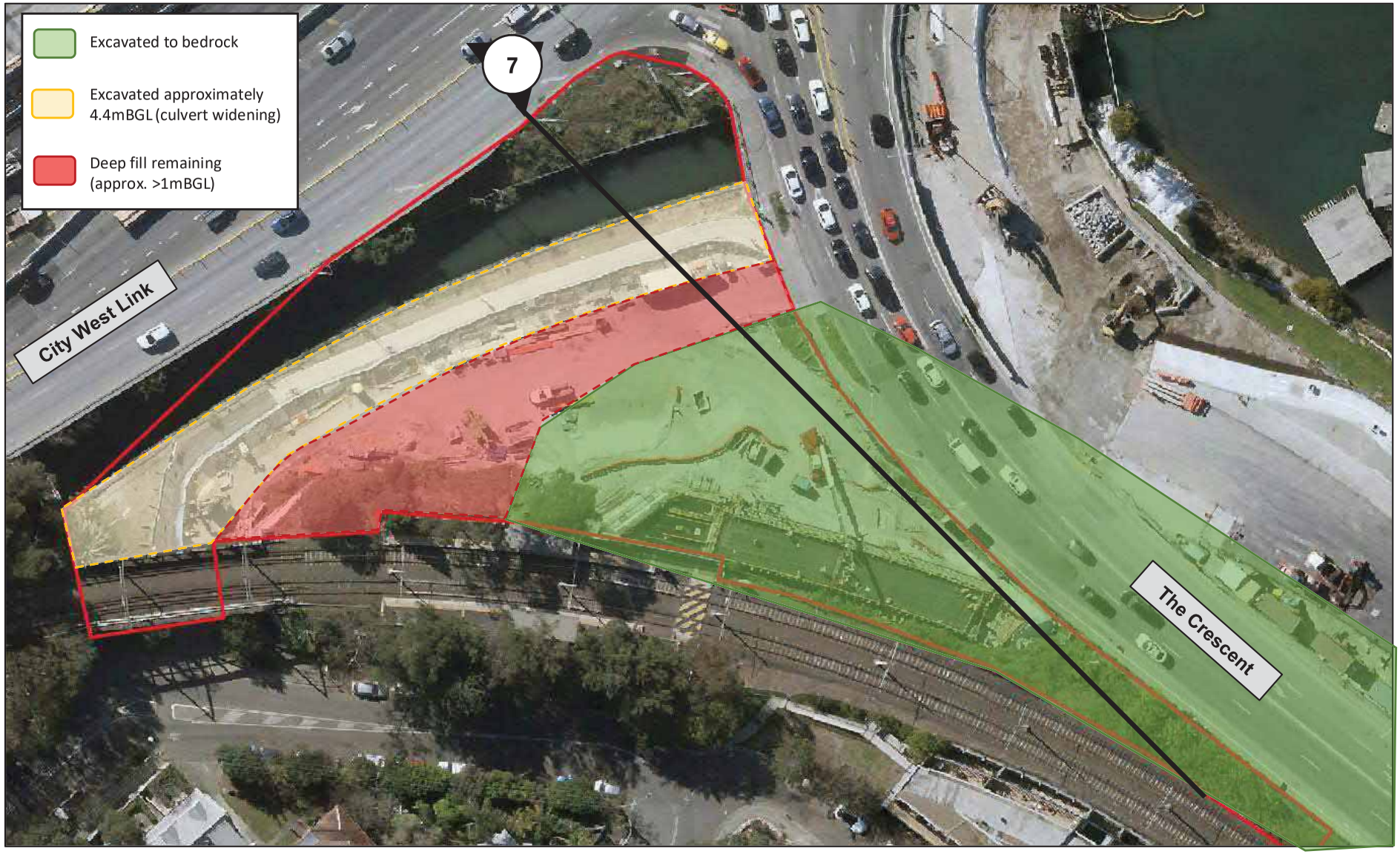
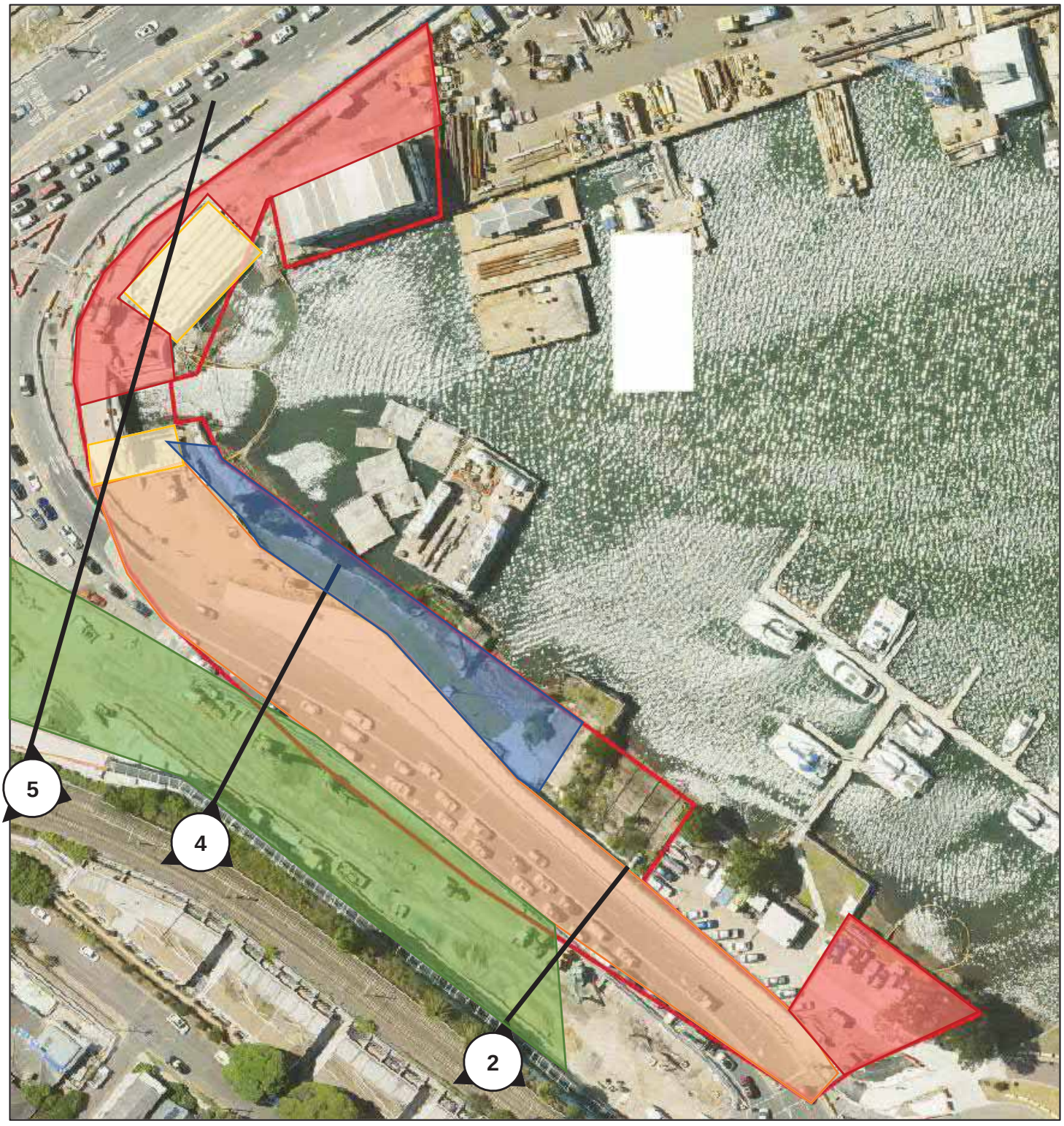


