

SITE CONTAMINATION AUDIT SYSTEM

SITE CONTAMINATION AUDIT STATEMENT



INSTRUCTIONS

Requirements relating to site contamination audit statements are prescribed in the *Environment Protection Regulations 2009* (the Regulations) and include the following:

Regulation 67—Site contamination audit report summary and statement

- (1) A site contamination audit report required under section 103Z(4)(a) and (b)(i) of the Act¹ must include a summary of the findings of the site contamination audit to which it relates that—
 - (a) is in the form set out in Schedule 3 clause 8 for site contamination audit statements; and
 - (b) is certified by the responsible auditor in accordance with the directions contained in the form set out in Schedule 3 clause 8.
- (2) A site contamination audit statement required under section 103Z(4)(b)(ii) of the Act in relation to a site contamination audit must comprise—
 - (a) a copy of the summary in the site contamination audit report relating to the audit and itself be certified by the responsible auditor in accordance with the directions contained in the form set out in Schedule 3 clause 8; or
 - (b) a photocopy, faxed copy or electronic copy of the summary as certified by the responsible auditor in accordance with the directions contained in the form set out in Schedule 3 clause 8.

Audit reports and audit statements are required to be provided to the EPA under section 103Z(4) of the Act, which requires that:

103Z—Requirements relating to site contamination audits

- (4) A site contamination auditor must, on the completion of each site contamination audit for which the auditor is the responsible auditor—
 - (a) provide a site contamination audit report to the person who commissioned the audit; and
 - (b) at the same time, provide—
 - (i) a site contamination audit report to the Authority; and
 - (ii) a site contamination audit statement to the council for the area in which the land to which the audit relates is situated and any prescribed body².

Penalty: Division 5 fine.

Where the audit subject to this form has been completed subject to a restricted scope, the audit report must be identified in the title as a 'Site contamination audit report (restricted scope)'.

An audit subject to a restricted scope is not suitable to be relied upon by a planning authority for the purpose of making decisions as to whether land is suitable for a sensitive use or another use or range of uses.

Please ensure that all sections of the form are completed, requested information and attachments (where necessary) are provided and labelled as indicated.

Please do not modify the form by moving or deleting sections or text, including these instructions.

Please ensure you are using the current version of the form (check the [EPA website](#)).

Refer to the current version of the EPA publication [Guidelines for the site contamination audit system](#), for further information. For any enquiries or questions relating to the site contamination audit system, including requests for editable versions of this form, contact the EPA Site Contamination Branch.

¹ *Environment Protection Act 1993*.

² Refer to Regulation 68 of the *Environment Protection Regulations 2009* regarding prescribed bodies.

Site contamination audit statements must be included in the relevant site contamination audit reports, and be sent to:

By mail

Manager, Site Contamination Branch
Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

Forms can also be emailed in pdf format to the Manager and an auditor's allocated EPA coordinator.

For any enquiries or questions relating to the site contamination audit system, contact the EPA Site Contamination Branch on:

Telephone: (08) 8204 2004

Email: <EPASitecontam@sa.gov.au>

SITE CONTAMINATION AUDIT STATEMENT

(under section 103Z of the *Environment Protection Act 1993*)

This statement contains the summary of the findings of the site contamination audit set out in the site contamination audit report titled:

Site Contamination Audit Report: Former Adelaide (Port Stanvac) Wharf and Northern Beach Area(referred to in this form as '*the report*')dated: **26 February 2021**

SECTION A: AUDITOR DETAILS	
Name of auditor*:	Darryl Strudwick
Auditor's accreditation number:	2009017
Name of auditor's company or business:	AECOM Australia Pty Ltd
SECTION B: AUDIT SITE DETAILS	
Auditor's project reference:	60221506, 60487638 & 60595790
EPA reference:	61605
Name of audit site [<i>if applicable</i>]:	Former Adelaide (Port Stanvac) Refinery – Wharf and Northern Beach Area
Address of audit site:	Refinery Road, Lonsdale, South Australia.
Name of council for area in which audit site is situated [<i>if within council area</i>]:	City of Onkaparinga
Provide the following particulars** relating to the relevant land and the audit: ** <i>If insufficient space, details may be annexed to this form.</i>	Crown Land: This area comprises a strip of beach area (leased and occupied by Mobil Oil Australia Pty Ltd) between the mean low tide mark and the mean high tide mark (red line shown on attached Figure F1), located immediately adjacent to the Mobil owned Adelaide Refinery area. The southern portion of the Audit area is referred to in this report as the Wharf portion of the Audit area. The northern portion of the Audit area is referred to in this report as the Northern Beach Area (NBA) portion of the Audit area. The approximate boundary (for investigation purposes) between the Wharf and NBA is shown in Figure F2.
certificates of title of all the relevant land and an indication of whether the audit site comprises all or part only of the land shown on or described in the certificates of title	Crown Land (The site does not have a Certificate of Title)
details sufficient to identify the location of the land, including section or allotment numbers, area and hundred and AMG co-ordinates (GDA 94, UTM 53 and 54)	MGA94, Zone 54, 269527 E 6111783 N

- if the audit site comprises part only of the land described in the certificates of title, or if there is no certificate of title for the land comprising the audit site— survey plans prepared by a licensed surveyor	A surveyed plan showing the current Site boundary is attached as Figure F1 .
- audit plans indicating the location and extent of the audit site (which must comply with the guidelines issued by the EPA from time to time)	
SECTION C: AUDIT DETAILS	
Name of owner of audit site:	Government of South Australia
Name of occupier of audit site:	Mobil Oil Australia Pty Ltd
Name, postal address and position of person who commissioned audit:	Ms Samantha Leow Team Lead Asia Pacific Project Execution ExxonMobil Environmental Services (EMES) The Audit has been completed for Mobil Oil Australia Pty Ltd. The contact details of the person receiving the report are as follows: Bogusia Smolenski Contractor Project Manager Programmed Skilled Workforce Ltd Mobil Oil Australia Pty Ltd
Indicate authority of person who commissioned audit:	EPA Yes ☐ No ☒ Owner Yes ☐ No ☒ Occupier Yes ☒ No ☐ Developer Yes ☐ No ☒ Other <i>[please specify]</i>
Indicate reasons for audit <i>[indicate all reasons]</i> :	Required under the Development Act 1993 Yes ☐ No ☒ Required under the Environment Protection Act 1993 Yes ☐ No ☒ Other <i>[please specify]</i> Agreement relating to termination of Lease of Crown Land with SA Government.
If audit was required under the Environment Protection Act 1993, provide EPA reference number:	N/A
Indicate audit purposes <i>[indicate all purposes]</i> :	Determining the nature and extent of any site contamination present or remaining on or below the surface of the site Yes ☒ No ☐ Determining the suitability of the site for a sensitive use or another use or range of uses Yes ☒ No ☐

	Determining what remediation is or remains necessary for a specified use or range of uses Yes ☒ No ☐ <i>[NB: an audit may be required for all of the above purposes.]</i>
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If audit was required for development plan consent under the *Development Act 1993*, provide:

Name of relevant planning authority:	City of Onkaparinga
Development application number [if known]:	N/A
Site zoning:	N/A
Proposed site use:	Recreational / Open Space

Date of commencement of audit:	<u>Initial notification</u> 19 February 2016 <u>Renotification (change of Audit boundary)</u> 30 July 2020 <u>Termination of the initial notification</u> 7 October 2020
Date of notification of commencement of audit to EPA:	<u>Initial notification</u> 19 February 2016 <u>Renotification (change of Audit boundary)</u> 30 July 2020 <u>Termination of the initial notification</u> 7 October 2020
Date of completion of audit:	26 February 2021

SUMMARY OF FINDINGS

Background

The site that is subject to this site contamination audit is described as the Wharf and Northern Beach Area of the Former Adelaide Refinery. This area comprises a strip of beach area (leased and occupied by Mobil Oil Australia Pty Ltd) between the mean low tide mark and the mean high tide mark (red line shown on attached **Figure F1**), located immediately adjacent to the Mobil owned Adelaide Refinery area. The southern portion of the audit area is referred to in this statement as the Wharf portion of the audit area. The northern portion of the audit area is referred to in this statement as the Northern Beach Area (NBA) portion of the audit area. The approximate boundary (for investigation purposes) between the Wharf and NBA is shown on the attached **Figure F2**.

The following assessment reports were prepared by the site assessors and reviewed by the auditor:

- Coffey (2008b), Post Phase 2 ESA (Additional Wells), 19 June 2008
- Golder (2009), Wharf Area Investigation Report, 11 May 2009.
- Golder (2013d) Environmental Site History Review, Adelaide Refinery, Lonsdale, South Australia, 26 July 2013
- Golder (2013e), Wharf Area Investigation Report., 16 December 2013.
- Kleinfelder (2015c), Technical Scope for Wharf Area Multi-Phase Extraction Event, Kleinfelder Reference ADL15R22242, 03 August 2015.
- Kleinfelder (2015d), Wharf Multi Phase Extraction Event, Kleinfelder Reference ADL15R25369, 25 September 2015.
- Kleinfelder (2015h), Assessment Criteria Matrix, Kleinfelder Reference ADL15L25623, 30 December 2015.

- Kleinfelder (2016a), Wharf Perfluorinated Compound Groundwater Assessment, Kleinfelder Reference ADL15R25368, 4 January 2016.
- Kleinfelder (2016b), Groundwater Assessment Criteria Matrix, 21 March 2016.
- Kleinfelder, (2016d), Adelaide Refinery Wharf Area Conceptual Site Model, Beneficial Use Assessment and Site Specific Risk Assessment (aka Wharf VSCAP, 2016), 31 October 2016, Kleinfelder Reference ADL16R33671
- Kleinfelder (2017a), 2016 Interim Groundwater Monitoring Event, Kleinfelder Reference ADL16R35131, 25 July 2017.
- Kleinfelder (2017b), Wharf Area Test Pitting Soil Investigation, Kleinfelder Reference ADL15R16073, 14 August 2017.
- Kleinfelder (2017c), Soil Gas Investigation Factual Report, Kleinfelder Reference ADL15R22402, 22 August 2017
- Kleinfelder (2018a), Aqueous Film Forming Foam Site History Review, Kleinfelder Reference ADL15R28166, 26 April 2018.
- Kleinfelder (2018b), Soil Vapour Monitoring Event (March 2016), Kleinfelder Reference ADL16R41563, 02 May 2018.
- Kleinfelder (2018c), Soil Vapour Monitoring Event (October 2015), Kleinfelder Reference ADL15R30842, 28 May 2018.
- Kleinfelder (2018d), NBA Marine Interface Monitoring and Gully Runoff Sampling, Kleinfelder Reference ADL17R68047, 12 July 2018.
- Kleinfelder (2018e), NBA Marine Interface Monitoring Sampling, (November 2017), Kleinfelder Reference ADL17R69347, 12 July 2018.
- Kleinfelder (2018f), Northern Beach Area (NBA) Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Assessment (Further), .Kleinfelder Reference ADL17R56940, 19 July 2018.
- Kleinfelder (2018g), Wharf Area - Limited Groundwater Monitoring Event, Kleinfelder Reference ADL17R69990, 23 July 2018.
- Kleinfelder (2018h), Northern Beach Area (NBA) Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Assessment, Kleinfelder Reference ADL16R49761, 27 July 2018.
- Kleinfelder (2018j), Wharf Area Tracer Injection and Aquifer Pumping Test, Kleinfelder Reference ADL15R1537, 11 September 2018.
- Kleinfelder (2018k), NBA Conceptual Site Model (draft) Kleinfelder Reference ADL18L83918, 13 September 2018.
- Kleinfelder (2018l), Wharf Area - Dilution Modelling, Kleinfelder Reference ADL16R50562, 24 October 2018.
- Kleinfelder (2018m), Groundwater Management Plan (draft), Kleinfelder Reference ADL18R87299, 21 December 2018.
- Kleinfelder (2018n), October 2018 Northwestern Investigation Area Groundwater Monitoring Event, 19 December 2018.
- Kleinfelder (2019a), 2015 Annual Groundwater Monitoring Event, Kleinfelder Reference ADL15R30840, 11 April 2019.
- Kleinfelder (2019b), Wharf Road - Soil Investigation, Kleinfelder Reference ADL17R56941, 11 June 2019.
- Kleinfelder (2019c), Northwestern Investigation Area Monitoring Well Installation Report, Kleinfelder Reference ADL18R83796, 14 June 2019.
- Kleinfelder (2019d), Northwestern Investigation Area Groundwater Monitoring Event Report , Kleinfelder Reference ADL18R83797, 23 September 2019.
- Golder (2019), Technical Approach for 2020 Survey, Biological Survey of Intertidal Assemblages on the Rocky Shore, Adelaide Refinery, Golder Reference 19132707, 20 December 2019.
- Kleinfelder (2020a), Wharf Area – 2018 Groundwater Monitoring Event, Kleinfelder Reference ADL18R87294, 27 February 2020.

- Kleinfelder (2020b), Northern Beach Area (NBA) Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Assessment (August 2019), Kleinfelder Reference ADL19R99536, 5 March 2020.
- Kleinfelder, (2020c), Wharf Area & NBA, Environmental Investigation Summary Report, Adelaide Refinery, 2 September 2020, Kleinfelder Reference ADL18R87298, 2 September 2020.
- Golder (2020), Former Adelaide Refinery – Port Stanvac, Marine Biological Survey, Golder Reference 19132707-004 Rev 0, 26 May 2020.
- Geosyntec Consultants (2020), Human Health and Ecological Risk Assessments, Former Adelaide Refinery, Northern Beach Area, July 2020.

Conceptual site model

Wharf Area CSM

The initial site conceptual site model (CSM) for the Wharf area is provided in:

- Kleinfelder (2016d), Adelaide Refinery Wharf Area Conceptual Site Model, Beneficial Use Assessment and Site Specific Risk Assessment, 31 October 2016 (aka Wharf VSCAP, Kleinfelder, 2016d).

This report includes the description of the site environmental setting, site hydrogeology, natural groundwater quality, groundwater use, potential beneficial uses, potentially contaminating activities, nature and extent of contamination, LNAPL CSM, fate and transport, natural attenuation, source, pathway and receptor relationships and a human health and ecological risk assessment.

The final CSM for the Wharf area incorporated more recent site data and is provided in:

- Kleinfelder, (2020c), Wharf Area & NBA, Environmental Investigation Summary Report, Adelaide Refinery, 2 September 2020, Kleinfelder Reference ADL18R87298

Data collected between the initial and final CSM for the Wharf area included the soil data collected along the Wharf Road reported in Kleinfelder, (2019b), the limited groundwater monitoring event data collected in 2017 and reported in Kleinfelder, (2018g) and the October 2018 groundwater monitoring event reported in Kleinfelder (2020a). In addition, surface water dilution modelling using CORMIX was conducted to estimate the concentrations of PFOS in the immediate vicinity of potential future discharge to the Gulf St Vincent (Kleinfelder, 2018g).

It is noted that these CSMs (Kleinfelder, 2016d and Kleinfelder, 2020c) relate to and include data from the broader Wharf area at the former refinery site, including the Wharf portion of the Wharf and NBA Audit area.

NBA CSM

SA EPA issued a letter to Mobil, dated 10 June 2016, stating that an ecological risk assessment was required for the NBA, specifically to assess the risks associated with PFAS identified in this area. To inform this work, a separate CSM was subsequently prepared for the NBA, namely:

- Kleinfelder Australia Pty Ltd (2018k) NBA Conceptual Site Model, 13 September 2018 (draft)³.

This CSM was developed specifically to investigate the pathway for PFAS compounds from the fire training and operational areas in the Plateau area, via the erosional gully to the NBA. The geographical extent of the NBA PFAS CSM overlaps and complements the CSM for the Wharf area.

This NBA CSM was further refined using data from further investigations conducted in the Northwestern Investigation Area of the Plateau (Kleinfelder, 2019c and 2019d), as well as with the results of an additional round of groundwater and surface water sampling conducted in August 2019 (Kleinfelder, 2020b).

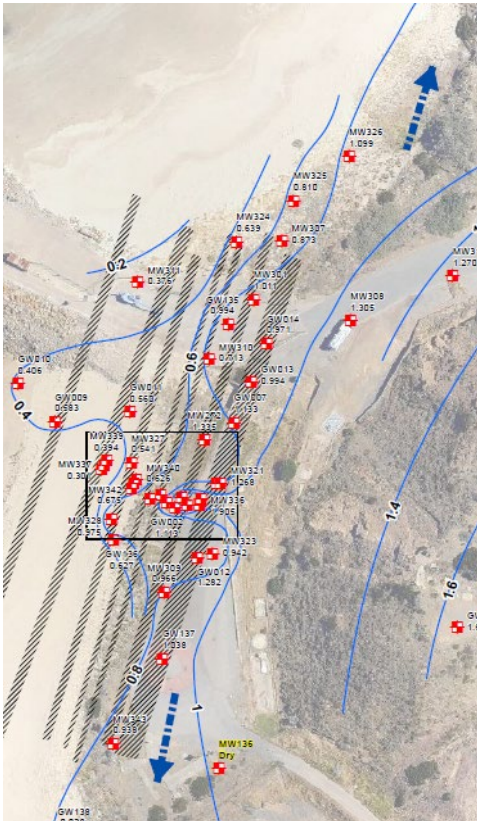
The final version of the NBA CSM is provided in:

- Kleinfelder, (2020c), Wharf Area & NBA, Environmental Investigation Summary Report, Adelaide Refinery, 2 September 2020, Kleinfelder Reference ADL18R87298

A summary of the relevant CSM information for both the Wharf and the NBA, as per the checklist in Appendix 4 of the GAR (SA EPA, 2019) is provided below. The auditor has reviewed the CSM information provided in the reports identified above and can confirm that the information provided is generally adequate to provide an understanding of the site.

³ This report was finalised as part of Kleinfelder, (2020c), Wharf Area & NBA, Environmental Investigation Summary Report, Adelaide Refinery, 2 September 2020, Kleinfelder Reference ADL18R87298

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
Known and potential sources of contamination including the mechanisms of contamination.	<u>Wharf - Known and potential sources of contamination</u> A description of the potential sources of contamination at the Wharf portion of the audit area are provided in Section 11 of Kleinfelder (2016d) and Section 3.1.2 and 3.1.3 of Kleinfelder, (2020c). Much of the information in relation to former Wharf infrastructure, processes and activities was obtained from: • Golder Associates (2013d), Environmental Site History Review, Adelaide Refinery, Lonsdale, South Australia, 26 July 2013; and • Kleinfelder Australia Pty Ltd (2018a), Aqueous Film Forming Foam Site History Review, 26 April 2018. Potentially contaminating activities which are known and potential sources of contamination in the Wharf portion of the audit area are: • Bulk shipping facilities (crude oil and refined product transfer lines through audit area) • Desalination plants (pilot plant) • Construction and demolition waste (asbestos) • Wastewater storage, treatment or disposal (septic tanks) • Storage and use of AFFF (AFFF line along wharf) In addition, the following potentially contaminating activities occurred in the wider Wharf area (i.e. off-site, adjacent to the audit area): • Bulk shipping facilities (transfer lines east of the audit area up to the Plateau) • Electrical substations • Electrical transformer or capacitor works • Wastewater storage, treatment or disposal (Ballast Water storage in the Ballast Tank Farm, septic tanks) • Storage and Use of AFFF - 1 AST containing AFFF (unknown volume) was located near the pipe rack east of Wharf Road. A discrete source of LNAPL impacts at the Wharf area is not known (in terms of a documented discrete release), however it likely to have been related to a historical leak from the product and crude lines at the base of the cliff in the wider Wharf area (i.e. off-site, to the east of the audit area). Fingerprinting conducted in 2010 concluded that the product had been in the groundwater for between 24 and 36 years (Golder, 2009). The historic distribution of petroleum hydrocarbons identified in soil (including bore logs) and groundwater in the Wharf portion of the audit area (in particular close to the Wharf structure and west of the ballast tank farm) indicates a number of historic sources are likely to have existed during the operation of the refinery (e.g. crude oil and hydrocarbon product pipes on the wharf adjacent to the beach). The exact source and release date of PFAS into the soil and groundwater in the Wharf area is also not known, however based on the distribution of PFAS impacts it is likely to primarily be associated with the historical AFFF storage infrastructure which was located immediately east of the audit area. Kleinfelder assumed that the latest date for a spill to have occurred was 2003 as the use of AFFF ceased in 2003 during the mothballing of the site. The highest concentrations of PFAS in groundwater were identified close to and to the north of the former AFFF AST. Lower concentrations of PFAS (at least 2 orders of magnitude) are present in groundwater across the wharf portion of the audit area, indicating the potential for other sources of PFAS at the site (e.g. use of water containing PFAS following hydrocarbon spills at the site).

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	<u>Wharf area - mechanisms of contamination</u> The mechanism of groundwater flow and distribution of contamination in the Wharf area is controlled by the geology of the site. The Wharf portion of the audit site is bounded to the west (and partially to the north and south) by the Gulf St Vincent and to the east by steep topographic features. The geology of the site is characterised by shallow sediments (i.e. beach sands) overlying almost vertically dipping siltstone and quartzite bands that are oriented (i.e. geological strike) parallel to the beach (i.e. NNE – SSW). The water-table across the site (except near the level of the surface water at the beach) occurs within the fractured rock aquifer. While the hydraulic gradient is east to west, the orientation and nature of the bedrock (fine grained siltstone beds) limits groundwater flow in that direction. Groundwater flow (and the distribution of groundwater contamination within the fractured rock aquifer) occurs predominately along the fractured quartzite bands in a NNE – SSW direction (see plate below). Discharge of groundwater from the fractured rock aquifer is expected to occur where the quartzite bedding planes intersect with the marine environment. The closest potential groundwater discharge location is considered to be at a projection of bedrock located 200 m north of the rock groyne, see (plate below). Dye tracing tests conducted by Kleinfelder (2018j) in the Wharf area indicated that groundwater was moving preferentially to the north, and to a lesser extent to the south, along the quartzite bands. Pumping tests also conducted by Kleinfelder (2018j) confirmed that drawdown in wells along the geological strike (i.e. NNE – SSW) was greater than that across strike (i.e. E- W). This concept has been supported by the distribution of LNAPL, dissolved phase hydrocarbons and PFAS in groundwater during various GMEs. Dissolved phase hydrocarbons and PFAS have not been detected in monitoring wells at the point of discharge (apart from TMW012 where detectable PFAS was reported at the closest potential discharge location).  NNE – SSW trending quartzite beds, with inferred NNE – SSW groundwater flow, (Kleinfelder 2016)

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	 Discharge area of groundwater in Wharf Area (Kleinfelder 2016). <u>NBA</u> A description of the potential sources of contamination at the NBA site are provided in Section 3.1.4 of Kleinfelder, (2020c). Potentially contaminating activities which are known and potential sources of contamination in the NBA portion of the audit area are: • Wastewater storage, treatment or disposal (southern section – ST9; northern section - WWTP discharge and refinery site runoff). • Construction and demolition waste (asbestos containing material observed in one localised area after storm activity) In addition, the following potentially contaminating activities occurred off-site at the adjacent former refinery. • Firefighting training areas • Use of AFFF (containing PFAS) in response to fires, spills of flammable liquids, fire system testing <i>etc.</i> The source of PFAS in soil and groundwater at the NBA is attributed to historic discharge and the intermittent flows of stormwater run-off (containing PFAS from the operational areas of the former refinery to the east of the NBA) via overflow and seepage from the Northern Holding Pond (NHP) and Frog Pond, which acted as stormwater retention ponds. The PFAS impacted water flowed down the deeply incised erosional gully located at the northern end of the NBA. The PFAS ultimately became emplaced in the soil and groundwater at the base of the gully. A number of smaller gullies are present along Wharf Road between the northern NBA area and the Wharf area that receive runoff from the Plateau. The potential for impacted stormwater run-off occurring down these gullies from the refinery was assessed in Kleinfelder (2019b). Isolated, minor impacts of PFAS were reported. <u>NBA - mechanisms of contamination</u> Kleinfelder conducted a number of investigations of soil, groundwater, marine interface monitoring and surface water runoff sampling (Kleinfelder, 2018h; Kleinfelder, 2018f; Kleinfelder, 2018d; Kleinfelder, 2018e; and Kleinfelder, 2020b), to investigate and refine the conceptual model in relation to the mechanism of contamination transport of PFAS down the erosional gully, emplacement of PFAS into sediments and into the fractured rock aquifer of the NBA and the potential subsequent transport to the marine discharge point of Gulf St Vincent. These works confirmed that shallow groundwater in the unconsolidated sediments of the NBA was being recharged by surface water flow down the erosional gully and was discharging into the sea. The relatively lower concentrations of PFAS in the shallow wells closer to the sea (as opposed to closer to the base of the gully) indicated that dilution was occurring due to infiltrating seawater. However, this was

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	considered to be a complete source-pathway-receptor scenario and a HHRA was conducted to assess the risk to the marine environment and human receptors. The further investigations also confirmed that the predominant recharge mechanism into the fractured rock aquifer was vertical migration through the overlying sediments, however, as per the Wharf area, the westerly flow of groundwater in the fractured rock aquifer is limited by the north-south strike of the bedding planes in the siltstone and therefore groundwater flow is likely to be predominantly NNE - SSW, rather than east-west. In addition, the concentrations of PFAS and TDS in groundwater from wells closest to the Gulf show that seawater infiltrates at high tide resulting in dilution of the water in the fractured rock aquifer. This accounts for the relatively lower concentrations of PFAS compounds in the shallow wells closest to the sea. Kleinfelder concluded that this pathway (i.e. east to west groundwater flow within the fractured rock aquifer) was incomplete. The investigations also concluded that at high tide and during large storm events, the pathway of PFAS impacted surface water discharging directly into the sea is complete. However, Kleinfelder, (2020c) concluded that this pathway is incomplete most of the time as it requires the coinciding of a high rainfall event and a high tide event. It is noted that the use of PFAS compounds at the site ceased in 2003 and therefore the primary source of PFAS has been removed. To further reduce the potential for PFAS impacted run-off to reach the NBA, the stormwater network pipes beneath the refinery site were truncated in 2019 and stormwater from the former operational areas of the refinery is retained in the fuels tank farm area. The Northern Holding Pond no longer receives stormwater flows from the former main operational areas of the refinery site. Kleinfelder also confirmed that any water falling on the former fire training area is captured by the oily water sewer system and runs into the API separator at the WWTP. The separator is connected to the NHP via a manual overflow valve which can be opened if the separator becomes full. Kleinfelder has reported that the incidental rainfall on the former fire pad is minimal, the valve has not been opened and the NHP remains at less than 10% capacity as of early 2021. Kleinfelder, (2020c) reported that standing water in the NHP was less than 100 mm in the winter of 2019, however as a precautionary measure the NHP was lined with a low permeability membrane in January 2020 to inhibit surface water infiltration into the underlying bedrock and to prevent seepage from the pond's walls directly into the erosional gully (as had been previously observed to have occurred in spring 2018, Kleinfelder (2020c). The potential migration pathway of surface water infiltrating into the underlying fractured bedrock in the refinery area was investigated in Kleinfelder (2019c) and Kleinfelder (2019d) but was not considered to be the mechanism by which PFAS has become emplaced in the sediments and fractured rock aquifer of the NBA (overland flow through the erosional gully, as described above, is the main mechanism). The surface water inlet to the Frog Pond has been closed and it is reported in Kleinfelder, (2020c) that this feature does not currently collect stormwater. The erosional gully is a natural drainage feature, therefore intermittent overland flow continues to occur (containing low concentrations of PFAS) during large storm events. According to Kleinfelder, (2020c) surface water is not observed in the erosional gully during light rainfall events.

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
Potentially affected media	<u>Wharf</u> Potentially affected media include soil and soil vapour, groundwater and the marine waters of the Gulf St Vincent. <u>NBA</u> Potentially affected media include shallow soil, surface water runoff, groundwater and the marine waters of the Gulf St Vincent.
Human and ecological receptors	<u>Wharf</u> Table 10.3 of Kleinfelder, (2020c), identifies the human and ecological receptors identified at the Wharf: Human: • Future recreational users of the Wharf area • Future intrusive workers of the Wharf area • Future recreational users of the Gulf St Vincent Ecological: • Marine ecosystems of the Gulf St Vincent <u>NBA</u> Table 10.3 of Kleinfelder, (2020c) identifies the human and ecological receptors at the NBA: Human: • Future recreational users of the NBA • Future intrusive workers of the NBA • Future recreational users of the Gulf St Vincent Ecological: • Marine ecosystems of the Gulf St Vincent including secondary consumers which feed on aquatic organisms. In addition, the Human Health and Ecological Risk Assessment conducted by Geosyntec (2020) also identified the following receptors which can be applied to both the NBA and Wharf areas: • Future recreational users (fishers) of the Gulf Saint Vincent ingesting PFAS (via the consumption of sportfish or shellfish) from discharge from groundwater to marine environment.
Potential and complete exposure pathways	<u>Wharf</u> Table 10.3 of Kleinfelder, (2020c), identifies the following potential and complete exposure pathways: • Future recreational users of the Wharf area - direct contact with COPCs in beach sand /groundwater - vapour inhalation of COPCs in beach sand/groundwater - ingestion of COPCs in beach sand /groundwater • Current/Future intrusive workers of the Wharf area - direct contact with COPCs in beach sand /groundwater - vapour inhalation of COPCs in beach sand /groundwater - ingestion of COPCs in beach sand /groundwater • Future recreational users of the Gulf St Vincent - ingestion of COPCs from discharge of groundwater to marine environment - ingestion of PFAS from discharge of groundwater to marine environment - aesthetic impacts of COPCs from discharge of groundwater to marine environment

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	- Marine ecosystems of the Gulf St Vincent - ingestion of COPCs from discharge of groundwater - ingestion of PFAS from discharge of groundwater <u>NBA</u> Table 10.2 of Kleinfelder, (2020c) identifies the following potential and complete exposure pathways: - Future recreational users of the NBA area - direct contact with PFAS in soil (beach sand) /groundwater - ingestion of PFAS in soil (beach sand)/groundwater - Current/future intrusive workers of the NBA area - direct contact with PFAS in soil (beach sand) /groundwater - ingestion of PFAS in soil (beach sand)/groundwater - Future recreational users of the Gulf St Vincent - ingestion of PFAS from discharge from groundwater to marine environment - Marine ecosystems of the Gulf St Vincent - ingestion of PFAS from discharge from groundwater and surface water From the above, Kleinfelder, (2020c) identified the following complete (or potentially complete) in the future exposure pathways for further investigation: <u>Wharf</u> - Future recreational users of the Gulf Saint Vincent - ingestion of PFAS from discharge from groundwater to marine environment. <u>NBA</u> - Future recreational users of the NBA area - direct contact with PFAS in soil (beach sand) /groundwater - ingestion of PFAS in soil (beach sand)/groundwater - Marine ecosystems of the Gulf Saint Vincent including secondary consumers which feed on aquatic organisms. - ingestion of PFAS from discharge from groundwater These were assessed by further investigations such the surface water mixing modelling (Kleinfelder (2018I) and Human Health and Ecological Risk Assessment (Geosyntec, 2020). In addition, the HHERA (Geosyntec, 2020) also identified the following potentially complete exposure pathway which can be applied to both the NBA and Wharf area. - Future recreational users (fishers) of the Gulf Saint Vincent - ingestion of PFAS (via the consumption of sportfish or shellfish) from discharge from groundwater to marine environment.
Chemicals of concern	BTEXN TPHs / TRHs PAHs Phenols VOCs and SVOCs Metals (copper, chromium, lead, mercury, zinc) Tin/lead in paint and anti-fouling paint potentially organotin, tributyltin residues Potential Asbestos Containing Material (ACM)

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	Faecal coliforms, nitrates, nitrites, phosphates, ammonia, sulphides, Per- and Poly Fluorinated Alkyl Substances (PFAS) including: • PFOS • PFHxS • PFOA • Fluorotelomer sulfonate (6:2 FtS) • Fluorotelomer sulfonate (8:2 FtS).
Nature of chemical substances	Wharf LNAPL transmissivity was estimated by Golder (2009) as having an average of 0.0037 m²/d. Kleinfelder (2016d) interpreted this data as being below the hydraulic recovery limit (0.0093 – 0.074 m²/day) from The Interstate Regulatory and Technology Council (IRTC), 2009 which indicated that LNAPL mobility was likely to be limited. The chemical composition of the LNAPL in the wharf area comprises crude oil, fuel oil, or a mixture of lubricating oil, diesel fuel and kerosene. Measured viscosity and fingerprinting of the LNAPL confirmed this composition. LNAPL acts as an ongoing source of dissolved phase hydrocarbon contamination. Outside of the LNAPL plume, dissolved phase hydrocarbon impacts are likely to undergo natural attenuation. Kleinfelder, (2016b) provided an assessment of the primary, secondary and tertiary evidence to indicate that natural attenuation of the dissolved phase hydrocarbon plume is occurring in the Wharf area. Kleinfelder (2016d) has assessed trends in LNAPL thickness over time as well as dissolved phase concentrations. Primary evidence as reported in Kleinfelder (2016d) indicates that the dissolved phase plume is stable or shrinking. Mann Kendall trend analysis was conducted on wells within the dissolved phase plume to identify trends as part of Kleinfelder (2016d). The latest groundwater data collected at the Wharf portion of the audit area (October 2018) was subjected to Mann Kendall analysis as part of Kleinfelder (2018m) to provide updated evidence of a stable or shrinking plume. The results of the trend analysis for BTEX, TPH C₆-C₉ and TPH C₁₀-C₃₆ indicate either no trend or a decreasing trend. The concentrations of petroleum hydrocarbons in groundwater from majority of wells sampled in October 2018 have been <LOR for the monitoring period. Kleinfelder conducted fate and transport modelling in the VSCAP, Kleinfelder, (2016d), to support the results of the Mann Kendall analysis. Fate and transport modelling (Bioscreen-AT) was conducted to assess the potential for benzene in groundwater in the wharf area to discharge into the marine environment. The modelling concluded that dissolved phase hydrocarbons will attenuate prior to reaching the closest projected point of discharge to the marine environment. This is summarised in Section 10.5 of Kleinfelder, (2020c). PFAS mobility in the Wharf area is discussed in Section 14.5 of Kleinfelder (2016d). This discussion concluded that PFAS compounds tend to be recalcitrant to biodegradation but are susceptible to sorption to organic carbon, positively charged mineral surfaces and oil. Due to the nature of the soils at the site (beach sands), sorption to organic matter in soils is not considered to be a key attenuation process. Kleinfelder (2016d), however considered sorption to be a key natural attenuation process for PFAS in groundwater where LNAPL was present. In the Wharf area, the most elevated PFOS concentrations occur in wells where LNAPL has been identified (GW013 and GW014). Kleinfelder concluded that PFAS compounds are sequestered in the

CSM Requirement (Appendix 4 of GAR 2019)	Auditor Comments
	LNAPL and this accounts for the limited migration of PFAS along strike (i.e. in a northerly or southerly direction from the source area). In the NBA area, PFAS mobility is influenced by diffusion, dispersion, dilution and limited sorption, Section 16.3.3 of Kleinfelder (2016d). Fingerprinting of LNAPL from GW004, GW007, MW316, MW321 and MW335 indicated that the product was representative of either or a combination of weathered diesel, weathered kerosene, crude oil, fuel oil and lube oil. On this basis the associated dissolved phase impacts are generally associated with TPH C₁₀-C₁₄ fraction impacts. Section 7.1 in Kleinfelder (2016d) concluded that there were no levels of volatile hydrocarbons above the acceptable human health criteria for recreational open space use. Soil vapour sampling conducted by Kleinfelder did not report soil vapour results above the HSL – C (Sand). PFAS and other COPCs are not volatile. Geosyntec (2020) states that the limited toxicity information for PFAS results in a limited ability to evaluate potential risks from individual PFAS. In the assessment of risk, Geosyntec used available toxicity data for PFOA, PFOS and PFHxS for human health and aquatic life and for PFOS for wildlife. The application of this toxicity data for PFAS is discussed in detail in Section 6.2.3 of Geosyntec (2020).
Data Gaps	The CSMs for the Wharf and NBA areas presented in Kleinfelder (2020c) are based on numerous soil, groundwater and soil vapour assessments conducted since 1999. A preliminary pCSM for the whole of refinery site was completed under the first VSCAP (2011 – 2013) phase of works. This CSM was refined for the Wharf area in Kleinfelder (2016d) to include works conducted between 2013 – 2016. Kleinfelder (2016d) identified that more work was required for the NBA CSM. The CSMs presented in Kleinfelder (2020c) include data collected in both the Wharf and NBA areas following Kleinfelder (2016d). The overall CSM for the Wharf did not change significantly based on the new data collected after 2016. The need for a separate CSM for the NBA area, focussing on PFAS evolved from data gaps identified in Kleinfelder (2016d). The identification of these data gaps resulted in soil, groundwater, marine interface monitoring and surface water runoff sampling which have been documented in the Kleinfelder assessment reports Kleinfelder (2018h), Kleinfelder (2018f), Kleinfelder (2018d), Kleinfelder (2018e) and Kleinfelder (2020b). The auditor provided detailed comments on a draft version of the NBA CSM and these were incorporated into the final version of the NBA CSM which was included in Kleinfelder, (2020c). The auditor is satisfied that no significant data gaps remain in the Wharf and NBA CSMs.
Diagrammatic representation of the site and exposure pathways	<u>Wharf</u> No single graphical representation of the CSM for the Wharf area has been produced, however the text in Kleinfelder (2020c) provides a detailed representation. Figure 2C in Kleinfelder (2020c) is a cross section showing the source area of LNAPL in the Wharf area. <u>NBA</u> Plate 6 and Figure 5F in Kleinfelder (2020c) show a graphical representation of the NBA PFAS CSM.

The auditor considers that the CSM presented in the documents identified above is detailed sufficiently for the purpose of the report objectives and audit purposes and concludes that the essential elements of a CSM, as identified in NEPM Schedule B2 and SA EPA (2018) have been covered.

Nature and extent of site contamination

Soil

The soil and underlying geological profile beneath the Wharf area is shown in attached **Figure F9**. Fill to a depth of approximately 4 m bgs was encountered beneath Wharf Road, however this maximum fill thickness was reported in MW317 which is outside the Wharf and NBA audit area (i.e. off-site). The maximum thickness of fill in a soil bore relating to Wharf Road that is representative of the Wharf and NBA audit area is in MW316 (1.0 m). The fill at MW316 comprises angular sandy silt and gravel, including blue metal and boulders (up to 60mm) and ballast rock. This fill does not extend westwards to the locations of GW001 and GW002 where over 3 m of beach sand containing shell fragments and gravels directly overlays siltstone bedrock. Fill to 3 m depth also exists under the former pipe rack along the wharf alignment (at location TP10/11). This fill comprises gravelly sand which had black staining and a hydrocarbon odour at 0.6 m and at 2m. The fill is underlain by siltstone bedrock at 3 m bgs.

Fill extends to the north and south of the Wharf area in areas of former infrastructure. No fill is present to the very south of the Wharf area and is absent or very thin along Wharf Road (extending to the NBA). Where no fill is present, beach sand and gravel are encountered from surface to a maximum depth of approximately 5 m bgs (MW322). The thickness of the beach sand and gravel decreases to the west (~2 m bgs at GW009). The beach sand and gravel are underlain by interbedded siltstone and quartzite bedrock. The siltstone beds are generally massive with fractures closed and filled with clay. The quartzite is generally blocky with clean and open orthogonal joints.

Fill is not present in the northern NBA, beyond the Wharf Road. Here beach sand and cobbles are present from the surface to depths of approximately 0.5 to 1 m bgs. Beneath the sand and cobbles is a thin layer of weathered siltstone which is underlain by massive, steeply bedded siltstone. At the low tide mark, the sand and cobbles are not present and steeply bedded quartzite outcrops at the surface. The soil and underlying geological profile beneath the NBA audit area is shown in attached **Figure F10**.

Organic compounds

Most impacts to soil resulting from organic compounds (e.g. petroleum hydrocarbons) which exceeded the adopted criteria have been identified in the wider Wharf area (i.e. off-site) and not within the Wharf portion of the audit area. These impacts are mostly associated with the swale area at the base of the cliff and adjacent to the former pipe rack which is assumed to be the source of LNAPL that has been identified in groundwater (including wells on-site).

These soil impacts were investigated during trenching works, conducted outside of the audit area, (Wharf Area Soil Investigation, Kleinfelder, 2015f). These impacts are localised to the trench area (which is outside the audit area), as shown on cross section I – I', attached as **Figure F9**.

Hydrocarbon odours and / or staining has been observed at numerous locations across the wharf portion of the audit area (e.g. TP10/011, GW007, GW008, GW009, GW010, BH47, GW135, MW307, MW309, MW310 and MW316) at depths ranging from 0.6 m bgs (TP10/011) to >5m bgs (mostly 1.7 – 3.0 m bgs) in fill, natural soils (sands / gravels) and fractured rock. These observations relate to the time of drilling / investigation (mostly from 2005 to 2009, apart from TP10/011 which was investigated in 2015).

Human health investigation levels

The soil sample results for BTEX/TPH compared against the adopted criteria for human health are shown in attached **Table T1** and for all other organic compounds (PAHs/Phenols etc) in attached **Table T2**. Within the audit area, concentrations of BTEX/TPH above the adopted criteria for human health were reported at a single location (SB/MW316, shown as a red dot on attached **Figure F11**). It is noted that these concentrations were reported at the time this well was drilled (2006) and may not be representative of current concentrations at that location. The concentrations of:

TPH C6-C9 (13,000 mg/kg), TPH C10-C14 (23,000 mg/kg) and TPH C15-C28 (32,000 mg/kg) in SB/MW316 were all above their respective criteria for recreational / public open space use (5,100 mg/kg, 3,800 mg/kg, 5,300 mg/kg) at a depth of 6.3 – 6.5 m bgs, within fractured rock. The criteria (HSL C) are based on direct contact which is unlikely given the depth of the impact.

TRH reported at SB/MW316 do not exceed the HSLs for vapour intrusion (which are non-limiting for recreational/ open space).

phenanthrene in SB316/MW316 were above the adopted criterion (HSL C) for recreational open space (5 mg/kg) at 6.3 – 6.5 m bgs (54 mg/kg) and at 7.8 – 8.0 m bgs (13 mg/kg). This criterion is based on direct exposure which is unlikely given the depth of the impact.

The organic compounds at SB316/MW316 are associated with the historic presence of LNAPL in this well. The most recent GME (October 2018, reported in Kleinfelder, 2020a) did not identify LNAPL in MW316, however concentrations of dissolved phase hydrocarbons were detected.

The concentrations of organic compounds at all other sample locations within the audit area (wharf and NBA portions) were less than the adopted criteria for human health.

Ecological Investigation Levels

The soil sample results for BTEX/TPH compared against the adopted ecological criteria are shown in attached **Table T3** and for all other organic compounds assessed (PAHs/Phenols etc) in attached **Table T2**.

Exceedances of the adopted ecological criteria for organic compounds at depths of up to 2 m bgs (i.e. the biologically active zone) are listed below. The locations described below are shown as green dots, on attached **Figures F12** and **F13**.