Figure 7A – Site Excavation Zone Map
Sub-Site Area – Buruwan Park



Approximate sub-site boundary

Residual land

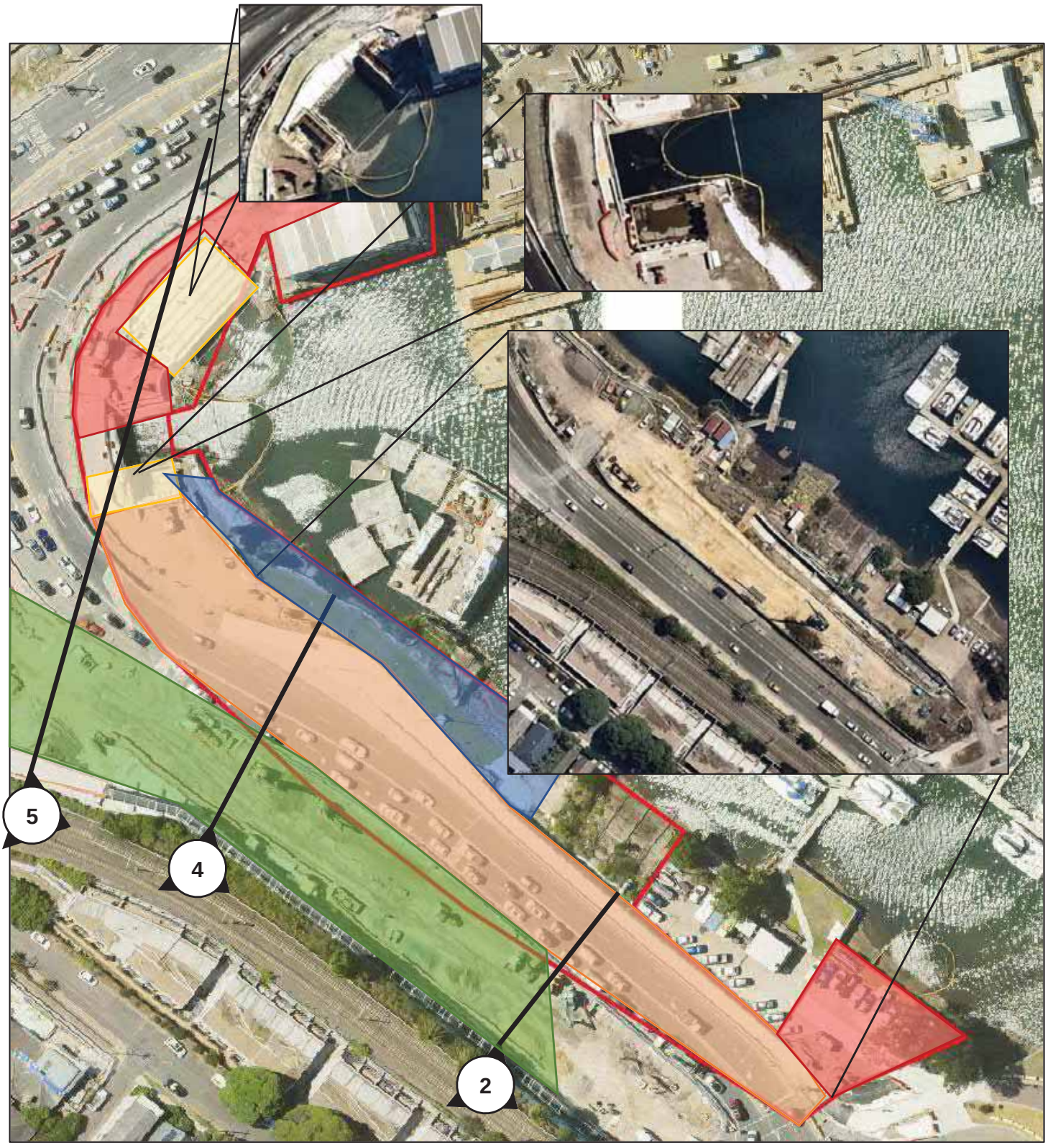
Excavated approximately 4mBGL

Limited excavation

Excavated to bedrock

Excavated to approximately 1.5mBGL

Figure 7B – Site excavation zone map
Sub-Site Area Crescent Civil



Approximate sub-site boundary

Residual land

Excavated approximately 4mBGL

Limited excavation

Excavated to bedrock

Excavated to approximately 1.5mBGL

Figure 7C – Site excavation zone map
Sub-Site Area Crescent Civil

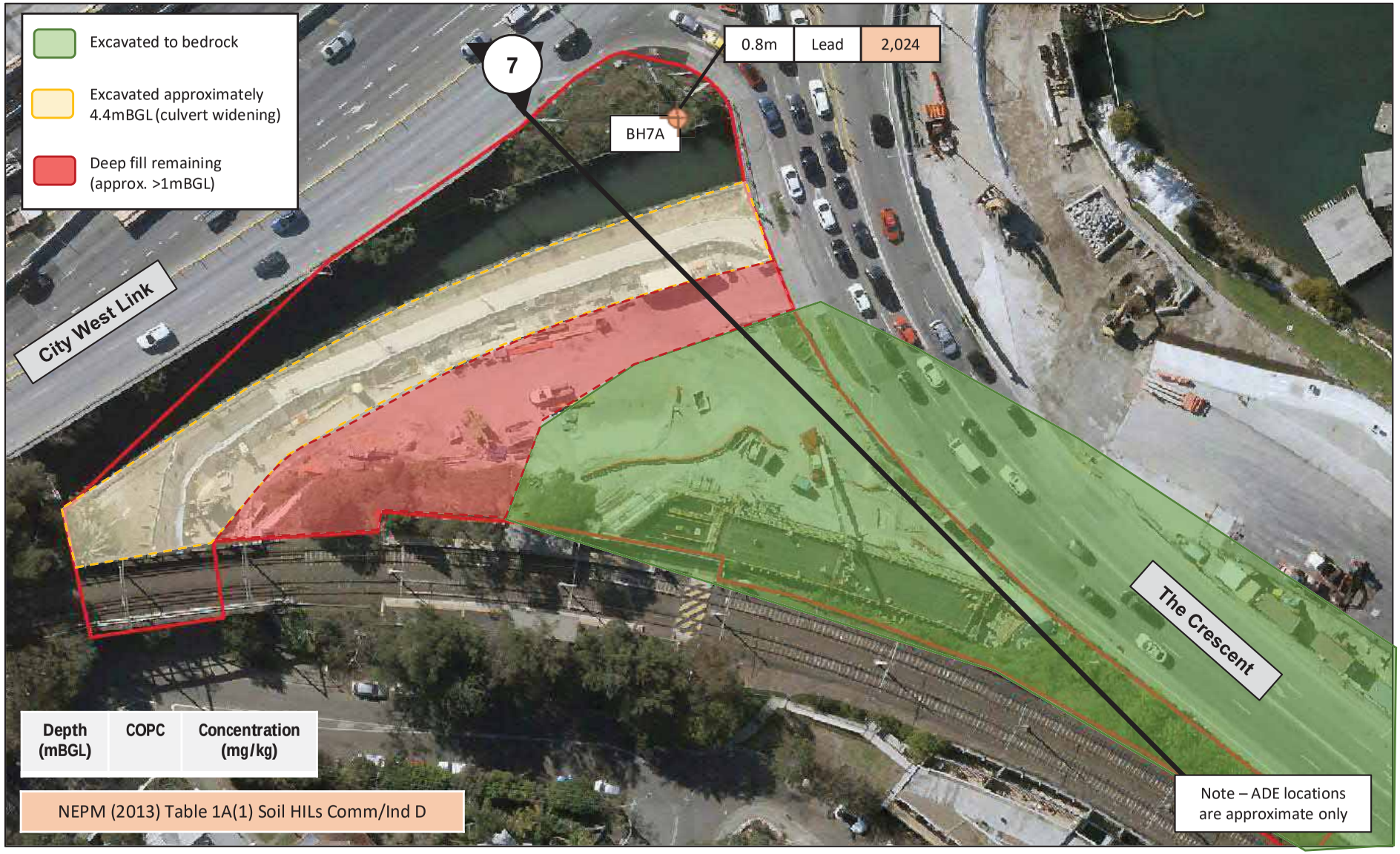
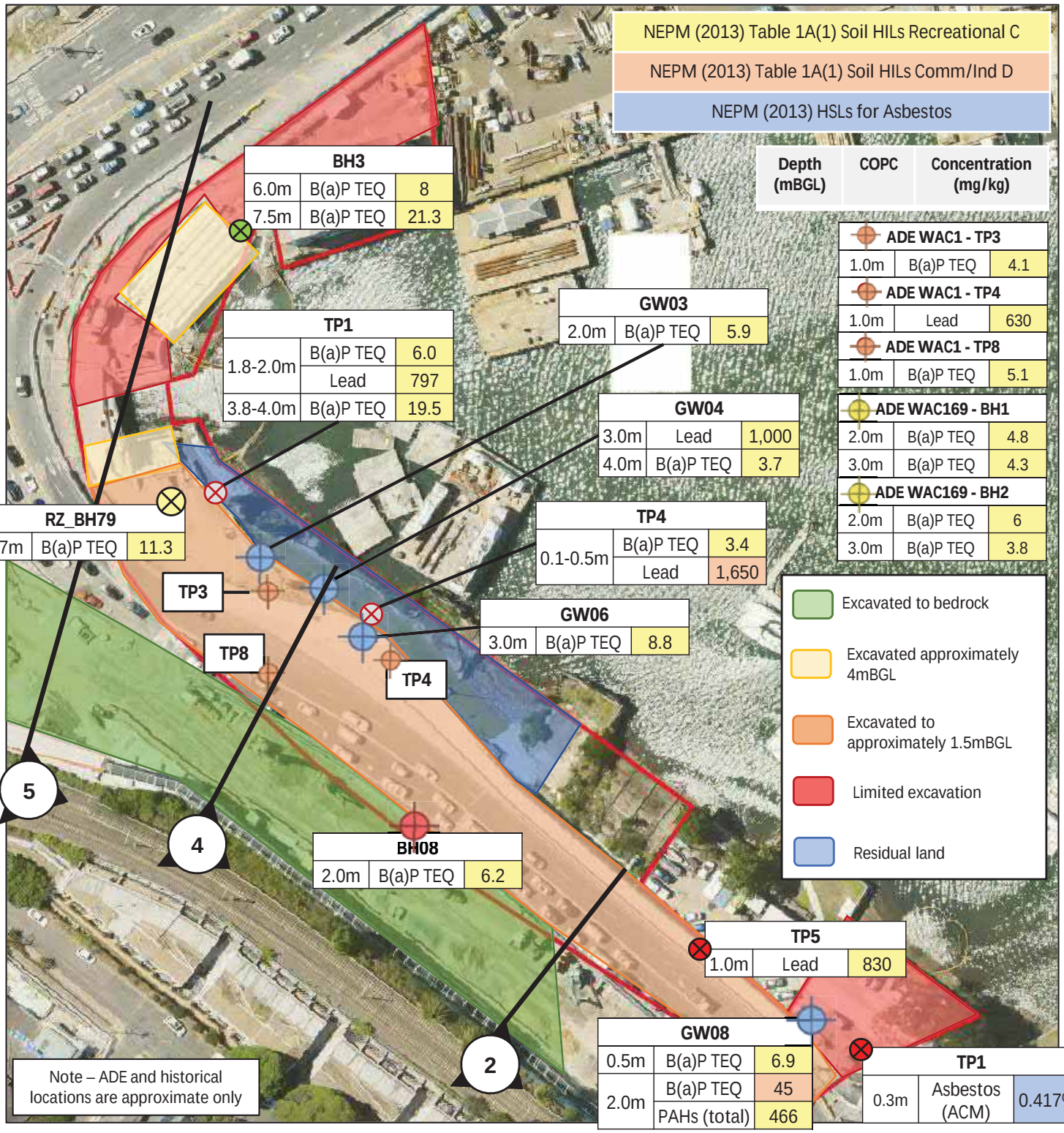