- In 2015, the concentration of TPH C₁₀-C₁₄ at TP10/011 at 0.5 m (70 mg/kg) exceeded the adopted criterion for areas of ecological significance (25 mg/kg).
- In 2015, the concentrations of:
 - TPH C₆-C₉ at TP10/011 at 2 m (145 mg/kg) exceeded the adopted criterion for areas of ecological significance (125 mg/kg).
 - TPH C₁₀-C₁₄ at TP10/011 at 2 m (590 mg/kg) exceeded the adopted criteria for areas of ecological significance (25 mg/kg) and urban residential and public open space (120 mg/kg).
 - TPH C₁₅-C₂₈ TP10/011 at 2 m (500 mg/kg) exceeded the adopted criterion for urban residential and public open space (300 mg/kg).
- In 2005, the concentration of TPH C₁₀-C₁₄ at SB/MW310 at 1 m (29 mg/kg) exceeded the adopted criterion for areas of ecological significance (25 mg/kg). This soil data is historical (2005) and may be considered to be low reliability. This location was later investigated and delineated to the west by TP10/013 and TP10/020 in Kleinfelder, (2017d) both of which reported TRH concentrations below the LOR.
- In 2005, the concentrations of TPH C₁₀-C₁₄ (150 mg/kg) and TPH C₁₅-C₂₈ (430 mg/kg) at SB/MW307, located to the north of the wharf on the beach, exceeded the adopted criteria for areas of ecological significance (25 mg/kg) and urban residential and public open space (120 and 300 mg/kg). This sample was taken in natural material at 1.5 m bgs where the PID reading was 126 ppm and a hydrocarbon odour was observed. This bore was drilled to 4 m in sediments in September 2005. It is assumed that the soil impacts are due to the presence of the dissolved phase hydrocarbon plume that historically extended to this location, and the soil sample was taken at the interface of the saturated zone. This soil data is historical (2005) and may be considered to be low reliability. This location was later investigated and delineated by TP004, Coffey, (2008b) which reported TPH concentrations below the LOR.
- In 2007, the concentrations of TPH C₁₀-C₁₄ (70 mg/kg) and TPH C₁₅-C₂₈ (370 mg/kg) at TP001 (1.8 m bgs), located adjacent to SB/MW307, exceeded the adopted ecological criteria for areas of ecological significance (25 mg/kg) and urban residential and public open space (300 mg/kg). As with SB/MW307, this is assumed to be associated with the dissolved phase hydrocarbon plume in groundwater. The lateral extent of soil impacts is delineated to the west and north-west (TP003, TP002 and SB325, see attached **Figure F12**).
- In 2007, the concentrations of TPH C₁₀-C₁₄ (180 mg/kg) and TPH C₁₅-C₂₈ (640 mg/kg) at TP009 (1.0 m bgs) exceeded the adopted ecological criteria for both areas of ecological significance (25 and 120 mg/kg) and urban residential and public open space (300 mg/kg). This was reportedly accompanied by elevated PID readings of 509 ppm (Coffey, 2008b). TP009 is located 2 m west of the stormwater drain which drains the Wharf access road, Coffey (2008b) inferred that the soil impacts are associated with impacted storm water run-off from the adjacent drain. The lateral extent of soil impacts is delineated to the north (TP10/015) and west (TP10/014) of this location.
- In 2007 and 2009, the concentrations of TPH C₁₀-C₁₄ and TPH C₁₅-C₂₈ at TP029 (1060 and 4620 mg/kg), TP030 (500 and 1230 mg/kg), TP033 (1560 and 2940 mg/kg) and GW008 (100 and 420 mg/kg), located south of the wharf, exceeded the adopted criteria for ecological significance (25 mg/kg) and urban residential and public open space (300 mg/kg). The hydrocarbon impacts were reported at depths of between 1.2 m and 2.0 m bgs. LNAPL sheen was historically reported in GW008, Golder, (2013e) and therefore, these soil impacts are attributed to the historical LNAPL impacts in this area associated with anecdotal area 2.

- In 2017, the concentration of TPH C₂₉-C₃₆ at TP10/026 (370 mg/kg), located along Wharf Road (see attached **Figure F13**), exceeded the adopted ecological criterion for urban residential and public open space (300 mg/kg). This occurred in fill material at the surface (0 m bgs). TP10/026 is not located close to any existing known sources of contamination (as it is located mid-way between the Wharf and NBA area) and is assumed to result from the asphalt road surface. The deeper sample at this location (0.3 m bgs) did not report any exceedances.
- The concentrations of 1,2,4 Trimethylbenzene, 1,3,5 Trimethylbenzene, n-Butylbenzene, n-Propylbenzene and sec-Butylbenzene exceed the adopted ecological criterion for areas of ecological significance (1.5 mg/kg for all) at TP10/011 in fill at depths of less than 2 m. The concentrations of these compounds ranged from 1.8 mg/kg (at 0.5 m bgs) and 1.7 mg/kg to 17 mg/kg at 1.9 to 2 m bgs. These compounds are considered to have been isolated to the fill material in TP10/011, which extended to 3 m and are likely to be associated with the TRH detected at this location at concentrations that are less than the adopted criteria. These compounds were not detected above the limit of reporting (0.5 mg/kg) in any other sample at the audit site. The 95% UCL (1.2 mg/kg) for the dataset is below the adopted criteria.

Management Limits

Management limits are to be considered after the consideration of ecological and human health criteria. These were exceeded in three locations within the audit area:

- In 2006, the concentrations of TPH C₆-C₉ (13,000 mg/kg), TPH C₁₀-C₁₄ (23,000 mg/kg) and TPH C₁₅-C₂₈ (32,000 mg/kg) at SB/MW316 at 6.3 – 6.5 m bgs exceeded their respective management limits (700, 1000 and 2500 mg/kg). At this depth, these exceedances are associated with historic LNAPL at this location and are unlikely to be a fire or explosive hazard. Adjacent soil sampling conducted during the drilling of GW001 and GW002 did not report TPH impacts above LOR in the unsaturated zone, further indicating that the impacts at MW316 were associated with localised LNAPL (which is no longer present in this well).
- In 2007, the concentrations of TPH C₁₀-C₁₄ (1060 mg/kg) and TPH C₁₅-C₂₈ (4620 mg/kg) at TP29_2.0 at 2 m bgs exceeded their respective management limits (1000 and 2500 mg/kg).
- In 2009, the concentrations of TPH C₁₀-C₁₄ (1560 mg/kg) and TPH C₁₅-C₂₈ (2940 mg/kg) at TP33_01 at 1.4 m bgs exceeded their respective management limits (1000 and 2500 mg/kg). Soil impacts at TP29 and TP30 were further investigated by the drilling of GW008, located approximately 5 m north of TP30. Petroleum hydrocarbons in soils (1.2 – 1.3m bgs) were detected at concentrations less than the management limits at GW008 and it is assumed the petroleum hydrocarbons in soil at this location (and those of TP29 and TP30) are associated with historical occurrence of an LNAPL sheen, Golder (2013e) (which is no longer present) in groundwater at GW008.

It is considered likely that due to the age of these exceedances and as they were associated with historic LNAPL or hydrocarbon sheen (that are no longer present), the petroleum hydrocarbon concentrations are likely to have decreased since the time of investigation.

Metals

Human health investigation levels

The soil sample results for metals compared against the adopted health based criteria are provided in attached **Table T4**.

Concentrations of barium (540 mg/kg) and molybdenum (30 mg/kg) exceeding their respective health based criteria for recreational open space (500 mg/kg and 10 mg/kg) were reported in TP10/018 at 1 m bgs in fill material. TP10/018 is located adjacent to the former septic tank ST9. The source of these metals at TP10/018 is unknown and is potentially associated with the former ST9 (now cement sand filled) and / or the fill material and black staining which was recorded (bore log) in the fill at 1 m depth. The shallower sample taken in TP10/018 (0.0 – 0.1m bgs) reported all metal concentrations below the adopted criteria. A deeper sample was not collected, therefore the impact has not been vertically delineated. There is no evidence of elevated concentrations of barium and molybdenum in the wider natural soil dataset (refer to attached **Table T4**).

Ecological investigation levels

The soil sample results for metals compared against the adopted ecological criteria are provided in attached **Table T5**.

Exceedances of the adopted ecological investigation criteria (at depths of < 2 m, the biologically active zone) are listed below. The locations described below are shown as yellow dots on attached **Figure F12** (Wharf) and attached **Figure F13** (NBA).

- Exceedances of the adopted ecological criteria for areas of ecological significance for copper (80 mg/kg) and zinc (190 mg/kg) were reported at TP10/018 at 1 m depth, with concentrations of 892 mg/kg (copper) and 14,000 mg/kg (zinc).
- Exceedances of the adopted ecological criteria for residential and public open space for barium (500 mg/kg), cobalt (50 mg/kg), copper (220 mg/kg), manganese (500 mg/kg), molybdenum (10 mg/kg) and zinc (770 mg/kg) were reported in TP10/018 at 1 m depth with concentrations of 540 mg/kg (barium), 111 mg/kg (cobalt), 892 mg/kg (copper), 15,800 mg/kg (manganese), 30 mg/kg (molybdenum) and 14,000 mg/kg (zinc). TP10/018 is located adjacent to the former septic tank ST9 (that has been filled with cement sand). The surface sample at TP10/018 did not contain concentrations of metals exceeding ecological criteria, therefore it appears likely that either the septic system at ST9 or the localised fill is the source of the metals. No sample was taken from depth greater than 1 m bgs, therefore these impacts have not been vertically delineated, however these metal concentrations appear to be associated with the fill material and black staining which was recorded (bore log) in the fill at 1 m depth. There is no evidence of elevated concentrations of these metals in the wider natural soil dataset.
- Exceedances of the adopted ecological criterion for residential and public open space for manganese (500 mg/kg) were reported at:
 - BH01 (1,400 mg/kg) and BH04 (650 mg/kg) in surface samples taken at the location of the former desalination pilot plant. These concentrations may be indicative of fill material at these locations
 - TP10/011 at 0.5 and 2 m bgs (686 mg/kg and 981 mg/kg respectively). The samples were taken in the fill material under the former pipe racks along the wharf alignment. The surrounding samples were all below the adopted ecological criterion. These concentrations may be considered to be indicative of fill material at this location.
 - TP10/27 at 0.12 m bgs (536 mg/kg), located along Wharf Road. This concentration is considered to be indicative of a thin layer of fill underlying the road. The concentration of manganese in the deeper sample (0.68 m bgs) was below the adopted ecological criteria and the lateral extent was delineated by sample locations to the north and south.
- Exceedances of the adopted ecological criteria for areas of ecological significance for copper (80 mg/kg) and zinc (190 mg/kg) for residential and public open space (770 mg/kg) were reported at BH01 (0.05 – 0.1 m bgs), with concentrations of 86 mg/kg (copper) and 969 mg/kg (zinc). These are likely to be associated with fill at the surface.
- An exceedance of the adopted ecological criteria for areas of ecological significance for zinc (190 mg/kg) was reported at HA1701_0.15 (located along Wharf Road), with a concentration of 242 mg/kg. This is likely to be associated with fill at the surface.
- A single exceedance of the adopted ecological criteria for areas of ecological significance for zinc (190 mg/kg) was reported in 1998 in BH035 at 0.5 m bgs, with a concentration of 470 mg/kg. This is located in the northern end of the NBA. This appears to be an isolated occurrence as one other location (IF111-033) in this area did not report zinc above the adopted criteria (refer to attached **Figure F13**).

PFAS

Human health investigation levels

PFAS concentrations in soil samples taken from the Wharf and NBA audit area compared against the adopted health based criteria are provided in attached **Table T6** and are shown on attached **Figure F14** (Wharf and Wharf Road area) and attached **Figure F15** (northern NBA).

The assumed source area for PFAS compounds in soil (and groundwater) in the Wharf area is the former AFFF AST which was located east of the audit area (i.e. off-site, refer to attached **Figure F3**). The soil samples taken at the source area (off-site) indicate that PFOS was present in the crushed concrete of the pad at location SB10/003A_0.0-0.11 at a concentration of 1.57 mg/kg, which exceeds the adopted criterion for human health (1 mg/kg) for the audit site. The concentration of PFOS in concrete at this location also exceeded the adopted human health criterion for the sum of PFHxS and PFOS, which is also 1 mg/kg (refer to attached **Figure F14**). The concentration of PFOS in the soil sample from directly below the concrete (SB10/003A_0.11-0.2) was 0.1 mg/kg, less than the adopted human health criteria (1 mg/kg) for the audit site. It cannot be stated whether this sample exceeded the sum of PFHxS and PFOS human health criteria as PFHxS was not analysed in soils during this investigation.

The concentrations of the PFOA in both the concrete and underlying soil (i.e. off-site) were less than the adopted health based criteria for the audit site (10 mg/kg).

The concrete pad was removed during the Wharf structure demolition between 2017 and 2018 and clean fill was placed over the surface.

Three soil samples were collected from a single location (TP10/011, see attached Figure F14) within the Wharf portion of the audit area and analysed for PFAS compounds. This was located under the former pipe-rack along the Wharf alignment approximately 50 m west of the off-site AFFF source area. Detectable concentrations of PFOS were reported in the fill at 0.5 m (0.0032 mg/kg) and at 2 m (0.0037 mg/kg), however these were below the adopted health based criterion for the audit site (1 mg/kg).

Further soil sampling for PFAS was conducted along Wharf Road to assess PFAS concentrations in soils between the Wharf area and NBA (see attached Figure F14). Detectable PFOS concentrations were reported in all of the Wharf Road test pits, in both fill and natural material (maximum investigation depth was 0.7 m) varying from 0.0004 mg/kg to 0.102 mg/kg (HA17/01). These concentrations were all below the adopted health based criterion (1 mg/kg). The source of the reported PFAS in soils in the Wharf Road area is not clear, however it is likely related to impacted stormwater run-off down the cliff face (including small drainage lines) from the operational areas of the refinery area to the east. Three of the four locations (TP10/025, GS01 and TP10/28) are located near MW139 and MW140 which have PFAS impacts in groundwater. During the site visit on 4 April 2017, the auditor observed that runoff from the cliff was likely to be occurring near the location of TP10/025/GS01. HA17/02 is located at the base of a small gully.

In the NBA portion of the audit area, the source of PFAS has been identified as being off-site (i.e. in the fire-training area and operational areas of the former refinery, located to the east of the NBA). Soil sampling in the NBA was conducted during the installation of the nested shallow and deep wells NBA- BH1, BH2, BH3 and BH4 (no soil samples could be taken from BH5) in 2016 and 2017. The concentrations of PFOS in the soil samples (taken in sand from depths varying from 0.2 to 2 m) ranged from <LOR (0.0002 mg/kg) to 0.05 mg/kg which are all below the adopted health based criterion (1 mg/kg). The results are shown in attached Figure F15.

Concentrations of PFOA in soils within the audit area were less than the adopted health based criterion (10 mg/kg) at all sample locations.

Ecological investigation levels

PFAS concentrations in soil samples taken from the Wharf and NBA audit area compared against the adopted ecological criteria are provided in attached Table T6 and are shown on attached Figure F14 (Wharf and Wharf Road area) and attached Figure F15 (northern NBA).

The reported concentrations of PFOS at TP10/011 in the wharf portion of the audit area are less than the adopted criteria for direct (1 mg/kg) and indirect (0.01 mg/kg) ecological exposure.

The concentrations of PFOS at five locations (7 individual samples) in the NBA area, including along Wharf Road (i.e. HA17/02, TP10/28, TP10/25, GS01 and NBA/BH1)⁴ exceeded the adopted criteria for indirect ecological exposure (0.01 mg/kg)⁵ (refer to attached Figure F14 and Figure F15). The exceedances ranged from 0.01 mg/kg to a maximum of 0.102 mg/kg (in HA17/01 at 0.2 m). The concentrations of PFOS in the other soil samples along Wharf Road in the NBA area were below the adopted ecological criteria.

The concentrations of PFOS in soil at NBA1 (located at the base of the erosional gully) exceeded the adopted ecological criterion for indirect ecological exposure (0.01 mg/kg), consistent with the runoff of stormwater (containing PFAS) from the refinery Plateau. The concentration of PFOS in the shallow sample (0.05 mg/kg at 0.5 m bgs) was higher than the sample from 2 m bgs (0.0178 mg/kg).

The reported concentrations of PFOS in the audit area did not exceed the adopted ecological criterion for direct ecological exposure criteria (1 mg/kg).

⁴ It is noted that the PFOS concentrations shown in Figure F14 for TP-10/25_0.1, TP-10/25_0.5 and GS01 are the primary sample concentrations and do not exceed the adopted criteria. The concentrations discussed in the text above and shown in Table T6 for these locations are the duplicate or triplicate samples which were higher than the primary sample and were adopted for the assessment of risk as this was considered to be a conservative approach.

⁵ The indirect exposure criteria (0.01 mg/kg) accounts for various pathways through which organisms can be exposed whether or not they are in direct contact with PFAS contaminated soil (i.e. exposure through the food chain). The ecological soil guideline values set by Environment and Climate Change Canada (ECCC) were considered and the value for exposure of a secondary consumer as the most sensitive exposure pathway was adopted as the PFOS indirect exposure value in the NEMP. This guideline provides a default value to manage the potential level of exposure for wildlife feeding on organisms that have been exposed. For example, in an open space area, if plants and soil dwelling animals are present, it is likely that there will be birds, small mammals and/or reptiles present consuming these plants and animals. It thus recognises that traditional land use categories are not relevant to ecological risks, therefore a single guideline value is now applicable to all land use scenarios. This better reflects the possibility of indirect PFAS exposure from any and use where PFAS may be present in a large area of soil. The indirect criteria may be over-protective if the area of exposed soil is too small to have any material impact on food chain transfer to secondary consumers such as insectivores and carnivores.

The reported concentrations of the sum of PFHxS and PFOS in the audit area did not exceed the adopted human health criteria (1 mg/kg).

Asbestos

Historical asbestos impacts within the audit area are considered to consist of bonded asbestos containing material (ACM) scattered over discrete areas of the site where demolition practices have resulted in fragments being located in surface material, or where asbestos waste may have been disposed. There are three areas within the Wharf and NBA audit area which were considered to contain potential asbestos impacts. SP09_2015 in the NBA at the base of the erosional gully was assessed for presence / absence of asbestos fibres associated with asbestos waste dumping at the top of the erosional gully (outside of the audit area). TP10/011 was assessed for presence / absence of asbestos fibres due to the former infrastructure which ran over the Wharf (i.e. former pipe rack). Neither location reported the presence of asbestos fibres and did not warrant further investigation as NEPM guidance states that if ACM or friable asbestos is not visible (i.e. present) then it is assumed to be below the NEPM screening criteria and quantification is not required.

The third location is the former diver's building where an asbestos survey by Greencap in 2015 (reported in Kleinfelder 2020c) indicated the presence of bonded asbestos mixed in with rocks and pebbles to the west of the diver's building (referred to as Area 10-Pebble Beach or Location 5 according to Golder).

Greencap determined that the source of the ACM was the demolition of the former diver's building in the 1960s. Greencap states in the register that the area (referred to as Area 10 – Beach Dump – Historic Dump Site) contains “asbestos debris mixed under all the rocks/pebbles/boulders west of the diver's building. The area runs the length of the divers building and heads six metres towards the ocean. The debris is thought to be from the demolition of the original building in the late sixties”.



Plate Former location of the Diver's Building showing the Area 5 where asbestos was observed on rocks during a storm surge and the location of the former septic tank (ST9) (note the base map at the time is showing the SA Water Desalination Pilot Plant, which has since also been removed), from Golder Environmental Site History 2013.



Plate Extract of Area 10 – Beach Dump – Historic Dump Site location from Greencap 2015 in Kleinfelder (2020c)

On 30 November 2018, Carters Asbestos Management were commissioned by Kleinfelder to remove the visible asbestos from Location 5 using an excavator to move boulders and conduct an “emu bob” type approach to remove visible asbestos from under boulders. The Carters Asbestos Management report (contained in Appendix F of Kleinfelder, 2020c) reported that the excavator was used to lift large boulders, and 2 asbestos bags of bonded ACM were collected. The ACM was reported to be in good condition and no friable asbestos was observed. Carters Asbestos Management then undertook a visual inspection and concluded that all visible asbestos material had been removed from Area 10 - Pebble Beach/Location 5.

Carters Asbestos Management recommended that the area be re-inspected in approximately 12 months and stated in the asbestos inspection certificate that other fragments may exist beneath boulders not accessible by the excavator but stated that these fragments are not accessible.

Kleinfelder has confirmed (pers. Comm. Kleinfelder 12 January 2020), that the Area 10 location had been reassessed in October 2019 by Carters Asbestos Management and that “several fragments of various sizes have been found... These fragments were collected and disposed of”. Carters recommended one further inspection which was conducted in July 2020. During this inspection, one ACM fragment was found and removed. No further inspections were considered necessary.

No friable asbestos was observed during these excavation works (Kleinfelder, 2020c) and it is considered that the adopted criterion of “no visible asbestos for surface soil” has been met at this location.

Testing for presence/absence of asbestos fibres was conducted at 11 locations within the audit area by Kleinfelder in February 2015 and April 2017. These locations are at the Wharf (TP10/011- two samples beneath the former pipe rack), at the Diver's Cottage/ST9 (TP10/018, SS10/01, SS10/02, SS10/03), along Wharf Road (TP10/025, HA17/01, TP10/28, TP10/31, TP10/32) and in the NBA (SP09, located to investigate the disposal of asbestos at the base of the cliff in the northern NBA) (see attached **Figure F16**).

These locations were chosen to either coincide with areas of known former infrastructure based on information from the site history report (Golder, 2013d), or to provide spatial coverage. The presence of asbestos fibres was reported in one surface sample within the audit area (TP10/018), which is adjacent to the former septic tank ST9 shown in the plate above.

None of the other surface locations reported presence of asbestos fibres, including the surface samples (SS10/01-SS10/03 from either side of TP10/018, see the plate above) indicating the occurrence of asbestos fibres was localised to TP10/018 and likely to be associated with the demolition of the diver's cottage. Quantification to assess against the screening levels was therefore not required.

The results of the 13 locations tested for presence/absence of asbestos fibres are shown in attached Table T7 and Figure F16.

Asbestos (piece of ACM sheeting) was historically reported in the north of the NBA area at Location 42. This was reported to have been removed in 2003. There was no evidence of ACM sheeting in this location based on the auditor's observations during site visits.

Based on the above, the condition of the site meets the adopted NEPM criteria with respect to asbestos (i.e. no visible asbestos in the surface soil).

Soils summary

Overall, residual concentrations of COPCs and aesthetic impacts in soil relating to the former Adelaide Refinery operations are present in soils at the audit site. Where they exceed the adopted criteria for this audit, they are generally isolated in areas associated with the former site activities / sources, spatially delineated and are present in the sub-surface (at depths greater than 0.5 m bgs).

In terms of human health, the concentrations of all analytes are less than the adopted criteria for the proposed site use (recreational / public open space), except for TRH at a single location at > 6 m bgs, as well as barium and molybdenum, which are localised at TP10/018 at 1 m bgs.

Hydrocarbon odours and / or staining has been observed at numerous locations across the wharf portion of the audit area (e.g. TP10/011, GW007, GW008, GW009, GW010, BH47, GW135, MW307, MW309, MW310 and MW316) at depths ranging from 0.6 m bgs (TP10/011) to >5m bgs (mostly 1.7 – 3.0 m bgs) in fill, natural soils (sands / gravels) and fractured rock. These observations relate to the time of drilling / investigation (mostly from 2005 to 2009, apart from TP10/011 which was drilled in 2015).

In terms of the environment, the concentrations of COPCs are predominantly less than the adopted ecological criteria for the proposed site use (recreational / public open space). Where they exceed the adopted ecological criteria, they are:

- are generally isolated in areas associated with the former site activities / sources, spatially delineated and are present in the sub-surface (at depths greater than 0.5 m bgs).

- are historical (2005 – 2010) TPH concentrations that have subsequently been re-investigated and (concentrations are less than the adopted criteria) or delineated.
- exceed the adopted criterion for areas of ecological significance.

Groundwater

LNAPL

The distribution of LNAPL in the Wharf area has been associated with an approximately 60 m long north-south transect along a quartzite band under Wharf Road. Historically, LNAPL has been reported in GW002, GW013, GW014, MW316 (within the audit area) and GW004, GW007, GW012, MW321, MW335 and MW336 (located off-site to the east of the audit area) at various times from when the monitoring wells were drilled (between 2006 and 2010) to the time of the most recent GME (October 2018) (refer to attached Figure F17). The source of the LNAPL is considered to relate to historic leaks from former pipes or tanks in the vicinity of the swale drain area at the base of the cliff and adjacent to the former pipe rack. An exact source (in terms of a documented discrete release) is not known. Fingerprinting of LNAPL (from GW004, GW007, MW316, MW321 and MW335) indicated that the product was representative of a combination of weathered diesel, weathered kerosene, crude oil, fuel oil and lube oil (Golder, 2013e). According to Golder (2013e), LNAPL has been in the subsurface between 24 and 36 years. Octane boosters such as TML, MTBE or MMT were not detected in the samples. The viscosity of the MW316 (0.88cP) obtained by Golder, (2013e) was consistent with a mixture of diesel fuel and kerosene.

The soil in the inferred source area was investigated in the Wharf Area Soil Investigation (Kleinfelder, 2015f). The results of these soil works indicated that a depleted source zone existed within the swale drain area to the east of the audit area and this was unlikely to be continuing to contribute significant contamination to groundwater (Kleinfelder, 2016d).

As of the most recent GME (October 2018, reported in Kleinfelder, 2020a), residual LNAPL (thicknesses of 0.03 m and 0.008 m) was identified in two wells (GW004 and MW321) at depths of approximately 5 m bgs in both wells. Both of these wells are located off-site, to the east of the audit area (refer to attached Figure F18). LNAPL was not present in on-site wells monitored in October 2018. Hydrocarbon sheen was not reported in any of the other wells which had historically reported LNAPL (Kleinfelder, 2020a).

The distribution of LNAPL at the wharf area is interpreted to be due to the anisotropy of the fractured rock aquifer which is limiting the east-west migration of LNAPL across the lower permeability siltstone beds, consistent with the CSM for the site (refer to attached Figure F9). The northern and southern extent of historic LNAPL distribution at the audit site is delineated by GW012 and GW014. These wells have been gauged since 2010 and have approximately 15 data points. The groundwater and LNAPL is within the screened interval of these wells, ensuring that where LNAPL is present, it will be detected. Depth to LNAPL in these wells has generally ranged from approximately 4.5 to 5.5 m bgs (approximately 1.5 to 0.5 m AHD). The fluctuation of water levels and therefore depth to LNAPL averages approximately 0.7 m over the monitoring period.

The LNAPL plume is delineated in all directions, refer to the attached Figure F18 for the most recent LNAPL distribution (October 2018).

LNAPL has not been observed in groundwater in the NBA which is consistent with the absence of potential source infrastructure in this area.

Dissolved phase hydrocarbons

The nature and extent of the dissolved phase hydrocarbon plume in the Wharf area has been assessed since groundwater well installation commenced in 2003, (IT, 2003). Depending on when each well was drilled and whether LNAPL was present, the Wharf area wells have been sampled between 1 and 19 times.

The complete set of dissolved phase concentrations (and comparison to the adopted criteria) in wells in the audit area are provided in:

Table T8 TPH/BTEX (attached)

Table T9 PAHs/Phenols (attached)

Table T10 VOCs (attached)

In terms of exceedances of the adopted criteria for dissolved phase hydrocarbons, only the more recent sampling rounds (i.e. September/October 2015, annual GME; February 2016, interim GME; November 2017, limited GME; October 2018) are discussed in detail below, as the older data is considered to be less reliable and not likely to be indicative of current conditions. The concentrations of:

- Benzene in all wells sampled since 2015 are below the LOR (<1).

- Ethylbenzene, Toluene, Xylene and total xylene in all wells sampled since 2015 are below the LOR (<2).
- TPH C6-C9 have previously exceeded the adopted criterion for recreation (health) (10 µg/l) in groundwater from GW002 (180 µg/l), GW014 (80 µg/l), MW135 (40 µg/l), MW272 (30 µg/l), MW310 (30 µg/l) and MW316 (40). In the most recent sampling round only groundwater from GW002 (180 µg/l) and MW316 (40) exceeded the adopted criterion.
- TPH C6-C9 in groundwater do not exceed the marine aquatic ecosystems criterion (500 µg/l).
- TPH C10-C14 have previously exceeded the adopted criterion for recreation (health) (940 µg/l) in groundwater from MW310 (1,840 µg/l) and MW316 (2,700 µg/l). In the most recent sampling round for these wells, only groundwater from MW316 (2,700 µg/l) exceeded the adopted criterion.
- TPH C10-C14 have previously exceeded the adopted marine aquatic ecosystems criterion (500 µg/l) in groundwater from GW002 (830 µg/l), GW014 (540 µg/l), MW310 (840-1840 µg/l) and MW316 (2700 µg/l). In the most recent sampling round for these wells, groundwater from GW002 (830 µg/l), GW014 (540 µg/l), MW310 (840 µg/l), and MW316 (2700 µg/l) exceeded the adopted criterion.
- TPH C15- C28 have previously exceeded the recreation (health) criterion (900 µg/l) in groundwater from GW002 (7,100 µg/l), GW014 (2420 – 7900 µg/l), GW135 (1,500 µg/l), MW135 (1,000 µg/l), MW272 (1090 – 1470 µg/l), MW310 (4820 – 5030 µg/l) and MW316 (14,000 µg/l). In the most recent sampling round for these wells, groundwater from GW002 (7,100 µg/l), GW014 (7,900 µg/l), GW135 (1,500 µg/l), MW135 (1,000 µg/l) MW272 (1470 µg/l (2016 data), MW310 (4820 µg/l (2016 data) and MW316 (14,000 µg/l) exceeded the adopted criterion.
- TPH C15- C28 have previously exceeded the marine aquatic ecosystems criteria (500 µg/l) in groundwater from GW002 (7,100 µg/l), GW014 (2420 – 7900 µg/l), GW135 (1,500 µg/l), MW135 (580 - 1,000 µg/l), MW272 (800 – 1470 µg/l), MW310 (4820 – 5030 µg/l) and MW316 (14,000 µg/l). In the most recent sampling round for these wells, groundwater from GW002 (7,100 µg/l), GW014 (7,900 µg/l), GW135 (1,500 µg/l), MW135 (1,000 µg/l) MW272 (1470 µg/l (2016 data), MW310 (4820 µg/l (2016 data) and MW316 (14,000 µg/l) exceeded the adopted marine aquatic ecosystems criterion.
- TPH C29- C36 exceeded the adopted recreation (health) criterion (900 µg/l) in groundwater from GW002 (1,900 µg/l) and MW316 (2,700 µg/l) in 2018.
- TPH C29- C36 exceeded the adopted marine aquatic ecosystems criterion (500 µg/l) in groundwater from GW002 (1,900 µg/l), GW014 (600 µg/l) and MW316 (2,700 µg/l) in 2018.
- fluorene exceeded the adopted marine aquatic ecosystems criterion (3 µg/l) in groundwater from GW014 (3.8 µg/l) in 2015.
- pyrene exceeded the adopted marine aquatic ecosystems criterion (0.025 µg/l) in groundwater from GW014 (1.2 µg/l) in 2015.
- Since 2015, the concentrations of VOCs in groundwater from wells sampled are either less than the adopted criteria or < LOR.

The dissolved phase hydrocarbon plume was progressively delineated by the installation of monitoring wells over the period 2003 to January 2015 (when the last groundwater monitoring well was installed in the Wharf area). The well network used to describe the nature and extent of the dissolved phase hydrocarbon plume is bounded by:

- GW139 located within the audit area, to the south of the inferred source area;
- MW318 located off-site, to the north east of the inferred source area;
- MW137 located within the audit area, to the northeast of the inferred source area; and
- GW010 located within the audit area, west of the inferred source area.

The remaining wells are generally situated in the area of the former Wharf infrastructure (pipework and tanks) and identified contamination. Refer to attached Figure F19 which shows the overall location of wells and historic dissolved petroleum hydrocarbon impacts (i.e. data up to end 2016, Kleinfelder, 2016d) within the wharf portion of the audit area and off-site.

The most recent dissolved petroleum hydrocarbon impacts in groundwater (24 October 2018) are shown on attached Figure F20.

Dissolved phase BTEX, TPH C6 - C9, TPH C10 - C14, TPH C15 - C28, and TPH C29 - C36 fractions have been reported in various groundwater monitoring wells in the Wharf area, both within and to the east of the audit area. The highest dissolved phase hydrocarbon concentrations have been reported in wells adjacent

to wells containing LNAPL, or wells where LNAPL had previously been recorded (GW002, GW014 and MW316).

The concentrations of benzene in groundwater in the audit area have ranged from <LOR to 1,200 µg/l (MW316 in 28 August 2006 and which subsequently contained LNAPL). The results of the most recent sampling round (24 October 2018) showed that benzene concentrations in the ten wells sampled for dissolved phase hydrocarbons (including MW316) were all below LOR (1 µg/l), representing a decrease in benzene concentrations at a number of those locations over time. The concentrations of toluene, ethylbenzene and xylene were < LOR (2 µg/l) in all the ten wells sampled in October 2018, which represents a decrease from historical results, which included concentrations of toluene and xylene in MW316.

The concentrations of TPH C6 - C9 in groundwater have ranged from <LOR (20 µg/l) to 532,000 µg/l (MW316 in September 2008). This historic concentration is indicative of the presence of LNAPL, which was subsequently identified in that well. The elevated historic TPH C6 - C9 concentrations were generally in groundwater wells which historically contained LNAPL or were adjacent to wells that contained LNAPL. The results of the most recent sampling round (24 October 2018) showed that TPH C6 - C9 concentrations in the ten wells sampled for dissolved phase hydrocarbons were generally <LOR (20 µg/l) except for MW316 which reported a TPH C6 - C9 concentration of 40 µg/l and GW002 which reported a TPH C6 - C9 concentration of 180 µg/l. This indicates that the TPH C6 - C9 plume is likely to be decreasing at the Wharf area.

The concentrations of the heavier end TPH fractions C10 - C36 have ranged from <LOR (50 µg/l) to 452,800 µg/l (MW301 in October 2003). The highest concentrations were reported in wells which previously or subsequently contained LNAPL or are adjacent to wells which contained LNAPL, such as GW013, GW014, MW310, MW316, MW321 and MW335. The most recent groundwater sampling results (24 October 2018) show that the highest TPH fractions C10 - C36 were reported in MW316 (19,400 µg/l) which historically contained LNAPL.

Based on the recent GME data (September / October 2015 to 24 October 2018) the dissolved phase hydrocarbon plume in the Wharf area is delineated by concentrations <LOR in GW139 and GW138 (to the south), MW324 and MW307 (to the north) and MW327, MW328 and GW011 (to the west) .

GW010 is the closest well to the down hydraulic gradient receptor (the Gulf St Vincent) and reported petroleum hydrocarbon concentrations of <LOR on all 11 occasions it has been sampled (between and November 2011 and February 2018).

A trend analysis of petroleum hydrocarbon concentrations in groundwater wells in the Wharf and NBA audit area was conducted (Kleinfelder 2018m), using all historical data to October 2018 (where sufficient sampling data was available). The results are provided in the table below.

Table Trend analysis of petroleum hydrocarbons

Well ID	Location	Sum of BTEX trend	Sum of TPH C ₆ -C ₉ trend	Sum of TPH C ₁₀ -C ₃₆ trend
GW001	Wharf Road	ND	ND	No trend
GW002	Wharf Road	No trend	No trend	No trend
GW006	Wharf Road	ND	ND	No trend
GW009	Beach south of Wharf	ND	No trend	No trend
GW010	Beach south of Wharf	ND	ND	ND
GW011	Beach south of Wharf	ND	ND	No trend
GW136	Beach south of Wharf	ND	ND	ND
GW138	Beach south of Wharf	ND	ND	ND
GW139	Beach south of Wharf	ND	ND	ND

Well ID	Location	Sum of BTEX trend	Sum of TPH C ₆ -C ₉ trend	Sum of TPH C ₁₀ -C ₃₆ trend
MW135	Beach south of Wharf	No trend ND >5 years	No trend	No trend
MW137	Beach north of Wharf	ND	ND	ND
MW272	Wharf Road	No trend ND >5 years	No trend	No trend
MW301	Beach	ND	Decreasing	No trend
MW307	Beach north of Wharf	ND	No trend ND >5 years	Decreasing
MW310	Beach north of Wharf	Decreasing	No trend	No trend
MW311	Beach north of Wharf	ND	ND	No trend ND >5 years
MW316	Beach south of Wharf	No trend	No trend	No trend
MW322	Beach south of Wharf	ND	ND	Decreasing
MW324	Beach north of Wharf	ND	ND	Decreasing
MW325	Beach north of Wharf	ND	ND	No trend
MW326	Beach north of Wharf	No trend ND >5 years	No trend ND >5 years	No trend
MW327	Beach south of Wharf	ND	ND	ND
MW328	Beach south of Wharf	No trend ND >5 years	No trend ND >5 years	No trend ND >5 years
MW333	Beach south of Wharf	ND	ND	No trend ND >5 years
MW337	Beach south of Wharf	ND	ND	No trend ND >5 years
MW338	Beach south of Wharf	ND	ND	No trend ND >5 years
MW339	Beach south of Wharf	ND	ND	No trend ND >5 years
MW340	Beach south of Wharf	ND	ND	No trend ND >5 years
MW341	Beach south of Wharf	ND	ND	ND
MW342	Beach south of Wharf	ND	ND	No trend ND >5 years

Well ID	Location	Sum of BTEX trend	Sum of TPH C ₆ -C ₉ trend	Sum of TPH C ₁₀ -C ₃₆ trend
MW343	Beach south of Wharf	ND	ND	No trend ND >5 years

Notes:

ND – No detection above the LOR

No trend – Detection above LOR with no identified trend from Mann Kendall analysis

Based on the table above, the concentrations of petroleum hydrocarbons in groundwater from most wells in the Wharf portion of the audit area are either <LOR or show no statistically significant trend (including those where the concentrations have been <LOR for more than 5 years). Dissolved phase petroleum hydrocarbons in a small number of wells show a statistically significant decreasing trend. Notably, these wells are located at the periphery of the plume to the north (MW301, MW307 and MW324) and west (MW310 and MW322). Overall, the analysis indicates a stable and reducing (in concentration and spatial extent) hydrocarbon plume at the site.

Dissolved phase hydrocarbons have been analysed in the NBA area wells MW139, MW140 and GW140 and have consistently reported concentrations <LOR and below the adopted criteria, which is consistent with the absence of potential sources of hydrocarbon in this area.

Metals

Groundwater samples from wells in the audit area have been analysed for metals (arsenic, barium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, vanadium, and zinc) during various GMEs. The complete set (i.e. entire monitoring record) of metal concentrations in groundwater in the audit area (and comparison to the adopted criteria) is provided in attached **Table T11**.

Based on the results of the two most recent GMEs where metals were analysed – the October 2015 annual GME, (Kleinfelder 2019a) and the February 2016 interim GME, (Kleinfelder 2017a), the following concentrations were reported:

- The concentrations of antimony, beryllium, cadmium, chromium, cyanide and tin are below the adopted criteria and generally below their respective LORs.
- Arsenic has been reported at concentrations above the adopted marine ecosystem criterion (13 µg/l) in two wells in the audit area – GW011 (18 µg/l) and MW272 (18 to 35 µg/l). Both of these wells are located south of the former wharf alignment and groundwater from these wells has contained dissolved phase hydrocarbons (reducing conditions resulting from the degradation of petroleum hydrocarbons can result in elevated concentrations of arsenic in groundwater). Kleinfelder (2016d) reported that the background concentration of arsenic at the site ranges from 0.1 to 9 µg/l⁶. Arsenic concentrations in groundwater from all other wells in the October 2015 and February 2016 sampling rounds were generally within the background range of < 9 µg/l. The site history and soil sampling data from the Wharf area does not indicate a discrete source of arsenic, as all concentrations in the soil samples were below the adopted criteria and are not elevated above background (maximum is 20 mg/kg) in the soil samples where the higher groundwater concentrations occur.
- Barium exceeds the adopted marine ecosystem criterion (4 µg/l) in all wells in the Wharf and NBA area. The concentrations ranged from 6 µg/l in TMW09 to 279 µg/l in MW272. Kleinfelder (2016d) reported that the background concentration of barium ranges from 21 – 34 µg/l and it is noted that the natural barium concentration in seawater is approximately 50 µg/l. The higher reported barium concentrations (i.e. above the background of 34 µg/l) have been reported in wells associated with LNAPL and hydrocarbon impacts (MW307, MW272, GW014 and MW316) and also in wells which have not reported hydrocarbon impacts and are remote from any known sources of metals or hydrocarbons (e.g. GW140 and MW139 in the NBA area). Barium concentrations in groundwater did not exceed the human health criterion recreation (20,000 µg/l).
- The concentrations of cobalt exceed the adopted marine ecosystem criterion (1 µg/l) in wells across the Wharf and NBA audit area, ranging from 1 to 156 µg/l (reported in MW325 in September 2015). Most wells reported concentrations within the background concentrations reported by Kleinfelder (2016d) (i.e. <1 – 4 µg/l) apart from GW006, GW136, MW324 and MW326 (8 µg/l to 50 µg/l), which are mostly associated with relatively low concentrations of petroleum hydrocarbons. Relatively low concentrations of petroleum hydrocarbons are also located at MW325. The source is therefore not

⁶ Background groundwater concentrations were obtained from well NMW08 located in the Undeveloped Area 2 to the north east (off-site) of the audit area, distant from any sources of hydrocarbon contamination.

clear as cobalt concentrations in the soils analysed close to these locations have been below criteria. Cobalt concentrations in groundwater exceeded the human health criterion for recreation (60 µg/l) in MW325 on three occasions (October 2014, 143 µg/l; September 2015, 156 µg/l; and February 2016, 69 µg/l).

- The concentrations of copper exceed the adopted marine ecosystem criterion (1.3 µg/l) in wells across the Wharf and NBA ranging from 2 – 87 µg/l (MW311). Most of these wells reported concentrations within the background concentrations reported by Kleinfelder, (2016d) of 3 – 13 µg/l, with slightly higher concentrations being reported in GW138, GW139, MW311, MW324, MW325, MW326 and MW340. These wells are not associated with hydrocarbon impact and the copper concentrations in the soils analysed close to these locations have been below criteria. Copper concentrations in groundwater did not exceed the human health criterion for recreation (20,000 µg/l). It is noted that the copper concentration in seawater is approximately 90 µg/L.
- The concentrations of manganese exceed the adopted marine ecosystem criterion (1,900 µg/l) in groundwater from MW325 (maximum of 10,800 µg/l in October 2014 and 7,380 µg/l in September 2015). MW325 is located in the beach area, north of the former wharf. These concentrations also exceed the adopted health based criterion for recreation (5,000 mg/L). When most recently sampled (February 2016), the concentration of manganese in groundwater from MW325 was 3,530 µg/l (i.e. less than the adopted health based criterion for recreation, 5,000 µg/l). All other manganese concentrations were below the adopted ecological and health based criteria. Manganese was not monitored in the TMWs so the concentration at the point of discharge to the marine environment is unknown, however as this is an isolated exceedance it is likely that the concentration of manganese at this location will have attenuated prior to discharge to the Gulf St Vincent. Concentrations of manganese above the adopted human health criterion for aesthetics (100 µg/l) were reported in some wells in the Wharf area however only concentrations in GW009, MW307, MW324 and MW325 were outside of the background concentrations of (73 – 471 µg/l) reported by Kleinfelder (2016d).
- The concentration of molybdenum in groundwater exceeded the adopted marine ecosystem criterion (23 µg/l) in groundwater from GW006 (maximum concentration 71 µg/l in April 2015). The concentrations in all other wells were below criteria. Molybdenum was not monitored in the TMWs so the concentration at the point of discharge is unknown, however as this is an isolated exceedance and wells down hydraulic gradient of GW006 did not report molybdenum above the criteria, it is likely that the concentration of molybdenum at this location will have attenuated prior to discharge to the Gulf St Vincent.
- The concentration of nickel in groundwater exceeded the adopted marine ecosystem criterion (7 µg/l) in 22 wells in the Wharf and NBA portions of the audit area. A sample from GW136 reported a concentration of 399 µg/l in September 2015, however this reduced to 29 µg/l in February 2016. Kleinfelder (2016d) reported that these concentrations were within the background range (<1 – 39 µg/l).
- The concentration of selenium in groundwater exceeded the adopted marine ecosystem criterion (3 µg/l) in three wells in the Wharf portion of the audit area (GW011, MW327 and GW139) and in GW140 and MW139 in the NBA. Kleinfelder (2016d) reported these selenium concentrations were within the background range (20 – 53 µg/l).
- The concentration of vanadium in groundwater exceeded the adopted marine ecosystem criterion (100 µg/l) in groundwater from GW011 (220 µg/l). All other concentrations of vanadium in groundwater were below the LOR (20 µg/l). Vanadium was not monitored in the TMWs so the concentration at the point of discharge is unknown, however as this is an isolated exceedance, and that wells located down hydraulic gradient of GW011 did not report vanadium above the LOR (20 µg/l), it is likely that the concentration of vanadium will have attenuated prior to discharge to the Gulf St Vincent.
- The concentration of zinc in groundwater exceeded the adopted marine ecosystem criterion (15 µg/l) in groundwater from 28 wells in the Wharf portion of the audit area, as well as GW139 and GW140 in the NBA. Kleinfelder (2016d) reported that concentrations in most of the wells were within the background range for zinc (8 – 66 µg/l), however higher concentrations were reported in GW136, GW138, GW139, MW311 and MW326. It is likely that the concentrations of zinc at these locations will have attenuated prior to discharge to the Gulf St Vincent.