Figure 8A – Site Excavation Zone Map
Sub-Site Area – Buruwan Park



Approximate sub-site boundary

AECOM (2018) borehole

Jacobs (2014) test pit

ADE (Nov 2019, WAC023)

WSP groundwater monitoring well

WSP borehole

ADE (Oct 2019, WAC1)

ADE (Jun 2020, WAC169)

ADE (May 2020, WAC170)

Figure 8B – Site excavation zone map
Sub-Site Area Crescent Civil

Figure 9 – WSP (2021a & 2021b) groundwater criteria exceedances - PFOS & benzo(a)pyrene
Sub-Site Areas Buruwan Park and Crescent Civil

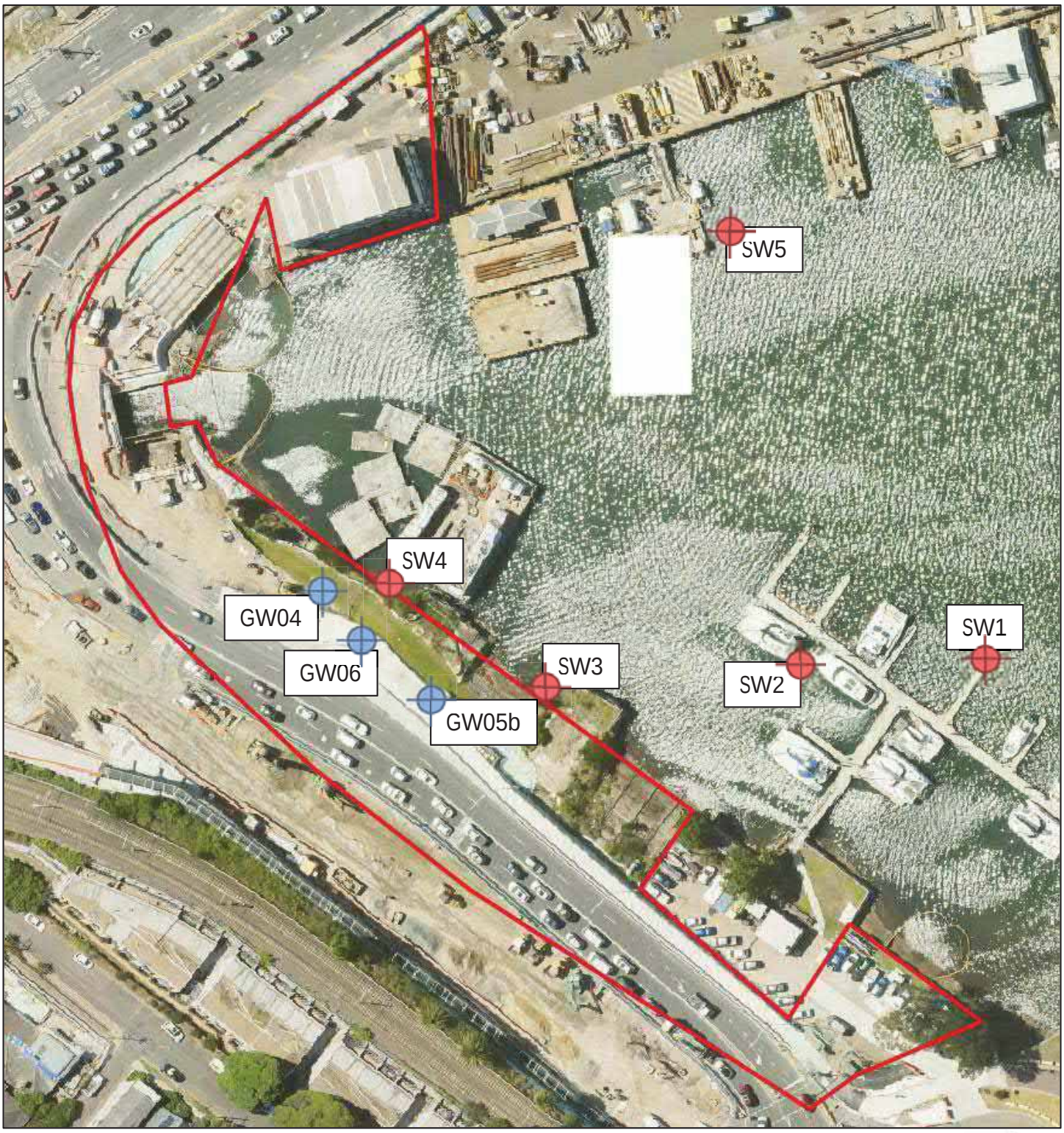


Figure 10 – May and July 2021 groundwater and surface water sampling locations
Sub-Site Area – Crescent Civil