PFAS Compounds

PFAS compounds were first analysed in wells in the Wharf and NBA area (GW140 only) in July 2015. The July 2015 sampling identified that the highest concentrations of PFAS compounds in groundwater were found in the Wharf area near the former AFFF infrastructure (GW013 and GW014). Selected groundwater

wells in the Wharf area were subsequently sampled for PFAS compounds in November 2017 and October 2018.

The most recent analytical results (October 2018) for PFAS in groundwater at the Wharf area (including some off-site wells) are shown in attached Figure F21 and are provided in attached Table T12.

Concentrations PFOS were reported in groundwater from 21 of the 23 wells sampled in October 2018. The two wells (i.e. MW318 and MW319) which reported PFOS < LOR (0.05 µg/l) are both located to the east of the audit area (i.e. off-site) and to the north east of the former AFFF AST. The highest concentrations of PFAS compounds in the Wharf portion of the audit area continue to be in groundwater from GW013 (PFOS 41 µg/l) and GW014 (PFOS 50 µg/l), which are close to the former AFFF tank that was located to the east of those wells. PFOS concentrations decrease to mostly less than 1 µg/l in monitoring wells away from GW013 and GW014. PFAS in groundwater is not delineated in any direction as detectable concentrations are identified in all wells sampled in the audit area.

Concentrations of PFOS in groundwater exceeded the adopted marine ecological criterion (0.00023 µg/l) in all wells sampled in the Wharf portion of the Audit area in October 2018. Concentrations of PFOS in the Wharf portion of the audit area which exceeded the criteria ranged from 0.005 µg/l (GW009) to 50 µg/l (GW014).

Concentrations of PFOS in groundwater exceeded the adopted recreational criterion (2 µg/l) in 5 wells sampled in the Wharf portion of the audit area in October 2018, ranging from 3.76 µg/l (MW325) to 50 µg/l (GW014).

Concentrations of PFHxS in groundwater exceeded the adopted recreational criterion (2 µg/l) in 4 wells sampled in the Wharf audit area in October 2018, ranging from 2.22 µg/l (MW325) to 17 µg/l (GW013).

Concentrations of the sum of PFHxS and PFOS in groundwater exceeded the adopted recreational criterion (2 µg/l) in 6 wells sampled in the Wharf audit area in October 2018, ranging from 2.5 µg/l (MW325) to 105 µg/l (GW014).

There is insufficient data to statistically assess trends in the concentrations of PFAS compounds in the Wharf portion of the audit area, however they have remained relatively consistent (i.e. within the same order of magnitude across the monitoring record).

PFAS compounds were identified in groundwater in the NBA area in July 2015 (PFOS of 7.6 µg/l in GW140). The presence of PFAS compounds in the NBA area in the absence of a local source resulted in the investigation of a potential source in the Plateau area and a pathway via the steeply incised erosional gully. To investigate the extent of PFAS in the groundwater and sediments at the base of the erosional gully, three nested (shallow and deep) wells were installed in an east – west transect from the base of the gully (NBA-BH1/1A) to the marine water interface (NBA- BH3/3A). Two nested wells were installed to the north (NBA – BH5/5A) and south (NBA – BH4/4A) of the main transect. Groundwater has been sampled from these wells on four occasions (October 2016, March 2017, July 2018 and August 2019). On two of these occasions (October 2016 and March 2017) the wells were sampled at high and low tide to assess the impact of the tide on groundwater elevations and PFAS concentrations. Groundwater sampling at the NBA also included MW139, GW140 and MW140. The analytical results for PFAS in groundwater at the NBA are shown in attached Figure F22 and are provided in attached Table T12.

Concentrations of PFAS compounds were reported in groundwater from all wells in the NBA area (including MW139). The highest concentrations of PFAS compounds in groundwater at the NBA were in the wells forming the east – west transect at the base of the erosional gully (i.e. GW140, BH1/1A, BH2/2A and BH3/3A). The maximum reported concentration of PFOS in groundwater at the NBA was 42.3 µg/l in NBA/BH2 (October 2016). Of the nested well pairs, higher concentrations were observed in the deeper (i.e. 5.5 – 6 m bgs) wells compared to the shallow (2.5 m bgs), indicating some dilution / mixing with seawater in the shallow wells, and lower concentrations in the source water since the closure of the refinery. A lateral (east to west) concentration gradient also exists between NBA1/1A and NBA3/3A where PFAS concentrations decrease towards the marine interface. The concentrations of PFAS in the wells to the north (NBA5/5A) and south (NBA4/4A) of the transect (both shallow and deep) have been consistently 1 order of magnitude lower than the wells along the east -west transect at the mouth of the erosional gully. MW140 is located close to NBA4 reported similar PFAS concentrations to NBA4/4A.

The results of the most recent groundwater monitoring event (August 2019) in the NBA indicate the following:

- The concentrations of PFOS in groundwater at all locations in the NBA exceeded the adopted marine ecosystem criterion (0.00023 µg/l) with concentrations ranging from 0.21 µg/l (NBA/BH3A) to 23 µg/l (NBA/BH2).
- The concentrations of PFOS in groundwater in six locations in the NBA exceeded the adopted recreational criterion (2 µg/l) with concentrations ranging from 4.28 µg/l (NBA/BH2A) to 23 µg/l (NBA/BH2).

- The concentrations of PFHxS in groundwater in six locations in the NBA exceeded the adopted recreational criterion (2 µg/l) with concentrations ranging from 2.83 µg/l (GW140) to 13 µg/l (NBA/BH1).
- The concentrations of the sum of PFHxS and PFOS in groundwater in seven locations in the NBA exceeded the adopted recreational criterion (2 µg/l) with concentrations ranging from 4.61 µg/l (MW140) to 35 µg/l (NBA/BH1).
- The concentrations of PFOA in groundwater in the NBA were less than the adopted marine ecosystem criterion (19 µg/l) and the adopted recreational criterion (10 µg/l), with concentrations ranging from <LOR (0.01 µg/l) (NBA/BH3A) to 1.6 µg/l (NBA/BH2).

Groundwater summary

Residual concentrations of COPCs relating to the former Adelaide Refinery operations are present in groundwater at the audit site. Where they exceed the adopted criteria for this audit, they are generally isolated in areas associated with the former site activities / sources and are spatially delineated, or consistent with background groundwater concentrations at the audit site. Residual petroleum hydrocarbon concentrations in groundwater at the Wharf are stable and / or reducing and are less than the analytical LOR in wells closest to the Gulf St Vincent. The concentrations of PFAS in groundwater in both the Wharf and NBA portions of the audit area exceed the adopted criteria for the audit area. For the NBA, the PFOS concentrations were subject to a HHERA for both human and ecological receptors.

Other waters

In addition to groundwater sampling, twelve temporary monitoring wells (TMW01 to TMW12) were installed in the Wharf portion of the audit area to monitor water discharging from surface sediments to the Gulf Saint Vincent at around low tide. The locations of the TMWs are shown in attached Figure F6. These wells were installed during each monitoring event in a north-south transect at the western portion of the beach. On each sampling occasion the wells were advanced with a shovel to 0.5 m bgs and installed with 125 mm PVC casing open at the bottom. The water captured in the TMWs was then sampled. The TMWs were placed in the same location as previous events. TMW01 to TMW11 were sampled quarterly from June 2010 to October 2015. Water was analysed for metals (arsenic, barium (selected TMWs), copper, lead, nickel, zinc), TRH, PAHs, phenols, VOCs and PFAS (October 2015 only). In November 2017, TMW12 was installed and analysed for PFAS (only). The results of the sampling of water from the TMWs are presented in tables T8 to T12 (attached to this report) and summarised below:

- Based on the concentrations of TDS in the TMW samples (>30,000 mg/L TDS), the water sampled appears to be predominantly seawater that recharged the beach sediments during the previous high tide (and is receding at low tide).
- LNAPL (or hydrocarbon sheen) was not detected in any of the TMWs over the course of the monitoring period (2010 -2015).
- Water from all the temporary monitoring wells (TMW01 – TMW11) reported BTEX, TPH, PAH, Phenol, and selected VOCs below their respective LORs. TMW12 was not analysed for these compounds as its purpose was to assess the potential for discharge of PFAS to the marine environment.
- Arsenic was reported at concentrations above the adopted marine ecological criterion (1.3 µg/l) in TMWs 01, 02, 03, 04 and 10 ranging from 14 to 23 µg/l in February 2015. These TMWs were resampled in October 2015 and the arsenic concentrations were less than the adopted marine ecosystem criterion in water from all the TMWs.
- The concentrations of barium exceeded the adopted marine ecological criterion (4 µg/l) in water from all the TMWs in February and October 2015 but the concentrations were within the background groundwater concentrations (<15 µg/l).
- The concentrations of copper exceeded the adopted marine ecological criterion (0.13 µg/l) in October 2015 in water from all of the TMWs, however the concentrations were within the reported background groundwater concentrations of 3 - 13 µg/l and were considered by Kleinfelder to be indicative of ambient concentrations.
- The concentration of lead exceeded the adopted ecological criterion (4.4 µg/l) on five historical occasions in four TMWs. In the most recent monitoring event (October 2015), the concentration of lead was <LOR (2 µg/l) in water from all TMWs.
- Concentrations of nickel in water from the TMWs occasionally exceeded the adopted marine ecosystem criterion (7 µg/l), with a maximum concentration of 11 µg/l. Kleinfelder (2016d) reported that these concentrations were within the background groundwater range (<1 – 39 µg/l).

- Concentrations of zinc in groundwater in water from the TMWs occasionally exceeded the adopted marine ecosystem criterion (15 µg/l). Kleinfelder (2016d) reported that concentrations in most of the wells were within the background range for zinc (8 – 66 µg/l), however there were isolated incidences of higher exceedances in TMW08 (584 µg/l in October 2014), TMW09 (293 µg/l March 2014) and TMW10 (245 µg/l in March 2014). In all cases these results were inconsistent with the previous (extensive dataset) and had reduced to <LOR in the subsequent sampling round.
- PFAS was also analysed in temporary monitoring wells (TMW01 – TMW11) located close to the discharge point of groundwater to the Gulf St Vincent. PFAS (limited suite) was analysed for in TMW01 – TMW11 in October 2015 and in an additional location (TMW12 – full suite) in November 2017.
- In October 2015, the concentrations of PFAS compounds (PFOS, PFOA, 6:2 FTS and FTS 8:2) in water from TMWs 1 to 11 were less than their respective LORs (<0.05 µg/l, <0.05 µg/l, < 0.5 µg/l, <0.5 µg/l).
- In November 2017, the concentration of PFOS (0.0035 µg/l) in water from TMW12 exceeded the marine aquatic ecosystem criteria (0.00023 µg/l).
- In November 2017, the concentration of PFOS (0.0035 µg/l), PFHxS (0.0018 µg/l) and the sum of PFOS and PFHxS (0.0053 µg/l) were less than the adopted health based criterion for recreational water (2 µg/l).

In addition to the groundwater well sampling in the NBA area, marine interface monitoring was conducted on two occasions (September 2017 and November 2017). This involved the excavation of eight shallow pits (MI/01 to MI/08) to 0.3 m in shallow weathered bedrock at the interface of the groundwater discharge into the marine environment and the collection of seepage water into these pits at low tide. The locations of these MIMs is provided in attached Figure F7 and the results are provided in attached Table T12.

The results of the MIM sampling indicate the following:

- Concentrations of PFOS were detected above LOR (0.01 µg/l) in water from all the MIM locations apart from MI/04 in September 2017 and MI/02 in November 2017.
- The reported concentrations of PFOS in water at all MIM locations exceeded the adopted marine ecosystem criterion (0.00023 µg/l) with concentrations ranging from 0.09 µg/l (MI/06) to 2.82 µg/l (MI/03).
- The concentration of PFOS in water from two of the MIM locations (2.16 µg/l at MI/03 in September 2017; and 2.82 µg/l at MI/03 in November 2017) exceeded the adopted health based criterion for recreational water (2 µg/l).
- The concentration of PFHxS in water from one of the MIM locations (2.14 µg/l at MI/05 in September 2017) exceeded the adopted health based criterion for recreational water (2 µg/l).
- The concentration of the sum of PFHxS and PFOS in water from four of the MIM locations, ranging from 2.07 µg/l (MI/08 in November 2017) to 3.86 µg/l (MI/03 in September 2017), exceeded the adopted health based criterion for recreational water (2 µg/l).
- The highest concentration of PFAS compounds are at MI/03 and are coincident with MI/03 being directly downgradient of the run-off areas identified in attached **Figure F7**.

In addition to the groundwater well and MIM sampling in the NBA area, Kleinfelder collected surface water runoff samples from locations SP01 – SP06 on three occasions (September 2017, August 2018, August 2019), where surface water was available. The locations of these samples is shown in attached Figure F23 and the results are provided in attached Table T12. The results of the surface water runoff sampling indicate the following:

- The concentrations of PFOS in surface water from all the locations exceeded the adopted marine ecosystem criterion (0.00023 µg/l) on all three occasions (where water was present) with concentrations ranging from 0.23 (SP03 in August 2019) to 45 µg/l (SP03 in August 2017).
- The concentrations of PFOS in surface water exceeded the adopted health based criterion for recreational water (2 µg/l) on seven occasions (where water was present), ranging from 2.82 (SP05 in August 2019) to 45 µg/l (SP03 in August 2017).
- The concentrations of PFHxS in surface water from four of the surface water runoff locations exceeded the adopted health based criterion for recreational water (2 µg/l) ranging from 2.48 (September 2017) to 21 µg/l (August 2017).

- The concentrations of PFHxS and PFOS in surface water from six of the surface water runoff locations exceeded the adopted recreational criterion (2 µg/l) ranging from 3.16 µg/l (SP05 in August 2019) to 66 µg/l (SP03 in August 2017).
- The higher concentrations of PFAS compounds in surface water samples are at with SP03, which is located at the confluence of two run off areas (runoff area 1 and runoff area 2) as shown on attached **Figure F23**.

Other waters summary

Residual concentrations of PFAS are present in water discharging from shallow sediments to the marine environment at the Wharf (TMW12) and residual concentrations of PFAS are present in water discharging from shallow sediments to the marine environment at the NBA (marine interface sample locations). The water sampled appears to be predominantly seawater that recharged the beach sediments during the previous high tide (and is receding at low tide). The concentrations of metals in the Wharf TMWs exceeding the adopted criteria for this audit are generally consistent with background groundwater concentrations for the audit site, less than the analytical LOR or the adopted criteria in the most recent sampling event. PFAS concentrations from shallow sediments to the marine environment across both the Wharf (TMW12) and the NBA exceed the adopted criteria for the site.

Vapour and soil gas

Two soil vapour probes (SVP010 and SVP011) were drilled in the wider Wharf Area in May 2015 (refer to attached Figure F5). SVP011 is located in the audit area, while SVP010 is located to the east of the site (i.e. off-site). The SVB locations were selected based on where residual LNAPL was present in the aquifer beneath Wharf Road (i.e. MW321, GW004, MW007 and GW013). SVP010 and SVP011 were both drilled to 1.7 m bgs into clayey sand. No groundwater was encountered during or after drilling. The soil vapour probes were sampled three times (May 2015, October 2015 and March 2016). Soil vapour samples were analysed for BTEXN, alkanes, trimethylbenzenes, TRH, TPH and permanent gases. The results were compared to the soil vapour health screening levels for recreation/open space and commercial/industrial use (refer to attached **Table T16**). Over the three sampling rounds, the concentrations volatile petroleum hydrocarbons were less than the analytical limit of reporting (LOR) and/ or the adopted HSLs for vapour intrusion for recreation/open space and commercial/industrial use.

Any other relevant elements of the environment

No other elements of the environment are relevant to the audit site.

The presence, or potential for migration, of any off-site contamination

Soil contamination and waste materials

Contamination of soil (including fill) at the site is consistent with and predominantly sourced from the former refinery operations to the east of the audit site. These areas of the former refinery are subject to the same regimen of site decommissioning and demolition of infrastructure, site contamination investigations, remediation / management (as required) and audit as per the audit area. As a result, the potential for migration of further contamination (of soil and waste) onto the site is considered to be minimal.

The potential for contamination of soil and waste at the site to migrate off-site from the audit site is considered to be minimal as:

- the audit site is bounded by steep elevation / cliffs to the east and the Gulf St Vincent to the west; and
- residual soil contamination at the site is relatively limited in extent and is delineated to the west of the site.

Off-site impacts due to odour, air quality, stormwater and sedimentation

The auditor considers that there is no evidence of the migration of chemical substances from the site, and therefore off-site impacts, due to odour, air quality, stormwater or sedimentation.

As discussed above, the source of PFAS in the NBA is wastewater (historic) and stormwater runoff from the operational areas of the former refinery and down the erosional gully. While the sources of PFAS contaminated water and stormwater from the Plateau area to the erosional gully have been removed, some PFAS contaminated stormwater is expected to continue to discharge to the NBA from the erosional gully (and some smaller drainage lines along the cliff face). PFAS impacted runoff to the NBA is expected to decrease over time as there are no new sources of PFAS off-site.

Off-site impacts due to groundwater

Groundwater contamination at the audit site is primarily sourced from the former refinery operations to the east of the site. The potential for groundwater contamination at the site to migrate off-site is limited by the

geology (i.e. near vertically dipping siltstone and quartzite with bedding planes orientated NNE – SSW, that is parallel to the coast). As a result, groundwater flow in the fractured rock aquifer at the site is predominantly NNE – SSW, resulting in the potential for groundwater discharge to the marine environment to occur hundreds of metres from the source areas (rather than directly down hydraulic gradient to the west). The same geological structure limits groundwater flow in the fractured rock aquifer from the former refinery areas to the east, onto the audit site.

Assessments of the on-site LNAPL plume and dissolved phase hydrocarbon concentrations in groundwater indicate that the hydrocarbon impacts at the Wharf portion of the audit site are stable and / or decreasing. Further, these are delineated to the north, west and south, and groundwater modelling estimates that hydrocarbons will attenuate before reaching the closest point of discharge to the marine environment.

Marine discharge monitoring has confirmed that LNAPL and dissolved phase concentrations are unlikely to be discharging to the marine environment west of the source areas.

The concentrations of PFAS in marine discharge / interface monitoring indicates that shallow water containing PFAS is discharging to the Gulf St Vincent at the Wharf area (TWM12) and NBA.

The potential for residual off-site contamination to migrate back onto the site

As discussed above, the source of soil and contamination in groundwater at the site is primarily the former refinery operations to the east of the audit site. As the primary sources of contamination have been removed and the site geology limits the movement of contaminated groundwater from east to west, the potential for contaminated soil and groundwater to migrate back onto the site is considered to be minimal.

As discussed above, the source of PFAS in the NBA is wastewater (historic) and stormwater runoff from the operational areas of the former refinery and down the erosional gully. While the sources of PFAS contaminated water and stormwater from the Plateau area to the erosional gully have been removed, PFAS contaminated stormwater is expected to continue to discharge to the NBA from the erosional gully (and some smaller drainage lines along the cliff face). The source of the PFAS in the stormwater is the residual PFAS concentrations in soil in the erosional gully. PFAS impacted runoff to the NBA is expected to decrease over time as there are no new sources of PFAS off-site.

Shallow water containing PFAS is discharging to the Gulf St Vincent at the Wharf area (TWM12) and NBA. There is the potential that PFAS (after being significantly diluted in the marine water) may migrate back onto the site during high tide (which will discharge on the following receding tide).

Relevant non-site contamination issues

The auditor has considered other non-site contamination issues such as toxic, corrosive, flammable, explosive or infectious hazards, biological substances or radioactive substances. It is the auditor's opinion that there are no such issues applicable to this site.

Assessment of risk to structures

Soil pH generally ranged from 7.95 to 8.3 in the natural sand material across the site. With regards to AS2159-2009 – Piling Design and Installation, the exposure classification for concrete piles in soils remaining on the site following the remedial excavations is “mild” for impacts to concrete and “non-aggressive,” for impacts to steel.

The auditor notes that these results alone cannot definitively assess the potential for soils beneath the site to be corrosive to structures, including concrete slabs, buildings, foundations or footings.

It is noted that the naturally occurring conditions (i.e. TDS, chlorides and sulphates relating to the coastal environment, potentially resulting in corrosion of concrete and steel structures, do not relate to site contamination resulting from the previous industrial activity. The wharf structure (now demolished) is known to have had a cathodic protection system to manage corrosion.

Given the depth to groundwater, the shallow nature of bedrock and the proposed use of the site (recreation / public open space), it is assumed that concrete or steel structures will not be installed at the site.

Auditor determinations

Auditor determinations for this site are set out as follows:

- The site history information provided in Golder Associates (2013d), Kleinfelder (2018a), Kleinfelder (2016d) and Kleinfelder (2020c) is considered adequate for the purpose of determining the potentially contaminating activities formerly carried out at, and adjacent to, the site and the contaminants of potential concern.
- The auditor considers that the CSM in Kleinfelder, (2020c) is detailed sufficiently for the purpose of the report objectives and audit purposes, and concludes that the essential elements of a CSM as identified in NEPM Schedule B2 and the GAR (SA EPA, 2019) have been covered.

- Soil and groundwater sampling methodologies as described in the various site assessors' reports are considered by the Auditor to be acceptable to achieve the purpose of the investigations.
- Relevant guidelines were adopted for the assessment of risk, based on site soils (sand), depth of sampling and the proposed land use (recreational / public open space).
- The data quality objectives were generally satisfactory for the purpose of the investigation objectives and audit purposes.
- The auditor considers that the number, depth and location of the soil and groundwater investigation locations (including soil vapour, surface water and marine interface water sampling) is sufficient to characterise the nature and extent of the contamination at the Wharf and NBA audit area, and that sufficient groundwater sampling events have been conducted over a number of years to assess temporal variability in groundwater quality and conditions.
- The field and laboratory procedures adopted were, for the majority of the works, complete, comparable, representative, precise and accurate, and therefore suitable for the objectives of the assessment.
- The auditor is satisfied that the quality of the information provided was sufficiently complete to characterise contamination at the site and that the data collected is reliable and representative and can be relied upon.
- The auditor is satisfied that the scope of the various assessors' reports was within the approved scope of work and that there are no significant uncertainties associated with the results.
- The auditor considers that the various assessors have complied with the relevant legislation (as applicable at the time) and that the investigations were undertaken generally consistent with the ASC NEPM and relevant EPA guidelines (applicable at the time of the investigations).
- Sampling procedures, staff competency and field methodologies adopted by various assessors are considered to be consistent between events, using standard field operating procedures.
- Given the purpose of various assessors' scopes of work, the auditor is of the opinion that the nature and extent of soil and groundwater contamination at the site was sufficiently assessed by the various assessors.
- The auditor concludes that the nature and extent of soil contamination has been determined, such that site contamination is not considered to exist in soils remaining on or below the surface of the site. The land uses that were taken into account in forming this opinion are public open space / recreational areas . The soils at the site:
 - do not represent an unacceptable human health risk to future site users associated with the proposed use of the site (public open space / recreational areas); and
 - do not represent an unacceptable ecological risk associated with the proposed use of the site (public open space / recreational areas).
- Should the site be used (currently or in the future) for a sensitive land use (e.g. residential), site contamination would be considered to exist based on the nature and extent of soil contamination remaining on or below the surface of the site.
- The auditor concludes that the nature and extent of soil vapour contamination underlying the Site has been determined, such that soil vapour contamination does not exist. The land uses that were taken into account in forming this opinion are public open space / recreational areas. This assessment is based on the current site conditions, where no buildings or other enclosed structures are present.
- The auditor concludes that the nature and extent of groundwater contamination underlying the site has been determined, such that groundwater contamination (that is not trivial) exists at the site. However, the groundwater at the site:
 - is not considered suitable for any on-site extractive use (based on the background TDS concentration);
 - does not represent an unacceptable human health risk to future recreational users of the marine waters of the Gulf St Vincent (including swimming and consuming fish or shellfish);
 - does not represent an unacceptable ecological risk to aquatic receptors in the marine waters of the Gulf St Vincent (and secondary consumers of those receptors).

- The auditor is of the opinion that the final site condition does not represent actual or potential harm to human health or environmental receptors at the site associated with the proposed site use (i.e. public open space / recreational areas).
- The auditor is of the opinion that hydrocarbon odours and / or staining (that have been observed at numerous locations across the wharf portion of the audit area in soils and fractured rock at depths ranging from 0.6 m bgs to >5 m bgs) do not represent aesthetically unacceptable conditions, as the depths of these aesthetic impacts (i.e. 0.6 m bgs) are beyond the depth that future site users associated with the proposed recreational and public open space are reasonably expected to access.
- The auditor considers that there is no evidence of the migration of chemical substances from the site, and therefore off-site impacts, due to odour, air quality, stormwater or sedimentation.
- The auditor has considered other non-site contamination issues such as toxic, corrosive, flammable, explosive or infectious hazards, biological substances or radioactive substances. It is the auditor's opinion that there are no such issues applicable to this site.

Audit outcomes

Given the Audit purposes being determined (refer to Section C, above), the Auditor provides clear statements on the following:

1. *the nature and extent of any site contamination present or remaining on or below the surface of the site*

- The auditor concludes that the nature and extent of soil contamination has been determined, such that site contamination is not considered to exist in soils remaining on or below the surface of the site. The land uses that were taken into account in forming this opinion are public open space / recreational areas . The soils at the site:
 - do not represent an unacceptable human health risk to future site users associated with the proposed use of the site (public open space / recreational areas) ; and
 - do not represent an unacceptable ecological risk associated with the proposed use of the site (public open space / recreational areas).
- Should the site be used (currently or in the future) for a sensitive land use (e.g. residential), site contamination would be considered to exist based on the nature and extent of soil contamination remaining on or below the surface of the site.
- The auditor concludes that the nature and extent of soil vapour contamination underlying the Site has been determined, such that soil vapour contamination does not exist. The land uses that were taken into account in forming this opinion are public open space / recreational areas. This assessment is based on the current site conditions, where no buildings or other enclosed structures are present.
- The auditor concludes that the nature and extent of groundwater contamination underlying the site has been determined, such that groundwater contamination (that is not trivial) exists at the site. However, the groundwater at the site:
 - is not considered suitable for any on-site extractive use (based on the background TDS concentration);
 - does not represent an unacceptable human health risk to future recreational users of the marine waters of the Gulf St Vincent (including swimming and consuming fish or shellfish);
 - does not represent an unacceptable ecological risk to aquatic receptors in the marine waters of the Gulf St Vincent (and secondary consumers of those receptors).
- The auditor is of the opinion that the final site condition does not represent actual or potential harm to human health or environmental receptors at the site associated with the proposed site use (i.e. public open space / recreational areas).

2. *the suitability of site for a sensitive use or another use or range of uses*

The auditor considers that the audit site is suitable for the following uses:

- public open space / recreational areas (i.e. passive recreation including walking / riding, use of the beach and access to the Gulf St Vincent, including swimming and recreational fishing⁷), where no buildings or other enclosed structures are present.

3. *what remediation is or remains necessary for a specified use or range of uses*

- Based on the results of the site investigation and after considering the proposed use of the site, no remediation is necessary to render the site suitable for the proposed use (i.e. public open space / recreational areas).

Audit conditions

The auditor considers that the Site is suitable for the purpose of public open space / recreational areas (i.e. passive recreation including walking / riding, use of the beach and access to the Gulf St Vincent, including swimming and recreational fishing⁸), where no buildings or other enclosed structures are present.

The audit conditions are set out as follows:

Conditions relating to planning and development

Should buildings or other enclosed structures be proposed in areas where residual volatile chemicals (e.g. petroleum hydrocarbons) are known to be present, an assessment of the potential for vapour intrusion to the proposed building / structure and associated risk to human health must be undertaken.

Conditions relating to site remediation and management

None

Conditions relating to environmental monitoring

None

Conditions relating to water restrictions

Groundwater at the site is contaminated and must not be used for any beneficial use without prior testing and confirmation that it is suitable for the proposed use. Relevant guidance issued by SA Health on the testing and use of bore water must be considered prior to groundwater use.

Audit recommendations

The Auditor recommends that:

1. Groundwater monitoring bores present at the site should be decommissioned in accordance with the requirements of "Minimum Construction Requirements for Water Bores in Australia, published by the Land and Water Biodiversity Committee (Edition 3, February 2012);
2. Any virgin (quarried) material (soil) imported to site must meet the criteria set out in Table **S1** and be aesthetically acceptable for the proposed use.
3. Any imported waste soil fill brought onto the site must be undertaken in accordance with the SA EPA Standard for the production and use of Waste Derived Fill. Should sampling and assessment of the material be necessary, it should be undertaken by an appropriately qualified site contamination consultant and should meet the waste fill criteria (as prescribed in the Environment Protection Regulations 2009).
4. Any soil removed from the site should be assessed, categorised and re-used in accordance with relevant guidance criteria or disposed off site at a site or facility suitable for accepting the material in accordance with SA EPA Standard for the production and use of Waste Derived Fill.
5. Asbestos containing material (in the form of fragments of ACM) has been identified and remediated at the site. It is possible that residual ACM may exist under the cobbles and rocks which may be uncovered in future. Residual ACM is not anticipated to represent a health risk to future site users as the WA DOH (2019) considers that natural erosion forces are unlikely to significantly contribute to the release of particulates within a person's breathing zone. If encountered during future use of the

⁷ Note that the site is within a Sanctuary Zone located within the existing Encounter Marine Park where recreational fishing is not permitted.

⁸ Note that the site is within a Sanctuary Zone located within the existing Encounter Marine Park where recreational fishing is not permitted.

site, any fragments of ACM should be handled and disposed in accordance with the relevant regulations

6. Groundwater in the area immediately around the site is contaminated. It is recommended that (prior to use) groundwater from the site be tested and its suitability for the proposed use be confirmed by a suitably qualified professional.

Concluding advice

The Auditor advises that all owners and / or occupiers of the Site (both current and future) should be made aware of the above Audit determinations, outcomes, conditions and recommendations.

CERTIFICATION OF COPY OF SUMMARY FINDINGS

I certify that the summary of findings contained within or annexed to this statement represents a true and accurate summary of the findings of the site contamination audit set out in the report.



Signed*:

Dated: 26 February 2021

** This form must be completed and signed by the 'responsible auditor', being, under the Environment Protection Act 1993 and the Environment Protection Regulations 2009, the auditor who personally carried out or directly supervised the work involved in the audit.*

This site contamination audit statement must be lodged, on completion of the audit, with the council for the area in which the audit site is situated and any prescribed body (see regulation 68 of the Environment Protection Regulations 2009).

The report (including the summary of findings) will be recorded in the public register kept by the EPA under section 109 of the Environment Protection Act 1993.

Table S1 Audit criteria for soils

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
Benzene	10	50	NL ¹ 120 ²
Toluene	10	85	NL ¹ 18,000 ²
Ethylbenzene	1.5	70	NL ¹ 5,300 ²
Xylenes, total	10	105	NL ¹ 15,000 ²
TPH C ₆ - C ₉ Fraction	Assess as F1 (125)	Assess as F1 (180)	Assess as F1 (5,100) 700 ¹³
TPH C ₁₀ - C ₁₄ Fraction	Assess as F2 (25)	Assess as F2 (120)	Assess as F2 (3,800) NL ¹ 1000 ¹³
TPH C ₁₅ - C ₂₈ Fraction	Assess as F3 (NE)	Assess as F3 (300)	5,300 ² 2500 ¹³
TPH C ₂₉ - C ₃₆ Fraction	Assess as F4 (NE)	Assess as F4 (2,800)	
TRH C ₆ - C ₁₀			5,100 ² 700 ¹³
TRH C ₆ - C ₁₀ Fraction minus BTEX (F1)	125	180	NL ¹ 5,100 ²
TRH >C ₁₀ - C ₁₆ Fraction	NE	NE	3,800 ² 1000 ¹³
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	25	120	NL ¹ 3,800 ²
TRH >C ₁₆ - C ₃₄ Fraction (F3)	NE	300	5,300 ² 2500 ¹³
TRH >C ₃₄ - C ₄₀ Fraction (F4)	NE	2,800	7,400 ² 10,000 ¹³
Antimony	NE	20 ³	20 ³
Arsenic	40	100	300
Barium	NE	500 ³	500 ³
Beryllium	NE	4	90 ³
Boron	81 ^{4a}	92 ^{4b}	20,000
Cadmium	NE	10 ³	90

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
Chromium	NE	64 ³	300 Chromium VI criteria adopted
Chromium VI	NE	0.4 ³	300
Cobalt	NE	50 ³	300
Copper	80 ¹²	220	17,000
Cyanide (total)	NE	8 ³	240
Iron	NR	NR	55,000 ⁵
Lead	480	1,110	600
Manganese	NE	500 ⁸	19,000
Mercury	NE	6.6 ³	80
Molybdenum	NE	10 ³	10 ³
Nickel	60 ¹²	290 ¹²	1,200
Selenium	NE	1 ³	700
Silver	NE	20 ³	20 ³
Tin	NE	50 ³	50 ³
Vanadium	NE	130 ³	130 ³
Zinc	190 ¹²	720 ¹²	30,000
Naphthalene	10	170	NL ¹ 1,900 ²
1-Methylnaphthalene	10	170	18 ⁵
2-acetylaminofluorene	NR	NR	1.4 ^{5a}
2-Chloronaphthalene	10	170	4,800 ⁵
2-Methylnaphthalene	10	170	240 ⁵
3-Methylcholanthrene	NR	NR	0.055 ^{5a}
7,12-Dimethylbenzo[a]anthracene	3 (assess as B(a)P)	3 (assess as B(a)P)	0.0046 ^{5a}
Acenaphthene	10 (assess as naphthalene)	170 (assess as naphthalene)	3,600 ⁵
Acenaphthylene	10 (assess as naphthalene)	170 (assess as naphthalene)	3,600 ⁵
Anthracene	NE	2.5 ³	18,000 ⁵
Carcinogenic PAHs as Benzo(a)pyrene TEQ	NE	NE	3

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
Benzo(b&j)fluoranthene	3 (assess as B(a)P)	3 (assess as B(a)P)	Assess as BaP (TEQ)
Benzo[a]anthracene	NE	1 ³	Assess as BaP (TEQ)
Benzo[a]pyrene ¹⁴	3	3	Assess as BaP (TEQ)
Benzo[b]fluoranthene	NE	1 ³	1 ³
Benzo[g,h,i]perylene	3 (assess as B(a)P)	3 (assess as B(a)P)	Assess as BaP (TEQ)
Benzo[k]fluoranthene	NE	1 ³	Assess as BaP (TEQ)
Chrysene	3 (assess as B(a)P)	3 (assess as B(a)P)	Assess as BaP (TEQ)
Coronene	3 (assess as B(a)P)	3 (assess as B(a)P)	NE
Dibenz[a,h]anthracene	NE	1 ³	Assess as BaP (TEQ)
Fluoranthene	NE	50 ³	50 ³
Fluorene	10 (assess as naphthalene)	170 (assess as naphthalene)	2,400 ⁵
Indeno[1,2,3-c,d]pyrene	NE	1 ³	Assess as BaP (TEQ)
Phenanthrene	10 (assess as naphthalene)	170 (assess as naphthalene)	5 ³
Pyrene	10 (assess as naphthalene)	170 (assess as naphthalene)	10 ³
Sum of PAHs	NE	NE	300
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	NE	0.5 ³	0.5 ³
2,3,4,6-Tetrachlorophenol	NE	0.5 ³	0.5 ³
2,3,5,6-Tetrachlorophenol	NE	0.5 ³	0.5 ³
2,3,6-Trichlorophenol	NE	0.5 ³	0.5 ³
2,4,5-Trichlorophenol	NE	0.5 ³	0.5 ³
2,4,6-Trichlorophenol	NE	0.5 ³	0.5 ³
2,4-Dichlorophenol	NE	0.5 ³	0.5 ³
2,4-Dimethylphenol	NE	1 ³	1 ³
2,6-Dichlorophenol	NE	0.5 ³	0.5 ³
2-Chlorophenol	NE	0.5 ³	0.5 ³

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
2-Methylphenol	NE	1 ³	4,000
2-Nitrophenol	NE	1 ³	1 ³
3- & 4-Methylphenol	NE	1 ³	4,000
4-Chloro-3-methylphenol	NE	0.5 ³	0.5 ³
Pentachlorophenol	NE	7.6 ³	120
Phenol	NE	3.8 ⁷	40,000
PCBs	0.004 ^{4b}	0.2 ^{4b}	1
1,2,4-Trimethylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	58 ⁵ Assess as xylene (NL) ¹
1,3,5-Trimethylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	780 ⁵ Assess as xylene (NL) ¹
Isopropylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	1,900 ⁵ Assess as xylene (NL) ¹
n-butylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	3,900 ⁵ Assess as xylene (NL) ¹
n-propylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	3,800 ⁵ Assess as xylene (NL) ¹
Sec-butylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	7800 ⁵ Assess as xylene (NL) ¹
Styrene	NE	5 ³	5 ³
Tert-butylbenzene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	7,800 ⁵ Assess as xylene (NL) ¹
2-Butanone (MEK)	89.6 ⁶	89.6 ⁶	27,000 ⁵
bis(2-ethylhexyl)phthalate	0.925 ⁶	0.925 ⁶	39 ⁵
Butyl benzyl phthalate	0.239 ⁶	0.239 ⁶	290 ⁵
Diethyl phthalate	24.8 ⁶	24.8 ⁶	51,000 ⁵
1,1,1-Trichloroethane	NE	5 ³	5 ³
1,1,2-Trichloroethane	NE	5 ³	5 ³
1,1-Dichloroethylene	NE	5 ³	5 ³

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
4-Isopropyltoluene	Assess as ethylbenzene (1.5) (coarse soil)	Assess as benzene (50) (coarse soil)	NL ¹ 15000 ²
Carbon tetrachloride	NE	5 ³	5 ³
Chloroethane	2.5 ^{4c}	2.5 ^{4c}	14,000 ⁵
Chloroform	NE	5 ³	5 ³
Tetrachloroethylene	NE	0.2 ³	24 ⁵
trans-1,4-Dichloro-2-butene	1,000 ⁷	1,000 ⁷	0.074 ^{5a}
Trichloroethylene	NE	0.01 ³	0.94 ⁵
Trichlorofluoromethane	16.4 ⁶	16.4 ⁶	2,300 ⁵
Vinyl chloride	0.646 ⁶	0.646 ⁶	0.59 ^{5a}
2,4,5-T	NR	NR	800
2,4-D	NR	NR	1,300
2-Methyl-4-Chlorophenoxy Butanoic Acid	NR	NR	800
4,4'-DDT	3	180	Assess as DDT+DDE+DDD (400)
Aldrin	NR	NR	Assess as Aldrin and dieldrin (10)
Chlordane	NR	NR	70
Dieldrin	NR	NR	Assess as Aldrin and dieldrin (10)
Endosulfan	NR	NR	340
Endrin	NR	NR	20
Heptachlor	NR	NR	10
Hexachlorobenzene	0.199 ⁶	0.199 ⁶	10
MCPA	NR	NR	800
MCPB	NR	NR	800
Mecoprop	NR	NR	800
Methoxychlor	NR	NR	400
Picloram	NR	NR	5,700
Sum of Aldrin + Dieldrin	NE	NE	10
Sum of DDD + DDT + DDE	NE	NE	400

Analyte	NEPM (2013) ESL/EIL Area of Ecological Significance (mg/kg)	NEPM (2013) ESL/EIL Urban Residential and Public Open Space (mg/kg)	NEPM (2013) HSL/HIL C Recreational/Open Space (mg/kg)
Monoethanolamine	NR	NR	130 ⁵
PFOA	10 ⁸		10 ⁹
6.2 FTS/ 8.2 FTS	Assess as PFOA (10 ^{8a})		Assess as PFOA (10 ^{9a})
PFOS	0.01 (indirect exposure) ⁸ 1 (direct exposure) ⁸		Assess as sum of PFOS and PFHxS (1 ^{9b})
PFHxS	Assess as PFOS (1) (direct exposure) ^{8b}		Assess as sum of PFOS and PFHxS (1 ^{9b})
PFHxS + PFOS	Assess as PFOS (1) (direct exposure) ^{8b}		1 ⁹
Furfural	0.449 ⁶	0.449 ⁶	210 ⁵
Tetramethyl lead	0.196 ¹⁰	0.196 ¹⁰	0.0078 ⁵
Tetraethyl lead	0.196 ¹⁰	0.196 ¹⁰	0.0078 ⁵
Ammonia	200 ¹¹ 40 ^{11a}	200 ¹¹ 40 ^{11a}	200 ¹¹ 40 ^{11a}
Nitrate	200 ¹¹ 40 ^{11a}	200 ¹¹ 40 ^{11a}	130,000 ⁵
Nitrite	200 ¹¹ 40 ^{15a}	200 ¹¹ 40 ^{15a}	7,800 ⁵
Sulfur	600	600	NR
Bonded ACM (asbestos-containing material)	Not applicable	Not applicable	0.04% w/w
FA and AF (friable asbestos)	Not applicable	Not applicable	0.001% w/w
Visible asbestos in top 10 cm	Not applicable	Not applicable	None

Notes:

NR Criteria not required based on assessment of potential risk conducted during VSCAP development

NE Criteria value not established

Soil criteria derivation is provided in Table 1 of Assessment Criteria Matrix (Kleinfelder 2016h) with updates to take into account changes in PFAS criteria since the issue of the Assessment Criteria Matrix (Kleinfelder 2015h).