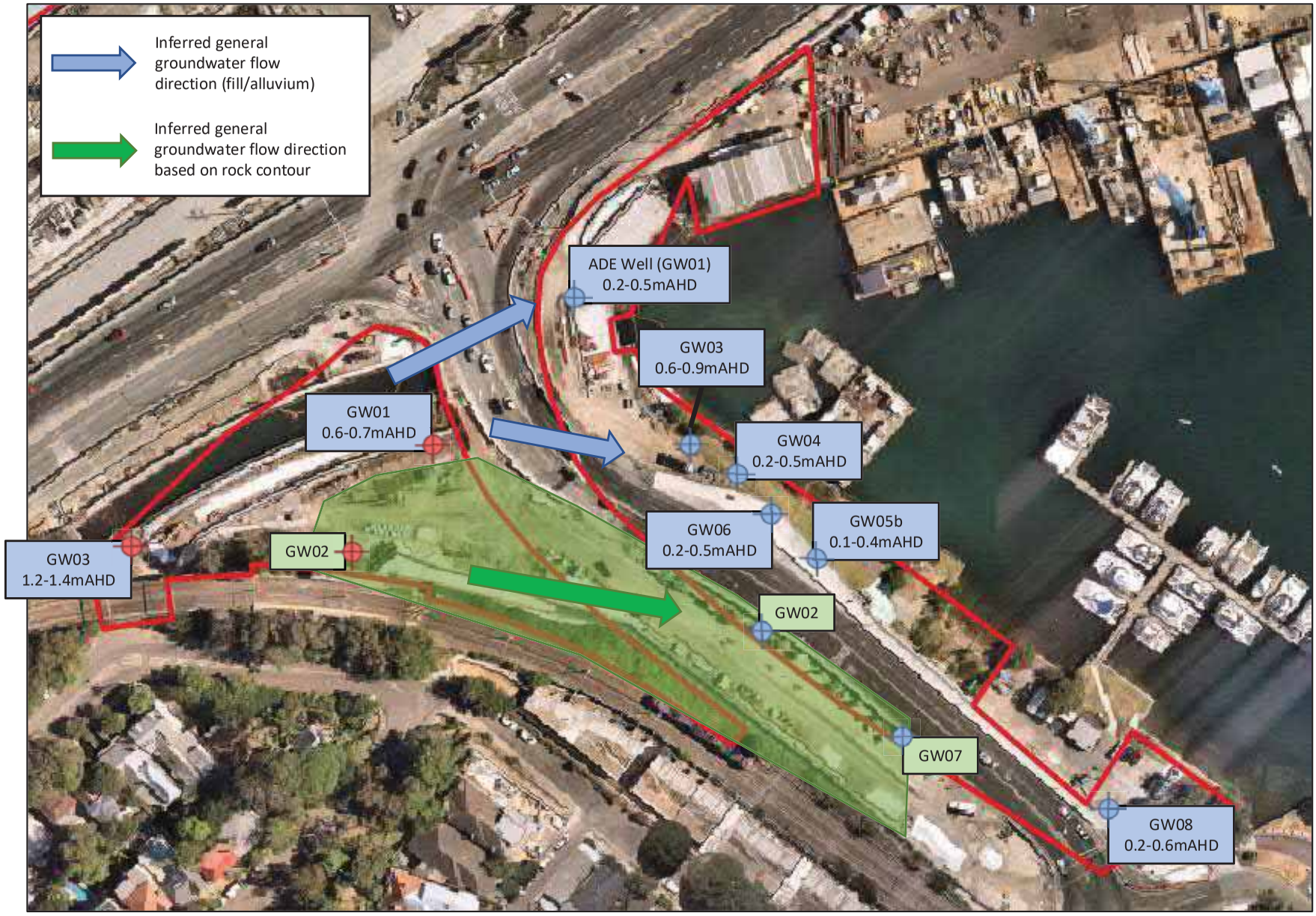


Figure 11 – Inferred groundwater flow direction
Sub-Site Areas Buruwan Park and Crescent Civil

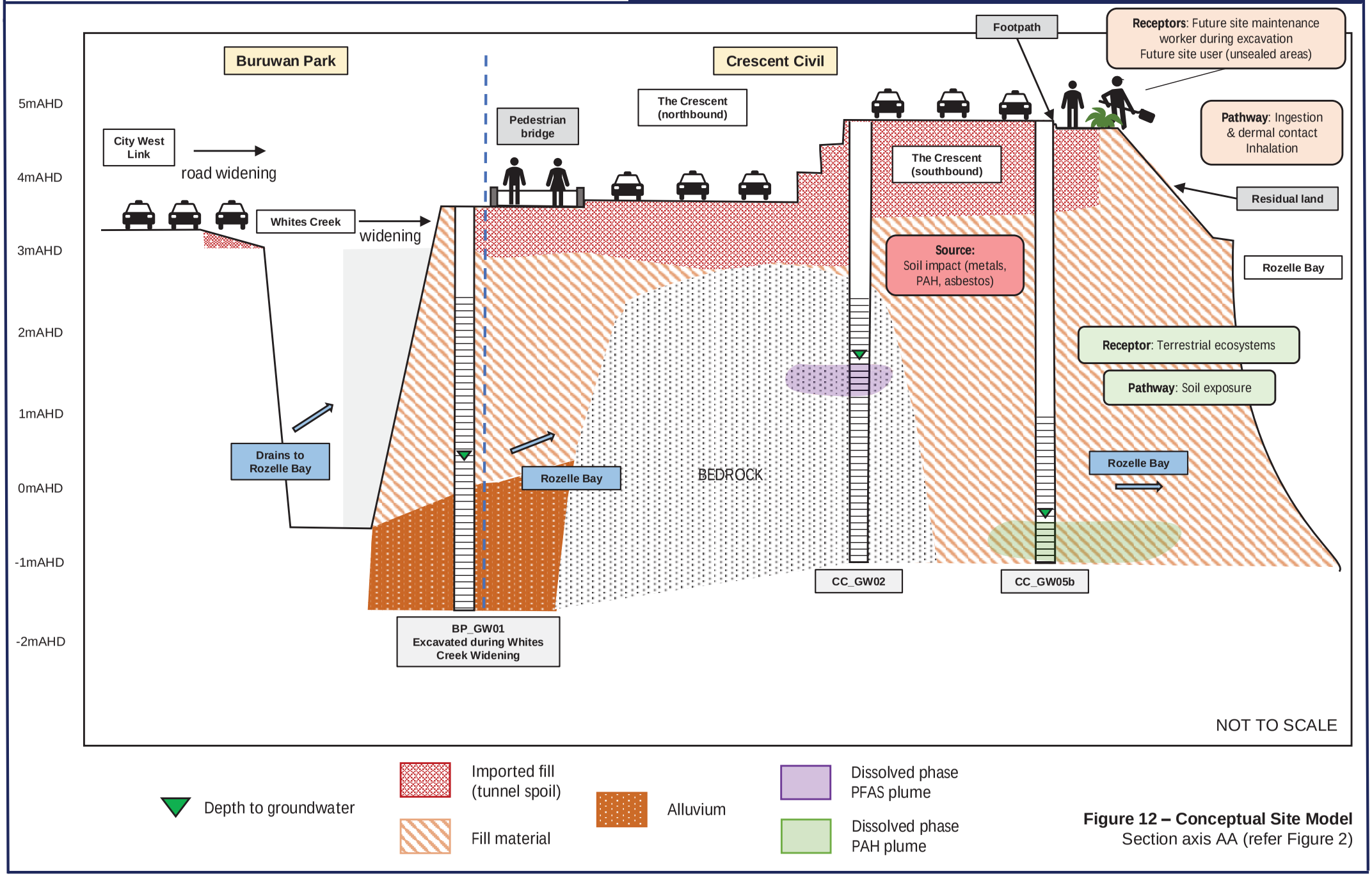
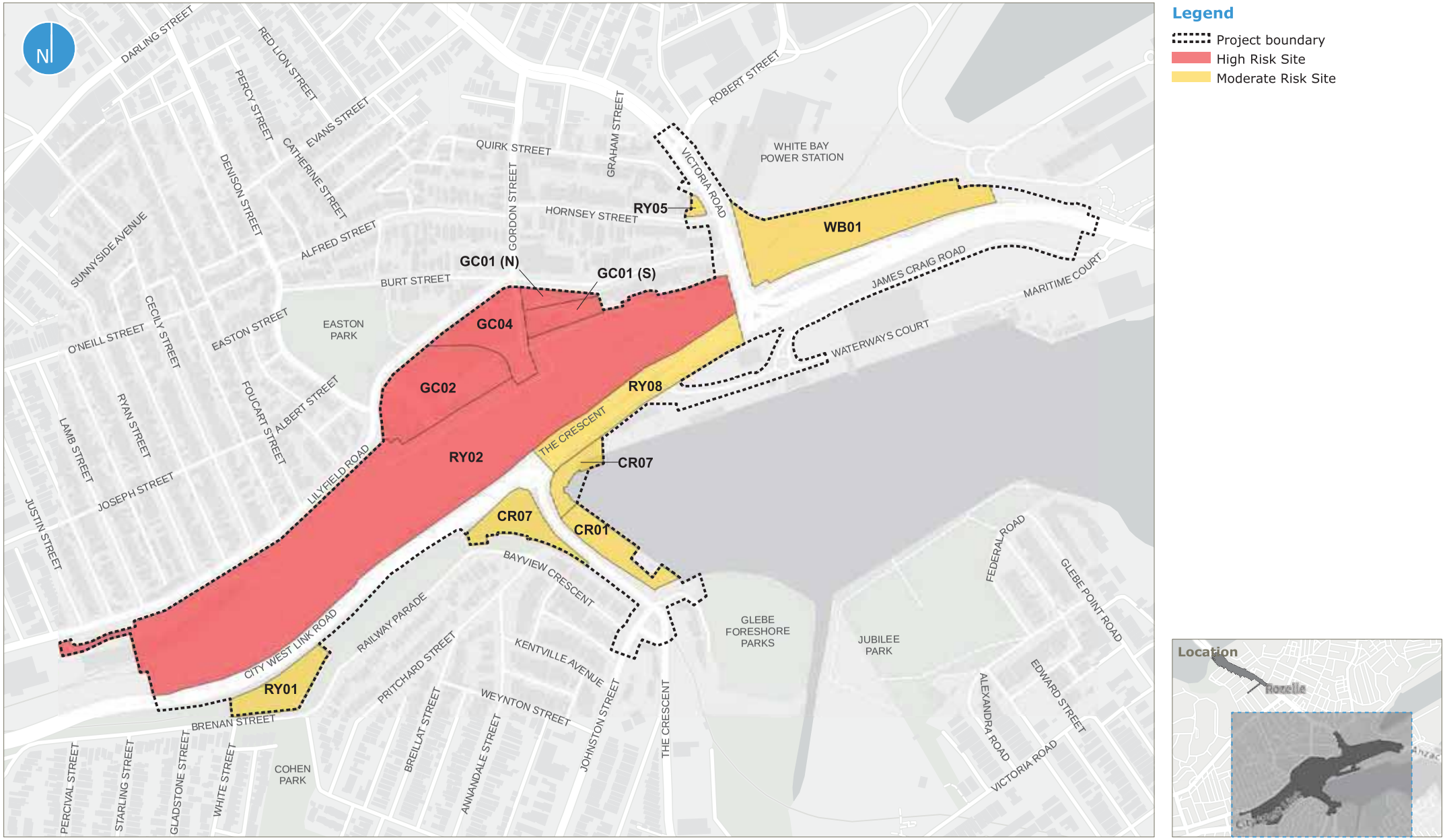