1 NEPM Schedule B1, Table 1A(3) - Vapour intrusion pathway, public open space (HSL C) (all depths)

2 Friebel and Nadebaum CRC Care Technical Report 10, Appendix F (2011) - Direct contact pathway

3 Canadian Councils of the Minister of the Environment (CCME), (1999), Soil Quality Guidelines for the Protection of Environmental and Human Health (1991-2003)

4 Ministry of Housing Spatial Planning and the Environment (VROM) Proposal for revised intervention values for soil and groundwater for 2nd, 3rd and 4th series of compounds Dutch (2012)

4a Ministry of Housing Spatial Planning and the Environment (VROM) Proposal for revised intervention values for soil and groundwater for 2nd, 3rd and 4th series of compounds Dutch (2012)- Boron background concentration estimated to be 81 mg/kg (Kleinfelder, 2015, ADL15R26045).

4b Ministry of Housing Spatial Planning and the Environment (VROM) Intervention (Soil Screening Benchmark) Soil Remediation Circular 2009 Dutch (2009)- Intervention Value modified for organic content

4c Ministry of Housing Spatial Planning and the Environment (VROM) Dutch (2009)- ad hoc intervention value modified for clay (<2%) (chloroethane)

5 US EPA Regional Screening Limits (November 2020)

- 5a US EPA Regional Screening Limits (November 2020), modified using Target risk of 1e-5
6 US EPA Region 5 Environmental Screening Level (2003)
7 Oak Ridge National Laboratory Screening benchmark for earthworms and soil microorganisms, (ORNL 1997)
8 NEMP (2020), Soil criteria for investigation - ecological direct exposure (all land uses)
8a Use PFOA criteria as surrogate because FTS compounds can break down to PFCAs which includes PFOA
8b Criteria not established, use PFOS criteria for direct exposure
9 NEMP (2020), Soil criteria for investigation - human health (public open space (HIL C)
9a Use PFOA criteria as surrogate because FTS compounds can break down to PFCAs which includes PFOA
9b Criteria not established - use Sum of PFOS and PFHxS criteria for PFOS and PFHxS individually
10 UK Environment Agency (2008)
11 Kansas Technical Standards for Nutrient Management (revised 2010) (at depths <0.61 m of soil)
11a Kansas Technical Standards for Nutrient Management (revised 2010) (at depths > 0.61 m)
12 Site specific EIL for Zinc, Nickel, Copper using CEC of 22 meq/ 100 g, pH of 7.95, TOC of 0.3% in an aged environment with low traffic. Clay content not required to be estimated as site specific chromium not derived. Natural and fill material considered similar based on beach natural of site.
13 NEPM Table 1B(7) Management Limits
14. As per email advice from SA EPA to all auditors dated 2 July 2015, the NEPM HIL A (3 mg/kg) for benzo(a)pyrene should be adopted as the ESL, as the NEPM value of 0.7 mg/kg is considered overly conservative
LOR Laboratory limit of reporting (LOR) is used in the absence of screening values from these sources.

Table S2 Audit groundwater assessment criteria

Analyte (µg/L)	Environmental Value for Aquatic Ecosystems (Marine)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Aesthetics)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Health)
Antimony	270 ¹	NE	78 ²
Arsenic	13 Arsenic ^{1f}	NE	100 ³
Barium	4 ⁴	NE	20,000 ³
Beryllium	0.13 ¹	NE	600 ³
Boron	5,100 ¹	NE	40,000 ³
Cadmium	0.7 ¹	NE	20 ³
Chromium	27.4 (Cr III) and 4.4 (Cr VI) ⁵	NE	500 ³
Chromium VI	4.4 ⁵	NE	500 ³
Cobalt	1 ¹	NE	60 ²
Copper	1.3 ¹	1,000 ⁶	20,000 ³
Iron	300 ¹⁰	300 ⁶	300 ⁶
Iron (Ferrous)	300 ¹⁰	NE	300 ⁶
Iron (Ferric)	300 ¹⁰	NE	300 ⁶
Lead	4.4 ¹	NE	100 ³
Manganese	1,900 ^{1e}	100 ⁶	5,000 ³
Mercury	0.1 ¹	NE	10 ³
Molybdenum	23 ¹	NE	500 ³
Nickel	7 ¹	NE	200 ³
Selenium	3 ¹	NE	100 ³
Silver	1.4 ¹	NE	1,000 ³

Analyte (µg/L)	Environmental Value for Aquatic Ecosystems (Marine)	Environmental Value of Recreation (non- domestic) and aesthetics of marine waters (Aesthetics)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Health)
Tin	10 ¹	NE	120,000 ²
Vanadium	100 ⁷	NE	860 ²
Zinc	15 ⁷	3,000 ⁶	60,000 ²
Cyanides (total)	4 ⁸	NE	800 ³
Benzene	500 ¹	NE	10 ³
Toluene	180 ¹	25 ⁶	8,000 ³
Ethyl Benzene	5 ¹	3 ⁶	3,000 ³
o-Xylene	350 ¹	NE	1,900 ²
m-Xylene	75 ¹	NE	1,900 ²
p-Xylene	200 ¹	NE	1,900 ²
Total xylenes	75-350 ¹	20 ⁶	6,000 ³
F1 (TRH C ₆ -C ₁₀ – BTEX)	500 ⁹	NE	10 (aromatic) 15,000 (Aliphatic) ¹⁰
F2 (TRH >C ₁₀ -C ₁₆ - naphthalene)	500 ⁹	NE	940 (aromatic) 3,000 (Aliphatic) ¹⁰
TRH >C ₁₆ -C ₃₄	500 ⁹	NE	900 (Aromatic) ¹⁰
TRH >C ₃₄ -C ₄₀	500 ⁹	NE	900 (Aromatic) ¹⁰
TRH C ₆ -C ₄₀ (for oil and grease)	500 ⁹	NE	NE
Benzo(a)pyrene	0.1 ¹	NE	0.1 ³
Naphthalene	50 ¹	NE	1.7 ²
Acenaphthene	5.8 ¹¹	NE	5,300 ²
Acenaphthylene	Assess as naphthalene (50 ^{1a})	NE	5,300 ²
Anthracene	0.01 ¹	NE	18,000 ²
Benzo(b)fluoranthene	0.1 ¹	NE	2.5 ²
Benz(a)anthracene	0.018 ¹¹	NE	0.3 ²
Benzo(g,h,i)perylene	Assess as B(a)P (0.1 ^{1b})	NE	250 ²
Benzo(e)pyrene	0.1 ^{1b}	NE	2.5 ²
2-Chloronaphthalene	NE	NE	7,500 ²
Chrysene	Assess as B(a)P (0.1 ^{1b})	NE	250 ²

Analyte (µg/L)	Environmental Value for Aquatic Ecosystems (Marine)	Environmental Value of Recreation (non- domestic) and aesthetics of marine waters (Aesthetics)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Health)
7,12-Dimethylbenz(a)anthracene	Assess as B(a)P (0.1 ^{1b})	NE	0.001 ²
Fluoranthene	1 ¹	NE	8,000 ²
Fluorene	3 ¹¹	NE	2,900 ²
2-Fluorene (acetylamino)	Assess as naphthalene (50 ^{1a})	NE	0.16 ²
3-Methylcholanthrene	Assess as B(a)P (0.1 ^{1b})	NE	0.011 ²
2-Methylnaphthalene	4.2 ¹²	NE	360 ²
1-methylnaphthalene	2.1 ¹²	NE	11 ²
Phenanthrene	0.6 ¹	NE	NE
Pyrene	0.025 ¹¹	NE	1,200 ²
Phenol	400 ¹	NE	58,000 ²
Pentachlorophenol	11 ¹	NE	100 ³
4-Chloro-3-Methylphenol (p-chloro-m-Cresol)	0.64 ¹³	NE	14,000 ²
2-Chlorophenol	340 ¹	0.1 ⁶	3,000 ³
2,4-Dichlorophenol	120 ¹	0.3 ⁶	2,000 ³
2,6-Dichlorophenol	34 ¹	NE	NE
2,4-Dimethylphenol	2 ¹	NE	3,600 ²
2-Methylphenol (o-cresol)	1,020 ¹²	NE	9,300 ²
3-Methylphenol (m-cresol)	Assess as 2- methylphenol (1,020 ^{12a})	NE	9,300 ²
4-Methylphenol (p-cresol)	Assess as 2- methylphenol (1,020 ^{12a})	NE	19,000 ²
2-Nitrophenol	2 ¹	NE	Assess as 2,4 dinitrophenol (390 ^{2a})
2,3,5,6-Tetrachlorophenol	1.4 ¹	NE	NE
2,3,4,5- Tetrachlorophenol	2 ¹	NE	NE
2,3,4,6 -Tetrachlorophenol	10 ¹	NE	2,400 ²
2,4,5-Trichlorophenol	4 ¹	NE	12,000 ²
2,4,6-Trichlorophenol	3 ¹	2 ⁶	200 ³
2,3,6- Trichlorophenol	2 ¹	NE	NE

Analyte (µg/L)	Environmental Value for Aquatic Ecosystems (Marine)	Environmental Value of Recreation (non- domestic) and aesthetics of marine waters (Aesthetics)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Health)
4,4-DDT	0.0004 ¹	NE	90 ³
Aldrin and dieldrin	0.01 (dieldrin) 0.003 (aldrin)	NE	3 ³
Chlordane	0.001 ¹	NE	20 ³
Endosulfan	0.005 ¹	NE	200 ³
Endrin	0.004 ¹	NE	23 ²
Heptachlor	0.0004 ¹	NE	3 ³
Hexachlorobenzene (HCB)	0.05 ¹	NE	0.098 ²
Methoxychlor	0.004 ¹	NE	3,000 ³
Mirex	0.04 ¹	NE	0.0088 ²
2,4,5-T	36 ¹	NE	1,000 ³
2,4-D	280 ¹	NE	300 ³
MCPA	1.4 ¹	NE	400 ³
Toxaphene	0.0006 ¹	NE	0.71 ²
Picloram	29 ¹¹	NE	3,000 ³
Atrazine	13 ¹	NE	200 ³
Chlorpyrifos	0.009 ¹	NE	100 ³
Bromodichloromethane	370 ^{1c}	NE	600 ¹⁴
Bromochloromethane	Assess as dichloromethane (4,000 ^{1d})	NE	830 ²
Dichloromethane	4,000 ¹	NE	40 ³
1,1-dichloroethane	47 ⁴	NE	28 ²
1,2-dichloroethane	1,130 ¹²	NE	30 ³
1,1-dichloroethene	2,240 ¹²	NE	300 ³
1,1,1-trichloroethane	270 ¹	NE	80,000 ²
1,1,2-trichloroethane	1,900 ¹	NE	2.8 ²
1,1-dichloroethylene	700 ¹	NE	300 ³
Trichloroethylene (TCE)	330 ¹	NE	4.9 ²
Tetrachloroethylene (PCE)	70 ¹	NE	500 ³
Trichloromethane (chloroform)	370 ¹	NE	2,500 ³
Carbon tetrachloride	240 ¹	NE	30 ³

Analyte (µg/L)	Environmental Value for Aquatic Ecosystems (Marine)	Environmental Value of Recreation (non- domestic) and aesthetics of marine waters (Aesthetics)	Environmental Value of Recreation (non-domestic) and aesthetics of marine waters (Health)
Vinyl chloride	100 ¹	NE	3 ³
n-butylbenzene	Assess as p- isopropylbenzene (85 ^{15a})	NE	10,000 ²
Sec-butylbenzene	Assess as p- isopropylbenzene (85 ^{15a})	NE	20,000 ²
Propylbenzene	128 ⁴	NE	6,600 ²
isopropylbenzene	30 ¹	NE	4,500 ²
1,2,4-trimethylbenzene	19 ¹²	NE	560 ²
1,2,3-trimethylbenzene	19 ¹²	NE	550 ²
1,3,5-trimethylbenzene	71 ⁴	NE	600 ²
4-isopropyltoluene	85 ⁴	NE	6,900 ²
Tert-butylbenzene	85 ¹⁵	NE	6,900 ^{2b}
Styrene	72 ¹¹	4 ⁶	300 ³
Methyl ethyl ketone	14,000 ⁴	NE	56,000 ²
Tetraethyl lead	NE	NE	0.013 ²
PFOA	19 ¹⁶	NE	10 ¹⁷
6:2 FTS	LOR	NE	LOR
8:2 FTS	LOR	NE	LOR
PFOS	0.00023 ¹⁶	NE	Assess as PFOS +PFHxS (2 ¹⁸)
PFHxS	LOR	NE	Assess as PFOS +PFHxS (2 ¹⁸)
PFOS +PFHxS	LOR	NE	2 ¹⁷
Furfural	Assess as dibenzofuran (65 ^{12c})	NE	380 ²
bis(2-ethylhexyl)phthalate	1 ¹	NE	100 ³
Butylbenzylphthalate	29.4 ¹²	NE	160 ²
Diethylphthalate	900 ¹	NE	150,000 ²
Ammonia as N	200	NE	4,110 ^{6a}
Nitrate as N	2,400 ¹⁹	NE	112,903 ^{6a*}
Nitrite as N	60 ¹¹	NE	9,130 ^{6a}
Sulphate (as SO ₄ ⁻)	NE	250,000 ⁶	5,000,000 ³

Notes:

*converted to NO₃ as N

NE = Criteria not established

Groundwater criteria derivation described in Groundwater Assessment Criteria Matrix, Kleinfelder, (2016b) with updates to include changes to PFAS as per NEMP V.2 and updates to Benzo(b)fluoranthene, Benz(a)anthracene, Benzo(g,h,i)perylene, Benzo(e)pyrene in November 2020.

- 1 ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Marine interim working level or low or moderate reliability trigger values
- 1a ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Marine interim working level or low or moderate reliability trigger values – Naphthalene value adopted
- 1b ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Marine interim working level or low or moderate reliability trigger values – Benzo(a)pyrene value adopted
- 1c ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Marine interim working level or low or moderate reliability trigger values – Chloroform value adopted due to structural similarity
- 1d ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Marine interim working level or low or moderate reliability trigger values – Dichloromethane value adopted due to structural similarity
- 1e ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines- Freshwater moderate reliability value adopted for manganese as marine value is considered low reliability.
- 1f ANZECC and ARMCANZ (2000) National Water Quality Management Strategy - Australian and New Zealand Guidelines- Freshwater moderate reliability value adopted for arsenic V as the marine value is considered low reliability. It is assumed that arsenic in marine water is primarily present as arsenic (V) as arsenic III is uncommon in seawater and considering that salinity does not affect arsenic toxicity the freshwater criteria is adopted as it is more reliable.
- 2 US EPA (November 2020) Regional Screening Levels – Tapwater, multiplied by a factor of 10
- 2a US EPA (November 2020) Regional Screening Levels – Tapwater, multiplied by a factor of 10 – 2,4-dinitrophenol value adopted
- 2b US EPA (November 2020) Regional Screening Levels – Tapwater, multiplied by a factor of 10 – tert-butylbenzene value adopted
- 3 NHMRC ADWG (2011) Updated August 2018 (Health), multiplied by a factor of 10
- 4 In the absence of marine criteria, USEPA R3 (2006) BTAG fresh water criteria was adopted
- 5 ANZECC (2000) Med-Low reliability trigger values
- 6 NHMRC ADWG (2011) Updated August 2018 (Aesthetic)
- 6a NHMRC ADWG (2011) Updated August 2018 (Aesthetic) multiplied by a factor of 10 for health
- 7 ANZECC (2000) high reliability trigger values
- 8 ANZECC (2000) very low reliability trigger values
- 9 San Francisco Regional Water Quality Control Board (SF RWQCB, 2013) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final – February-May 2013
- 10 WHO Petroleum Products in DW 2008 for benzene for aromatic fraction/ WHO Petroleum Products in DW 2008 for aliphatic (multiplied by a factor of 10)
- 11 CCME (1999) Freshwater
- 12 US EPA (2006) Region 3 - BTAG Marine Screening Benchmarks (7/2006)
- 12a US EPA (2006) Region 3 - BTAG Marine Screening Benchmarks (7/2006) – 2-methylphenol value adopted
- 12b US EPA (2006) Region 3 - BTAG Marine Screening Benchmarks (7/2006) – 2-methylphenol value adopted
- 12c US EPA (2006) Region 3 - BTAG Marine Screening Benchmarks (7/2006) – dibenzofuran value adopted due to its structural similarity
- 13 RIVM (2009), Environmental risk limits for monochlorophenols, 4-chloro-3-methylphenol and aminochlorophenol (RIVM report No. 601714006/2009).
- 14 WHO DWG (2008), multiplied by a factor of 10
- 15 US EPA (2006) Region 3 - BTAG Freshwater Screening Benchmarks (7/2006) – p-isopropyltoluene criteria adopted due to structural similarity
- 16 NEMP 2020, Interim Marine 99% species protection (based on freshwater)
- 17 NEMP 2020, (based on NHMRC (2019) – recreational water quality guideline value
- 18 NEMP 2020, (based on NHMRC (2019) – recreational water quality guideline value – use Sum of PFOS +PFHxS for PFOS and PFHxS individually
- 19 Nitrate as N <https://www.mfe.govt.nz/sites/default/files/1207-ESRC255%20Updating%20nitrate%20toxicity%20effects%20on%20freshwater%20aquatic%20species%20.pdf>

Table S3 Groundwater HSLs for vapour intrusion (sand) from NEPM Table 1A (4)

Chemical	HSL C (mg/L)		
	2 m to < 4 m	4 m to < 8 m	8 m +
Benzene	NL	NL	NL
F1 (TPH C6 – C10 minus BTEX)	NL	NL	NL
F2 (TPH C10 – C16 minus naphthalene)	NL	NL	NL

Table S4 Soil vapour (HSLs) for vapour intrusion (sand) from NEPM Table 1A (5)

Chemical	HSL C (mg/ m3)
	1 m to < 2 m
Benzene	2400
Toluene	Not Limiting (NL)
Ethylbenzene	NL
Xylenes	NL
Naphthalene	NL
TRH C ₆ -C ₁₀ minus BTEX (F1)	NL
TRH C ₁₀ -C ₁₆ minus naphthalene (F2)	NL

Attachments

Tables:

Table T1 – Soil analytical data – BTEX and Total Petroleum and Recoverable Hydrocarbons Health Screening Levels

Table T2 – Soil analytical data – PAHs, Phenols, PCBs, MAHs, Solvents, VOCs, Pesticides Ecological and Health Screening Levels

Table T3 – Soil analytical data – BTEX and Total Petroleum Hydrocarbons

Table T4 – Soil analytical data – Inorganic compounds Health Investigation Levels

Table T5 – Soil analytical data - Inorganic compounds Ecological Investigation Levels

Table T6 – Soil analytical data – PFAS compounds Ecological and Health Screening Levels

Table T7 – Soil analytical data – Asbestos and general chemistry

Table T8 – Groundwater analytical data – BTEX, TRH Ecological and Health Screening Levels

Table T9 – Groundwater analytical data – PAHs and Phenols Ecological and Health Screening Levels

Table T10 – Groundwater analytical data – VOCs Ecological and Health Screening Levels

Table T11 – Groundwater analytical data – Metals and cyanide Ecological and Health Screening Levels

Table T12 – Groundwater analytical data – PFAS compounds

Table T13 – Soil Vapour Results

Attachments

Figures:

- Figure F1 Site Locality Plan
- Figure F2 Overall facility layout
- Figure F3 Wharf Area Site Plan
- Figure F4 Environmental Site History Areas of Environmental Concern
- Figure F5 Wharf Investigation Locations
- Figure F6 Marine Discharge Monitoring (MDM) Temporary Monitoring Wells Location
- Figure F7 NBA Marine Discharge PFAS
- Figure F8 NBA Investigation Locations
- Figure F9 Wharf Area Cross Section October 2018
- Figure F10 Northern Beach Area CSM
- Figure F11 Wharf Area Soil HIL HSL Organic

Figure F12	Wharf Area Soil EIL ESL
Figure F13	NBA EIL ESL
Figure F14	Wharf Area PFAS
Figure F15	NBA Soil PFAS HIL
Figure F16	Wharf Area Aesthetics and Asbestos
Figure F17	Wharf Area Historic LNAPL
Figure F18	Wharf Area Current LNAPL
Figure F19	Wharf Area Historic BTEXN TPH and TRH Concentrations
Figure F20	Wharf Area TPH Concentrations
Figure F21	PFAS Concentrations Wharf Area October 2018.pdf
Figure F22	NBA Groundwater PFAS
Figure F23	Stormwater Runoff Analytical Results -PFAS

Table S5 Document Control

Version	Document	Recipients	Issue Date
01	Site Contamination Audit Report 61605_SCAR_001	- Mobil Oil Australia Pty Ltd - SA EPA	26/02/2020
01	Site Contamination Audit Statement 61605_SCAS_001	- SA EPA - City of Onkaparinga - State Commission Assessment Panel, Department of Infrastructure and Transport	26/02/2020

Tables

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											BTEx						TPH				TRH				PAHs		Monocyclic Aromatic Hydrocarbons										
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEx	C ₈ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₄ Fraction	C ₂₅ - C ₃₆ Fraction	C ₈ - C ₉ Fraction	C ₁₀ - C ₁₆ Fraction minus BTEx (F1)	>C ₁₆ - C ₁₈ Fraction	>C ₁₉ - C ₂₄ less Naphthalene (F2)	>C ₂₅ - C ₃₄ Fraction	Naphthalene	Benzo(a)pyrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene
NEPM HSL C Recreational / Open Space											120	18,000	5,300	-	-	15,000	-	5,100	3,800	5,300	5,100	-	3,800	-	5,300	7,400	1,900	-	-	-	15,000	-	-	-	-	-	-
NEPM Management Limits (Coarse)											-	-	-	-	-	-	-	700	1,000	2,500	700	-	1,000	-	2,500	10,000	-	-	-	-	-	-	-	-	-	-	
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg							
Wharf	SB135	SB135_1.8-2.0	27-Jun-03		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB135	SB135_3.8-4.0	27-Jun-03		Primary	3.8	4.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB137	SB137_0.4-0.6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB138	SB138_0.3-0.5	27-Jun-03		Primary	0.3	0.5	Sand	Coarse	Fill	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	130	< 50	< 50	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB140	SB140_0.0-0.3	27-Jun-03		Primary	0.0	0.3	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	-	-	-	-	-							
Wharf	SB137	SB137_5.8-6.0	8-Jul-03		Primary	5.8	6.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	-	-	-	-	-							
Wharf	SB137	SB137_3.0-3.2	15-Jul-03		Primary	3.0	3.2	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	-	-	-	-	-							
Wharf	SB140	SB140_5.8-6.0	15-Jul-03		Primary	5.8	6.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	50	< 50	< 50	-	-	-	-	-	-	-	-							
Wharf	SB301	SB301_0.0-0.2	17-Nov-03		Primary	0.0	0.2	Sand	Coarse	Fill	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB301	SB301_2.8-3.0	17-Nov-03		Primary	2.8	3.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	80	180	< 50	< 50	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB307	SB307-23092005-1.5-1.7	23-Sep-05	Historical	Primary	1.5	1.7	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	150	430	81	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB309	SB309-23092005	23-Sep-05	Historical	Primary			Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	6.1	< 20	50	< 20	-	-	-	-	-	-	-	-	-							
Wharf	SB309	SB309-26092005-2.8-3	26-Sep-05	Historical	Primary	2.8	3.0	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	6.0	< 20	66	< 20	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB309	SB309-26092005-5.8-6	26-Sep-05	Historical	Primary	5.8	6.0	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	6.1	< 20	140	81	-	-	-	-	-	-	-	-	-							
Wharf	SB310	SB310-26092005-1-1.3	26-Sep-05	Historical	Primary	1.0	1.3	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	7.8	29	130	33	-	-	-	-	-	-	-	-	-							
Wharf	SB310	SB310-26092005-3.8-4	26-Sep-05	Historical	Primary	3.8	4.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	14	250	280	36	-	-	-	-	0.7	< 0.5	-	-	-							
Wharf	SB310	SB310-26092005-5.8-6	26-Sep-05	Historical	Primary	5.8	6.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	61	130	44	-	-	-	-	-	-	-	-	-							
Wharf	MW313	MW313-4102005-0.8-1	4-Oct-05	Historical	Primary	0.8	1.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	25	< 20	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB316	SB316-11072006-0-0.2	11-Jul-06	Historical	Primary	0.0	0.2	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	< 20	< 20	-	-	-	-	-	-	-	-	-							
Wharf	SB316	SB316_0.0-0.2	11-Jul-06		Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB315	SB315-31072006-4.8-5	31-Jul-06	Historical	Primary	4.8	5.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	< 20	< 20	-	-	-	-	-	-	-	-	-							
Wharf	SB315	SB315_4.8-5.0	31-Jul-06		Primary	4.8	5.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB316	SB316-2082006-3.8-4	2-Aug-06	Historical	Primary	3.8	4.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	22	66	< 20	< 20	-	-	-	-	-	-	-	-							
Wharf	SB316	SB316-2082006-5.8-6	2-Aug-06	Historical	Primary	5.8	6.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	36	< 20	-	-	-	-	-	-	-	-	-							
Wharf	SB316	SB316-2082006-6.3-6.5	2-Aug-06	Historical	Primary	6.3	6.5	Sand	Coarse	Natural	7.8	-	100	-	-	-	108	13,000	23,000	32,000	5,200	-	-	-	-	-	-	-	-	-							
Wharf	SB316	SB316-2082006-3.8-4	2-Aug-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-	-							
Wharf	SB316	SB316-2082006-6.3-6.5	2-Aug-06		Primary	6.3	6.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	< 6.0	-	-	-	-							
Wharf	SB316	SB316_7.8-8.0	2-Aug-06		Primary	7.8	8.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	< 5.0	-	-	-	-							
Wharf	SB322	SB322_1.8-2.0	4-Aug-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	31	24	-	-	-	-	-	-	-	-	-	-							
Wharf	SB322	SB322_7.8-8.0	4-Aug-06		Primary	7.8	8.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	83	28	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB324	SB324_1.8-2.0	7-Aug-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB324	SB324_0.3-0.5	7-Aug-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB325	SB325_0.3-0.5	7-Aug-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB325	SB325_0.8-1.0	7-Aug-06		Primary	0.8	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	SB340	SB340_3.8-4.0	18-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-							
Wharf	SB342	SB342_3.8-4.0	23-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	0.2	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	-	-	-	-							
Wharf	TP001	TP001_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	70	370	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP001	TP001_3.0	25-Oct-07		Primary	3.0	3.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP002	TP002_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP003	TP003_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP004	TP004_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP004	TP004_2.5	25-Oct-07		Primary	2.5	2.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP005	TP005_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP006	TP006_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP007	TP007_1.5	25-Oct-07		Primary	1.5	1.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP008	TP008_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	< 100	-	-	-	< 0.5	< 0.5	-	-	-							
Wharf	TP009	TP009_1.0	25-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5																									

Table T1 – Soil analytical data – BTEX and Total Petroleum and Recoverable Hydrocarbons Health Screening Levels

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											BTEX							TPH				TRH						PAHs		Monocyclic Aromatic Hydrocarbons																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEX	C ₉ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₁₈ Fraction	C ₁₉ - C ₂₅ Fraction	C ₉ - C ₁₀ Fraction	C ₁₁ - C ₁₂ Fraction minus BTEX (F1)	C ₁₃ - C ₁₄ Fraction	C ₁₅ - C ₁₈ less Naphthalene (F2)	C ₁₉ - C ₂₅ Fraction	C ₂₆ - C ₂₈ Fraction	Naphthalene	Benzo[a]pyrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
NEPM HSL C Recreational / Open Space											120	18,000	5,300	-	-	15,000	-	5,100	3,800	5,300	5,100	-	3,800	-	5,300	7,400	1,900	-	-	-	15,000	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
NEPM Management Limits (Coarse)											-	-	-	-	-	-	-	700	1,000	2,500	700	-	1,000	-	2,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	

Table T1 – Soil analytical data – BTEX and Total Petroleum and Recoverable Hydrocarbons Health Screening Levels

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											BTEX							TPH				TRH						PAHs		Monocyclic Aromatic Hydrocarbons																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEX	C ₉ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₁₈ Fraction	C ₁₉ - C ₂₄ Fraction	C ₂₅ - C ₂₈ Fraction	C ₂₉ - C ₃₂ Fraction	C ₃₃ - C ₃₆ Fraction minus BTEX (F1)	C ₃₇ - C ₄₀ Fraction	C ₄₁ - C ₄₄ Fraction less Naphthalene (F2)	C ₄₅ - C ₄₈ Fraction	Naphthalene	Benzo(a)pyrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NEPM HSL C Recreational / Open Space											120	18,000	5,300	-	-	15,000	-	5,100	3,800	5,300		5,100		-	3,800	-	5,300	7,400	1,900	-	-	-	-	15,000	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
NEPM Management Limits (Coarse)											-	-	-	-	-	-	-	700	1,000	2,500		700		-	1,000	-	2,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

											BTEX							TPH				
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEX	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₄ Fraction	C ₂₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction (sum)
Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria																						
NEPM ESL Areas of Ecological Significance (coarse soil)											8.0	10	1.5	--	--	10	--	125	25	--	--	--
NEPM ESL Urban Residential and Public Open Space (coarse soil)											50	85	70	--	--	105	--	180	120	300	--	--
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Wharf	SB135	SB135_1.8-2.0	27-Jun-03		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-
Wharf	SB137	SB137_0.4-0.6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-
Wharf	SB138	SB138_0.3-0.5	27-Jun-03		Primary	0.3	0.5	Sand	Coarse	Fill	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	130	< 50	130
Wharf	SB140	SB140_0.0-0.3	27-Jun-03		Primary	0.0	0.3	Sand	Coarse	Natural	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-
Wharf	SB301	SB301_0.0-0.2	17-Nov-03		Primary	0.0	0.2	Sand	Coarse	Fill	< 0.2	< 1.0	< 1.0	< 2.0	< 1.0	-	-	< 5.0	< 10	< 50	< 50	-
Wharf	SB307	SB307-23092005-1.5-1.7	23-Sep-05	Historical	Primary	1.5	1.7	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	150	430	81	661
Wharf	SB309	SB309-23092005	23-Sep-05	Historical	Primary			Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	6.1	< 20	50	< 20	50
Wharf	SB310	SB310-26092005-1-1.3	26-Sep-05	Historical	Primary	1.0	1.3	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	7.8	29	130	33	192
Wharf	MW313	MW313-4102005-0.8-1	4-Oct-05	Historical	Primary	0.8	1.0	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	25	< 20	25
Wharf	MW313	MW313-4102005-1.6-1.8	4-Oct-05	Historical	Primary	1.6	1.8	Sand	Coarse	Natural	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	< 20	< 20	< 60
Wharf	SB316	SB316-11072006-0-0.2	11-Jul-06	Historical	Primary	0.0	0.2	Sand	Coarse	Fill	< 0.2	< 0.4	< 0.4	< 1.0	< 0.4	< 1.4	< 2.4	< 5.0	< 20	< 20	< 20	< 60
Wharf	SB316	SB316_0.0-0.2	11-Jul-06		Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	SB322	SB322_1.8-2.0	4-Aug-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	31	24	55
Wharf	SB322	SB322_1.6-1.8	4-Aug-06		Primary	1.6	1.8	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	SB324	SB324_1.8-2.0	7-Aug-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	25	-	-
Wharf	SB324	SB324_0.3-0.5	7-Aug-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	SB325	SB325_0.3-0.5	7-Aug-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	SB325	SB325_0.8-1.0	7-Aug-06		Primary	0.8	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	SB326	SB326_0.3-0.5	7-Aug-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	TP001	TP001_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	70	370	< 100	440
Wharf	TP002	TP002_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP003	TP003_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP004	TP004_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP005	TP005_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP006	TP006_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP007	TP007_1.5	25-Oct-07		Primary	1.5	1.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP008	TP008_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP009	TP009_1.0	25-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	44	180	640	< 100	870
Wharf	TP009	TP009_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP010	TP010_1.8-2.0	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP012	TP012_1.0	25-Oct-07		Primary	1.0	1.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP013	TP013_1.5	25-Oct-07		Primary	1.5	1.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP014	TP014_0.5	25-Oct-07		Primary	0.5	0.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP015	TP015_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP016	TP016_2.0	25-Oct-07		Primary	2.0	0.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	TP016	TP016_2.0	26-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP017	TP017_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP018	TP018_0.5	26-Oct-07		Primary	0.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP019	TP019_1.0	26-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP020	TP020_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP021	TP021_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP022	TP022_0.5	26-Oct-07		Primary	0.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP023	TP023_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP024	TP024_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP025	TP025_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP025	TP025_1.6-0.0	26-Oct-07		Primary	1.6	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP025	TP025_1.8	26-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP026	TP026_1.4	26-Oct-07		Primary	1.4	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP027	TP027_2.0	26-Oct-07		Primary	2.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP028	TP028_1.0	26-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP028	TP028_2.0	26-Oct-07		Primary	2.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP029	TP029_1.5	26-Oct-07		Primary	1.5	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	TP029	TP029_2.0	26-Oct-07		Primary	2.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	1,060	4,620	< 100	5,730
Wharf	TP030	TP030_1.0	26-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-

											BTEX							TPH				
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEX	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₁₀ - C ₃₆ Fraction (sum)
Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria																						
NEPM ESL Areas of Ecological Significance (coarse soil)											8.0	10	1.5	-	-	10	-	125	25	-	-	-
NEPM ESL Urban Residential and Public Open Space (coarse soil)											50	85	70	-	-	105	-	180	120	300	-	-
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Wharf	TP030	TP030_1.8	26-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	34	500	1,230	< 100	1,780
Wharf	TP025	TP025_1.6-1.8	26-Oct-07		Primary	1.6	1.8	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	
Wharf	TP025	TP025_1.8-2.0	26-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	
Wharf	GW001	GW1_001_0-0.2M	4-Dec-08	2008_Wharf_Invest	Primary	0.0	0.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW005	GW5_002_1-1.2M	4-Dec-08	2008_Wharf_Invest	Primary	1.0	1.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW002	GW2_003-2.0M	8-Dec-08	2008_Wharf_Invest	Primary	2.0	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW007	GW7_002-1.0M	9-Dec-08	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	14	< 50	< 100	< 100	< 250
Wharf	BH032	BH 32_03-0.9M	9-Jan-09	2008_Wharf_Invest	Primary	0.9	0.9	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH034	BH 34_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH036	BH 36_03-0.9M	9-Jan-09	2008_Wharf_Invest	Primary	0.9	0.9	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH037	BH 37_02-0.5M	9-Jan-09	2008_Wharf_Invest	Primary	0.5	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH038	BH 38_04-1.3M	9-Jan-09	2008_Wharf_Invest	Primary	1.3	1.3	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH039	BH 39_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH031	BH31_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH033	BH33_04-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH037	BH37_04-1.5M	9-Jan-09	2008_Wharf_Invest	Primary	1.5	1.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH040	BH40_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW001	GW1_01-3.5M	12-Jan-09	2008_Wharf_Invest	Primary	1.0	3.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	TP33-01	TP33-01	28-Jan-09	2008_Wharf_Invest	Primary			Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	1,560	2,940	< 100	4,550
Wharf	TP33-02	TP33-02	28-Jan-09	2008_Wharf_Invest	Primary			Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	460	1,420	< 100	1,930
Wharf	GW008	GW08_0.7-0.8	2-Sep-09	EM0908512	Primary	0.7	0.8	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW008	GW08_1.2-1.3	2-Sep-09	EM0908512	Primary	1.2	1.3	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	100	420	< 100	570
Wharf	GW009	GW09_1.1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW011	GW11_1.1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW013	GW13_1.9-2.0	3-Sep-09	EM0908611	Primary	1.9	2.0	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW008	GW008_0.9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW009	GW009_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW009	GW009_0.9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	230	< 100	305
Wharf	GW010	GW010_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW011	GW011_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	GW011	GW011_1.9-2.0	13-May-10	EM1005356	Primary	1.9	2.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	290	< 100	365
Wharf	GW014	GW014_0.6-0.7	13-May-10	EM1005356	Primary	0.6	0.7	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	BH01	BH01_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	250	
Wharf	BH01	BH01_1.1-1.2	13-Dec-10		Primary	1.1	1.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	230	-
Wharf	BH03	BH03_1.4-1.5	13-Dec-10		Primary	1.4	1.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	160	-
Wharf	BH04	BH04_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	BH04	BH04_0.3-0.4	13-Dec-10		Primary	0.3	0.4	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	BH04	BH04_1.7-1.8	13-Dec-10		Primary	1.7	1.8	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	BH05	BH05_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	BH06	BH06_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	-	-	< 10	< 50	< 100	< 100	-
Wharf	BH07	BH07_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-
Wharf	BH040	BH040-1104	8-Feb-11	EM1101310	Primary			Sand	Coarse		< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 2.2	< 10	< 50	< 100	< 100	< 250
Wharf	TP10/006	TP10/006_0.0-0.1	18-Feb-15	EM1501839	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/006	TP10/006_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/011	TP10/011_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	115	70	240	< 100	310
Wharf	TP10/011	TP10/011_2.0-2.1	18-Feb-15	EM1501839	Primary	2.0	2.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	145	590	500	< 100	1,090
Wharf	TP10/012	TP10/012_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/012	TP10/012_2.0-2.1	18-Feb-15	EM1501839	Primary	2.0	2.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/017	TP10/017_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/020	TP10/020_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/020	TP10/020_2.0-2.1	19-Feb-15	EM1502009	Primary	2.0	2.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/014	TP10/014_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/015	TP10/015_0.0-0.1	19-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	&	

											BTEX							TPH				
											Benzene	Toluene	Ethylbenzene	meta- & para-Xylene	o-Xylene	Xylenes, total	Sum of BTEX	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₄ Fraction	C ₂₅ - C ₂₈ Fraction	C ₁₀ - C ₂₈ Fraction (sum)
Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria																						
NEPM ESL Areas of Ecological Significance (coarse soil)											8.0	10	1.5	--	--	10	--	125	25	--	--	--
NEPM ESL Urban Residential and Public Open Space (coarse soil)											50	85	70	--	--	105	--	180	120	300	--	--
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Wharf	TP10/013	TP10/013_0.0-0.1	19-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/013	TP10/013_1.0-1.1	19-Feb-15	EM1502009	Primary	1.0	1.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/014	TP10/014_0.0-0.1	19-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/017	TP10/017_0.0-0.1	19-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/018	TP10/018_0.0-0.1	20-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/018	TP10/018_1.0-1.1	20-Feb-15	EM1502009	Primary	1.0	1.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/016	TP10/016_0.0-0.1	20-Feb-15	EM1502009	Primary	0.0	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP10/016	TP10/016_0.5-0.6	20-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/024	TP-10/024_0.4-0.5	29-Oct-15	EM1516602	Primary	0.4	0.5	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/024	TP-10/024_2.0-2.1	29-Oct-15	EM1516602	Primary	2.0	2.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-IFA/001	TP-IFA/001_0.4-0.5	30-Oct-15	EM1516627	Primary	0.4	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-IFA/002	TP-IFA/002_0.0-0.1	30-Oct-15	EM1516627	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-IFA/002	TP-IFA/002_1.0-1.1	30-Oct-15	EM1516627	Primary	1.0	1.1	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/32	TP-10/32_0.16	6-Apr-17	EM1705680	Primary	0.2	0.3	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/32	TP-10/32_1.0	6-Apr-17	EM1705680	Primary	1.0	1.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/25	TP-10/25_0.10	4-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/25	TP-10/25_0.50	4-Apr-17	EM1704389	Primary	0.5	0.5	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	HA17/01	HA17/01_0.15	4-Apr-17	EM1704758	Primary	0.2	0.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/26	TP-10/26_0.01	5-Apr-17	EM1704389	Primary	0.0	0.0	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	110	370	480
Wharf	TP-10/26	TP-10/26_0.28	5-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/27	TP-10/27_0.12	5-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/27	TP-10/27_0.68	5-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/28	TP-10/28_0.15	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/28	TP-10/28_0.60	5-Apr-17	EM1704389	Primary	0.6	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/29	TP-10/29_0.16	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/29	TP-10/29_0.88	5-Apr-17	EM1704389	Primary	0.9	0.9	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/30	TP-10/30_0.16	6-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/30	TP-10/30_0.71	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/31	TP-10/31_0.28	6-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/31	TP-10/31_0.68	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/32	TP-10/32_0.16	6-Apr-17	EM1705680	Primary	0.2	0.2	Sand	Coarse	Fill	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
Wharf	TP-10/32	TP-10/32_1.0	6-Apr-17	EM1705680	Primary	1.0	1.0	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
NBA	IF11-003	IF11-003_0.5-0.6	29-Apr-15	EM1504558	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2	< 10	< 50	< 100	< 100	< 50
NBA	SB035	SB35-23082002-7.8-8	23-Aug-02	Historical	Primary	7.8	8.0	Sand	Coarse	Natural	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.5	< 5.0	< 20	< 20	< 20	< 60

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria										Metals																						
										Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Cyanide (total)	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc	
NEPM HIL C Recreational Open Space										20	300	500	90	20,000	90	-	300	300	17,000	-	55,000	-	600	19,000	80	10	1,200	700	20	50	130	30,000
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
Wharf	SB135	SB135_0-0-6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	-	2.2	1.6	-	< 1.0	< 2.0	-	< 2.0	-	-	-	< 2.0	-	< 0.01	-	< 2.0	-	-	3.3	3.5		
Wharf	SB135	SB135_1.8-2.0	27-Jun-03		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	-	-		
Wharf	SB135	SB135_3.8-4.0	27-Jun-03		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	-	-		
Wharf	SB137	SB137_0-0-6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-	-	-	-	-	-		
Wharf	SB138	SB138_0-0-0.5	27-Jun-03		Primary	0.3	0.5	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-		
Wharf	SB140	SB140_0-0-0.3	27-Jun-03		Primary	0.0	0.3	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-		
Wharf	SB137	SB137_5.8-6.0	8-Jul-03		Primary	5.8	6.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	6.6	-	-	-	-	-	-	-	-		
Wharf	SB137	SB137_3.0-3.2	15-Jul-03		Primary	3.0	3.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	-	-		
Wharf	SB140	SB140_5.8-6.0	15-Jul-03		Primary	5.8	6.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	-	-		
Wharf	SB301	SB301_0-0-0.2	17-Nov-03		Primary	0.0	0.2	Sand	Coarse	Fill	-	< 2.0	< 1.0	-	< 1.0	< 2.0	-	6.0	-	-	< 2.0	-	< 0.01	-	2.0	-	-	< 2.0	39			
Wharf	SB301	SB301_2.8-3.0	17-Nov-03		Primary	2.8	3.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	< 2.0	39		
Wharf	SB307	SB307-23092005-1.5-1.7	23-Sep-05	Historical	Primary	1.5	1.7	Sand	Coarse	Natural	-	15	56	-	< 2.0	12	-	28	-	-	-	6.7	-	0.06	-	20	-	-	6.3	63		
Wharf	SB309	SB309-23092005	23-Sep-05	Historical	Primary			Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-		
Wharf	SB309	SB309-26092005-2.8-3	26-Sep-05	Historical	Primary	2.8	3.0	Sand	Coarse	Fill	-	3.1	2.3	-	< 2.0	< 2.0	-	< 2.0	-	-	< 2.0	-	< 0.01	-	2.3	-	-	3.3	3.9			
Wharf	SB310	SB310-26092005-3.8-4	26-Sep-05	Historical	Primary	3.8	4.0	Sand	Coarse	Natural	-	4.8	34	-	< 2.0	21	-	39	-	-	-	8.5	-	0.03	-	39	-	-	14	72		
Wharf	SB309	SB309-26092005-5.8-6	26-Sep-05	Historical	Primary	5.8	6.0	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-		
Wharf	SB310	SB310-26092005-1-1.3	26-Sep-05	Historical	Primary	1.0	1.3	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-		
Wharf	SB310	SB310-26092005-5.8-6	26-Sep-05	Historical	Primary	5.8	6.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	6.2	-	-	-	-	-	-	-	-		
Wharf	MW313	MW313-4102005-0.8-1	4-Oct-05	Historical	Primary	0.8	1.0	Sand	Coarse	Natural	-	3.3	4.1	-	< 2.0	< 2.0	-	-	< 2.0	-	-	< 2.0	-	< 0.01	-	2.1	-	-	4.1	6.3		
Wharf	MW313	MW313-4102005-1.6-1.8	4-Oct-05	Historical	Primary	1.6	1.8	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	< 2.0	-	-	-	-	-	-	-	-		
Wharf	SB333	SB333_1.8-2.0	18-Jan-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-		
Wharf	SB334	SB334_1.8-2.0	24-Jan-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-		
Wharf	SB316	SB316-11072006-0-0.2	11-Jul-06	Historical	Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-		
Wharf	SB315	SB315-31072006-4.8-5	31-Jul-06	Historical	Primary	4.8	5.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	-	-	-		
Wharf	SB316	SB316-2082006-3.8-4	2-Aug-06		Primary	3.8	4.0	Sand	Coarse	Natural	< 2.0	6.8	40	-	< 1.0	26	-	80	20	-	-	15	-	< 0.01	< 2.0	69	< 2.0	-	< 2.0	18	92	
Wharf	SB316	SB316-2082006-3.8-4	2-Aug-06	Historical	Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-		
Wharf	SB316	SB316-2082006-5.8-6	2-Aug-06	Historical	Primary	5.8	6.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	8.7	-	-	-	-	-	-	-	-		
Wharf	SB325	SB325_0.8-1.0	7-Aug-06		Primary	0.8	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-		
Wharf	SB326	SB326_3.8-4.0	7-Aug-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-		
Wharf	SB328	SB328_2.8-3.0	10-Aug-06		Primary	2.8	3.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-		
Wharf	SB328	SB328_5.8-6.0	10-Aug-06		Primary	5.8	6.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	-	-	-	-		
Wharf	SB335	SB335_0.8-1.0	18-Oct-06		Primary	0.8	1.0	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	-	-	-		
Wharf	SB335	SB335_3.8-4.0	18-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.1	-	-	-	-	-	-	-	-		
Wharf	SB335	SB335_4.8-5.0	18-Oct-06		Primary	4.8	5.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-		
Wharf	SB338	SB338_3.8-4.0	18-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-		
Wharf	SB339	SB339_3.8-4.0	18-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-		
Wharf	SB340	SB340_3.8-4.0	18-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-		
Wharf	SB335	SB335_6.0-6.2	23-Oct-06		Primary	6.0	6.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-		
Wharf	SB342	SB342_3.8-4.0	23-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	-	-	-		
Wharf	SB343	SB343_0.3-0.5	23-Oct-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	9.9	-	-	-	-	-	-	-	-		
Wharf	SB336	SB336_0.0-0.2	24-Oct-06		Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-		
Wharf	SB336	SB336_3.8-4.0	24-Oct-06		Primary	3.8	4.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-		
Wharf	TP001	TP001_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	<																					

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria										Metals																										
										Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Cyanide (total)	Iron	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc				
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
NEPM HIL C Recreational Open Space																																				
Wharf	BH034	BH 34_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH036	BH 36_03-0.9M	9-Jan-09	2008_Wharf_Invest	Primary	0.9	0.9	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH037	BH 37_02-0.5M	9-Jan-09	2008_Wharf_Invest	Primary	0.5	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH038	BH 38_04-1.3M	9-Jan-09	2008_Wharf_Invest	Primary	1.3	1.3	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH039	BH 39_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH031	BH01_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH033	BH03_04-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH037	BH07_04-1.5M	9-Jan-09	2008_Wharf_Invest	Primary	1.5	1.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	BH400	BH40_03-1.0M	9-Jan-09	2008_Wharf_Invest	Primary	1.0	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW001	GW01_01-3.5M	12-Jan-09	2008_Wharf_Invest	Primary	1.0	3.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-						
Wharf	TP33-01	TP33-01	28-Jan-09	2008_Wharf_Invest	Primary			Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	TP33-02	TP33-02	28-Jan-09	2008_Wharf_Invest	Primary			Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW008	GW08_0-7-0.8	2-Sep-09	EM0908512	Primary	0.7	0.8	Sand	Coarse	Natural	-	5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW008	GW08_1-2-1.3	2-Sep-09	EM0908512	Primary	1.2	1.3	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW009	GW09_1-1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW011	GW11_1-1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW013	GW13_1-9-2.0	3-Sep-09	EM0908611	Primary	1.9	2.0	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-						
Wharf	GW013	GW13_3-2-3.8	9-Sep-09	EM0908760	Primary	3.2	3.8	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-						
Wharf	GW008	GW008_0-9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW009	GW009_0-4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW009	GW009_0-9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW010	GW010_0-4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-						
Wharf	GW011	GW011_0-4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW011	GW011_1-9-2.0	13-May-10	EM1005356	Primary	1.9	2.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-						
Wharf	GW014	GW014_0-6-6.7	13-May-10	EM1005356	Primary	0.6	0.7	Sand	Coarse	Fill	-	16	-	-	1.0	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-						
Wharf	BH01	BH01_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	80	< 1.0	< 1.0	19	< 0.5	18	86	< 1.0	32,500	-	59	1,400	< 0.1	-	12	-	< 2.0	-	-	969				
Wharf	BH02	BH02_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	14	-	-	8.0	-	-	-	10	-	< 0.1	-	12	-	-	< 5.0	-	33				
Wharf	BH02	BH02_0-2-0.3	13-Dec-10		Primary	0.2	0.3	Sand	Coarse	Fill	-	15	-	-	< 1.0	22	-	-	23	-	-	-	13	-	< 0.1	-	16	-	-	-	-	49				
Wharf	BH03	BH03_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	8.0	-	-	< 1.0	10	-	-	10	-	-	-	9.0	-	< 0.1	-	5.0	-	-	-	31					
Wharf	BH04	BH04_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Natural	-	6.0	110	< 1.0	< 1.0	24	< 0.5	8.0	9.0	< 1.0	21,500	-	9.0	650	< 0.1	-	16	-	< 2.0	-	40					
Wharf	BH04	BH04_0-3-0.4	13-Dec-10		Primary	0.3	0.4	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	22	-	-	8.0	-	-	-	10	-	< 0.1	-	14	-	-	-	38					
Wharf	BH05	BH05_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	19	-	-	7.0	-	-	-	10	-	< 0.1	-	14	-	-	-	33					
Wharf	BH05	BH05_0-5-0.6	13-Dec-10		Primary	0.5	0.6	Sand	Coarse	Fill	-	5.0	-	-	< 1.0	8.0	-	-	12	-	-	-	18	-	< 0.1	-	6.0	-	-	-	71					
Wharf	BH06	BH06_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	19	-	-	9.0	-	-	-	8.0	-	< 0.1	-	12	-	-	< 5.0	-	36				
Wharf	BH07	BH07_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	18	-	-	7.0	-	-	-	7.0	-	< 0.1	-	12	-	-	-	29					
Wharf	BH08	BH08_0-05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	18	-	-	9.0	-	-	-	7.0	-	< 0.1	-	13	-	-	< 5.0	-	30				
Wharf	BH08	BH08_0-25-0.35	13-Dec-10		Primary	0.3	0.4	Sand	Coarse	Fill	-	8.0	-	-	< 1.0	13	-	-	23	-	-	-	10	-	< 0.1	-	8.0	-	-	-	21					
Wharf	BH400	BH400-1104	8-Feb-11	EM1101310	Primary			Sand	Coarse	Fill	-	< 5.0	60	< 1.0	< 1.0	20	-	7.0	< 5.0	-	-	7.0	-	< 0.1	< 2.0	11	< 5.0	-	-	33	14					
Wharf	TP10006	TP10006_0-0-0.1	18-Feb-15	EM1501839	Primary	0.0	0.1	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	< 2.0	< 5.0	-	-	< 5.0	8.0	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	< 5.0					
Wharf	TP10006	TP10006_0-5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	< 2.0	< 5.0	-	-	< 5.0	21	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	10					
Wharf	TP10011	TP10011_0-5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Fill	< 5.0	14	120	< 1.0	< 50	1.0	22	-	14	50	-	-	81	686	< 0.1	< 2.0	< 2.0	< 5.0	< 5.0	18	68					
Wharf	TP10011	TP10011_2-0-2.1	18-Feb-15	EM1501839	Primary	2.0	2.1	Sand	Coarse	Fill	< 5.0	10	50	< 1.0	< 50	< 1.0	12	-	14	109	-	-	38	991	< 0.1	< 2.0	< 2.0	< 5.0	< 5.0	18	26					
Wharf	TP10011	TP10011_2-9-3.0	18-Feb-15	EM1501839	Primary	2.9	3.0	Sand	Co																											

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											Metals																							
											Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Cyanide (total)	Iron	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc	
NEPM EIL Areas of Ecological Significance											20	40	500	4.0	81	10	64	0.4	50	80	-	-	-	480	500	6.6	10	60	290	1.0	20	50	130	190
NEPM EIL Urban Residential and Public Open Space											20	100	500	4.0	92	10	64	0.4	50	220	-	-	-	1,110	500	6.6	10	60	290	1.0	20	50	130	770
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
Wharf	SB135	SB135_0.4-0.6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	-	2.2	1.6	-	-	<1.0	<2.0	-	-	<2.0	-	-	-	<2.0	-	<0.01	-	<2.0	-	-	3.3	3.5		
Wharf	SB135	SB135_1.8-2.0	27-Jun-03		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-			
Wharf	SB137	SB137_0.4-0.6	27-Jun-03		Primary	0.4	0.6	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-	-	-	-	-	-			
Wharf	SB138	SB138_0.3-0.5	27-Jun-03		Primary	0.3	0.5	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-			
Wharf	SB140	SB140_0.0-0.3	27-Jun-03		Primary	0.0	0.3	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-			
Wharf	SB301	SB301_0.0-0.2	17-Nov-03		Primary	0.0	0.2	Sand	Coarse	Fill	-	<2.0	<1.0	-	-	<1.0	<2.0	-	-	6.0	-	-	<2.0	-	<0.01	-	2.0	-	-	-	<2.0	39		
Wharf	SB307	SB307-23092005-1.5-1.7	23-Sep-05	Historical	Primary	1.5	1.7	Sand	Coarse	Natural	-	15	56	-	-	<2.0	12	-	-	28	-	-	-	6.7	-	0.06	-	20	-	-	-	6.3	63	
Wharf	SB309	SB309-23092005	23-Sep-05	Historical	Primary			Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-			
Wharf	SB310	SB310-26092005-1-1.3	26-Sep-05	Historical	Primary	1.0	1.3	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-			
Wharf	MW313	MW313-4102005-0.8-1	4-Oct-05	Historical	Primary	0.8	1.0	Sand	Coarse	Natural	-	3.3	4.1	-	-	<2.0	<2.0	-	-	<2.0	-	-	<2.0	-	<0.01	-	2.1	-	-	-	4.1	6.3		
Wharf	MW313	MW313-4102005-1.6-1.8	4-Oct-05	Historical	Primary	1.6	1.8	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-			
Wharf	SB333	SB333_1.8-2.0	18-Jan-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-			
Wharf	SB334	SB334_1.8-2.0	24-Jan-06		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-			
Wharf	SB316	SB316-11072006-0-0.2	11-Jul-06	Historical	Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-			
Wharf	SB325	SB325_0.8-1.0	7-Aug-06		Primary	0.8	1.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-			
Wharf	SB335	SB335_0.8-1.0	18-Oct-06		Primary	0.8	1.0	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	-	-	-			
Wharf	SB343	SB343_0.3-0.5	23-Oct-06		Primary	0.3	0.5	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	9.9	-	-	-	-	-	-	-	-			
Wharf	SB336	SB336_0.0-0.2	24-Oct-06		Primary	0.0	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-			
Wharf	TP001	TP001_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	<5.0	<5.0	30	-	<1.0	7.0	-	2.0	7.0	-	-	-	<5.0	-	<0.1	<2.0	5.0	<5.0	-	<5.0	10	32		
Wharf	TP004	TP004_1.8	25-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	<5.0	7.0	10	-	<1.0	7.0	-	2.0	10	-	-	-	<5.0	-	<0.1	<2.0	4.0	<5.0	-	<5.0	13	12		
Wharf	TP009	TP009_1.0	25-Oct-07		Primary	1.0	0.0	Sand	Coarse	Natural	<5.0	6.0	70	-	<1.0	5.0	-	<2.0	9.0	-	-	-	<5.0	-	<0.1	<2.0	3.0	<5.0	-	<5.0	13	65		
Wharf	TP002	TP002_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-			
Wharf	TP003	TP003_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP005	TP005_1.8	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-	-	-	-	-	-	-	-			
Wharf	TP006	TP006_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP007	TP007_1.5	25-Oct-07		Primary	1.5	1.7	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP008	TP008_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-	-	-	-	-	-	-	-			
Wharf	TP009	TP009_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-			
Wharf	TP010	TP010_1.8-2.0	25-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP012	TP012_1.0	25-Oct-07		Primary	1.0	1.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP013	TP013_1.5	25-Oct-07		Primary	1.5	1.7	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP014	TP014_0.5	25-Oct-07		Primary	0.5	0.7	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP015	TP015_2.0	25-Oct-07		Primary	2.0	2.2	Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-			
Wharf	TP025	TP025_1.8-2.0	26-Oct-07		Primary	1.8	2.0	Sand	Coarse	Natural	<5.0	<5.0	<10	-	<1.0	<2.0	-	<2.0	<5.0	-	-	-	<5.0	-	<0.1	<2.0	<2.0	<5.0	-	<5.0	<5.0	11		
Wharf	TP026	TP026_1.4	26-Oct-07		Primary	1.4	0.0	Sand	Coarse	Natural	<5.0	<5.0	<10	-	<1.0	<2.0	-	<2.0	<5.0	-	-	-	<5.0	-	<0.1	<2.0	<2.0	<5.0	-	<5.0	<5.0	<5.0		
Wharf	TP029	TP029_2.0	26-Oct-07		Primary	2.0	0.0	Sand	Coarse	Natural	<5.0	<5.0	<10	-	<1.0	4.0	-	<2.0	<5.0	-	-	-	<5.0	-	<0.1	<2.0	2.0	<5.0	-	<5.0	15	13		
Wharf	TP030	TP030_1.8	26-Oct-07		Primary	1.8	0.0	Sand	Coarse	Natural	<5.0	<5.0	<10	-	<1.0	<2.0	-	<2.0	<5.0	-	-	-	<5.0	-	0.9	3.0	<2.0	<5.0	-	<5.0	<5.0	<5.0		
Wharf	TP023	TP023_0.5	26-Oct-07		Primary	0.5	0.0	Sand	Coarse	Natural	-	<5.0	<10	-	<1.0	<2.0	-	-	<5.0	-	-	-	<5.0											

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											Metals																						
											Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Cyanide (total)	Iron	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc
											20	100	500	4.0	92	10	64	0.4	50	220	-	-	-	480	1,110	500	6.6	10	290	1.0	20	50	130
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Wharf	TP33-02	TP33-02	28-Jan-09	2008_Wharf_Invest	Primary			Sand	Coarse	Natural	-	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW008	GW08_0.7-0.8	2-Sep-09	EM0908512	Primary	0.7	0.8	Sand	Coarse	Natural	-	5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW008	GW08_1.2-1.3	2-Sep-09	EM0908512	Primary	1.2	1.3	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW009	GW09_1.1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW011	GW11_1.1-1.2	2-Sep-09	EM0908512	Primary	1.1	1.2	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW013	GW13_1.9-2.0	3-Sep-09	EM0908611	Primary	1.9	2.0	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
Wharf	GW008	GW008_0.9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW009	GW009_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW009	GW009_0.9-1.0	13-May-10	EM1005356	Primary	0.9	1.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW010	GW010_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-	
Wharf	GW011	GW011_0.4-0.5	13-May-10	EM1005356	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW011	GW011_1.9-2.0	13-May-10	EM1005356	Primary	1.9	2.0	Sand	Coarse	Natural	-	< 5.0	-	-	< 1.0	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	
Wharf	GW014	GW014_0.6-0.7	13-May-10	EM1005356	Primary	0.6	0.7	Sand	Coarse	Fill	-	16	-	-	1.0	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-	
Wharf	BH01	BH01_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	80	< 1.0	-	< 1.0	19	< 0.5	18	86	< 1.0	32,500	-	59	1,400	< 0.1	-	12	-	< 2.0	-	-	969
Wharf	BH02	BH02_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	14	-	-	8.0	-	-	-	10	-	< 0.1	-	12	-	-	< 5.0	-	-	33
Wharf	BH02	BH02_0.2-0.3	13-Dec-10		Primary	0.2	0.3	Sand	Coarse	Fill	-	15	-	-	< 1.0	22	-	-	23	-	-	-	13	-	< 0.1	-	16	-	-	-	-	-	49
Wharf	BH03	BH03_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	8.0	-	-	< 1.0	10	-	-	10	-	-	-	9.0	-	< 0.1	-	5.0	-	-	-	-	-	31
Wharf	BH04	BH04_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	6.0	110	< 1.0	-	< 1.0	24	< 0.5	8.0	9.0	< 1.0	21,500	-	9.0	650	< 0.1	-	16	-	< 2.0	-	-	40
Wharf	BH04	BH04_0.3-0.4	13-Dec-10		Primary	0.3	0.4	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	22	-	-	8.0	-	-	-	10	-	< 0.1	-	14	-	-	-	-	-	38
Wharf	BH05	BH05_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	19	-	-	7.0	-	-	-	10	-	< 0.1	-	14	-	-	-	-	-	33
Wharf	BH05	BH05_0.5-0.6	13-Dec-10		Primary	0.5	0.6	Sand	Coarse	Fill	-	5.0	-	-	< 1.0	8.0	-	-	12	-	-	-	18	-	< 0.1	-	6.0	-	-	-	-	-	71
Wharf	BH06	BH06_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	19	-	-	9.0	-	-	-	8.0	-	< 0.1	-	12	-	-	< 5.0	-	-	36
Wharf	BH07	BH07_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	18	-	-	7.0	-	-	-	7.0	-	< 0.1	-	12	-	-	-	-	-	29
Wharf	BH08	BH08_0.05-0.1	13-Dec-10		Primary	0.1	0.1	Sand	Coarse	Fill	-	< 5.0	-	-	< 1.0	18	-	-	9.0	-	-	-	7.0	-	< 0.1	-	13	-	-	< 5.0	-	-	30
Wharf	BH08	BH08_0.25-0.35	13-Dec-10		Primary	0.3	0.4	Sand	Coarse	Fill	-	8.0	-	-	< 1.0	13	-	-	23	-	-	-	10	-	< 0.1	-	8.0	-	-	-	-	-	21
Wharf	BH040	BH040-1104	8-Feb-11	EM1101310	Primary			Sand	Coarse		-	< 5.0	60	< 1.0	-	< 1.0	20	-	7.0	< 5.0	-	-	-	7.0	-	< 0.1	< 2.0	11	< 5.0	-	-	33	14
Wharf	TP10V006	TP10V006_0.0-0.1	18-Feb-15	EM1501839	Primary	0.0	0.1	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	8.0	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	< 5.0
Wharf	TP10V006	TP10V006_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	21	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	10
Wharf	TP10V011	TP10V011_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Fill	< 5.0	14	120	< 1.0	< 50	1.0	22	-	14	50	-	-	-	81	686	< 0.1	< 2.0	17	< 5.0	-	< 5.0	18	68
Wharf	TP10V011	TP10V011_2.0-2.1	18-Feb-15	EM1501839	Primary	2.0	2.1	Sand	Coarse	Fill	< 5.0	10	50	< 1.0	< 50	< 1.0	12	-	14	109	-	-	-	38	991	< 0.1	< 2.0	21	< 5.0	-	< 5.0	18	26
Wharf	TP10V012	TP10V012_0.5-0.6	18-Feb-15	EM1501839	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	12	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	< 5.0
Wharf	TP10V012	TP10V012_2.0-2.1	18-Feb-15	EM1501839	Primary	2.0	2.1	Sand	Coarse	Natural	< 5.0	< 5.0	10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	34	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	8.0
Wharf	TP10V017	TP10V017_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	4.0	-	< 2.0	< 5.0	-	-	-	10	67	< 0.1	< 2.0	2.0	< 5.0	-	< 5.0	6.0	22
Wharf	TP10V020	TP10V020_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	12	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	< 5.0
Wharf	TP10V020	TP10V020_2.0-2.1	19-Feb-15	EM1502009	Primary	2.0	2.1	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	< 2.0	-	< 2.0	< 5.0	-	-	-	< 5.0	32	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	15
Wharf	TP10V014	TP10V014_0.5-0.6	19-Feb-15	EM1502009	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	< 10	< 1.0	< 50	< 1.0	3.0	-	< 2.0	< 5.0	-	-	-	< 5.0	19	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	5.0	< 5.0
Wharf	TP10V015	TP10V015_0.0-0.1	19-Feb-15	EM150200																													

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											Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Chromium VI	Cobalt	Copper	Cyanide (total)	Iron	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc
NEPM EIL Areas of Ecological Significance											-	40	-	-	81	-	-	-	-	80	-	-	-	480	-	-	-	60	-	-	-	190	
NEPM EIL Urban Residential and Public Open Space											20	100	500	4.0	92	10	64	0.4	50	220	-	-	-	1,110	500	6.6	10	290	1.0	20	50	130	770
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
Wharf	TP-10/32	TP-10/32_0.16	6-Apr-17	EM1705680	Primary	0.2	0.3	Sand	Coarse	Fill	< 5.0	< 5.0	30	< 1.0	< 50	< 1.0	9.0	-	2.0	8.0	-	-	-	9.0	125	< 0.1	< 2.0	4.0	< 5.0	-	12	16	48
Wharf	TP-10/32	TP-10/32_1.0	6-Apr-17	EM1705680	Primary	1.0	1.1	Sand	Coarse	Fill	< 5.0	< 5.0	30	< 1.0	< 50	< 1.0	8.0	-	2.0	6.0	-	-	-	< 5.0	139	< 0.1	< 2.0	3.0	< 5.0	-	< 5.0	20	9.0
Wharf	TP-10/25	TP-10/25_0.10	4-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	< 5.0	7.0	110	< 1.0	< 50	< 1.0	16	-	8.0	10	-	-	-	11	302	< 0.1	< 2.0	12	< 5.0	-	< 5.0	27	26
Wharf	TP-10/25	TP-10/25_0.50	4-Apr-17	EM1704389	Primary	0.5	0.5	Sand	Coarse	Natural	< 5.0	< 5.0	40 *	< 1.0	< 50	< 1.0	15 *	-	3.0	5.0	-	-	-	< 5.0	62	< 0.1	< 2.0	7.3 *	< 5.0	-	< 5.0	17	24 *
Wharf	HA17/01	HA17/01_0.15	4-Apr-17	EM1704758	Primary	0.2	0.2	Sand	Coarse	Fill	6.0	7.0	70	< 1.0	< 50	< 1.0	19	-	6.0	24	-	-	-	15	225	< 0.1	< 2.0	9.0	< 5.0	-	< 5.0	33	242
Wharf	TP-10/26	TP-10/26_0.01	5-Apr-17	EM1704389	Primary	0.0	0.0	Sand	Coarse	Fill	< 5.0	< 5.0	20	< 1.0	< 50	< 1.0	6.0	-	2.0	< 5.0	-	-	-	6.0	162	< 0.1	< 2.0	4.0	< 5.0	-	< 5.0	8.0	15
Wharf	TP-10/26	TP-10/26_0.28	5-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Natural	< 5.0	6.0	60	< 1.0	< 50	< 1.0	12	-	6.0	13	-	-	-	8.0	135	< 0.1	< 2.0	8.0	< 5.0	-	< 5.0	22	27
Wharf	TP-10/27	TP-10/27_0.12	5-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	< 5.0	10	110	< 1.0	< 50	< 1.0	20	-	18	16	-	-	-	16	536	< 0.1	< 2.0	18	< 5.0	-	< 5.0	36	31
Wharf	TP-10/27	TP-10/27_0.68	5-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 5.0	6.0	50	< 1.0	< 50	< 1.0	12	-	6.0	9.0	-	-	-	10	126	< 0.1	< 2.0	10	< 5.0	-	< 5.0	24	29
Wharf	TP-10/28	TP-10/28_0.15	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 5.0	< 5.0	60	< 1.0	< 50	< 1.0	13	-	5.0	11	-	-	-	20	161	< 0.1	< 2.0	8.0	< 5.0	-	< 5.0	26	68
Wharf	TP-10/28	TP-10/28_0.60	5-Apr-17	EM1704389	Primary	0.6	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	10	< 1.0	< 50	< 1.0	6.0	-	3.0	8.0	-	-	-	< 5.0	35	< 0.1	< 2.0	9.0	< 5.0	-	< 5.0	10	23
Wharf	TP-10/29	TP-10/29_0.16	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 5.0	7.0	200	< 1.0	< 50	< 1.0	15	-	10	11	-	-	-	10	254	< 0.1	< 2.0	11	< 5.0	-	< 5.0	27	27
Wharf	TP-10/29	TP-10/29_0.88	5-Apr-17	EM1704389	Primary	0.9	0.9	Sand	Coarse	Natural	< 5.0	6.0	90	< 1.0	< 50	< 1.0	13	-	8.0	13	-	-	-	9.0	315	< 0.1	< 2.0	12	< 5.0	-	< 5.0	32	34
Wharf	TP-10/30	TP-10/30_0.16	6-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	< 5.0	5.0	50	< 1.0	< 50	< 1.0	11	-	5.0	17	-	-	-	16	351	0.1	< 2.0	8.0	< 5.0	-	< 5.0	16	144
Wharf	TP-10/30	TP-10/30_0.71	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 5.0	< 5.0	40	< 1.0	< 50	< 1.0	8.0	-	2.0	10	-	-	-	< 5.0	87	< 0.1	< 2.0	3.0	< 5.0	-	< 5.0	14	28
Wharf	TP-10/31	TP-10/31_0.28	6-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Fill	< 5.0	< 5.0	40	< 1.0	< 50	< 1.0	8.0	-	2.0	6.0	-	-	-	9.0	115	< 0.1	< 2.0	6.0	< 5.0	-	< 5.0	18	25
Wharf	TP-10/31	TP-10/31_0.68	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	< 5.0	< 5.0	40	< 1.0	< 50	< 1.0	10	-	4.0	6.0	-	-	-	10	100	< 0.1	< 2.0	6.0	< 5.0	-	< 5.0	20	24
Wharf	TP-10/32	TP-10/32_0.16	6-Apr-17	EM1705680	Primary	0.2	0.2	Sand	Coarse	Fill	< 5.0	< 5.0	30	< 1.0	< 50	< 1.0	9.0	-	2.0	8.0	-	-	-	9.0	125	< 0.1	< 2.0	4.0	< 5.0	-	12	16	48
Wharf	TP-10/32	TP-10/32_1.0	6-Apr-17	EM1705680	Primary	1.0	1.0	Sand	Coarse	Natural	< 5.0	< 5.0	30	< 1.0	< 50	< 1.0	8.0	-	2.0	6.0	-	-	-	< 5.0	139	< 0.1	< 2.0	3.0	< 5.0	-	< 5.0	20	9.0
NBA	1998-BH035	BH035_0.5-0.6	9-Oct-98		Primary	0.5	0.6	Sand	Coarse	Fill	-	-	-	-	-	-	9.0	-	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	470
NBA	1998-BH035	BH035_0.1-0.2	9-Oct-98		Primary	0.1	0.2	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
NBA	IF11-003	IF11-003_0.5-0.6	29-Apr-15	EM1504558	Primary	0.5	0.6	Sand	Coarse	Natural	< 5.0	< 5.0	20	< 1.0	< 50	< 1.0	4.0	-	< 2.0	7.0	-	-	-	< 5.0	122	< 0.1	< 2.0	< 2.0	< 5.0	-	< 5.0	< 5.0	65

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											PFAS														
											Perfluorobutane sulfonic acid (PFBS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonate (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum of PFHxS and PFOS	Sum of PFAS (WA)	
NEMP Human Health Based Guidance Values for Land Use - Public Open Space												1.0	1.0						10	-	10	10	-	1.0	-
NEMP Ecological Direct Exposure - All Land Uses												1.0	1.0						10	-	10	10	-	1.0	-
NEMP Ecological Indirect Exposure - All Land Uses													0.01												
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill		mg/kg	mg/kg					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Wharf	TP10/011	TP10/011_0.5-0.6	18-Feb-15			0.5	0.6	Sand	Coarse	Fill	-	-	0.0032	-	-	-	-	< 0.0005	-	< 0.005	-	-	-	-	
Wharf	TP10/011	TP10/011_2.0-2.1	18-Feb-15			2.0	2.1	Sand	Coarse	Fill	-	-	0.0037	-	-	-	-	< 0.0005	-	< 0.005	-	-	-	-	
Wharf	TP10/011	TP10/011_2.9-3.0	18-Feb-15			2.9	3.0	Sand	Coarse	Fill	-	-	-	-	-	-	-	-	-	-	-	-	-		
NBA	NBA/BH1	NBA/BH1/0.2-0.3	17-Mar-17	ES1703948	Primary	0.2	0.3	Sand	Coarse	Natural	<0.0002	<0.0002	0.0007	<0.001	<0.0002	<0.0002	<0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0007	0.0007		
NBA	NBA/BH1	NBA/BH1/0.5-0.6	6-Oct-16	EM1612158	Primary	0.5	0.6	Sand	Coarse	Natural	-	0.0014	0.0497	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0511	-	
NBA	NBA/BH1	NBA/BH1/1.9-2.0	6-Oct-16	EM1612158	Primary	1.9	2	Sand	Coarse	Natural	-	0.002	0.0178	-	-	-	-	0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0198	-	
NBA	NBA/BH2	NBA/BH2/0.2-0.3	17-Mar-17	ES1703948	Primary	0.2	0.3	Sand	Coarse	Natural	<0.0002	<0.0002	0.0005	<0.001	<0.0002	<0.0002	<0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0005	0.0005		
NBA	NBA/BH2	NBA/BH2/0.3-0.4	8-Oct-16	EM1612158	Primary	0.3	0.4	Sand	Coarse	Natural	-	0.0005	0.002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0025	-	
NBA	NBA/BH2	NBA/BH2/0.7-0.8	8-Oct-16	EM1612158	Primary	0.7	0.8	Sand	Coarse	Natural	-	0.001	0.002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.003	-	
NBA	NBA/BH3	NBA/BH3/0.4-0.5	7-Oct-16	EM1612158	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 0.0002	0.0005	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0005	-	
NBA	NBA/BH3	NBA/BH3/0.9-1.0	7-Oct-16	EM1612158	Primary	0.9	1	Sand	Coarse	Natural	-	< 0.0002	< 0.0002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	-	
NBA	NBA/BH4	NBA/BH4/0.0-0.1	17-Mar-17	ES1703948	Primary	0.0	0.1	Sand	Coarse	Natural	< 0.0002	< 0.0002	0.0029	<0.001	<0.0002	<0.0002	<0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0029	0.0029		
NBA	NBA/BH4	NBA/BH4/0.2-0.3	17-Mar-17	ES1703948	Primary	0.3	0.3	Sand	Coarse	Natural	< 0.0002	< 0.0002	0.0035	<0.001	<0.0002	<0.0002	<0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0035	0.0035		
NBA	NBA/BH4	NBA/BH4/0.5-0.6	17-Mar-17	ES1703948	Primary	0.5	0.6	Sand	Coarse	Natural	< 0.0002	< 0.0002	0.0005	<0.001	<0.0002	<0.0002	<0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0005	0.0005		
NBA	NBA-TP1	NBA-TP1_2_0.4-0.5	15-Sep-16	EM1610935	Primary	0.4	0.5	Sand	Coarse	Natural	-	< 0.0002	0.0004	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0004	-	
NBA	NBA-TP1	NBA-TP1_3_0.6-0.7	15-Sep-16	EM1610935	Primary	0.6	0.7	Sand	Coarse	Natural	-	< 0.0002	0.0035	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0035	-	
NBA	NBA-TP2	NBA-TP2_2_0.5	15-Sep-16	EM1610935	Primary	0.5	0.6	Sand	Coarse	Natural	-	0.0003	0.0045	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0048	-	
NBA	NBA-TP2	NBA-TP2_4_1.5	15-Sep-16	EM1610935	Primary	1.5	1.6	Sand	Coarse	Natural	-	0.0005	0.0014	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0019	-	
NBA	NBA-TP3	NBA-TP3_2_0.5	15-Sep-16	EM1610935	Primary	0.5	0.6	Sand	Coarse	Natural	-	< 0.0002	0.0003	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0003	-	
NBA	NBA-TP3	NBA-TP3_4_1.0_R	15-Sep-16	EM1610935	Primary	1.0	1.1	Sand	Coarse	Natural	-	< 0.0002	< 0.0002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	-	
NBA	NBA-TP4	NBA-TP4_1_0.0-0.2	15-Sep-16	EM1610935	Primary	0.0	0.2	Sand	Coarse	Natural	-	< 0.0002	< 0.0002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	-	
NBA	NBA-TP4	NBA-TP4_3_1.0	15-Sep-16	EM1610935	Primary	1.0	1.1	Sand	Coarse	Natural	-	< 0.0002	< 0.0002	-	-	-	-	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	-	
Wharf/NBA	TP-10/25	TP-10/25_0.10	4-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	<0.0002	0.003	0.021*	<0.001	<0.0002	0.0011*	0.0002*	0.0004*	<0.0005	<0.0005	<0.0005	<0.0005	0.024*	0.0257	
Wharf/NBA	TP-10/25	TP-10/25_0.50	4-Apr-17	EM1704389	Primary	0.5	0.5	Sand	Coarse	Natural	<0.0002	0.0161	0.015**	<0.001	<0.0002	0.0006	0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.0005	0.0177	0.0203	
Wharf/NBA	GS01	GS01	4-Apr-17	EM1704758	Primary	0	0	Sand	Coarse	Fill	<0.0002	0.0004*	0.01*	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0104*	0.0104*	
Wharf/NBA	HA17/01	HA17/01_0.15	4-Apr-17	EM1704758	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	<0.0002	0.0024	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	0.0024	0.0024	
Wharf/NBA	HA17/02	HA17/02_0.20	4-Apr-17	EM1704758	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	0.0012	0.102	<0.001	<0.0002	0.0004	<0.0002	0.0006	<0.0005	<0.0005	0.0019	<0.0005	0.103	0.106	
Wharf/NBA	TP-10/26	TP-10/26_0.01	5-Apr-17	EM1704389	Primary	0	0	Sand	Coarse	Fill	<0.0002	0.0003	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	0.0013	0.0013	
Wharf/NBA	TP-10/26	TP-10/26_0.28	5-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Natural	<0.0002	0.0007	0.0035	<0.001	<0.0002	0.0002	0.0002	<0.0002	<0.0002	0.0003	<0.0005	<0.0005	0.0042	0.0047	
Wharf/NBA	TP-10/27	TP-10/27_0.12	5-Apr-17	EM1704389	Primary	0.1	0.1	Sand	Coarse	Fill	<0.0002	0.0003	0.0011	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0014	0.0014	
Wharf/NBA	TP-10/27	TP-10/27_0.68	5-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	<0.0002	0.0006	0.0012	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	0.0018	
Wharf/NBA	TP-10/28	TP-10/28_0.15	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	0.0005	0.0117	<0.001	<0.0002	<0.0002	<0.0002	0.0004	<0.0005	<0.0005	<0.0005	<0.0005	0.0122	0.0126	
Wharf/NBA	TP-10/28	TP-10/28_0.60	5-Apr-17	EM1704389	Primary	0.6	0.6	Sand	Coarse	Natural	<0.0002	0.0008	0.0072	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.008	0.0082	
Wharf/NBA	TP-10/29	TP-10/29_0.16	5-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	<0.0002	0.0003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0003	0.0003	
Wharf/NBA	TP-10/29	TP-10/29_0.88	5-Apr-17	EM1704389	Primary	0.9	0.9	Sand	Coarse	Natural	<0.0002	0.0012	0.002	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0005	<0.0005	<0.0005	<0.0005	0.0032	0.0035	
Wharf/NBA	TP-10/30	TP-10/30_0.16	6-Apr-17	EM1704389	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	0.0003	0.0004	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	0.0007	
Wharf/NBA	TP-10/30	TP-10/30_0.71	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	<0.0002	0.0005	0.0004	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	0.0009	
Wharf/NBA	TP-10/31	TP-10/31_0.28	6-Apr-17	EM1704389	Primary	0.3	0.3	Sand	Coarse	Fill	<0.0002	0.0003	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0003	0.0003	

Soil Criteria Refer to Table 9 in Audit Report for the origin of the criteria											PFAS													
											Perfluorobutane sulfonic acid (PFBS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonate (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum of PFHxS and PFOS	Sum of PFAS (WA)
NEMP Human Health Based Guidance Values for Land Use - Public Open Space												1.0	1.0					10	-	10	10	-	1.0	-
NEMP Ecological Direct Exposure - All Land Uses												1.0	1.0					10	-	10	10	-	1.0	-
NEMP Ecological Indirect Exposure - All Land Uses													0.01											
Location Group	Location	Sample ID	Sample Date	Laboratory Report Number	Sample Type	Sample From	End	Lithology	Coarse/Fine	Natural/Fill		mg/kg	mg/kg					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Wharf/NBA	TP-10/31	TP-10/31_0.68	6-Apr-17	EM1704389	Primary	0.7	0.7	Sand	Coarse	Natural	<0.0002	0.0004	0.005	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0054	0.0056
Wharf/NBA	TP-10/32	TP-10/32_0.16	6-Apr-17	EM1705680	Primary	0.2	0.2	Sand	Coarse	Fill	<0.0002	<0.0002	0.0006	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0006
Wharf/NBA	TP-10/32	TP-10/32_1.0	6-Apr-17	EM1705680	Primary	1	1	Sand	Coarse	Natural	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002

Notes

* Indicates duplicate result used.