Figure 12 – Conceptual Site Model
Section axis AA (refer Figure 2)



Legend

- Project boundary
- High Risk Site
- Moderate Risk Site

0 200 400m

RAMBOLL

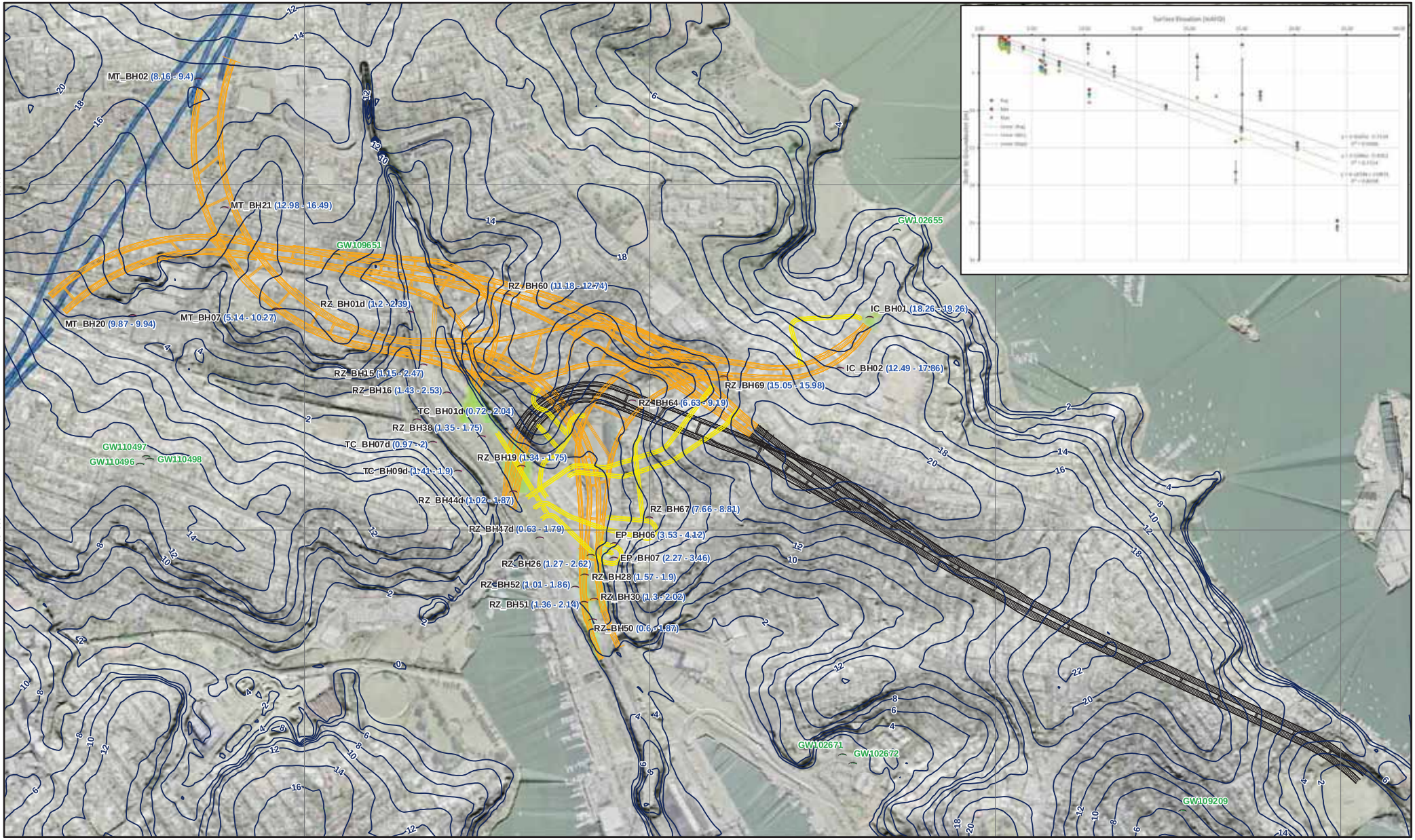
Figure 1 – Rozelle Interchange SAQP Site Locations