** Indicates triplicate result used.

Note the Auditor took verification samples at these TP10/025 (0.1) and (0.5) and they accorded with the secondary laboratory and so will be used for interpretative purposes

[illegible]

[illegible]

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₄ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEx	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₆ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₃₄ Fraction - Silica Cleanup	TPH C ₃₄ -C ₄₀ Fraction - Silica Cleanup	TPH C ₁₀ -C ₄₀ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
GW001	21-Jan-09	2008_Wharf_Invest	Wharf	Fractured Rock	< 1	< 2	< 5	< 2	< 2	< 4	< 50	< 20	610	1,800	340	2,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW001	12-Oct-09	EM0912826	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	440	100	540	< 50	180	60	240	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW001	22-Apr-10	EM1004449	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 90	600	130	730	< 60	< 110	< 60	< 60	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW001	13-Sep-12	EM1210854	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	990	170	1,160	-	-	-	-	< 20	-	-	150	980	< 100	1,130	-	-	-	-	-	-				
GW001	23-Sep-13	EM1310180	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	540	90	630	-	-	-	-	< 20	< 20	< 100	< 100	560	< 100	560	-	-	-	-	-	-				
GW002	18-Dec-08	2008_Wharf_Invest	Wharf	Fractured Rock	< 1	< 2	< 5	2.0	4.0	6.0	6.0	250	100	400	60	560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW002	12-Oct-09	EM0912826	Wharf	Fractured Rock	< 1	6.0	< 2	3.0	2.0	5.0	11	200	< 50	810	180	990	< 50	450	120	570	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW002	27-Apr-10	EM1004449	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	40	140	690	150	980	< 50	330	80	410	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW002	24-Oct-18	ES1832634	Wharf	Fractured Rock	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	180	830	7,100	1,900	9,830	-	-	-	-	300	300	2,100	2,100	7,600	1,000	10,700	-	-	-	-	-	-				
GW006	18-Dec-08	2008_Wharf_Invest	Wharf	Fractured Rock *	< 1	< 2	< 5	< 2	< 2	< 4	< 12	< 20	< 50	< 100	< 50	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW006	12-Oct-09	EM0912826	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW006	22-Apr-10	EM1004449	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 90	< 100	< 50	< 50	< 60	< 110	< 60	< 60	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW006	18-Oct-10	EM1011417	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW006	10-May-11	EM1111334	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
GW006	27-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
GW006	25-Sep-12	EM1211305	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	250	< 50	250	-	-	-	-	< 20	-	-	< 100	270	< 100	270	-	-	-	-	-	-				
GW006	16-Sep-13	EM1309867	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
GW006	17-Oct-14	EM1411054	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
GW006	14-Apr-15	EM1503872	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
GW006	1-Oct-15	ES1532743	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
GW008	11-Feb-10	EM1011961	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	160	< 50	160	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW008	8-Oct-10	EM1008818	Wharf	Fractured Rock	< 1	< 2	3.0	< 2	< 2	< 4	3.0	60	< 50	250	< 50	250	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW008	18-May-11	Unknown	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	260	< 50	260	-	-	-	-	< 20	-	-	< 100	240	< 100	240	-	-	-	-	-	-				
GW009	8-Oct-10	EM1008818	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-</														

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup					
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₃₇ - C ₃₈ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₃₈ Sum - Silica Cleanup	TRH > C ₉ -C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene	TRH > C ₁₀ -C ₁₆	TRH > C ₁₆ -C ₃₄	TRH > C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silicia Clean up	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₃₈ Fraction - Silica Cleanup						
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-						
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-						
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-						
					4 m - <8 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-			
					8 m +	35,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-			
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L							
GW010	26-Mar-14	EM1402901	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW010	28-Sep-15	EM1515178	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW010	11-Feb-16	EM1601410	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW011	14-Oct-10	EM1011328	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
GW011	8-Dec-10	EM1008884	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 0.1	< 20	60	210	< 50	270	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-						
GW011	18-May-11	Unknown	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	150	760	< 50	910	-	-	-	-	< 20	-	-	360	550	< 100	910	-	-	-	-	-						
GW011	29-Sep-11	EM1111065	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	150	< 50	150	-	-	-	-	< 20	-	-	< 100	140	< 100	140	-	-	-	-	-						
GW011	20-Apr-12	EM1204744	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	260	< 50	260	-	-	-	-	< 20	-	-	110	190	< 100	300	-	-	-	-	-						
GW011	17-Sep-12	EM1210854	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	150	< 50	150	-	-	-	-	< 20	-	-	< 100	120	< 100	120	-	-	-	-	-						
GW011	17-Sep-13	EM1309992	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW011	9-Sep-15	EM1514372	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW011	6-Oct-15	EM1515504	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100							
GW013	8-Nov-10	EM1008818	Wharf	Fractured Rock	11	2.0	< 2	< 2	< 2	< 4	13	1,420	5,320	17,500	1,620	24,400	5,250	16,900	1,690	23,800	-	-	-	-	-	-	-	-	-	-	-	-						
GW014	8-Nov-10	EM1008818	Wharf	Sediments	1.0	< 2	< 2	< 2	< 2	< 4	1.0	1,920	6,640	24,100	2,420	33,200	6,740	22,800	2,310	31,800	-	-	-	-	-	-	-	-	-	-	-	-						
GW014	8-Oct-15	EM1515589	Wharf	Sediments	1.0	< 2	< 2	< 2	< 2	< 2	1.0	80	440	2,420	200	3,060	-	-	-	-	60	60	750	750	2,250	< 100	3,000	-	-	-	-	-						
GW014	24-Oct-18	ES1832634	Wharf	Sediments	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	540	7,900	600	9,040	-	-	-	-	< 20	< 20	1,300	1,300	7,400	200	8,900	-	-	-	-	-						
GW135	30-Sep-15	EM1515326	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	330	< 50	330	-	-	-	-	< 20	< 20	< 100	< 100	270	< 100	270	-	-	-	-	-						
GW135	22-Feb-16	EM1601789	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	340	< 50	340	-	-	-	-	< 20	< 20	< 100	< 100	310	< 100	310	-	-	-	-	-						
GW135	24-Oct-18	ES1832634	Wharf	Fractured Rock	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	150	1,500	< 100	1,650	-	-	-	-	< 20	< 20	340	340	1,300	< 100	1,640	-	-	-	-	-						
GW136	21-Apr-15	EM1504152	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW136	24-Sep-15	EM1515056	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW136	23-Feb-16	EM1601872	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW138	21-Apr-15	EM1504152	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW138	15-Sep-15	EM1514633	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW138	22-Feb-16	EM1601789	Wharf	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW138	24-Oct-18	ES1832634	Wharf	Overlying sediments	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	< 50	< 100	< 100	< 100	-	-	-	-	< 20	< 20	< 50	< 50	< 100	< 100	< 100	< 100	-	-	-	-						
GW139	22-Apr-15	EM1504198	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW139	9-Oct-15	EM1515735	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW139	19-Feb-16	EM1601789	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	200	< 50	200	-	-	-	-	< 20	< 20	< 100	< 100	150	< 100	150	-	-	-	-	-						
GW139	10-Nov-17	ES1728628	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	< 50	350	< 50	350	-	-	-	-	-	-	-	< 50	360	< 50	360	-	-	-	-	-						
GW139	24-Oct-18	ES1832634	Wharf	Fractured Rock	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	< 50	< 100	< 100	< 100	-	-	-	-	< 20	< 20	< 50	< 50	< 100	< 100	< 100	< 100	-	-	-	-						
GW140	22-Apr-15	EM1504198	NBA	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW140	8-Oct-15	EM1515589	NBA	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
GW140	23-Feb-16	EM1601872	NBA	Overlying sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-						
MW135	9-Feb-03	Historical	Wharf	Sediments	< 0.5	1.0	< 1	< 2	< 1	< 1	1.0	30	50	1,070	100	1,220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
MW135	10-Dec-03	Historical	Wharf	Sediments	-	-	-	-	-	-	-	100	300	1,620	111	2,031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
MW135	10-May-05	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	200	100	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
MW135	29-Aug-06	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1</																												

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₄ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₃₇ - C ₄₀ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₀ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₀ Fraction - Silica Cleanup				
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-	-			
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-	-			
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-			
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
MW135	22-Apr-10	EM1004449	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 90	< 100	< 50	< 50	< 90	< 110	< 60	< 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW135	26-Oct-10	EM1011747	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	40	< 50	310	60	370	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW135	25-May-11	Unknown	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-	-			
MW135	10-Dec-11	EM1111608	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-	-			
MW135	10-Feb-12	EM1211580	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	160	< 50	160	-	-	-	-	< 20	-	-	< 100	180	< 100	180	-	-	-	-	-	-	-			
MW135	23-Apr-12	EM1204514	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	160	90	250	-	-	-	-	< 20	-	-	< 100	230	< 100	230	-	-	-	-	-	-	-			
MW135	17-Apr-13	EM1304042	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	260	< 50	260	-	-	-	-	< 20	-	-	< 100	290	< 100	290	-	-	-	-	-	-	-			
MW135	16-Sep-13	EM1309867	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	230	< 50	230	-	-	-	-	< 20	< 20	< 100	< 100	230	< 100	230	-	-	-	-	-	-	-			
MW135	9-Oct-14	EM1410750	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	320	70	390	-	-	-	-	< 20	< 20	< 100	< 100	390	< 100	390	-	-	-	-	-	-	-			
MW135	8-Oct-15	EM1515589	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	40	130	580	90	800	-	-	-	-	40	40	190	190	590	< 100	780	-	-	-	-	-	-	-			
MW135	24-Oct-18	ES1832634	Wharf	Sediments	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	< 50	1,000	< 100	1,000	-	-	-	-	< 20	< 20	< 50	< 50	1,000	< 100	1,000	-	-	-	-	-	-	-			
MW137	9-Feb-03	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 20	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	10-May-05	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	29-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	< 40	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	7-Nov-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	10-Mar-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	17-Oct-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	12-Jul-09	EM0912444	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 100	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	11-Mar-10	EM1012021	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	4-Dec-10	EM1003819	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 100	< 60	< 110	< 60	< 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
MW137	16-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-	-			
MW137	13-Oct-11	EM1111711	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-	-			
MW137	10-May-12	EM1211885	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-	-			
MW137	8-Oct-15	EM1515589	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50																						

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₁₀ - C ₃₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Sum - Silica Cleanup	TRH >C ₁₀	FL = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₀ -C ₃₄	TRH >C ₁₀ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-				
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-				
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-				
					4 m - <8 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L					
MW272	29-Aug-06	Historical	Wharf	Fractured Rock *	1.5	< 1	< 1	< 2	< 1	< 1	1.5	< 20	210	2,000	200	2,410	210	2,000	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	2-Nov-06	Historical	Wharf	Fractured Rock *	2.3	< 1	< 1	< 2	< 1	< 1	2.3	50	440	2,300	400	3,140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	27-Sep-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	140	< 100	280	420	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	24-Oct-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	50	1,000	320	1,370	< 50	< 100	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	30-Nov-09	EM0912168	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	240	< 50	240	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	13-Apr-10	EM1003886	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	540	60	600	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	10-Jul-10	EM1011001	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	360	80	440	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW272	19-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	630	120	750	-	-	-	-	< 20	-	-	< 100	710	< 100	710	-	-	-	-	-	-				
MW272	17-Oct-11	EM1111767	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW272	20-Sep-12	EM1211234	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	640	190	830	-	-	-	-	< 20	-	-	< 100	760	< 100	760	-	-	-	-	-	-				
MW272	15-Apr-13	EM1303890	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	540	210	750	-	-	-	-	< 20	-	-	< 100	620	130	750	-	-	-	-	-	-				
MW272	9-Nov-13	EM1309724	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	290	80	370	-	-	-	-	< 20	< 20	< 100	< 100	340	< 100	340	-	-	-	-	-	-				
MW272	31-Mar-14	EM1403051	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	80	1,800	450	2,330	-	-	-	-	< 20	< 20	270	270	2,130	220	2,620	-	-	-	-	-	-				
MW272	22-Apr-15	EM1504198	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	30	100	1,090	200	1,390	-	-	-	-	30	30	220	220	1,160	< 100	1,380	-	-	-	-	-	-				
MW272	1-Oct-15	ES1532743	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	800	80	880	-	-	-	-	< 20	< 20	< 100	< 100	790	< 100	790	-	-	-	-	-	-				
MW272	19-Feb-16	EM1601789	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	1,470	120	1,590	-	-	-	-	< 20	< 20	< 100	< 100	1,530	< 100	1,530	-	-	-	-	-	-				
MW301	12-Oct-03	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	360	193,000	233,000	26,800	452,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	27-Sep-05	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	890	1,400	1,600	200	3,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	24-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	530	1,000	2,100	200	3,300	1,000	2,100	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	2-Nov-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	370	870	2,000	200	3,070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	10-Mar-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	200	3,560	4,600	500	8,660	870	1,260	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	24-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	210	1,780	3,200	560	5,540	590	810	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	12-Mar-09	EM0912392	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	70	160	520	< 100	680	60	210	< 50	280	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	22-Apr-10	unknown	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	200	170	360	60	590	100	< 110	< 60	100	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	11-Oct-10	EM1012324	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	130	90	390	< 50	480	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	4-Nov-10	EM1012096	Wharf	Fractured Rock *	< 5	< 0.01	< 10	< 1	< 1	< 0.5	< 0.5	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW301	24-Oct-11	EM1112020	Wharf	Fractured Rock *	-	-	-	-	-	-	-	90	130	830	100	1,060	-	-	-	-	90	-	-	270	750	< 100	1,020	-	-	-	-	-	-				
MW301	5-Nov-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	110	310	840	120	1,270	-	-	-	-	120	-	-	460	720	< 100	1,180	-	-	-	-	-	-				
MW301	26-Apr-12	EM1204628	Wharf	Fractured Rock *	-	-	-	-	-	-	-	90	190	400	< 50	590	-	-	-	-	90	-	-	290	320	< 100	610	-	-	-	-	-	-				
MW301	24-Sep-12	EM1211305	Wharf	Fractured Rock *	-	-	-	-	-	-	-	80	120	300	< 50	420	-	-	-	-	100	-	-	190	220	< 100	410	-	-	-	-	-	-				
MW301	9-Jun-13	EM1309586	Wharf	Fractured Rock *	-	-	-	-	-	-	-	120	200	390	50	640	-	-	-	-	130	130	280	290	330	< 100	620	-	-	-	-	-	-				
MW307	19-Oct-05	Historical	Wharf	Sediments	< 0.5	< 1	2.0	< 2	< 1	< 1	3.5	110	520	1,800	200	2,520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	11-Feb-06	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	160	1,300	200	1,660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	24-Aug-06	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	50	160	1,200	200	1,560	160	1,200	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	10-Apr-07	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	400	80	480	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	24-Sep-08	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 60	600	180	840	< 50	< 100	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	12-Mar-09	EM0912392	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	20	< 50	300	< 50	300	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	10-Jun-10	EM1010927	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	40	< 50	430	< 50	430	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	4-Jul-10	EM1003701	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	250	< 50	250	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW307	25-May-11	Unknown	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	190	60	250	-	-	-	-	< 20	-	-	< 100	220	< 100	220	-	-	-	-	-	-				
MW307	17-Oct-11	EM1111767	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	130	< 50	130	-	-	-	-	< 20	-	-	<													

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₃₇ - C ₅₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₅₆ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₀ -C ₃₄	TRH >C ₃₅ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silicia Clean up	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₃₇ -C ₅₆ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems				500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-						
Recreation (Health)				10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-					
Recreation (Aesthetic)				-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-					
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L						
MW307	9-Oct-13	EM1309679	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW307	10-Oct-14	EM1410750	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	110	720	100	930	-	-	-	< 20	< 20	200	200	750	< 100	950	-	-	-	-	-	-					
MW307	25-Sep-15	EM1515178	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	480	< 50	480	-	-	-	< 20	< 20	< 100	< 100	430	< 100	430	-	-	-	-	-	-					
MW310	14-Oct-05	Historical	Wharf	Fractured Rock *	< 0.5	29	< 1	< 2	< 1	< 1	29	180	2,200	3,800	300	6,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	11-Feb-06	Historical	Wharf	Fractured Rock *	< 0.5	23	< 1	28	2.0	30	53	60	80	10,000	500	10,580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	24-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	58	1.0	< 2	3.0	3.0	62	70	80	8,600	300	8,980	80	8,600	300	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	24-Sep-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	60	2,340	6,900	1,760	11,000	380	720	400	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	24-Sep-08	Historical	Wharf	Fractured Rock *	< 1	2.0	< 2	3.0	< 2	3.0	5.0	160	1,300	2,400	300	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	12-Aug-09	EM0912572	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	140	580	1,180	60	1,810	140	150	< 50	280	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	4-Aug-10	EM1003819	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	2,590	5,040	80	7,710	150	250	< 50	400	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	30-Sep-10	EM1010727	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	100	540	2,650	100	3,290	230	240	< 50	470	-	-	-	-	-	-	-	-	-	-	-	-					
MW310	19-Oct-11	EM1111932	Wharf	Fractured Rock *	-	-	-	-	-	-	-	40	250	940	< 50	1,190	-	-	-	-	60	-	-	440	730	< 100	1,170	-	-	-	-	-					
MW310	10-Feb-12	EM1211580	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	50	460	< 50	510	-	-	-	-	< 20	-	-	140	380	< 100	520	-	-	-	-	-					
MW310	23-Apr-12	EM1204514	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	1,000	80	1,080	-	-	-	-	< 20	-	-	240	840	< 100	1,080	-	-	-	-	-					
MW310	22-Apr-13	EM1304156	Wharf	Fractured Rock *	-	-	-	-	-	-	-	110	3,500	7,880	120	11,500	-	-	-	-	100	-	-	6,250	5,120	< 100	11,400	-	-	-	-	-					
MW310	9-Oct-13	EM1309679	Wharf	Fractured Rock *	-	-	-	-	-	-	-	70	320	1,330	100	1,750	-	-	-	-	100	100	680	680	1,100	< 100	1,780	-	-	-	-	-					
MW310	28-Mar-14	EM1402999	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	100	1,880	5,110	120	7,110	-	-	-	-	100	100	3,520	3,520	3,790	< 100	7,310	-	-	-	-	-					
MW310	15-Apr-15	EM1503930	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	1,840	5,030	240	7,110	-	-	-	-	< 20	< 20	3,070	3,070	3,740	< 100	6,810	-	-	-	-	-					
MW310	30-Sep-15	EM1515326	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	30	840	4,820	230	5,890	-	-	-	-	30	30	1,990	1,990	3,860	< 100	5,850	-	-	-	-	-					
MW311	19-Oct-05	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	200	100	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	11-Feb-06	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	24-Aug-06	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	< 40	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	24-Sep-07	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	50	400	80	530	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	24-Sep-08	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	12-Jan-09	EM0912236	Wharf	Sediments	-	-	-	-	-	-	-	-	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	21-Apr-10	EM1004336	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	26-Oct-10	EM1011747	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW311	17-May-11	Unknown	Wharf	Sediments	< 1	< 2	< 3.0	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	10-Oct-11	EM1111492	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	16-Apr-12	EM1204247	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 100	-	-	-	< 20	-	-	< 100	< 100	< 100	-	-	-	-	-	-	-					
MW311	18-Sep-12	EM1211028	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	9-Jun-13	EM1309586	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	4-Dec-13	EM1303828	Wharf	Sediments	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	26-Mar-14	EM1402901	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	120	< 100	120	-	-	-	-	-	-					
MW311	14-Apr-15	EM1503872	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	28-Sep-15	EM1515178	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW311	22-Feb-16	EM1601789	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW313	11-Mar-05	Historical	Wharf	Sediments	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	< 100	-	-	-	-	-	-					
MW316	11-Jun-06	Historical	Wharf	Fractured Rock *	590	650	< 50	520	< 50	520	1,760	4,800	37,000	52,000	9,100	98,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW316	28-Aug-06	Historical	Wharf	Fractured Rock *	1,200	770	< 20	550	22	272	2,242	14,000	12,000	17,000	2,500	31,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW316	25-Sep-07	Historical	Wharf	Fr																																	

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₅ - C ₃₅ Fraction	C ₃₇ - C ₄₅ Fraction (sum)	C ₁₀ - C ₁₈ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₅ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEx	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₈	TRH >C ₁₅ -C ₃₄	TRH >C ₃₄ -C ₄₉	Sum of TRH C ₁₀ - C ₄₉	TPH C ₁₀ -C ₁₈ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₃₄ Fraction - Silica Cleanup	TPH C ₃₄ -C ₄₉ Fraction - Silica Cleanup	TPH C ₁₀ -C ₄₉ Fraction - Silica Cleanup				
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-	-			
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-	-			
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-			
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
MW322	11-Jun-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	500	13,000	200	13,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW322	28-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	1,100	3,400	< 100	4,500	1,100	3,400	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW322	25-Sep-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	13,800	47,100	710	61,610	1,660	5,630	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW322	24-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	12,000	47,000	< 50	59,000	5,690	23,300	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW322	14-Dec-09	EM0912839	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	370	1,570	60	2,000	200	1,040	60	1,310	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW322	10-Apr-12	EM1211773	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	60	500	50	610	-	-	-	-	< 20	-	-	140	450	< 100	590	-	-	-	-	-	-				
MW322	16-Sep-13	EM1309867	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	180	< 50	180	-	-	-	-	< 20	< 20	< 100	< 100	170	< 100	170	-	-	-	-	-	-				
MW322	13-Oct-14	EM1410876	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	50	400	< 50	450	-	-	-	-	< 20	< 20	130	130	360	< 100	490	-	-	-	-	-	-				
MW324	11-Feb-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	200	< 100	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	24-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	200	< 100	200	< 40	200	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	24-Sep-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	80	700	530	1,310	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	24-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	27-Nov-09	EM0912168	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	130	< 50	130	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	20-Apr-10	EM1004275	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	140	< 50	140	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	13-Oct-10	EM1011222	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW324	25-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW324	10-Nov-11	EM1111550	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	60	110	< 50	170	-	-	-	-	< 20	-	-	< 100	120	< 100	120	-	-	-	-	-	-				
MW324	26-Apr-12	EM1204744	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW324	18-Sep-12	EM1211028	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	140	< 50	140	-	-	-	-	< 20	-	-	< 100	140	< 100	140	-	-	-	-	-	-				
MW324	16-Apr-13	EM1303964	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW324	9-Oct-13	EM1309679	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW324	26-Mar-14	EM1402901	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	130	< 50	130	-	-	-	-	< 20	< 20	< 100	< 100	160	< 100	160	-	-	-	-	-	-				
MW324	9-Oct-14	EM1410626	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW324	10-Apr-15	EM1503819	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 2																

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₅ - C ₃₅ Fraction	C ₃₇ - C ₄₅ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₅ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₈	TRH >C ₁₀ -C ₃₄	TRH >C ₃₄ -C ₄₉	Sum of TRH C ₁₀ - C ₄₉	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₅ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					4 m - <8 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
MW326	11-Feb-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	200	< 100	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	24-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	400	< 100	400	< 40	400	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	10-Mar-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	24-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	12-Jan-09	EM0912236	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	4-Aug-10	EM1003819	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	130	< 50	130	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	13-Oct-10	EM1011222	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW326	27-May-11	Unknown	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW326	20-Oct-11	EM111932	Wharf	Fractured Rock *	< 1	< 2	21	< 2	< 2	< 4	25	40	< 50	< 100	< 50	< 50	-	-	-	-	40	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW326	24-Sep-12	EM1211234	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	130	< 100	130	-	-	-	-	-	-				
MW326	17-Sep-13	EM1309992	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW326	10-Oct-14	EM1410750	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	150	< 50	150	-	-	-	-	< 20	< 20	< 100	< 100	170	< 100	170	-	-	-	-	-	-				
MW326	9-Apr-15	EM1503819	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW326	25-Sep-15	EM1515178	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW326	24-Oct-18	ES1832634	Wharf	Fractured Rock *	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	-	< 20	< 50	300	< 100	300	-	-	-	-	< 20	< 20	< 50	< 50	300	< 100	300	-	-	-	-	-	-				
MW327	11-Jun-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	24-Aug-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	< 40	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	10-Mar-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	29-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 100	< 100	< 200	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	27-Nov-09	EM0912168	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	27-Apr-10	EM1004449	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 90	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	10-Dec-10	EM1011222	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
MW327	18-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
MW327	24-Oct-11	EM1112020	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-															

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₁₀ - C ₃₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Sum - Silica Cleanup	TRH >C ₁₀	FL = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₀ -C ₃₄	TRH >C ₁₀ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-					
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-					
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-					
					4 m - <8 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L						
MW328	14-Apr-15	EM1503872	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW328	24-Sep-15	EM1515056	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW333	11-Jan-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	100	< 100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	25-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	50	300	150	500	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	60	60	< 100	< 200	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	14-Dec-09	EM0912839	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	200	140	340	< 50	< 100	70	70	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	19-Apr-10	EM1004147	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	13-Oct-10	EM1011222	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW333	25-Oct-11	EM1112085	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	90	90	-	-	-	-	< 20	-	-	< 100	150	< 100	150	-	-	-	-	-	-				
MW333	5-Nov-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW333	26-Sep-12	EM1211378	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW333	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW333	15-Oct-14	EM1410953	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW333	21-Apr-15	EM1504152	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW333	24-Sep-15	EM1515056	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	11-Jan-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	40	300	200	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	27-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	12-Sep-09	EM0912673	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	14-Apr-10	EM1004044	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	10-May-10	EM1010861	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW337	10-May-11	EM1111334	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	26-May-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 100	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	19-Sep-12	EM1211028	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW337	9-Oct-14	EM1410750	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW338	11-Jan-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	100	< 100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	27-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 100	< 200	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	12-Sep-09	EM0912673	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	11-Feb-10	EM1011961	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	14-Apr-10	EM1004044	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	190	< 50	190	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW338	19-May-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW338	14-Oct-11	EM1111711	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW338	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 100	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW338	10-May-12	EM1211885	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW338	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW338	9-Oct-14	EM1410750	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW339	11-Feb-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	&																											

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₁₀ - C ₃₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₀ -C ₃₄	TRH >C ₃₅ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-					
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-					
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-					
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L						
MW339	11-Feb-10	EM1011961	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW339	14-Apr-10	EM1004044	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW339	19-May-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW339	14-Oct-11	EM1111711	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW339	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	-	-	-	-	-	-	-	< 20	-	-	-	-	-	-	-	-	-	-	-	-					
MW339	26-Apr-12	EM1204744	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	< 50	< 100	< 50	< 50	-	-	-	-	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
MW339	21-Sep-12	EM1211234	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW339	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW339	10-Oct-14	EM1410750	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	11-Feb-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	27-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	12-Nov-09	EM0912826	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	15-Apr-10	EM1004147	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	10-May-10	EM1010861	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW340	26-May-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	10-Jun-11	EM1111433	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	21-Sep-12	EM1211234	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	4-Dec-13	EM1303828	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
MW340	28-Mar-14	EM1402999	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW340	24-Sep-15	EM1515056	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	11-Feb-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	27-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 100	< 200	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	12-Nov-09	EM0912826	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	10-Jan-10	EM1010861	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	15-Apr-10	EM1004044	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW341	10-May-11	EM1111334	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	19-May-11	Unknown	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	26-Sep-12	EM1211378	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	15-Apr-13	EM1303890	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW341	28-Mar-14	EM1402999	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW342	11-Feb-06	Historical	Wharf	Fractured Rock	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	70	200	200	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	27-Sep-07	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	29-Sep-08	Historical	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	200	470	670	< 100	300	470	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	12-Nov-09	EM0912826	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	15-Apr-10	EM1004147	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	10-Dec-10	EM1011222	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW342	16-May-11	Unknown	Wharf																																		

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₄ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEx	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₆ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₄ Fraction - Silica Cleanup	TPH C ₂₄ -C ₃₆ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₆ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-				
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-				
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-				
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L						
MW342	19-Apr-13	EM1304156	Wharf	Fractured Rock	-	-	-	-	-	-	-	< 20	< 50	< 100	70	70	-	-	-	-	< 20	-	-	< 100	100	< 100	100	-	-	-	-	-					
MW342	16-Sep-13	EM1309867	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW342	31-Mar-14	EM1403051	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW342	15-Apr-15	EM1503930	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW342	1-Oct-15	ES1532743	Wharf	Fractured Rock	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
MW343	11-Feb-06	Historical	Wharf	Fractured Rock *	< 0.5	< 1	< 1	< 2	< 1	< 1	< 4.0	< 20	< 40	< 100	< 100	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	25-Sep-07	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	200	140	340	< 50	< 100	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	29-Sep-08	Historical	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 50	< 100	< 50	< 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	12-Aug-09	EM0912572	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	19-Apr-10	EM1004147	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	21-Oct-10	EM1011595	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 4	< 9	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW343	17-May-11	Unknown	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	19-Oct-11	EM1111854	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	10-Feb-12	EM1211676	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	9-Jun-13	EM1309586	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	4-Sep-13	EM1303671	Wharf	Fractured Rock *	-	-	-	-	-	-	-	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	27-Mar-14	EM1402999	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW343	6-Oct-15	EM1515457	Wharf	Fractured Rock *	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
MW344	9-Feb-08	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	< 250	600	300	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
MW347	9-Feb-08	Historical	Wharf	Sediments	< 1	< 2	< 2	< 2	< 2	< 1	< 4.0	< 20	700	330	1,030	2,060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW01	30-Jun-10	EM1007243	Wharf	Overlying Sediments	< 0.1	< 100	< 5	< 0.1	< 1	< 4	< 10	< 5	< 100	< 1	< 0.1	< 0.1	< 5	< 5	< 5	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-					
TMW01	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 1	< 1	< 1	< 1	< 5	< 4	< 10	< 20	< 1	< 100	< 50	< 50,000	< 50	< 100	< 50	< 2	-	-	-	-	-	-	-	-	-	-	-	-					
TMW01	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 0.01	< 1	< 1	< 1	< 5	< 4	< 10	< 0.1	< 0.01	< 100	< 0.5	< 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW01	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW01	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	&																														

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEx								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₅ - C ₃₅ Fraction	C ₃₇ - C ₄₅ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₅ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEx	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₆ -C ₁₈	TRH >C ₁₈ -C ₃₄	TRH >C ₃₄ -C ₄₉	Sum of TRH C ₁₀ - C ₄₉	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₅ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-				
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-				
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-				
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L					
TMW02	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW02	27-Mar-14	EM1403000	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW02	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW02	26-Feb-15	EM1502300	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW02	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW03	30-Jun-10	EM1007243	Wharf	Overlying Sediments	< 0.1	< 100	< 100	< 0.1	< 0.1	< 4	< 10	< 5	< 100	< 2	< 0.1	< 5	< 5	< 5	< 5	< 1	-	-	-	-	-	-	-	-	-	-	-	-					
TMW03	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 2	< 1	< 0.05	< 1	< 5	< 4	< 10	< 20	< 1	< 100	< 2	< 5	< 50	< 5	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-					
TMW03	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 2	< 1	< 0.1	< 50	< 2	< 4	< 10	< 1	< 1	< 100	< 0.1	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW03	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW03	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW03	21-Sep-11	EM1110717	Wharf	Overlying Sediments	< 0.05	< 0.05	< 0.05	< 1	< 0.1	< 4	< 10	< 1	< 1	< 1	< 0.1	< 5	-	-	-	-	< 1	-	-	< 5	< 1	< 5	< 0.1	-	-	-	-	-					
TMW03	13-Dec-11	EM1114272	Wharf	Overlying Sediments	< 50	< 2	< 1	< 1	< 0.5	< 4	< 10	< 1	< 1	< 1	< 1	< 50	-	-	-	-	< 1	-	-	< 0.1	< 5	< 100	< 0.1	-	-	-	-	-					
TMW03	4-Nov-12	EM1204007	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW03	4-Mar-13	EM1211778	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW03	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW03	27-Mar-14	EM1403000	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW03	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW03	26-Feb-15	EM1502300	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW03	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW04	1-Jul-10	EM1007324	Wharf	Overlying Sediments	< 0.1	< 0.1	< 0.1	< 50	< 5	< 0.1	< 5	-	-	-	-	335	-	-	-	305	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW04	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 1	< 1	< 1	< 1	< 5	< 4	< 10	< 20	< 0.5	< 100	< 2	< 50,000	< 50	< 100	< 50	< 5	-	-	-	-	-	-	-	-	-	-	-	-					
TMW04	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 1	< 1	< 1	< 1	< 0.1	< 4	< 10	< 1	< 1	< 100	< 1	< 1	-	-	-	-	-	-	-	-	-												

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₃ Fraction	C ₂₅ - C ₃₅ Fraction	C ₃₇ - C ₄₀ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₀ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₈	TRH >C ₁₈ -C ₃₄	TRH >C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₃ Fraction - Silica Cleanup	TPH C ₂₅ -C ₃₅ Fraction - Silica Cleanup	TPH C ₃₇ -C ₄₀ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-				
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-				
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-				
					4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
					8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L					
TMW05	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-					
TMW05	28-Mar-14	EM1403000	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
TMW05	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW05	27-Feb-15	EM1502300	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW05	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW06	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 1	< 1	< 1	< 1	< 5	< 4	< 10	< 20	< 1	< 100	< 5	< 50,000	< 50	< 100	< 50	< 2	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW06	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 1	< 1	< 0.5	< 0.1	< 5	< 4	< 10	< 0.1	< 50	< 100	< 0.5	< 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW06	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW06	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
TMW06	21-Sep-11	EM1110717	Wharf	Overlying Sediments	< 1	< 0.1	< 0.1	< 0.1	< 2	< 4	< 10	< 1	< 2	< 100	< 0.1	< 0.1	-	-	-	-	< 1	-	-	< 0.1	< 1	< 5	< 5	-	-	-	-	-	-				
TMW06	13-Dec-11	EM1114272	Wharf	Overlying Sediments	< 0.1	< 1	< 0.1	< 0.1	< 1	< 4	< 10	< 1	< 1	< 1	< 0.01	< 1	-	-	-	-	< 1	-	-	< 1	< 1	< 1	< 0.1	-	-	-	-	-	-				
TMW06	10-Mar-12	EM1211778	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
TMW06	4-Nov-12	EM1204007	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
TMW06	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-	-				
TMW06	28-Mar-14	EM1403000	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-				
TMW06	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW06	27-Feb-15	EM1502300	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW06	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100				
TMW07	30-Jun-10	EM1007243	Wharf	Overlying Sediments	< 0.05	< 0.1	< 0.1	< 100	< 2	< 4	< 10	< 2	< 100	< 5	< 0.1	< 5	< 5	< 5	< 5	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW07	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 0.01	< 0.1	< 1	< 1	< 5	< 4	< 10	< 20	< 1	< 100	< 2	< 50,000	< 50	< 2	< 50	< 5	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW07	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TMW07	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	< 2	<																													

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX								TPH AND TPH Silica Gel Cleanup										Total Recoverable Hydrocarbons (TRH)										TRH Silica Gel Cleanup				
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₈ Fraction	C ₂₉ - C ₃₆ Fraction	C ₃₇ - C ₃₈ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₈ Fraction - Silica Cleanup	TPH C ₂₉ -C ₃₈ Fraction - Silica Cleanup	TPH C ₁₀ -C ₃₈ Sum - Silica Cleanup	TRH >C ₁₀	F1 = TRH (C ₆ -C ₁₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₄) minus Naphthalene	TRH >C ₁₀ -C ₁₆	TRH >C ₁₆ -C ₃₄	TRH >C ₃₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₆ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₆) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₃₄ Fraction - Silica Cleanup	TPH C ₃₄ -C ₄₀ Fraction - Silica Cleanup	TPH C ₁₀ -C ₄₀ Fraction - Silica Cleanup					
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-				
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-				
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HSL (Vapour Intrusion) C - SAND (NEPM 2013)					2 m - <4 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-				
					4 m - <8 m	30,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	
					8 m +	35,000	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-	
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L					
TMW09	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 1	< 5	< 5	< 2	< 20	< 4	< 10	< 20	< 1	< 100	< 5	< 50,000	< 50	< 2	< 50	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-					
TMW09	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 1	< 1	< 1	< 1	< 0.5	< 4	< 10	< 0.1	< 1	< 5	< 2	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW09	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW09	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW09	21-Sep-11	EM1110717	Wharf	Overlying Sediments	< 1	< 0.1	< 0.05	< 0.1	< 0.1	< 4	< 10	< 0.1	< 1	< 100	< 5	< 1	-	-	-	-	< 1	-	-	< 0.1	< 1	< 5	< 0.1	-	-	-	-	-					
TMW09	13-Dec-11	EM1114272	Wharf	Overlying Sediments	< 50	< 1	< 1	< 1	< 1	< 4	< 10	< 0.1	< 50	< 1	< 50	< 0.1	-	-	-	-	< 1	-	-	< 1	< 100	< 100	< 0.1	-	-	-	-	-					
TMW09	4-Nov-12	EM1204007	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	< 100	-	-	-	-					
TMW09	4-Mar-13	EM1211778	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW09	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	< 100	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW09	31-Mar-14	EM1403050	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW09	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW09	27-Feb-15	EM1502300	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW09	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	< 50	< 100	< 50	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100					
TMW10	30-Jun-10	EM1007243	Wharf	Overlying Sediments	< 0.1	< 100	< 0.1	< 0.1	< 5	< 4	< 10	< 5	< 100	< 5	< 0.1	< 5	< 5	< 5	< 5	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-					
TMW10	3-Aug-10	EM1008537	Wharf	Overlying Sediments	< 0.5	< 0.1	< 0.5	< 1	< 2	< 4	< 10	< 20	< 1	< 100	< 2	< 50,000	< 50	< 100	< 50	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-					
TMW10	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 2	< 1	< 1	< 1	< 0.01	< 4	< 10	< 0.1	< 1	< 100	< 0.1	< 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW10	22-Mar-11	EM1102938	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TMW10	19-Jul-11	EM1108066	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW10	21-Sep-11	EM1110717	Wharf	Overlying Sediments	< 0.05	< 0.05	< 1	< 1	< 0.1	< 4	< 10	< 1	< 1	< 100	< 5	< 0.1	-	-	-	-	< 1	-	-	< 0.1	< 1	< 5	< 5	-	-	-	-	-					
TMW10	13-Dec-11	EM1114272	Wharf	Overlying Sediments	< 0.1	< 0.1	< 1	< 1	< 0.5	< 4	< 10	< 0.1	< 1	< 1	< 0.1	< 1	-	-	-	-	< 1	-	-	< 1	< 1	< 100	< 50	-	-	-	-	-					
TMW10	10-Mar-12	EM1211778	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW10	4-Nov-12	EM1204007	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 4	< 10	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	-	-	< 100	< 100	< 100	< 100	-	-	-	-	-					
TMW10	31-Mar-14	EM1403050	Wharf	Overlying Sediments	< 1	< 2	< 2	< 2	< 2	< 2	< 1	< 20	< 50	< 100	< 50	< 50	-	-	-	-	< 20	< 20	-	< 100	< 100	< 100	< 100										

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					BTEX							TPH AND TPH Silica Gel Cleanup								Total Recoverable Hydrocarbons (TRH)								TRH Silica Gel Cleanup						
					Benzene	Ethylbenzene	Toluene	Xylenes (m & p)	Xylene (o)	Xylene (Sum of total)	BTEX (Sum of total)	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₁₅ - C ₂₀ Fraction	C ₂₀ - C ₂₅ Fraction	C ₁₀ - C ₁₅ Fraction (sum)	TPH C ₁₀ -C ₁₄ Fraction - Silica Cleanup	TPH C ₁₅ -C ₂₀ Fraction - Silica Cleanup	TPH C ₂₀ -C ₂₅ Fraction - Silica Cleanup	TPH C ₁₀ -C ₂₅ Sum - Silica Cleanup	TRH >C ₁₀ -C ₁₅	F1 = TRH (C ₆ -C ₂₀) minus BTEX	F2 = TRH (>C ₁₀ -C ₁₅) minus Naphthalene	TRH >C ₁₀ -C ₁₅	TRH >C ₁₅ -C ₂₄	TRH >C ₂₄ -C ₄₀	Sum of TRH C ₁₀ - C ₄₀	TPH C ₁₀ -C ₁₅ Fraction - Silica Cleanup	F2 = TRH (>C ₁₀ -C ₁₅) minus Naphthalene Silica Clean up	TPH C ₁₅ -C ₂₄ Fraction - Silica Cleanup	TPH C ₂₄ -C ₄₀ Fraction - Silica Cleanup	TPH C ₁₀ -C ₄₀ Fraction - Silica Cleanup		
Marine Aquatic Ecosystems					500	5.0	180	-	350	75	-	500	500	500	500	-	-	-	-	500	500	-	500	500	-	-	-	-	-	-	-	-		
Recreation (Health)					10	3,000	8,000	-	1,900	20	-	10	940	900	900	-	-	-	-	10	940	-	900	900	-	-	-	-	-	-	-	-		
Recreation (Aesthetic)					-	3.0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	940	-	-	-	-	-	-	-	-	-	-	-		
HSL (Vapour Intrusion) C - SAND (NEPM 2013)				2 m - <4 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-		
				4 m - <8 m	30,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-
				8 m +	35,000	NL	NL	NL	NL	NL	-	NL	NL	-	-	-	-	-	-	-	-	NL	NL	-	-	-	-	-	-	-	-	-	-	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		

Fractured rock * - indicates well screen is placed across bedrock interface and overlying sediments and may be subject to influence from perched water (if present).
- - not analysed
< - less than laboratory limit of reporting
LOR - Laboratory Limit of Reporting
µg/L - micrograms per litre
Bold indicates a detection above the laboratory LOR.

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																			Phenolics													
						1-Methylnaphthalene	2-(Acetyl)amino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol		
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400			
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000		
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-			
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L					
GW1_210109	GW001	21-Jan-09	2008_Wharf_invest	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	8.5	<1	<1	8.5	-	-	-	-	-	-	-	-				
GW001-21-20091210	GW001	12-Oct-09	EM0912826	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1			
GW001-21	GW001	22-Apr-10	Unknown - March GME	Wharf	Fractured Rock	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW001-21	GW001	22-Apr-10	EM1004449	Wharf	Fractured Rock	-	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.2	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW001-21-30120913	GW001	13-Sep-12	EM1210854	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW001-21-20130923	GW001	23-Sep-13	EM1310180	Wharf	Fractured Rock	<2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.2	0.2	<0.1	<0.1	0.1	0.2	0.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	0.6	<0.1		
GW2_181208	GW002	18-Dec-08	2008_Wharf_invest	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<16	-	-	-	-	-	-	-	-	-	-	-				
GW002-21-20091210	GW002	12-Oct-09	EM0912826	Wharf	Fractured Rock	<2	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.1	0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1				
GW002-21	GW002	27-Apr-10	EM1004449	Wharf	Fractured Rock	-	<0.1	7.2	0.6	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	1.6	<0.1	3.2	1.3	0.2	14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW6_181208	GW006	18-Dec-08	2008_Wharf_invest	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<16	-	-	-	-	-	-	-	-	-	-	-	-				
GW006-21-20091210	GW006	12-Oct-09	EM0912826	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1				
GW006-21	GW006	22-Apr-10	Unknown - March GME	Wharf	Fractured Rock *	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
GW006-21	GW006	22-Apr-10	EM1004449	Wharf	Fractured Rock *	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006-21-20101018	GW006	18-Oct-10	EM1011417	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006-21-2111005	GW006	10-May-11	EM1111334	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006-21-20110527	GW006	27-May-11	Unknown	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006-21-20120925	GW006	25-Sep-12	EM1211305	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006-21-20130916	GW006	16-Sep-13	EM1309867	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006_17102014	GW006	17-Oct-14	EM1411054	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006_14042015	GW006	14-Apr-15	EM1503872	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW006_01102015	GW006	1-Oct-15	ES1532743	Wharf	Fractured Rock *	<2	-	-	<1	<1	<1	<1	<0.5	-	-	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1			
GW008-21-20101102	GW008	11-Feb-10	EM1011961	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
GW008-21-20100810	GW008	8-Oct-10	EM1008818	Wharf	Fractured Rock	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1																		

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																Phenolics															
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol	
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400		
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-		
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
GW138_21042015	GW138	21-Apr-15	EM1504152	Wharf	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW138_15092015	GW138	15-Sep-15	EM1514633	Wharf	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW138_22022016	GW138	22-Feb-16	EM1601789	Wharf	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.005	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.02	<3.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	
GW139_22042015	GW139	22-Apr-15	EM1504198	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW139_09102015	GW139	9-Oct-15	EM1515735	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW139_19022016	GW139	19-Feb-16	EM1601789	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW140_22042015	GW140	22-Apr-15	EM1504198	NBA	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW140_08102015	GW140	8-Oct-15	EM1515589	NBA	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
GW140_23022016	GW140	23-Feb-16	EM1601872	NBA	Overlying sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW135_20030902	MW135	9-Feb-03	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-	-			
MW135_20051019	MW135	19-Oct-05	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-			
MW135_20060829	MW135	29-Aug-06	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-	-			
MW135_20060611	MW135	6-Nov-06	Historical	Wharf	Sediments	-	-	-	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<160	-	-	-	-	-	-	-	-	-	-	-	-		
MW135_20071027	MW135	27-Oct-07	Historical	Wharf	Sediments	-	-	-	<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			
MW135-2120091216	MW135	16-Dec-09	EM0912870	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1		
MW135-21	MW135	22-Apr-10	EM1004449	Wharf	Sediments	-	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.3	-	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.05	<0.1	<0.1	
MW135-21	MW135	22-Apr-10	Unknown - March GME	Wharf	Sediments	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-		
MW135-21-20101026	MW135	26-Oct-10	EM1011747	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW135-21-20110525	MW135	25-May-11	Unknown	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW135-21-20111012	MW135	10-Dec-11	EM1111608	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW135-21-20121002	MW135	10-Feb-12	EM1211580	Wharf	Sediments	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<7.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW135-21-20120423	MW135	23-Apr-12	EM1204514	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW135-2120130417	MW135	17-Apr-13	EM1304042	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<									

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					Polycyclic Aromatic Hydrocarbons																		Phenolics																	
					1-Methylnaphthalene	2-(Acetyl)amino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol					
Marine Aquatic Ecosystems					2.1	50	4.2	5.8	90	0.01	0.018	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.025	-	-	4.0	3.0	1.0	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400							
Recreation (Health)					11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	14,000	19,000	58,000							
Recreation (Aesthetic)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-							
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L									
MW272-21-2030911	MW272	9-Nov-13	EM1309724	Wharf	Fractured Rock *	<2	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.05	<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									
MW272_01302014	MW272	31-Mar-14	EM1403051	Wharf	Fractured Rock *	<2	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.05	<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									
MW272_22042015	MW272	22-Apr-15	EM1504198	Wharf	Fractured Rock *	<2	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.05	-	<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									
MW272_01102015	MW272	1-Oct-15	ES1532743	Wharf	Fractured Rock *	<2	-	<1	<1	<1	<1	<1	<0.5	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1									
MW272_19022016	MW272	19-Feb-16	EM1601789	Wharf	Fractured Rock *	<2	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.05	-	<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									
MW301_20031210	MW301	12-Oct-03	Historical	Wharf	Fractured Rock *	-	-	-	4.0	1.0	<1	<1	<1	<1	-	<1	<1	<1	<1	7.0	<1	68	11	<1	91	-	-	-	-	-	-	-								
MW301_20051005	MW301	10-May-05	Historical	Wharf	Fractured Rock *	-	-	-	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	3.0	<10	45	3.0	<10	50	-	-	-	-	-	-	-								
MW301_20060824	MW301	24-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	42	<1	<1	42	-	-	-	-	-	-	-								
MW301_20060211	MW301	2-Nov-06	Historical	Wharf	Fractured Rock *	-	-	-	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	38	<10	<10	40	-	-	-	-	-	-	-								
MW301_20071027	MW301	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	1.7	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	4.0	<1	43	3.5	<1	52	<1	<1	<1	<1	<1	<1	<1								
MW301_20080924	MW301	24-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	3.3	<1	31	2.7	<1	38	<1	<1	<1	<1	<1	<1	<1								
MW301-2120091203	MW301	12-Mar-09	EM0912392	Wharf	Fractured Rock *	8.0	<0.1	5.2	0.4	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	<0.1	6.6	0.4	<0.1	22	<1	<1	<1	<1	<1	<1	<1	<1								
MW301-21	MW301	22-Apr-10	unknown	Wharf	Fractured Rock *	9.0	<0.1	16	0.8	<0.1	0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.5	<0.1	23	1.0	<0.1	51	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1								
MW301-21-20101110	MW301	11-Oct-10	EM1012324	Wharf	Fractured Rock *	16	<0.1	26	0.9	<0.1	0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	<0.1	24	1.3	<0.1	70	-	-	-	-	-	-	-	-								
MW301-21-20111024	MW301	24-Oct-11	EM1112020	Wharf	Fractured Rock *	16	<0.1	27	1.6	<0.1	0.2	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	2.4	<0.1	27	1.7	<0.1	76	-	-	-	-	-	-	-	-								
MW301-21-20110511	MW301	5-Nov-11	Unknown	Wharf	Fractured Rock *	12	<0.1	11	0.8	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.4	<0.1	12	0.8	<0.1	37	-	-	-	-	-	-	-	-								
MW301-21-20120426	MW301	26-Apr-12	EM1204628	Wharf	Fractured Rock *	16	<0.1	29	1.0	<0.1	0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.3	<0.1	18	1.0	<0.1	66	-	-	-	-	-	-	-	-								
MW301-21-20120924	MW301	24-Sep-12	EM1211305	Wharf	Fractured Rock *	10	<0.1	14	0.9	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.5	<0.1	11	0.9	<0.1	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1								
MW301-21-20130906	MW301	9-Jun-13	EM1309586	Wharf	Fractured Rock *	12	<0.1	11	1.1	<0.1	0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	<0.1	12	1.1	<0.1	<40	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1								
MW307_20051019	MW307	19-Oct-05	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	2.0	<1	<1	<20	-	-	-	-	-	-	-								
MW307_20061102	MW307	11-Feb-06	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1									
MW307_20060824	MW307	24-Aug-06	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1									
MW307_20071027	MW307	27-Oct-07	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1									
MW307-2120091203	MW307	12-Mar-09	EM0912392	Wharf	Sediments	<2	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.05	<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									
MW307-21-20101006	MW307	10-Jun-10	EM1010927	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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									
MW307-21	MW307	4-Jul-10	EM1003701	Wharf	Sediments	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	-	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1								
MW307-21	MW307	4-Jul-10	Unknown - March GME	Wharf	Sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1								
MW307-21-20110525	MW307	25-May-11	Unknown	Wharf	Sediments	<2	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.05	<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									
MW307-21-20111017	MW307	17-Oct-11	EM1111767	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.06	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									
MW307-21-20120423	MW307	23-Apr-12	EM1204514	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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									
MW307-21-20120917	MW307	17-Sep-12	EM1210854	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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									
MW307-21-20130910	MW307	9-Oct-13	EM1309679	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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									
MW307_10102014	MW307	10-Oct-14	EM1410750	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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									
MW307_25092015	MW307	25-Sep-15	EM1515178	Wharf	Sediments	<2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<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									
MW310_20051014	MW310	14-Oct-05	Historical	Wharf	Fractured Rock *	-	-	-	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	41	<10	<10	40	-	-	-	-	-	-	-								
MW310_20061102	MW310	11-Feb-06	Historical	Wharf	Fractured Rock *	-	-	-	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<160	-	-	-	-	-	-	-								
MW310_20060824	MW310	24-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-									
MW310_20071027	MW310	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	1.2	<1	<1	<1	0.9	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1															