Overarching Sample Analysis and Quality Plan

PROJECT: WestConnex Stage 3B - Rozelle Interchange			CLIENT: JHCPB
SCALE: 1:5,000	A3	DRAWN BY: jchen	PROJECT #: 318000500
PAGE: 01 of 01	COORDINATE SYSTEM: GDA 1994 MGA Zone 56	REVIEW: VW	DATE: 30/07/2019

MAP #: F001 VER: 1

RAMBOLL AUSTRALIA - GIS MAP file : JHCPB3BRozelle_GIS_P006_OverarchingSAQP_F001_SAQPSiteLocations_RI_v1 | Z:\Projects\JHCPB 3B Rozelle\Spatial



Interpreted Groundwater Level Contours (m AHD) (See Inset)

M4 - M5 Link

Rozelle Interchange

Western Harbour Tunnel - Design Only Not Excavated

Ventilation Tunnels

Cut and Cover

NSW Groundwater Works

Groundwater Levels Observed in Hawkesbury Sandstone (m AHD)

Note: Where available, observed groundwater levels take precedence over interpreted contours.

Scale 1:10,500

0 0.05 0.1 0.2 0.3 0.4 0.5 Km

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

P S M

Created By: D.L.

Revision: B

Date: 25 Oct 2019

Paper Size: A3

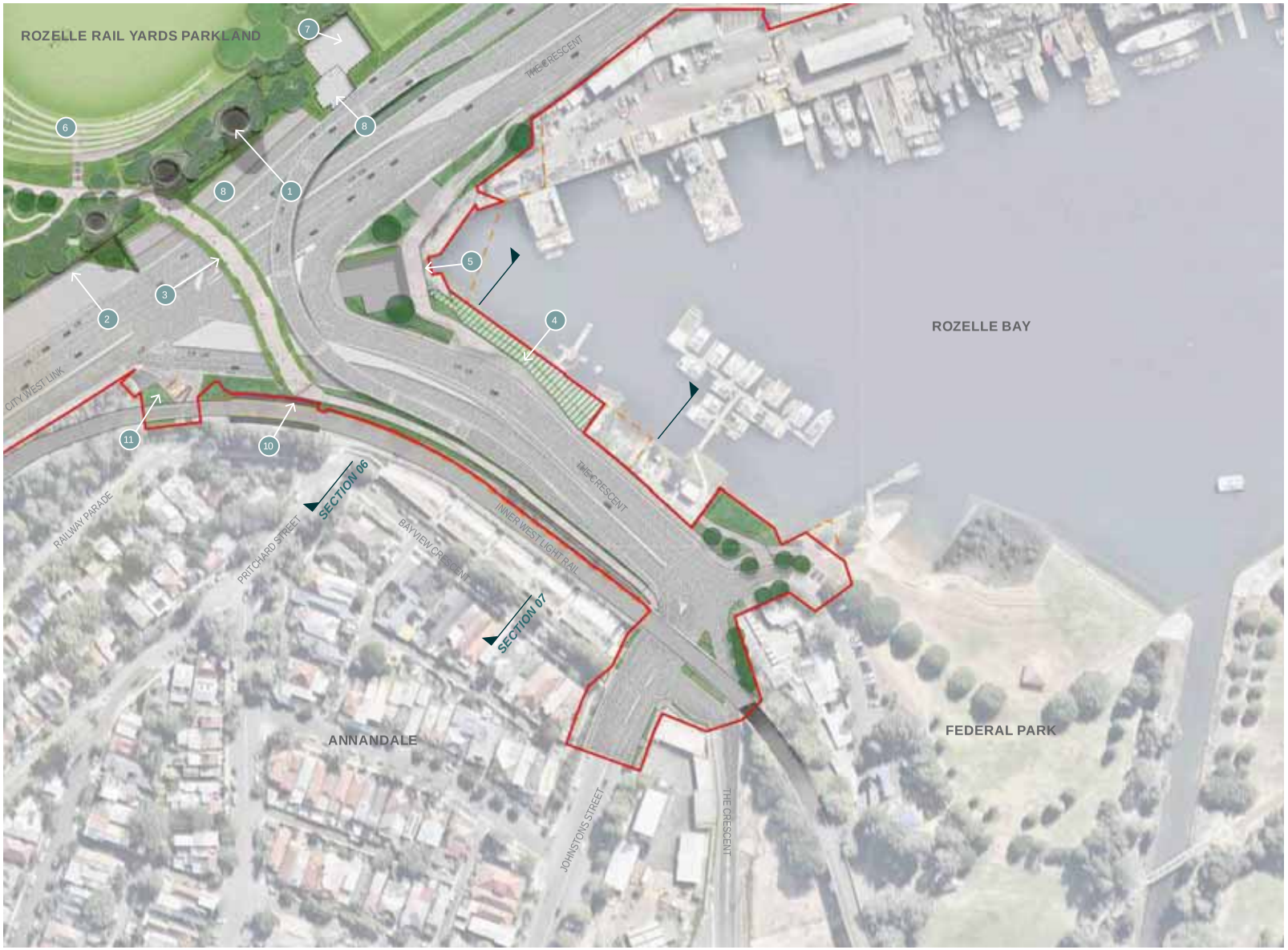
Rozelle Interchange & WHT Enabling Works Hydrogeological Interpretive Report