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																Phenolics															
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol	
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400	
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	-	1,200	-	-	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-	-	
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
MW311-21-20120918	MW311	18-Sep-12	EM1211028	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311-21-20130906	MW311	9-Jun-13	EM1309586	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311-21-20130412	MW311	4-Dec-13	EM1303828	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311_26032014	MW311	26-Mar-14	EM1402901	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311_14042015	MW311	14-Apr-15	EM1503872	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311_28092015	MW311	28-Sep-15	EM1515178	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW311_22022016	MW311	22-Feb-16	EM1601789	Wharf	Sediments	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW313_20051103	MW313	11-Mar-05	Historical	Wharf	Sediments	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<20	-	-	-	-	-	-	-	-	-	-	-	-			
MW316_20061106	MW316	11-Jun-06	Historical	Wharf	Fractured Rock *	-	-	-	<100	<100	<100	<100	<100	<100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
MW316_20060828	MW316	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW316_20071027	MW316	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<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		
MW316_20080929	MW316	29-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	<10	<10	<1	10	5.3	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	-	<10		
MW322_20061106	MW322	11-Jun-06	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW322_20060828	MW322	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW322_20071027	MW322	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW322_20080924	MW322	24-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW322-21-20091214	MW322	14-Dec-09	EM0912839	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1		
MW322-21-20121004	MW322	10-Apr-12	EM1211773	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW322-21-20130916	MW322	16-Sep-13	EM1309867	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW322_13102014	MW322	13-Oct-14	EM1410876	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW324_20061102	MW324	11-Feb-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-		
MW324_20060824	MW324	24-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<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			
MW324_20071027	MW324	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1							

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																		Phenolics													
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol	
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400		
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-	-		
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
MW326-21-20111020	MW326	20-Oct-11	EM1111932	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	-	-	-	-	-	-	-	-	-				
MW326-21-20120924	MW326	24-Sep-12	EM1211234	Wharf	Fractured Rock *	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<7.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW326-21-20130917	MW326	17-Sep-13	EM1309992	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW326_10102014	MW326	10-Oct-14	EM1410750	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW326_09042015	MW326	9-Apr-15	EM1503819	Wharf	Fractured Rock *	<2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW326_25092015	MW326	25-Sep-15	EM1515178	Wharf	Fractured Rock *	<2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.2	-	-	-	-	-	-	-	-	-	-	-			
MW327_20061106	MW327	11-Jun-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	-	-	-	-	-	-	-	-	-	-	-			
MW327_20060824	MW327	24-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	-	-	-	-	-	-	-	-	-	-	-			
MW327_20071027	MW327	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1			
MW327-2120091127	MW327	27-Nov-09	EM0912168	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2		
MW327-21	MW327	27-Apr-10	EM1004449	Wharf	Fractured Rock *	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<3.2	<0.1	<0.1	<0.1	<0.1	-	<0.05	-	<0.1	<0.1	-	<0.1	<0.1		
MW327-21	MW327	27-Apr-10	Unknown - March GME	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.05	-	-		
MW327-21-20101012	MW327	10-Dec-10	EM1011222	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW327-21-20110518	MW327	18-May-11	Unknown	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW327-21-20111024	MW327	24-Oct-11	EM1112020	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW327-21-20120920	MW327	20-Sep-12	EM1211234	Wharf	Fractured Rock *	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<7.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW327-21-20130910	MW327	9-Oct-13	EM1309679	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1		
MW327_06102015	MW327	6-Oct-15	EM1515504	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-	-	-			
MW328_20061106	MW328	11-Jun-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	-	-	-	-	-	-	-	-	-	-	-			
MW328_20060828	MW328	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	-	-	-	-	-	-	-	-	-	-	-			
MW328_20071027	MW328	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1			
MW328_20080924	MW328	24-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1			
MW328-2120091214	MW328	14-Dec-09	EM0912839	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1		
MW328-21-20101104	MW328	11-Apr-10	EM1012096	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<																		

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																		Phenolics																	
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]pyrene	Benzo[ghi]perylene	Chrysene	Fluoranthene	Fluorene	Indeno[1,2,3-c,d]pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol					
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400						
Recreation (Health)						11	0.16	360	5,300	18,000	0.3	0.1	2.5	2.5	250	8,000	2,900	0.34	1.7	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000								
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-	-							
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L									
MW338_20061101	MW338	11-Jan-06	Historical	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-								
MW338_20071027	MW338	27-Oct-07	Historical	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1								
MW338_20080929	MW338	29-Sep-08	Historical	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1							
MW338-21-20091209	MW338	12-Sep-09	EM0912673	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<1	<1	<1	<1	<1	<1	<1	<1							
MW338-21-20101102	MW338	11-Feb-10	EM1011961	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	-	-	-	-	-	-	-	<1							
MW338-21	MW338	14-Apr-10	EM1004044	Wharf	Fractured Rock	<1	<0.1	-	<0.1	-	<0.1	<0.1	<0.05	<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	<0.1							
MW338-21	MW338	14-Apr-10	Unknown - March GME	Wharf	Fractured Rock	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	-							
MW338-21-20110519	MW338	19-May-11	Unknown	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	-	-	-	-	-							
MW338-21-20111014	MW338	14-Oct-11	EM1111711	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	-	-	-	-	-							
MW338-21-20120417	MW338	17-Apr-12	EM1204247	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	-	-	-	-	-							
MW338-21-20121005	MW338	10-May-12	EM1211885	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW338-21-20130910	MW338	9-Oct-13	EM1309679	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW338_09102014	MW338	9-Oct-14	EM1410750	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339_20061102	MW339	11-Feb-06	Historical	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-							
MW339_20071027	MW339	27-Oct-07	Historical	Wharf	Fractured Rock	-	-	-	<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							
MW339_20080929	MW339	29-Sep-08	Historical	Wharf	Fractured Rock	-	-	-	<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							
MW339-21-20091209	MW339	12-Sep-09	EM0912673	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<1	<1	<1	<1	<1	<1	<1	<1							
MW339-21-20101102	MW339	11-Feb-10	EM1011961	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	-	-	-	-	-	-	-	-							
MW339-21	MW339	14-Apr-10	EM1004044	Wharf	Fractured Rock	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339-21	MW339	14-Apr-10	Unknown - March GME	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.05	-	-	-							
MW339-21-20110519	MW339	19-May-11	Unknown	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339-21-20111014	MW339	14-Oct-11	EM1111711	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339-21-20120417	MW339	17-Apr-12	EM1204247	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339-21-20120426	MW339	26-Apr-12	EM1204744	Wharf	Fractured Rock	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
MW339-21-20120921	MW339	21-Sep-12	EM1211234	Wharf	Fractured Rock	<6.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339-21-20130910	MW339	9-Oct-13	EM1309679	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW339_10102014	MW339	10-Oct-14	EM1410750	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW340_20061102	MW340	11-Feb-06	Historical	Wharf	Fractured Rock	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-	-	-	-							
MW340_20071027	MW340	27-Oct-07	Historical	Wharf	Fractured Rock	-	-	-	<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							
MW340_20080929	MW340	29-Sep-08	Historical	Wharf	Fractured Rock	-	-	-	<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							
MW340-21-20091211	MW340	12-Nov-09	EM0912826	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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	<0.1							
MW340-21	MW340	15-Apr-10	EM1004147	Wharf	Fractured Rock	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<2.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1							
MW340-21	MW340	15-Apr-10	Unknown - March GME	Wharf	Fractured Rock	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-							
MW340-21-20101005	MW340	10-May-10	EM1010861	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-							
MW340-21-20110526	MW340	26-May-11	Unknown	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<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</											

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																		Phenolics													
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(b)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol	
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400		
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000		
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-	-		
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
MW342-21-20120926	MW342	26-Sep-12	EM1211378	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW342-21-20130419	MW342	19-Apr-13	EM1304156	Wharf	Fractured Rock	<6.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<8.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW342-21-20130916	MW342	16-Sep-13	EM1309867	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW342_31032014	MW342	31-Mar-14	EM1403051	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW342_15042015	MW342	15-Apr-15	EM1503930	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW342_01102015	MW342	1-Oct-15	ES1532743	Wharf	Fractured Rock	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343_20061102	MW343	11-Feb-06	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<10	-	-	-	-	-	-	-	-	-	-	-				
MW343_20071027	MW343	27-Oct-07	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<0.5	<1	-	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1			
MW343_20080929	MW343	29-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1			
MW343-21-20091208	MW343	12-Aug-09	EM0912572	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1			
MW343-21	MW343	19-Apr-10	EM1004147	Wharf	Fractured Rock *	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.2	<0.1	<0.1	<0.1	<0.1	-	<0.05	-	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343-21	MW343	19-Apr-10	Unknown - March GME	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-			
MW343-21-20101021	MW343	21-Oct-10	EM1011595	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<4.3	-	-	-	-	-	-	-	-	-				
MW343-21-201010517	MW343	17-May-11	Unknown	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	0.6	-	-	-	-	-	-	-	-				
MW343-21-20111019	MW343	19-Oct-11	EM1111854	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.2	-	-	-	-	-	-	-	-				
MW343-21-20121002	MW343	10-Feb-12	EM1211676	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343-21-20130906	MW343	9-Jun-13	EM1309586	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343-21-20130409	MW343	4-Sep-13	EM1303671	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343_27032014	MW343	27-Mar-14	EM1402999	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
MW343_06102015	MW343	6-Oct-15	EM1515457	Wharf	Fractured Rock *	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1				
TMW01-21-20100630	TMW01	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	<20	<5	<0.1	<50	<0.05	<0.1	<5	<0.1	<5	<0.05	<5	<5	<5	<5	<2	<20	<200	<5	<5	<0.1	<0.1	<4.0	<1	<5	<50	<5	<5	<0.1	<5		
TMW01-21	TMW01	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	<0.1	<50	<5	<1	<1	<0.5	<1	<1	<0.05	<5	<50	<10	<2	<1	<0.1	<0.1	<1	<140	<0.1	<1	<1	<5	<0.1	<1	0.8	<0.1	<1	<1	<5	<1	
TMW01-21-20101123	TMW01	23-Nov-10	EM1012946	Wharf	Overlying Sediments	<1	<1	<5	<2	<1	<1	<0.1	<0.1	<1	<2	<1	<50	<1	<0.1	<0.5	<1	<36	<1	<1</													

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Polycyclic Aromatic Hydrocarbons																Phenolics															
						1-Methylnaphthalene	2-Acetylamino fluorene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)pyrene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3-Methylphenol	4-Chloro-3-methylphenol	4-Methylphenol	Phenol	
Marine Aquatic Ecosystems						2.1	50	4.2	5.8	50	0.01	0.018	0.1	0.1	0.1	0.1	1.0	3.0	0.1	50	0.6	0.025	-	4.0	3.0	120	2.0	34	340	1,020	2.0	1,020	0.64	1,020	400		
Recreation (Health)						11	0.16	360	5,300	5,300	18,000	0.3	0.1	2.5	2.5	250	250	8,000	2,900	0.34	1.7	-	1,200	-	12,000	200	2,000	3,600	-	3,000	9,300	390	9,300	14,000	19,000	58,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	0.3	-	-	0.1	-	-	-	-	-	-	-		
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L				
TMW03_20102015	TMW03	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1				
TMW04-21-2010100107	TMW04	1-Jul-10	EM1007324	Wharf	Overlying Sediments	-	< 20	< 5	< 0.1	< 0.1	< 0.1	< 5	< 0.1	< 5	< 0.1	< 5	< 5	< 5	< 2	< 0.1	< 0.1	< 130	< 5	0.3	< 0.1	< 0.1	< 2	< 1	< 0.1	< 2	< 0.1	< 5	< 0.1	< 5			
TMW04-21	TMW04	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	< 10	< 1	< 0.1	< 0.1	< 0.1	< 2	< 0.1	< 0.1	< 50	< 0.1	< 1	< 0.1	< 50	< 1	< 0.1	< 0.1	< 220	< 1	< 0.1	< 5	< 0.5	< 0.1	< 5	< 0.1	< 1	< 1	< 5	< 5	< 5		
TMW04-21-20101123	TMW04	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 0.1	< 0.1	< 1	< 2	< 1	< 1	< 0.1	< 0.1	< 1	< 50	< 1	< 0.1	< 5	< 1	< 5	< 2	< 1	< 140	< 1	< 5	< 1	< 1	< 1	< 0.1	< 0.1	< 0.1	< 1	< 5	< 1			
TMW04-21-20110322	TMW04	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04-21-20110719	TMW04	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04-21-20110921	TMW04	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 1	< 0.1	< 5	< 0.1	< 5	< 0.1	< 0.1	< 2	< 2	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 1	< 1	< 5	< 35	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 5	< 0.1	< 0.1	< 0.1	< 5	< 1	< 0.5	
TMW04-21-20111213	TMW04	13-Dec-11	EM1114272	Wharf	Overlying Sediments	< 0.5	< 50	< 1	< 0.5	< 0.1	< 5	< 0.1	< 0.1	< 1	< 0.1	< 1	< 1	< 1	< 1	< 0.1	< 0.1	< 5	< 0.01	< 1	< 70	< 0.1	< 0.1	< 2	< 1	< 1	< 0.1	< 0.5	< 1	< 5	< 0.5	< 1	< 0.1
TMW04-21-20121003	TMW04	10-Mar-12	EM1211778	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04-21-20120411	TMW04	4-Nov-12	EM1204007	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04-21-20130909	TMW04	9-Sep-13	EM1309635	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04_28032014	TMW04	28-Mar-14	EM1403000	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	0.1			
TMW04_22102014	TMW04	22-Oct-14	EM1411369	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04_26022015	TMW04	26-Feb-15	EM1502300	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW04_20102015	TMW04	20-Oct-15	EM1516098	Wharf	Overlying Sediments	< 2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW05-2120100107	TMW05	1-Jul-10	EM1007324	Wharf	Overlying Sediments	-	< 20	< 5	< 0.1	< 0.1	< 0.1	< 0.1	< 5	< 0.1	< 5	< 0.1	< 5	< 5	< 5	< 5	< 2	< 2	< 0.1	< 77	< 5	< 5	< 5	< 0.1	< 5	< 0.1	< 2	< 0.05	< 0.1	< 0.1	< 0.1		
TMW05-21	TMW05	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	< 1	< 5	< 2	< 5	< 1	< 1	< 10	< 0.1	< 5	< 1	< 5	< 1	< 20	< 5	< 0.1	< 0.1	< 1	< 74	< 1	< 5	< 1	< 5	< 0.1	< 0.05	< 0.1	< 0.1	< 1	< 1	< 5	< 50	
TMW05-21-20101123	TMW05	23-Nov-10	EM1012946	Wharf	Overlying Sediments	< 0.5	< 0.1	< 1	< 0.01	< 1	< 1	< 1	< 1	< 0.1	< 0.1	< 5	< 5	< 1	< 1	< 5	< 0.1	< 0.1	< 5	< 37	< 0.01	< 0.01	< 0.1	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.01	< 5	< 5		
TMW05-21-20110322	TMW05	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1			
TMW05-21-20110719	TMW05	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	<															

Notes:
Fractured rock - indicates well screen is placed across bedrock interface and overlying sediments and may be subject to influence from perched water (if present)
- - not analysed
- - less than laboratory limit of reporting
LOR - Laboratory Limit of Reporting
µg/L - micrograms per litre
Bold indicates a detection above the laboratory LOR.

[illegible]

[illegible]

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Volatile Organic Compounds																																																																																																																																																																																																																																																																																																																																																																																																																																																								
						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	1,1,2,2-Trichloroethene	1,1,2,2-Trichloropropene	1,2,3-Trichloropropene	1,2,3-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4,6-Tetrachlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromochloroethane	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	1,2,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorobenzene	4-Chlorobenzene	Bromobenzene	Propylchloride	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane

[illegible]

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Volatile Organic Compounds																																																																																																																																																																																																																																																																																																																																																																																																																																											
						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	1,2,2-Trichloroethene	1,2,2-Trichloropropane	1,2,2-Trimethylbenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloro-3-chloropropane	1,2-Dichloroethane	1,2-Dichlorobenzene	1,2-Dichloroethene	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane	1,2-Dichloropropane

Notes:
Fractured rock - - indicates well screen is placed across bedrock interface and overlying sediments and may be subject to influence from perched water (if present).
- - not analysed
< - less than laboratory limit of reporting
LOR - Laboratory Limit of Reporting
µg/L - micrograms per litre
Bold indicates a detection above the laboratory LOR.

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																		
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)	
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15	
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	1,000	-	-	100	-	-	-	-	-	-	-	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
GW1_210109	GW001	21-Jan-09	2008_Wharf_Invest	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-	
GW001-2120091210	GW001	12-Oct-09	EM0912826	Wharf	Fractured Rock	-	10	-	-	< 0.1	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW001-21	GW001	22-Apr-10	EM1004449	Wharf	Fractured Rock	-	12	-	-	< 0.1	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW001-21-20100927	GW001	27-Sep-10	EM1010549	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	
GW001-21-20110513	GW001	13-May-11	EM1105101	Wharf	Fractured Rock	-	13	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	
GW001-21-20111017	GW001	17-Oct-11	EM1111711	Wharf	Fractured Rock	-	11	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW001-21-30120913	GW001	13-Sep-12	EM1210854	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW001-21-20130923	GW001	23-Sep-13	EM1310180	Wharf	Fractured Rock	-	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW001_13102014	GW001	13-Oct-14	EM1410876	Wharf	Fractured Rock	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW2_181208	GW002	18-Dec-08	2008_Wharf_Invest	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	49	-	-	-	-	-	-	-	-	
GW002-2120091210	GW002	12-Oct-09	EM0912826	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW002-21	GW002	27-Apr-10	EM1004449	Wharf	Fractured Rock	-	5.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW002-21-20101018	GW002	18-Oct-10	EM1011417	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW002-21-20110505	GW002	5-May-11	EM1104825	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW002-21-20111014	GW002	14-Oct-11	EM1111711	Wharf	Fractured Rock	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW002-21-20120920	GW002	20-Sep-12	EM1211124	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW002-21-20130903	GW002	9-Mar-13	EM1309419	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW002_17102014	GW002	17-Oct-14	EM1411054	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW6_181208	GW006	18-Dec-08	2008_Wharf_Invest	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW006-2120091210	GW006	12-Oct-09	EM0912826	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW006-21	GW006	22-Apr-10	EM1004449	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW006-21-20101018	GW006	18-Oct-10	EM1011417	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW006-21-2111005	GW006	10-May-11	EM1111334	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW006-21-20110527	GW006	27-May-11	Unknown	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW006-21-20120925	GW006	25-Sep-12	EM1211305	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW006-21-20130916	GW006	16-Sep-13	EM1309867	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW006_17102014	GW006	17-Oct-14	EM1411054	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW006_14042015	GW006	14-Apr-15	EM1503872	Wharf	Fractured Rock *	< 1	3.0	23	< 1	-	< 1	8.0	13	-	< 1	25	< 0.1	71	4.0	0.7	< 1	< 10	11	
GW006_01102015	GW006	1-Oct-15	ES1532743	Wharf	Fractured Rock *	-	2.0	18	-	-	< 1	2.0	11	-	< 1	-	< 0.1	47	2.0	1.2	-	< 10	22	
GW008-21-20101102	GW008	11-Feb-10	EM1011961	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW008-2120100810	GW008	8-Oct-10	EM1008818	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	8.0	-	< 1	-	-	-	13	-	-	-	6.0	
GW008-21-20110518	GW008	18-May-11	Unknown	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW009-2120100810	GW009	8-Oct-10	EM1008818	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	8.0	-	< 1	-	-	-	4.0	-	-	-	5.0	
GW009-21-20101014	GW009	14-Oct-10	EM1011328	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW009-21-20110526	GW009	26-May-11	Unknown	Wharf	Fractured Rock	-	8.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW009-21-20111006	GW009	10-Jun-11	EM1111433	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009-21-20120419	GW009	19-Apr-12	EM1204409	Wharf	Fractured Rock	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009-21-20121005	GW009	10-May-12	EM1211885	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009-21-20130910	GW009	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009-21-20130411	GW009	4-Nov-13	EM1303757	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009_26032014	GW009	26-Mar-14	EM1402901	Wharf	Fractured Rock	-	151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009_14042015	GW009	14-Apr-15	EM1503872	Wharf	Fractured Rock	-	< 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW009_30092015	GW009	30-Sep-15	EM1515326	Wharf	Fractured Rock	< 2	< 2	52	< 2	-	< 2	< 2	< 2	-	< 2	758	< 0.1	11	< 2	< 2	< 2	< 20	12	
GW010-21-20101011	GW010	10-Nov-10	EM1011127	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW10-2120100812	GW010	8-Dec-10	EM1008884	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	5.0	
GW010-21-20110519	GW010	19-May-11	Unknown	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW010-21-20111018	GW010	18-Oct-11	EM1111854	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																		
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)	
						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	1,000	-	-	100	-	-	-	-	-	-	-	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
GW010-21-20121002	GW010	10-Feb-12	EM1211580	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW010-21-20120419	GW010	19-Apr-12	EM1204409	Wharf	Fractured Rock	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW010-21-20130925	GW010	25-Sep-13	EM1310180	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW010-21-20130411	GW010	4-Nov-13	EM1303757	Wharf	Fractured Rock	-	< 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW010_26032014	GW010	26-Mar-14	EM1402901	Wharf	Fractured Rock	-	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW010_28092015	GW010	28-Sep-15	EM1515178	Wharf	Fractured Rock	3.0	< 2	33	< 2	-	< 2	< 2	< 2	-	< 2	160	< 0.1	10	< 2	1.0	< 2	< 20	< 10	
GW010_11022016	GW010	11-Feb-16	EM1601410	Wharf	Fractured Rock	5.0	< 2	35	< 2	-	< 2	< 2	< 2	-	< 2	< 2	< 0.1	14	< 2	< 2	< 2	< 20	24	
GW011-21-20101014	GW011	14-Oct-10	EM1011328	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW011-2120100812	GW011	8-Dec-10	EM1008884	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	2.0	-	< 1	-	-	-	2.0	-	-	-	< 5	
GW011-21-20110518	GW011	18-May-11	Unknown	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW011-21-20110929	GW011	29-Sep-11	EM1111065	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW011-21-20120420	GW011	20-Apr-12	EM1204744	Wharf	Fractured Rock	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW011-21-20120917	GW011	17-Sep-12	EM1210854	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW011-21-20130917	GW011	17-Sep-13	EM1309992	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW11_09092015	GW011	9-Sep-15	EM1514372	Wharf	Fractured Rock	< 1	18	46	< 1	-	1.0	< 1	2.0	-	< 1	2.0	< 0.1	22	10	21	< 1	220	9.0	
GW011_06102015	GW011	6-Oct-15	EM1515504	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW013-21-20100924	GW013	24-Sep-10	EM1010549	Wharf	Fractured Rock	-	7.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW0013-2120100811	GW013	8-Nov-10	EM1008818	Wharf	Fractured Rock	-	10	-	-	-	-	-	2.0	-	< 1	-	-	-	9.0	-	-	-	6.0	
GW013-21-20110505	GW013	5-May-11	EM1104825	Wharf	Fractured Rock	-	17	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW013-21-20110926	GW013	26-Sep-11	EM1110921	Wharf	Fractured Rock	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW013-21-20121004	GW013	10-Apr-12	EM1211885	Wharf	Fractured Rock	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW013-21-20130903	GW013	9-Mar-13	EM1309419	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014-21-20100929	GW014	29-Sep-10	EM1010673	Wharf	Sediments	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW0014-2120100811	GW014	8-Nov-10	EM1008818	Wharf	Sediments	-	3.0	-	-	-	-	-	1.0	-	< 1	-	-	-	42	-	-	-	8.0	
GW014-21-20110505	GW014	5-May-11	EM1104825	Wharf	Sediments	-	7.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
GW014-21-20110926	GW014	26-Sep-11	EM1110921	Wharf	Sediments	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014-21-20121004	GW014	10-Apr-12	EM1211885	Wharf	Sediments	-	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014-21-20120412	GW014	4-Dec-12	EM1204190	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014-21-20130903	GW014	9-Mar-13	EM1309419	Wharf	Sediments	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014-21-20130405	GW014	4-May-13	EM1303561	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014_26032014	GW014	26-Mar-14	EM1402901	Wharf	Sediments	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014_23042015	GW014	23-Apr-15	EM1504236	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW014_08102015	GW014	8-Oct-15	EM1515589	Wharf	Sediments	< 1	2.0	204	< 1	-	< 1	< 1	< 1	-	< 1	203	< 0.1	2.0	3.0	0.7	< 1	< 10	9.0	
GW135_30092015	GW135	30-Sep-15	EM1515326	Wharf	Fractured Rock	2.0	6.0	139	< 1	-	< 1	1.0	1.0	-	< 1	398	< 0.1	11	8.0	< 0.2	< 1	< 10	47	
GW135_22022016	GW135	22-Feb-16	EM1601789	Wharf	Fractured Rock	< 1	8.0	139	< 1	-	< 1	1.0	1.0	-	< 1	364	< 0.1	10	45	0.2	< 1	< 10	97	
GW136_21042015	GW136	21-Apr-15	EM1504152	Wharf	Overlying sediments	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW136_24092015	GW136	24-Sep-15	EM1515056	Wharf	Overlying sediments	< 1	3.0	47	< 1	-	2.0	15	12	-	< 1	51	< 0.1	11	399	1.1	< 1	< 10	184	
GW136_23022016	GW136	23-Feb-16	EM1601872	Wharf	Overlying sediments	< 1	3.0	65	< 1	-	2.0	50	12	-	< 1	14	< 0.1	6.0	29	1.5	< 1	< 10	130	
GW138_21042015	GW138	21-Apr-15	EM1504152	Wharf	Overlying sediments	-	< 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW138_15092015	GW138	15-Sep-15	EM1514633	Wharf	Overlying sediments	< 1	5.0	92	< 1	-	< 1	4.0	37	-	< 1	19	< 0.1	6.0	68	< 2	< 1	< 10	115	
GW138_22022016	GW138	22-Feb-16	EM1601789	Wharf	Overlying sediments	< 1	4.0	90	< 1	-	< 1	< 1	20	-	< 1	4.0	< 0.1	7.0	117	< 2	< 1	< 10	130	
GW139_22042015	GW139	22-Apr-15	EM1504198	Wharf	Fractured Rock	-	< 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW139_09102015	GW139	9-Oct-15	EM1515735	Wharf	Fractured Rock	< 1	5.0	55	< 1	-	< 1	2.0	21	-	< 1	< 1	< 0.1	5.0	4.0	3.4	< 1	< 10	31	
GW139_19022016	GW139	19-Feb-16	EM1601789	Wharf	Fractured Rock	< 1	5.0	71	< 1	-	< 1	3.0	35	-	2.0	10	< 0.1	4.0	36	< 2	< 1	< 10	134	
GW140_22042015	GW140	22-Apr-15	EM1504198	NBA	Overlying sediments	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GW140_08102015	GW140	8-Oct-15	EM1515589	NBA	Overlying sediments	< 1	5.0	241	< 1	-	1.0	< 1	9.0	-	< 1	6.0	< 0.1	12	14	7.2	< 1	< 10	17	
GW140_23022016	GW140	23-Feb-16	EM1601872	NBA	Overlying sediments	< 1	5.0	261	< 1	-	1.0	< 1	11	-	< 1	44	< 0.1	9.0	7.0	5.8	< 1	< 10	47	

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW135_20030902	MW135	9-Feb-03	Historical	Wharf	Sediments	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	
MW135_20051005	MW135	10-May-05	Historical	Wharf	Sediments	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW135_20060828	MW135	28-Aug-06	Historical	Wharf	Sediments	< 1	5.0	130	-	-	9.0	-	1.0	-	-	-	< 0.1	-	5.0	-	-	5.0	12
MW135_20060829	MW135	29-Aug-06	Historical	Wharf	Sediments	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW135_20060611	MW135	6-Nov-06	Historical	Wharf	Sediments	-	11	200	-	-	12	-	32	-	< 1	-	< 0.1	-	6.0	-	-	4.0	12
MW135_20070928	MW135	28-Sep-07	Historical	Wharf	Sediments	-	9.0	237	-	-	< 1	-	6.0	-	< 1	-	< 0.1	-	4.0	-	-	< 10	12
MW135_20081021	MW135	21-Oct-08	Historical	Wharf	Sediments	-	2.0	52	-	-	< 1	-	2.0	-	< 1	-	< 0.1	-	< 1	-	-	< 10	16
MW135-2120091216	MW135	16-Dec-09	EM0912870	Wharf	Sediments	-	5.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW135-21	MW135	22-Apr-10	EM1004449	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW135-21-20101026	MW135	26-Oct-10	EM1011747	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW135-21-20110525	MW135	25-May-11	Unknown	Wharf	Sediments	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135-21-20111012	MW135	10-Dec-11	EM1111608	Wharf	Sediments	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135-21-20121002	MW135	10-Feb-12	EM1211580	Wharf	Sediments	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135-21-20120423	MW135	23-Apr-12	EM1204514	Wharf	Sediments	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135-2120130417	MW135	17-Apr-13	EM1304042	Wharf	Sediments	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135-21-20130916	MW135	16-Sep-13	EM1309867	Wharf	Sediments	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135_09102014	MW135	9-Oct-14	EM1410750	Wharf	Sediments	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW135_08102015	MW135	8-Oct-15	EM1515589	Wharf	Sediments	< 1	5.0	48	< 1	-	< 1	< 1	7.0	-	< 1	81	< 0.1	1.0	< 1	0.4	< 1	< 10	24
MW137_20030902	MW137	9-Feb-03	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137_20051005	MW137	10-May-05	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137_20060824	MW137	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	4.0	63	-	-	5.0	-	3.0	-	-	-	< 0.1	-	4.0	-	-	-	2.0
MW137_20060829	MW137	29-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137_20060711	MW137	7-Nov-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137_20071003	MW137	10-Mar-07	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137_20081017	MW137	17-Oct-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137-2120091207	MW137	12-Jul-09	EM0912444	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137-21-20101103	MW137	11-Mar-10	EM1012021	Wharf	Fractured Rock *	-	9.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137-21	MW137	4-Dec-10	EM1003819	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW137-21-20110516	MW137	16-May-11	Unknown	Wharf	Fractured Rock *	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW137-21-20111013	MW137	13-Oct-11	EM1111711	Wharf	Fractured Rock *	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW137-21-20121005	MW137	10-May-12	EM1211885	Wharf	Fractured Rock *	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW137_08102015	MW137	8-Oct-15	EM1515589	Wharf	Fractured Rock *	< 1	9.0	58	< 1	-	< 1	< 1	2.0	-	< 1	6.0	< 0.1	4.0	2.0	2.2	< 1	< 10	11
MW137_25022016	MW137	25-Feb-16	EM1601981	Wharf	Fractured Rock *	< 1	9.0	68	< 1	-	< 1	2.0	9.0	-	< 1	18	< 0.1	4.0	32	2.5	< 1	< 10	93
MW139_20030902	MW139	9-Feb-03	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139_20051005	MW139	10-May-05	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139_20061102	MW139	11-Feb-06	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139_20070928	MW139	28-Sep-07	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139_20081017	MW139	17-Oct-08	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139-2120091125	MW139	25-Nov-09	EM0911993	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW139_09102015	MW139	9-Oct-15	EM1515735	Wharf	Fractured Rock	< 1	< 1	130	< 1	-	< 1	2.0	6.0	-	< 1	222	< 0.1	< 1	8.0	3.5	< 1	< 10	76
MW139_23022016	MW139	23-Feb-16	EM1601872	Wharf	Fractured Rock	< 1	< 1	153	< 1	-	< 1	1.0	2.0	< 4.0	< 1	101	< 0.1	< 1	78	3.2	< 1	< 10	49
MW140_20030904	MW140	9-Apr-03	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	
MW140_20051013	MW140	13-Oct-05	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW140_20060211	MW140	2-Nov-06	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW140_20071003	MW140	10-Mar-07	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW140_20081016	MW140	16-Oct-08	Historical	Wharf	Fractured Rock	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW140-2120091125	MW140	25-Nov-09	EM0911993	Wharf	Fractured Rock	-	2.0	121	-	-	1.0	2.0	14	-	< 1	-	< 0.1	3.0	3.0	< 10	-	< 10	30

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						-	-	-	-	-	-	-	1,000	-	-	100	-	-	-	-	-	-	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW272_20030902	MW272	9-Feb-03	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272_20051013	MW272	13-Oct-05	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272_20060828	MW272	28-Aug-06	Historical	Wharf	Fractured Rock *	< 1	20	960	-	-	4.0	-	< 1	-	-	-	< 0.1	-	3.0	-	-	3.0	18
MW272_20060829	MW272	29-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272_20060211	MW272	2-Nov-06	Historical	Wharf	Fractured Rock *	-	9.0	980	-	-	13	-	< 1	-	< 1	-	< 0.1	-	2.0	-	-	4.0	29
MW272_20070927	MW272	27-Sep-07	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272_20080927	MW272	27-Sep-08	Historical	Wharf	Fractured Rock *	-	75	105	-	-	< 1,000	-	< 10	-	-	-	< 100	-	3.0	-	-	20	< 2
MW272_20081024	MW272	24-Oct-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272-2120091127	MW272	30-Nov-09	EM0912168	Wharf	Fractured Rock *	-	18	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272-21	MW272	13-Apr-10	EM1003886	Wharf	Fractured Rock *	-	23	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272-21-20101007	MW272	10-Jul-10	EM1011001	Wharf	Fractured Rock *	-	5.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW272-21-20110519	MW272	19-May-11	Unknown	Wharf	Fractured Rock *	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272-21-20111017	MW272	17-Oct-11	EM1111767	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272-21-20120920	MW272	20-Sep-12	EM1211234	Wharf	Fractured Rock *	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272-21-20130415	MW272	15-Apr-13	EM1303890	Wharf	Fractured Rock *	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272-21-20130911	MW272	9-Nov-13	EM1309724	Wharf	Fractured Rock *	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272_31032014	MW272	31-Mar-14	EM1403051	Wharf	Fractured Rock *	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272_22042015	MW272	22-Apr-15	EM1504198	Wharf	Fractured Rock *	-	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW272_01102015	MW272	1-Oct-15	ES1532743	Wharf	Fractured Rock *	-	3.0	279	-	-	< 1	3.0	2.0	-	< 1	-	< 0.1	2.0	7.0	0.2	-	< 10	19
MW272_19022016	MW272	19-Feb-16	EM1601789	Wharf	Fractured Rock *	< 1	18	259	< 1	-	< 1	1.0	< 1	-	< 1	440	< 0.1	< 1	100	0.5	< 1	< 10	34
MW301_20000101	MW301	1-Jan-00	Historical	Wharf	Fractured Rock *	-	60	1,110	-	-	< 1	-	< 1	-	-	-	< 0.1	-	< 1	-	-	< 1	8.0
MW301_20031210	MW301	12-Oct-03	Historical	Wharf	Fractured Rock *	-	88	1,400	-	-	4.0	-	6.0	-	25	-	< 0.05	-	16	-	-	2.0	350
MW301_20051005	MW301	10-May-05	Historical	Wharf	Fractured Rock *	-	84	1,800	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	1.0	-	-	< 1	17
MW301_20050927	MW301	27-Sep-05	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW301_20060824	MW301	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	79	1,600	-	-	11	-	1.0	-	1.0	-	< 0.1	-	8.0	-	-	< 1	100
MW301_20060211	MW301	2-Nov-06	Historical	Wharf	Fractured Rock *	-	29	1,600	-	-	12	-	< 1	-	< 1	-	< 0.1	-	7.0	-	-	1.0	58
MW301_20071003	MW301	10-Mar-07	Historical	Wharf	Fractured Rock *	-	57	1,260	-	-	< 1	-	1.0	-	< 1	-	< 0.1	-	< 1	-	-	< 10	9.0
MW301_20080924	MW301	24-Sep-08	Historical	Wharf	Fractured Rock *	-	60	1,110	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	< 5
MW301-2120091203	MW301	12-Mar-09	EM0912392	Wharf	Fractured Rock *	-	43	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW301-21	MW301	22-Apr-10	unknown	Wharf	Fractured Rock *	-	75	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW301-21-20101110	MW301	11-Oct-10	EM1012324	Wharf	Fractured Rock *	-	60	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW301-21-20111024	MW301	24-Oct-11	EM1112020	Wharf	Fractured Rock *	-	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301-21-20110511	MW301	5-Nov-11	Unknown	Wharf	Fractured Rock *	-	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301-21-20120426	MW301	26-Apr-12	EM1204628	Wharf	Fractured Rock *	-	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301-21-20120924	MW301	24-Sep-12	EM1211305	Wharf	Fractured Rock *	-	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW301-21-20130906	MW301	9-Jun-13	EM1309586	Wharf	Fractured Rock *	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307_20000101	MW307	1-Jan-00	Historical	Wharf	Sediments	-	11	205	-	-	< 1	-	6.0	-	-	-	< 0.1	-	6.0	-	-	< 1	50
MW307_20051019	MW307	19-Oct-05	Historical	Wharf	Sediments	-	11	1,300	-	-	5.0	-	2.0	-	< 1	-	< 0.1	-	2.0	-	-	2.0	150
MW307_20061102	MW307	11-Feb-06	Historical	Wharf	Sediments	-	19	700	-	-	19	-	2.0	-	< 1	-	< 0.1	-	11	-	-	< 1	30
MW307_20060824	MW307	24-Aug-06	Historical	Wharf	Sediments	< 1	14	460	-	-	10	-	4.0	-	< 1	-	< 0.1	-	6.0	-	-	< 1	19
MW307_20071004	MW307	10-Apr-07	Historical	Wharf	Sediments	-	24	162	-	-	< 1	-	6.0	-	< 1	-	< 0.1	-	4.0	-	-	< 10	30
MW307_20080924	MW307	24-Sep-08	Historical	Wharf	Sediments	-	11	205	-	-	< 1	-	6.0	-	< 1	-	< 0.1	-	6.0	-	-	< 10	50
MW307-2120091203	MW307	12-Mar-09	EM0912392	Wharf	Sediments	-	14	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW307-21-20101006	MW307	10-Jun-10	EM1010927	Wharf	Sediments	-	9.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW307-21	MW307	4-Jul-10	EM1003701	Wharf	Sediments	-	6.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW307-21-20110525	MW307	25-May-11	Unknown	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307-21-20111017	MW307	17-Oct-11	EM1111767	Wharf	Sediments	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW307-21-20120423	MW307	23-Apr-12	EM1204514	Wharf	Sediments	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307-21-20120917	MW307	17-Sep-12	EM1210854	Wharf	Sediments	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307-21-20130910	MW307	9-Oct-13	EM1309679	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307_10102014	MW307	10-Oct-14	EM1410750	Wharf	Sediments	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW307_25092015	MW307	25-Sep-15	EM1515178	Wharf	Sediments	< 1	5.0	186	< 1	-	< 1	2.0	< 1	-	< 1	1,260	< 0.1	6.0	9.0	0.2	< 1	< 10	46
MW310_20051014	MW310	14-Oct-05	Historical	Wharf	Fractured Rock *	-	16	33	-	-	2.0	-	6.0	-	< 1	-	< 0.1	-	4.0	-	-	3.0	20
MW310_20061102	MW310	11-Feb-06	Historical	Wharf	Fractured Rock *	-	15	340	-	-	16	-	3.0	-	< 1	-	< 0.1	-	9.0	-	-	9.0	16
MW310_20060824	MW310	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	26	170	-	-	16	-	1.0	-	< 1	-	< 0.1	-	4.0	-	-	-	41
MW310_20070924	MW310	24-Sep-07	Historical	Wharf	Fractured Rock *	-	5.0	85	-	-	< 1	-	2.0	-	< 1	-	< 0.1	-	3.0	-	-	< 10	8.0
MW310_20080924	MW310	24-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW310-2120091208	MW310	12-Aug-09	EM0912572	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW310-21	MW310	4-Aug-10	EM1003819	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW310-21-20100930	MW310	30-Sep-10	EM1010727	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW310-21-20110513	MW310	13-May-11	EM1105101	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW310-21-20111019	MW310	19-Oct-11	EM1111932	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310-21-20121002	MW310	10-Feb-12	EM1211580	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310-21-20120423	MW310	23-Apr-12	EM1204514	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310-21-20130422	MW310	22-Apr-13	EM1304156	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310-21-20130910	MW310	9-Oct-13	EM1309679	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310_28032014	MW310	28-Mar-14	EM1402999	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310_15042015	MW310	15-Apr-15	EM1503930	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW310_30092015	MW310	30-Sep-15	EM1515326	Wharf	Fractured Rock *	2.0	2.0	73	< 1	-	< 1	< 1	< 1	-	< 1	80	< 0.1	3.0	< 1	0.3	< 1	< 10	15
MW311_20051019	MW311	19-Oct-05	Historical	Wharf	Sediments	-	< 1	57	-	-	4.0	-	8.0	-	5.0	-	< 0.1	-	4.0	-	-	2.0	20
MW311_20061102	MW311	11-Feb-06	Historical	Wharf	Sediments	-	< 1	60	-	-	12	-	6.0	-	< 1	-	< 0.1	-	6.0	-	-	2.0	14
MW311_20060824	MW311	24-Aug-06	Historical	Wharf	Sediments	< 1	< 1	59	-	-	6.0	-	11	-	< 1	-	< 0.1	-	6.0	-	-	-	11
MW311_20070924	MW311	24-Sep-07	Historical	Wharf	Sediments	-	4.0	54	-	-	< 1	-	7.0	-	< 1	-	< 0.1	-	< 1	-	-	< 10	10
MW311_20080924	MW311	24-Sep-08	Historical	Wharf	Sediments	-	5.0	54	-	-	< 1	-	10	-	< 1	-	< 0.1	-	< 1	-	-	< 10	16
MW311-2120091201	MW311	12-Jan-09	EM0912236	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW311-21	MW311	21-Apr-10	EM1004336	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW311-21-20101026	MW311	26-Oct-10	EM1011747	Wharf	Sediments	-	5.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW311-21-20110517	MW311	17-May-11	Unknown	Wharf	Sediments	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311-21-20111010	MW311	10-Oct-11	EM1111492	Wharf	Sediments	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311-21-20120416	MW311	16-Apr-12	EM1204247	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311-21-20120918	MW311	18-Sep-12	EM1211028	Wharf	Sediments	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311-21-20130906	MW311	9-Jun-13	EM1309586	Wharf	Sediments	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311-21-20130412	MW311	4-Dec-13	EM1303828	Wharf	Sediments	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311_26032014	MW311	26-Mar-14	EM1402901	Wharf	Sediments	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311_14042015	MW311	14-Apr-15	EM1503872	Wharf	Sediments	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW311_28092015	MW311	28-Sep-15	EM1515178	Wharf	Sediments	< 1	3.0	55	< 1	-	2.0	< 1	87	-	4.0	31	< 0.1	9.0	58	0.9	< 1	< 10	161
MW311_22022016	MW311	22-Feb-16	EM1601789	Wharf	Sediments	< 1	2.0	35	< 1	-	< 1	< 1	75	-	2.0	18	< 0.1	7.0	79	< 2	< 1	< 10	207
MW313_20051103	MW313	11-Mar-05	Historical	Wharf	Sediments	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW316_20061106	MW316	11-Jun-06	Historical	Wharf	Fractured Rock *	-	19	410	-	-	13	-	< 1	-	< 1	-	< 0.1	-	5.0	-	-	3.0	34
MW316_20060824	MW316	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	33	820	-	-	6.0	-	< 1	-	-	-	< 0.1	-	23	-	-	4.0	7.0
MW316_20060828	MW316	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW316_20070925	MW316	25-Sep-07	Historical	Wharf	Fractured Rock *	-	32	160	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	11
MW316_20080924	MW316	24-Sep-08	Historical	Wharf	Fractured Rock *	-	< 1	15	-	-	< 1	-	22	-	-	-	< 0.1	-	59	-	-	< 1	92
MW316_20080929	MW316	29-Sep-08	Historical	Wharf	Fractured Rock *	-	21	127	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	3.0	-	-	< 10	8.0