PROJECT WIDE INTERPRETED GROUNDWATER LEVEL CONTOURS

RIC-PSM-TRP-00-GE-010-009_B

Figure 5

Z:\Jobs 3001 to 4000\PSM3696\Eng\GIS\03_Figures\PSM3696-022R Final\Figure 4 Project Wide Interpreted Groundwater Level Contours.mxd



Key Project Elements

1. *Rozelle Ventilation Facility*
2. *Western Harbour Tunnel Portal*
3. *Green Link Bridge (subject to approval of modification SSI-7485-Mod-2)*
4. *Residual Land (subject to the Residual Land Management Plan)*
5. *Whites Creek Shared User Path Bridge*
6. *Landscape terraces*
7. *Sydney Trains Switching Station*
8. *Maintenance access and hardstand area*
9. *Western drainage channel*
10. *Rozelle Bay Light Rail Stop connection*
11. *Street pocket parks and landscaping*

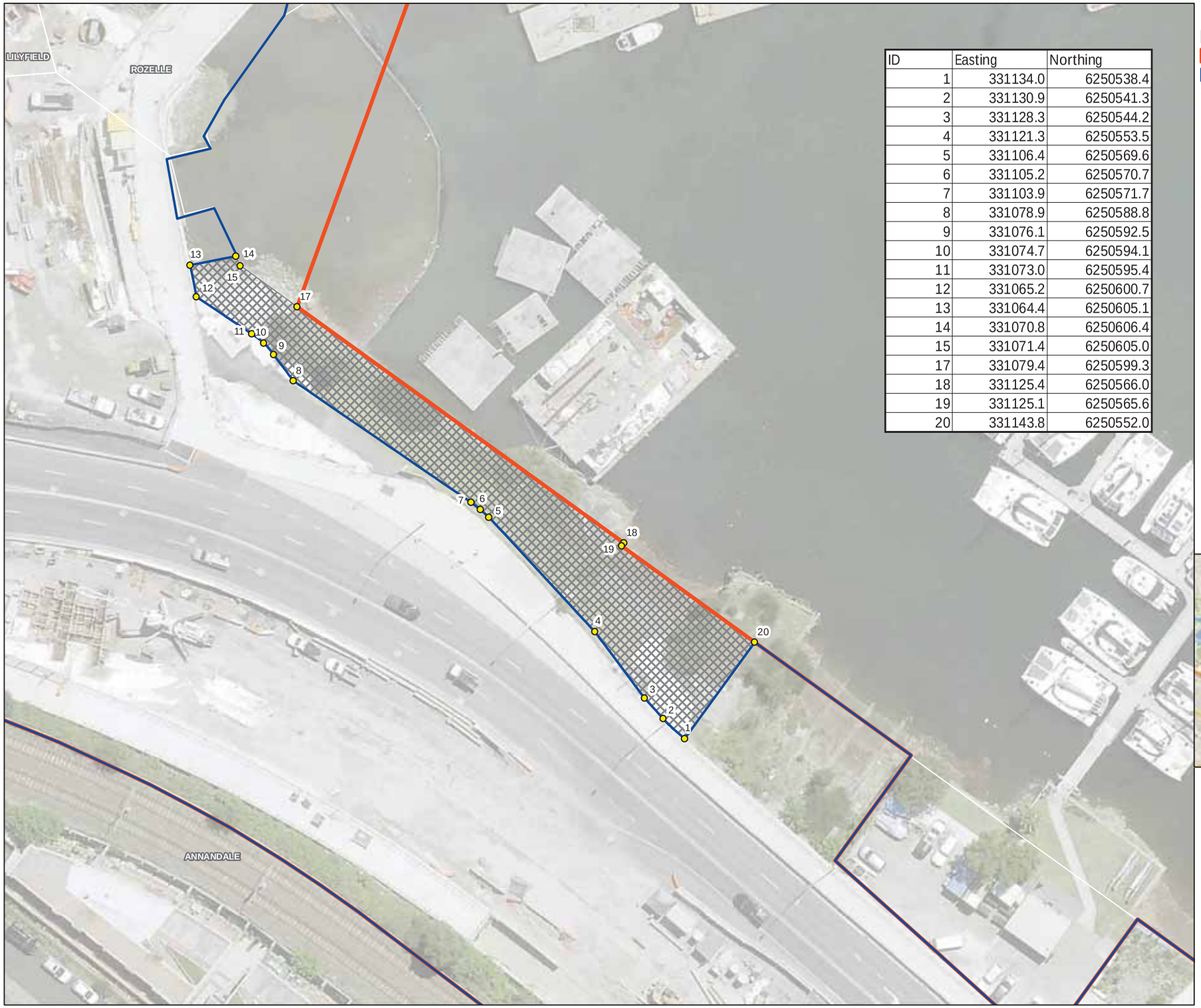
LEGEND

- *Proposed tree planting*
- *Sand ground cover for play areas*
- *Gravel paths*
- *Publicly accessible turf areas*
- *Landscape revegetation areas*
- *Constructed wetland*
- *Concrete Path*
- *Softfall ground cover areas for fitness and play*
- *Project Boundary*

Note: further detail description for parkland elements in Rozelle Rail Yards parkland is provided in Section 4.6

0 20 40 80m

Figure 4-14: Rozelle - Concept Plan - Drawing 4 of 4



ID	Easting	Northing
1	331134.0	6250538.4
2	331130.9	6250541.3
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17	331079.4	6250599.3
18	331125.4	6250566.0
19	331125.1	6250565.6
20	331143.8	6250552.0

Legend

- Residual Land
- Site Access Schedule boundary
- Contam Land Audit Areas

FINAL

ROZELLE INTERCHANGE
RESIDUAL LAND - CWL
SHEET 1 of 1

Metres
0 2.5 5 10 15 20

All coordinates quoted in MGA Zone 56 - GDA94 datum

This map is shown for reference purposes only. John Holland CPB Contractors Joint Venture provide this information "as-is" with the undertsanding that it is not guaranteed to be accurate, correct or complete and conclusions drawn from such information are the responsibility of the user. While every effort is made to ensure the information displayed is as accurate and current as possible, John Holland CPB Contractors Joint Venture will not be held responsible for any loss, damage or inconvenience caused as a result of reliance on such information or data.

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CONTACT US

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