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW316-2120091211	MW316	12-Nov-09	EM0912826	Wharf	Fractured Rock *	-	20	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
MW316-21	MW316	4-Jun-10	EM1003701	Wharf	Fractured Rock *	-	20	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	-
MW316-21-20100928	MW316	28-Sep-10	EM1010614	Wharf	Fractured Rock *	-	20	-	-	-	-	-	< 1	-	1.0	-	-	-	1.0	-	-	-	< 5
MW316-21-20110505	MW316	5-May-11	EM1104825	Wharf	Fractured Rock *	-	16	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	5.0
MW316-21-20110926	MW316	26-Sep-11	EM1110921	Wharf	Fractured Rock *	-	17	-	-	-	-	-	< 1	-	< 1	-	-	-	1.0	-	-	-	< 5
MW316-21-20121004	MW316	10-Apr-12	EM1211773	Wharf	Fractured Rock *	-	11	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	6.0
MW316-21-20130903	MW316	9-Mar-13	EM1309419	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	< 1	-	-	-	< 5
MW316_13102014	MW316	13-Oct-14	EM1410876	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322_20061106	MW322	11-Jun-06	Historical	Wharf	Fractured Rock *	-	11	2,600	-	-	10	-	1.0	-	< 1	-	< 0.1	-	5.0	-	-	1.0	15
MW322_20060824	MW322	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	5.0	970	-	-	9.0	-	1.0	-	-	-	< 0.1	-	5.0	-	-	2.0	13
MW322_20060828	MW322	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW322_20070925	MW322	25-Sep-07	Historical	Wharf	Fractured Rock *	-	35	1,180	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	9.0
MW322_20080924	MW322	24-Sep-08	Historical	Wharf	Fractured Rock *	-	4.0	198	-	-	< 1	-	1.0	-	< 1	-	< 0.1	-	2.0	-	-	< 10	9.0
MW322-2120091214	MW322	14-Dec-09	EM0912839	Wharf	Fractured Rock *	-	5.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW322-21	MW322	28-Apr-10	EM1004523	Wharf	Fractured Rock *	-	7.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW322-21-20100927	MW322	27-Sep-10	EM1010549	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW322-21-20110526	MW322	26-May-11	EM1105718	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322-21-20110926	MW322	26-Sep-11	EM1110921	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322-21-20121004	MW322	10-Apr-12	EM1211773	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322-21-20130916	MW322	16-Sep-13	EM1309867	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW322_13102014	MW322	13-Oct-14	EM1410876	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324_20061102	MW324	11-Feb-06	Historical	Wharf	Fractured Rock *	-	< 1	89	-	-	12	-	6.0	-	< 1	-	< 0.1	-	13	-	-	3.0	16
MW324_20060824	MW324	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	< 1	130	-	-	8.0	-	10	-	< 1	-	< 0.1	-	12	-	-	-	9.0
MW324_20070924	MW324	24-Sep-07	Historical	Wharf	Fractured Rock *	-	< 1	94	-	-	< 1	-	6.0	-	< 1	-	< 0.1	-	< 1	-	-	< 10	16
MW324_20080924	MW324	24-Sep-08	Historical	Wharf	Fractured Rock *	-	4.0	217	-	-	< 1	-	12	-	< 1	-	< 0.1	-	< 1	-	-	< 10	31
MW324-2120091127	MW324	27-Nov-09	EM0912168	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW324-21	MW324	20-Apr-10	EM1004275	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW324-21-20101013	MW324	13-Oct-10	EM1011222	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW324-21-20110525	MW324	25-May-11	Unknown	Wharf	Fractured Rock *	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324-21-20111011	MW324	10-Nov-11	EM1111550	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324-21-20120426	MW324	26-Apr-12	EM1204744	Wharf	Fractured Rock *	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324-21-20120918	MW324	18-Sep-12	EM1211028	Wharf	Fractured Rock *	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324-21-20130416	MW324	16-Apr-13	EM1303964	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324-21-20130910	MW324	9-Oct-13	EM1309679	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324_26032014	MW324	26-Mar-14	EM1402901	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324_09102014	MW324	9-Oct-14	EM1410626	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324_10042015	MW324	10-Apr-15	EM1503819	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW324_25092015	MW324	25-Sep-15	EM1515178	Wharf	Fractured Rock *	< 1	2.0	46	< 1	-	< 1	16	19	-	< 1	1,310	< 0.1	8.0	18	0.6	< 1	< 10	50
MW324_24022016	MW324	24-Feb-16	EM1601919	Wharf	Fractured Rock *	< 2	3.0	50	< 2	-	< 2	12	20	-	< 2	869	< 0.1	5.0	2.0	2.0	< 2	< 20	48
MW325_20061102	MW325	11-Feb-06	Historical	Wharf	Fractured Rock *	-	9.0	140	-	-	12	-	30	-	< 1	-	< 0.1	-	62	-	-	< 1	33
MW325_20060824	MW325	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	25	140	-	-	8.0	-	15	-	< 1	-	< 0.1	-	55	-	-	-	19
MW325_20070924	MW325	24-Sep-07	Historical	Wharf	Fractured Rock *	-	3.0	70	-	-	< 1	-	10	-	< 1	-	< 0.1	-	11	-	-	10	20
MW325_20080924	MW325	24-Sep-08	Historical	Wharf	Fractured Rock *	-	8.0	81	-	-	< 1	-	11	-	< 1	-	< 0.1	-	1.0	-	-	< 10	12
MW325-2120091203	MW325	12-Mar-09	EM0912392	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	14	-	< 1	-	-	-	-	-	-	-	-
MW325-21-20101104	MW325	11-Apr-10	EM1012096	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	6.0	-	< 1	-	-	-	-	-	-	-	-
MW325-21	MW325	21-Apr-10	EM1004275	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	20	-	< 1	-	-	-	-	-	-	-	-
MW325-21-20110525	MW325	25-May-11	Unknown	Wharf	Fractured Rock *	-	8.0	-	-	-	-	-	8.0	-	< 1	-	-	-	-	-	-	-	-

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																		
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)	
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15	
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000	
Recreation (Aesthetic)						-	-	-	-	-	-	-	1,000	-	100	-	-	-	-	-	-	-	-	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW325-21-20111013	MW325	13-Oct-11	EM1111711	Wharf	Fractured Rock *	-	8.0	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	
MW325-21-20120423	MW325	23-Apr-12	EM1204514	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	9.0	-	-	-	-	-	-	-	-	-	-	
MW325-21-20121005	MW325	10-May-12	EM1211885	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	6.0	-	-	-	-	-	-	-	-	-	-	
MW325-21-20130910	MW325	9-Oct-13	EM1309679	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	
MW325_09102014	MW325	9-Oct-14	EM1410750	Wharf	Fractured Rock *	< 1	< 1	76	< 1	-	< 1	143	24	-	< 1	10,800	< 0.1	14	22	< 2	< 1	< 10	< 5	
MW325_25092015	MW325	25-Sep-15	EM1515178	Wharf	Fractured Rock *	< 2	< 2	60	< 2	-	< 2	156	44	-	< 2	7,380	< 0.1	13	34	0.9	< 2	< 20	70	
MW325_24022016	MW325	24-Feb-16	EM1601919	Wharf	Fractured Rock *	< 1	< 1	74	< 1	-	< 1	69	20	-	< 1	3,530	< 0.1	11	23	2.0	< 1	< 10	41	
MW326_20061102	MW326	11-Feb-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326_20060824	MW326	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	1.0	99	-	-	7.0	-	7.0	-	1.0	-	< 0.1	-	6.0	-	-	-	21	
MW326_20071003	MW326	10-Mar-07	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326_20080924	MW326	24-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326-2120091201	MW326	12-Jan-09	EM0912236	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326-21	MW326	4-Aug-10	EM1003819	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326-21-20101013	MW326	13-Oct-10	EM1011222	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW326-21-20110527	MW326	27-May-11	Unknown	Wharf	Fractured Rock *	-	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326-21-20111020	MW326	20-Oct-11	EM1111932	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326-21-20120924	MW326	24-Sep-12	EM1211234	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326-21-20130917	MW326	17-Sep-13	EM1309992	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326_10102014	MW326	10-Oct-14	EM1410750	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326_09042015	MW326	9-Apr-15	EM1503819	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW326_25092015	MW326	25-Sep-15	EM1515178	Wharf	Fractured Rock *	< 1	3.0	100	< 1	-	< 1	14	19	-	< 1	386	< 0.1	3.0	25	0.8	< 1	< 10	106	
MW327_20061106	MW327	11-Jun-06	Historical	Wharf	Fractured Rock *	-	2.0	48	-	-	12	-	3.0	-	< 1	-	< 0.1	-	5.0	-	-	3.0	17	
MW327_20060824	MW327	24-Aug-06	Historical	Wharf	Fractured Rock *	1.0	2.0	41	-	-	140	-	4.0	-	5.0	-	< 0.1	-	26	-	-	-	74	
MW327_20071003	MW327	10-Mar-07	Historical	Wharf	Fractured Rock *	-	29	87	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	< 5	
MW327_20080929	MW327	29-Sep-08	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW327-2120091127	MW327	27-Nov-09	EM0912168	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	-	-	-	-	-	
MW327-21	MW327	27-Apr-10	EM1004449	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	6.0	-	< 1	-	-	-	-	-	-	-	-	
MW327-21-20101012	MW327	10-Dec-10	EM1011222	Wharf	Fractured Rock *	-	5.0	-	-	-	-	-	4.0	-	< 1	-	-	-	-	-	-	-	-	
MW327-21-20110518	MW327	18-May-11	Unknown	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	9.0	-	-	-	-	-	-	-	-	-	-	
MW327-21-20111024	MW327	24-Oct-11	EM1112020	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	
MW327-21-20120920	MW327	20-Sep-12	EM1211234	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	5.0	-	-	-	-	-	-	-	-	-	-	
MW327-21-20130910	MW327	9-Oct-13	EM1309679	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	
MW327_06102015	MW327	6-Oct-15	EM1515504	Wharf	Fractured Rock *	< 1	5.0	21	< 1	-	< 1	< 1	< 1	-	< 1	< 1	< 0.1	7.0	< 1	3.1	< 1	< 10	11	
MW328_20061106	MW328	11-Jun-06	Historical	Wharf	Fractured Rock *	-	3.0	37	-	-	7.0	-	2.0	-	< 1	-	< 0.1	-	4.0	-	-	3.0	29	
MW328_20060824	MW328	24-Aug-06	Historical	Wharf	Fractured Rock *	< 1	2.0	35	-	-	14	-	2.0	-	-	-	< 0.1	-	2.0	-	-	3.0	7.0	
MW328_20060828	MW328	28-Aug-06	Historical	Wharf	Fractured Rock *	-	-	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW328_20070927	MW328	27-Sep-07	Historical	Wharf	Fractured Rock *	-	6.0	89	-	-	< 1	-	5.0	-	< 1	-	< 0.1	-	4.0	-	-	< 10	15	
MW328_20080924	MW328	24-Sep-08	Historical	Wharf	Fractured Rock *	-	4.0	97	-	-	< 1	-	5.0	-	< 1	-	< 0.1	-	1.0	-	-	< 10	9.0	
MW328-2120091214	MW328	14-Dec-09	EM0912839	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW328-21-20101104	MW328	11-Apr-10	EM1012096	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW328-21	MW328	20-Apr-10	EM1004275	Wharf	Fractured Rock *	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-	
MW328-21-20101103	MW328	3-Nov-10	EM1012021	Wharf	Fractured Rock *	-	< 0.5	-	-	-	-	-	-	-	< 0.5	-	-	-	-	-	-	-	-	
MW328-21-20110518	MW328	18-May-11	Unknown	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW328-21-20111025	MW328	25-Oct-11	EM1112085	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW328-21-20120417	MW328	17-Apr-12	EM1204247	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW328-21-20120919	MW328	19-Sep-12	EM1211028	Wharf	Fractured Rock *	-	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW328-21-20130409	MW328	4-Sep-13	EM1303671	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW328-21-20130911	MW328	9-Nov-13	EM1309724	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW328_27032014	MW328	27-Mar-14	EM1402999	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW328_14102014	MW328	14-Oct-14	EM1410876	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW328_14042015	MW328	14-Apr-15	EM1503872	Wharf	Fractured Rock *	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW328_24092015	MW328	24-Sep-15	EM1515056	Wharf	Fractured Rock *	< 1	3.0	36	< 1	-	2.0	< 1	3.0	-	< 1	10	< 0.1	5.0	40	1.2	< 1	< 10	39
MW333_20061101	MW333	11-Jan-06	Historical	Wharf	Fractured Rock	-	2.0	110	-	-	12	-	1.0	-	< 1	-	< 0.1	-	3.0	-	-	3.0	16
MW333_20070925	MW333	25-Sep-07	Historical	Wharf	Fractured Rock	-	2.0	63	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	8.0
MW333_20080929	MW333	29-Sep-08	Historical	Wharf	Fractured Rock	-	2.0	82	-	-	< 1	-	1.0	-	< 1	-	< 0.1	-	5.0	-	-	< 10	12
MW333-2120091214	MW333	14-Dec-09	EM0912839	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW333-21	MW333	19-Apr-10	EM1004147	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW333-21-20101013	MW333	13-Oct-10	EM1011222	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW333-21-20111025	MW333	25-Oct-11	EM1112085	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW333-21-20110511	MW333	5-Nov-11	Unknown	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW333-21-20120926	MW333	26-Sep-12	EM1211378	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW333-21-20130910	MW333	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW333_15102014	MW333	15-Oct-14	EM1410953	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW333_21042015	MW333	21-Apr-15	EM1504152	Wharf	Fractured Rock	< 1	2.0	63	< 1	-	< 1	< 1	2.0	-	1.0	10	< 0.1	2.0	3.0	1.0	< 1	< 10	74
MW333_24092015	MW333	24-Sep-15	EM1515056	Wharf	Fractured Rock	< 1	2.0	40	< 1	-	< 1	< 1	2.0	-	1.0	2.0	< 0.1	2.0	48	0.9	< 1	< 10	65
MW336-21	MW336	22-Apr-10	EM1004449	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW336-21-20100930	MW336	30-Sep-10	EM1010727	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW336-21-20110513	MW336	13-May-11	EM1105101	Wharf	Fractured Rock	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW336-21-20110929	MW336	29-Sep-11	EM1111065	Wharf	Fractured Rock	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW336-21-20120928	MW336	28-Sep-12	EM1211580	Wharf	Fractured Rock	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337_20061101	MW337	11-Jan-06	Historical	Wharf	Fractured Rock	-	< 1	26	-	-	12	-	8.0	-	< 1	-	< 0.1	-	7.0	-	-	2.0	26
MW337_20070927	MW337	27-Sep-07	Historical	Wharf	Fractured Rock	-	12	21	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	< 5
MW337_20080929	MW337	29-Sep-08	Historical	Wharf	Fractured Rock	-	11	22	-	-	< 1	-	8.0	-	2.0	-	< 0.1	-	15	-	-	< 10	10
MW337-2120091209	MW337	12-Sep-09	EM0912673	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW337-21	MW337	14-Apr-10	EM1004044	Wharf	Fractured Rock	-	8.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW337-21-20101005	MW337	10-May-10	EM1010861	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW337-21-20111005	MW337	10-May-11	EM1111334	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337-21-20110526	MW337	26-May-11	Unknown	Wharf	Fractured Rock	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337-21-20120417	MW337	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337-21-20120919	MW337	19-Sep-12	EM1211028	Wharf	Fractured Rock	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337-21-20130911	MW337	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW337_09102014	MW337	9-Oct-14	EM1410750	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338_20061101	MW338	11-Jan-06	Historical	Wharf	Fractured Rock	-	< 1	37	-	-	16	-	8.0	-	< 1	-	< 0.1	-	5.0	-	-	1.0	6.0
MW338_20070927	MW338	27-Sep-07	Historical	Wharf	Fractured Rock	-	< 1	42	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	< 1	-	-	< 10	< 5
MW338_20080929	MW338	29-Sep-08	Historical	Wharf	Fractured Rock	-	8.0	45	-	-	< 1	-	9.0	-	< 1	-	< 0.1	-	15	-	-	< 10	18
MW338-2120091209	MW338	12-Sep-09	EM0912673	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW338-21-20101102	MW338	11-Feb-10	EM1011961	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW338-21	MW338	14-Apr-10	EM1004044	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW338-21-20110519	MW338	19-May-11	Unknown	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338-21-20111014	MW338	14-Oct-11	EM1111711	Wharf	Fractured Rock	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338-21-20120417	MW338	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338-21-20121005	MW338	10-May-12	EM1211885	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338-21-20130910	MW338	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW338_09102014	MW338	9-Oct-14	EM1410750	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW339_20061102	MW339	11-Feb-06	Historical	Wharf	Fractured Rock	-	< 1	53	-	-	11	-	5.0	-	7.0	-	< 0.1	-	19	-	-	1.0	66
MW339_20070927	MW339	27-Sep-07	Historical	Wharf	Fractured Rock	-	< 1	44	-	-	< 1	-	< 1	-	< 1	-	< 0.1	-	11	-	-	< 10	< 5
MW339_20080929	MW339	29-Sep-08	Historical	Wharf	Fractured Rock	-	6.0	37	-	-	< 1	-	7.0	-	< 1	-	< 0.1	-	14	-	-	< 10	30
MW339-2120091209	MW339	12-Sep-09	EM0912673	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-
MW339-21-20101102	MW339	11-Feb-10	EM1011961	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW339-21	MW339	14-Apr-10	EM1004044	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW339-21-20110519	MW339	19-May-11	Unknown	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW339-21-20111014	MW339	14-Oct-11	EM1111711	Wharf	Fractured Rock	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW339-21-20120417	MW339	17-Apr-12	EM1204247	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW339-21-20120921	MW339	21-Sep-12	EM1211234	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW339-21-20130910	MW339	9-Oct-13	EM1309679	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW339_10102014	MW339	10-Oct-14	EM1410750	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW340_20061102	MW340	11-Feb-06	Historical	Wharf	Fractured Rock	-	< 1	77	-	-	9.0	-	4.0	-	6.0	-	< 0.1	-	10	-	-	2.0	27
MW340_20070927	MW340	27-Sep-07	Historical	Wharf	Fractured Rock	-	2.0	44	-	-	< 1	-	5.0	-	2.0	-	< 0.1	-	6.0	-	-	< 10	17
MW340_20080929	MW340	29-Sep-08	Historical	Wharf	Fractured Rock	-	5.0	32	-	-	< 1	-	2.0	-	2.0	-	< 0.1	-	11	-	-	< 10	28
MW340-2120091211	MW340	12-Nov-09	EM0912826	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW340-21	MW340	15-Apr-10	EM1004147	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-
MW340-21-20101005	MW340	10-May-10	EM1010861	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW340-21-20110526	MW340	26-May-11	Unknown	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW340-21-20111006	MW340	10-Jun-11	EM1111433	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW340-21-20120921	MW340	21-Sep-12	EM1211234	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW340-21-20130911	MW340	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW340-21-20130412	MW340	4-Dec-13	EM1303828	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW340_28032014	MW340	28-Mar-14	EM1402999	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW340_24092015	MW340	24-Sep-15	EM1515056	Wharf	Fractured Rock	< 1	1.0	48	< 1	-	< 1	< 1	17	-	1.0	< 1	< 0.1	3.0	25	1.5	< 1	< 10	36
MW341_20000101	MW341	1-Jan-00	Historical	Wharf	Fractured Rock	-	3.0	58	-	-	< 1	-	2.0	-	-	-	< 0.1	-	7.0	-	-	< 1	12
MW341_20061102	MW341	11-Feb-06	Historical	Wharf	Fractured Rock	-	< 1	19	-	-	14	-	1.0	-	1.0	-	< 0.1	-	4.0	-	-	3.0	38
MW341_20070927	MW341	27-Sep-07	Historical	Wharf	Fractured Rock	-	< 1	61	-	-	< 1	-	4.0	-	< 1	-	< 0.1	-	4.0	-	-	< 10	14
MW341_20080929	MW341	29-Sep-08	Historical	Wharf	Fractured Rock	-	3.0	58	-	-	< 1	-	2.0	-	< 1	-	< 0.1	-	7.0	-	-	< 10	12
MW341-2120091211	MW341	12-Nov-09	EM0912826	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW341-21-20101001	MW341	10-Jan-10	EM1010861	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW341-21	MW341	15-Apr-10	EM1004044	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW341-21-20111005	MW341	10-May-11	EM1111334	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW341-21-20110519	MW341	19-May-11	Unknown	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW341-21-20120926	MW341	26-Sep-12	EM1211378	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW341-21-20130415	MW341	15-Apr-13	EM1303890	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW341-21-20130911	MW341	9-Nov-13	EM1309724	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW341_28032014	MW341	28-Mar-14	EM1402999	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW342_20061102	MW342	11-Feb-06	Historical	Wharf	Fractured Rock	-	< 1	130	-	-	9.0	-	3.0	-	3.0	-	< 0.1	-	6.0	-	-	2.0	64
MW342_20070927	MW342	27-Sep-07	Historical	Wharf	Fractured Rock	-	1.0	66	-	-	< 1	-	3.0	-	1.0	-	< 0.1	-	2.0	-	-	< 10	21
MW342_20080929	MW342	29-Sep-08	Historical	Wharf	Fractured Rock	-	7.0	88	-	-	< 1	-	5.0	-	< 1	-	< 0.1	-	11	-	-	< 10	11
MW342-2120091211	MW342	12-Nov-09	EM0912826	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW342-21	MW342	15-Apr-10	EM1004147	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW342-21-20101012	MW342	10-Dec-10	EM1011222	Wharf	Fractured Rock	-	3.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	-
MW342-21-20110516	MW342	16-May-11	Unknown	Wharf	Fractured Rock	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW342-21-20111012	MW342	10-Dec-11	EM1111608	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW342-21-20120926	MW342	26-Sep-12	EM1211378	Wharf	Fractured Rock	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Marine Aquatic Ecosystems						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Health)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	3,000	
Recreation (Aesthetic)						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW342-21-20130419	MW342	19-Apr-13	EM1304156	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW342-21-20130916	MW342	16-Sep-13	EM1309867	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW342_31032014	MW342	31-Mar-14	EM1403051	Wharf	Fractured Rock	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW342_15042015	MW342	15-Apr-15	EM1503930	Wharf	Fractured Rock	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW342_01102015	MW342	1-Oct-15	ES1532743	Wharf	Fractured Rock	-	2.0	26	-	-	< 1	< 1	< 1	-	< 1	-	< 0.1	8.0	< 1	1.6	-	< 10	20
MW343_20061102	MW343	11-Feb-06	Historical	Wharf	Fractured Rock *	-	< 1	77	-	-	11	-	4.0	-	< 1	-	< 0.1	-	8.0	-	-	2.0	24
MW343_20070925	MW343	25-Sep-07	Historical	Wharf	Fractured Rock *	-	< 1	104	-	-	< 1	-	2.0	-	< 1	-	< 0.1	-	< 1	-	-	< 10	20
MW343_20080929	MW343	29-Sep-08	Historical	Wharf	Fractured Rock *	-	8.0	141	-	-	< 1	-	6.0	-	< 1	-	< 0.1	-	12	-	-	< 10	21
MW343-2120091208	MW343	12-Aug-09	EM0912572	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW343-21	MW343	19-Apr-10	EM1004147	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW343-21-20101021	MW343	21-Oct-10	EM1011595	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	< 1	-	-	-	-	-	-	-	
MW343-21-20110517	MW343	17-May-11	Unknown	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343-21-20111019	MW343	19-Oct-11	EM1111854	Wharf	Fractured Rock *	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343-21-20121002	MW343	10-Feb-12	EM1211676	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343-21-20130906	MW343	9-Jun-13	EM1309586	Wharf	Fractured Rock *	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343-21-20130409	MW343	4-Sep-13	EM1303671	Wharf	Fractured Rock *	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343_27032014	MW343	27-Mar-14	EM1402999	Wharf	Fractured Rock *	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW343_06102015	MW343	6-Oct-15	EM1515457	Wharf	Fractured Rock *	< 1	2.0	80	< 1	-	< 1	4.0	3.0	-	1.0	46	< 0.1	2.0	85	1.1	< 1	< 10	55
TMW01-2120100630	TMW01	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	6.0	-	< 5	-	-	-	3.0	-	-	-	18
TMW01-21	TMW01	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	5.0	-	< 1	-	-	-	5.0	-	-	-	13
TMW01-21-20101123	TMW01	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	4.0	-	< 50	-	-	-	1.0	-	-	-	15
TMW01-21-20110322	TMW01	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	12	-	-	-	-	-	6.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW01-21-20110719	TMW01	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	6.0	-	< 1	-	-	-	3.0	-	-	-	7.0
TMW01-21-20110921	TMW01	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 2	-	-	-	4.0	-	-	-	10
TMW01-21-20111213	TMW01	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	7.0
TMW01-21-20120411	TMW01	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	17	-	-	-	-	-	6.0	-	< 1	-	-	-	4.0	-	-	-	13
TMW01-21-20121003	TMW01	4-Mar-13	EM1211778	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	8.0	-	1.0	-	-	-	< 1	-	-	-	47
TMW01-21-20130909	TMW01	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	5.0	-	< 1	-	-	-	2.0	-	-	-	< 5
TMW01_27032014	TMW01	27-Mar-14	EM1403000	Wharf	Overlying Sediments	-	18	-	-	-	-	-	19	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW01_22102014	TMW01	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	12	-	-	-	-	-	10	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW01_26022015	TMW01	26-Feb-15	EM1502300	Wharf	Overlying Sediments	-	23	-	-	-	-	-	11	-	< 5	-	-	-	9.0	-	-	-	< 25
TMW01_20102015	TMW01	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	3.0	15	-	-	< 2	-	7.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW02-2120100630	TMW02	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	9.0	-	4.0	-	-	-	5.0	-	-	-	25
TMW02-21	TMW02	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	7.0	-	-	-	-	-	8.0	-	4.0	-	-	-	7.0	-	-	-	31
TMW02-21-20101123	TMW02	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	7.0	-	< 0.01	-	-	-	3.0	-	-	-	22
TMW02-21-20110322	TMW02	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	6.0
TMW02-21-20110719	TMW02	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	7.0	-	< 1	-	-	-	2.0	-	-	-	9.0
TMW02-21-20110921	TMW02	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	12	-	2.0	-	-	-	7.0	-	-	-	33
TMW02-21-20111213	TMW02	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 1	-	-	-	3.0	-	-	-	8.0
TMW02-21-20121003	TMW02	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	10	-	< 1	-	-	-	4.0	-	-	-	23
TMW02-21-20120411	TMW02	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	14	-	-	-	-	-	8.0	-	< 1	-	-	-	6.0	-	-	-	10
TMW02-21-20130909	TMW02	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	9.0	-	< 1	-	-	-	3.0	-	-	-	17
TMW02_27032014	TMW02	27-Mar-14	EM1403000	Wharf	Overlying Sediments	-	10	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW02_22102014	TMW02	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	9.0	-	-	-	-	-	5.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW02_26022015	TMW02	26-Feb-15	EM1502300	Wharf	Overlying Sediments	-	22	-	-	-	-	-	12	-	< 5	-	-	-	9.0	-	-	-	< 25
TMW02_20102015	TMW02	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	3.0	11	-	-	< 2	-	12	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW03-2120100630	TMW03	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	10	-	< 5	-	-	-	4.0	-	-	-	22

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						-	-	-	-	-	-	-	1,000	-	-	100	-	-	-	-	-	-	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
TMW03-21	TMW03	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	10	-	-	-	-	-	9.0	-	< 5	-	-	-	6.0	-	-	-	12
TMW03-21-20101123	TMW03	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 0.01	-	-	-	-	-	8.0	-	< 0.01	-	-	-	2.0	-	-	-	47
TMW03-21-20110322	TMW03	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	7.0	-	< 1	-	-	-	3.0	-	-	-	< 5
TMW03-21-20110719	TMW03	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	7.0	-	< 1	-	-	-	2.0	-	-	-	14
TMW03-21-20110921	TMW03	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 5	-	-	-	-	-	13	-	< 0.1	-	-	-	8.0	-	-	-	36
TMW03-21-20111213	TMW03	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 0.1	-	-	-	3.0	-	-	-	7.0
TMW03-21-20120411	TMW03	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	16	-	-	-	-	-	9.0	-	< 1	-	-	-	7.0	-	-	-	8.0
TMW03-21-20121003	TMW03	4-Mar-13	EM1211778	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	11	-	< 1	-	-	-	5.0	-	-	-	54
TMW03-21-20130909	TMW03	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	11
TMW03_27032014	TMW03	27-Mar-14	EM1403000	Wharf	Overlying Sediments	-	11	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW03_22102014	TMW03	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	12	-	-	-	-	-	5.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW03_26022015	TMW03	26-Feb-15	EM1502300	Wharf	Overlying Sediments	-	22	-	-	-	-	-	11	-	< 5	-	-	-	10	-	-	-	< 25
TMW03_20102015	TMW03	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	3.0	9.0	-	-	< 2	-	10	-	< 2	-	< 0.1	-	< 2	-	-	< 20	10
TMW04-2120100107	TMW04	1-Jul-10	EM1007324	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	8.0	-	19	-	-	-	3.0	-	-	-	67
TMW04-21	TMW04	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	10	-	3.0	-	-	-	6.0	-	-	-	14
TMW04-21-20101123	TMW04	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 50	-	-	-	3.0	-	-	-	20
TMW04-21-20110322	TMW04	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	1.0	-	-	-	-	-	8.0	-	2.0	-	-	-	2.0	-	-	-	17
TMW04-21-20110719	TMW04	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	7.0	-	< 1	-	-	-	3.0	-	-	-	16
TMW04-21-20110921	TMW04	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 2	-	-	-	-	-	12	-	2.0	-	-	-	7.0	-	-	-	16
TMW04-21-20111213	TMW04	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 0.1	-	-	-	3.0	-	-	-	16
TMW04-21-20121003	TMW04	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	11	-	< 1	-	-	-	3.0	-	-	-	47
TMW04-21-20120411	TMW04	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	9.0	-	-	-	-	-	9.0	-	4.0	-	-	-	6.0	-	-	-	26
TMW04-21-20130909	TMW04	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	< 5
TMW04_28032014	TMW04	28-Mar-14	EM1403000	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW04_22102014	TMW04	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	9.0	-	-	-	-	-	7.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW04_26022015	TMW04	26-Feb-15	EM1502300	Wharf	Overlying Sediments	-	14	-	-	-	-	-	11	-	< 5	-	-	-	10	-	-	-	< 25
TMW04_20102015	TMW04	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	2.0	10	-	-	< 2	-	8.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW05-2120100107	TMW05	1-Jul-10	EM1007324	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	9.0	-	< 5	-	-	-	5.0	-	-	-	16
TMW05-21	TMW05	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	1.0	-	-	-	-	-	9.0	-	< 50	-	-	-	5.0	-	-	-	6.0
TMW05-21-20101123	TMW05	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 0.01	-	-	-	-	-	9.0	-	< 0.01	-	-	-	3.0	-	-	-	16
TMW05-21-20110322	TMW05	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	5.0	-	-	-	16
TMW05-21-20110719	TMW05	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	22
TMW05-21-20110921	TMW05	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	13	-	1.0	-	-	-	7.0	-	-	-	13
TMW05-21-20111213	TMW05	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	9.0	-	< 1	-	-	-	2.0	-	-	-	16
TMW05-21-20121003	TMW05	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	11	-	< 1	-	-	-	3.0	-	-	-	41
TMW05-21-20120411	TMW05	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	10	-	-	-	-	-	8.0	-	< 1	-	-	-	6.0	-	-	-	7.0
TMW05-21-20130909	TMW05	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	9.0
TMW05_28032014	TMW05	28-Mar-14	EM1403000	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW05_22102014	TMW05	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	7.0	-	< 1	-	-	-	< 1	-	-	-	56
TMW05_27022015	TMW05	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	13	-	< 5	-	-	-	11	-	-	-	< 25
TMW05_20102015	TMW05	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	3.0	11	-	-	< 2	-	8.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW06-21	TMW06	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	10	-	< 50	-	-	-	5.0	-	-	-	10
TMW06-21-20101123	TMW06	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	1.0	-	-	-	11
TMW06-21-20110322	TMW06	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	8.0	-	< 1	-	-	-	4.0	-	-	-	12
TMW06-21-20110719	TMW06	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	4.0	-	-	-	27
TMW06-21-20110921	TMW06	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	13	-	< 2	-	-	-	7.0	-	-	-	10
TMW06-21-20111213	TMW06	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	9.0	-	2.0	-	-	-	3.0	-	-	-	13

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
TMW06-21-20121003	TMW06	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	11	-	< 1	-	-	-	4.0	-	-	-	24
TMW06-21-20120411	TMW06	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	9.0	-	< 1	-	-	-	7.0	-	-	-	18
TMW06-21-20130909	TMW06	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	6.0
TMW06_28032014	TMW06	28-Mar-14	EM1403000	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW06_22102014	TMW06	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	6.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW06_27022015	TMW06	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	10	-	-	-	-	-	20	-	< 5	-	-	-	9.0	-	-	-	28
TMW06_20102015	TMW06	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	3.0	8.0	-	-	< 2	-	9.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	15
TMW07-2120100630	TMW07	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	8.0	-	< 5	-	-	-	5.0	-	-	-	34
TMW07-21	TMW07	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	9.0	-	< 2	-	-	-	5.0	-	-	-	7.0
TMW07-21-20110322	TMW07	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	1.0	-	-	-	-	-	10	-	< 1	-	-	-	3.0	-	-	-	12
TMW07-21-20110719	TMW07	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	16
TMW07-21-20110921	TMW07	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	13	-	< 0.1	-	-	-	8.0	-	-	-	8.0
TMW07-21-20111213	TMW07	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 1	-	-	-	3.0	-	-	-	8.0
TMW07-21-20121003	TMW07	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	10	-	< 1	-	-	-	4.0	-	-	-	21
TMW07-21-20130909	TMW07	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	< 5
TMW07_31032014	TMW07	31-Mar-14	EM1403050	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	2,750
TMW07_27022015	TMW07	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	9.0	-	-	-	-	-	11	-	< 5	-	-	-	7.0	-	-	-	< 25
TMW07_20102015	TMW07	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	5.0	7.0	-	-	< 2	-	9.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW08-2120100630	TMW08	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	10	-	17	-	-	-	4.0	-	-	-	21
TMW08-21	TMW08	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	9.0	-	< 50	-	-	-	5.0	-	-	-	6.0
TMW08-21-20101123	TMW08	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	14
TMW08-21-20110322	TMW08	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	9.0	-	< 1	-	-	-	2.0	-	-	-	6.0
TMW08-21-20110719	TMW08	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	4.0	-	-	-	25
TMW08-21-20110921	TMW08	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 2	-	-	-	-	-	13	-	< 2	-	-	-	7.0	-	-	-	13
TMW08-21-20111213	TMW08	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	9.0	-	< 0.1	-	-	-	3.0	-	-	-	11
TMW08-21-20121003	TMW08	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	3.0	-	-	-	-	-	10	-	< 1	-	-	-	4.0	-	-	-	15
TMW08-21-20130909	TMW08	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	< 5
TMW08_31032014	TMW08	31-Mar-14	EM1403050	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	584
TMW08_22102014	TMW08	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	6.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW08_20102015	TMW08	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	5.0	8.0	-	-	< 2	-	9.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW09-2120100630	TMW09	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	9.0	-	3.0	-	-	-	4.0	-	-	-	23
TMW09-21	TMW09	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	8.0	-	< 2	-	-	-	5.0	-	-	-	6.0
TMW09-21-20101123	TMW09	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 0.01	-	-	-	-	-	8.0	-	1.0	-	-	-	2.0	-	-	-	14
TMW09-21-20110322	TMW09	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	7.0	-	< 1	-	-	-	3.0	-	-	-	12
TMW09-21-20110719	TMW09	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	22
TMW09-21-20110921	TMW09	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 5	-	-	-	-	-	14	-	< 0.1	-	-	-	7.0	-	-	-	19
TMW09-21-20111213	TMW09	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	9.0	-	< 1	-	-	-	4.0	-	-	-	8.0
TMW09-21-20120411	TMW09	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	7.0	-	-	-	-	-	9.0	-	< 1	-	-	-	11	-	-	-	27
TMW09-21-20121003	TMW09	4-Mar-13	EM1211778	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	10	-	< 1	-	-	-	4.0	-	-	-	21
TMW09-21-20130909	TMW09	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	5.0
TMW09_31032014	TMW09	31-Mar-14	EM1403050	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	293
TMW09_22102014	TMW09	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	10	-	-	-	-	-	9.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW09_27022015	TMW09	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	6.0	-	-	-	-	-	11	-	< 5	-	-	-	8.0	-	-	-	< 25
TMW09_20102015	TMW09	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	< 2	6.0	-	-	< 2	-	9.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW10-2120100630	TMW10	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	1.0	-	-	-	-	-	10	-	21	-	-	-	3.0	-	-	-	33
TMW10-21	TMW10	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	8.0	-	< 20	-	-	-	5.0	-	-	-	7.0
TMW10-21-20101123	TMW10	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	11	-	1.0	-	-	-	4.0	-	-	-	81

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)						Metals and Cyanide																	
						Antimony (Filtered)	Arsenic (Filtered)	Barium (Filtered)	Beryllium (Filtered)	Cadmium (Filtered)	Chromium (Filtered)	Cobalt (Filtered)	Copper (Filtered)	Cyanide (total)	Lead (Filtered)	Manganese (Filtered)	Mercury (Filtered)	Molybdenum (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Tin (Filtered)	Vanadium (Filtered)	Zinc (Filtered)
Marine Aquatic Ecosystems						270	13	4.0	0.13	0.7	4.4	1.0	1.3	4.0	4.4	1,900	0.1	23	7.0	3.0	10	100	15
Recreation (Health)						78	100	20,000	600	20	500	60	20,000	800	100	5,000	10	500	200	100	120,000	860	60,000
Recreation (Aesthetic)						--	--	--	--	--	--	--	1,000	--	--	100	--	--	--	--	--	--	3,000
Field ID	Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
TMW10-21-20110322	TMW10	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	9.0	-	< 1	-	-	-	3.0	-	-	-	33
TMW10-21-20110719	TMW10	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	20
TMW10-21-20110921	TMW10	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 2	-	-	-	-	-	13	-	< 2	-	-	-	8.0	-	-	-	20
TMW10-21-20111213	TMW10	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.5	-	-	-	-	-	10	-	< 0.1	-	-	-	3.0	-	-	-	10
TMW10-21-20121003	TMW10	10-Mar-12	EM1211778	Wharf	Overlying Sediments	-	5.0	-	-	-	-	-	10	-	< 1	-	-	-	3.0	-	-	-	51
TMW10-21-20120411	TMW10	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	8.0	-	-	-	-	-	8.0	-	1.0	-	-	-	6.0	-	-	-	12
TMW10_31032014	TMW10	31-Mar-14	EM1403050	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	245
TMW10_22102014	TMW10	22-Oct-14	EM1411369	Wharf	Overlying Sediments	-	13	-	-	-	-	-	6.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW10_27022015	TMW10	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	17	-	-	-	-	-	12	-	< 5	-	-	-	9.0	-	-	-	< 25
TMW10_20102015	TMW10	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	2.0	8.0	-	-	< 2	-	9.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10
TMW11-2120100630	TMW11	30-Jun-10	EM1007243	Wharf	Overlying Sediments	-	2.0	-	-	-	-	-	10	-	18	-	-	-	4.0	-	-	-	28
TMW11-21	TMW11	3-Aug-10	EM1008537	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	18	-	2.0	-	-	-	6.0	-	-	-	12
TMW11-21-20101123	TMW11	23-Nov-10	EM1012946	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	2.0	-	-	-	1.0	-	-	-	17
TMW11-21-20110322	TMW11	22-Mar-11	EM1102938	Wharf	Overlying Sediments	-	4.0	-	-	-	-	-	8.0	-	< 1	-	-	-	3.0	-	-	-	14
TMW11-21-20110719	TMW11	19-Jul-11	EM1108066	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	10	-	-	-	2.0	-	-	-	44
TMW11-21-20110921	TMW11	21-Sep-11	EM1110717	Wharf	Overlying Sediments	-	< 2	-	-	-	-	-	13	-	< 2	-	-	-	8.0	-	-	-	9.0
TMW11-21-20111213	TMW11	13-Dec-11	EM1114272	Wharf	Overlying Sediments	-	< 0.1	-	-	-	-	-	10	-	< 1	-	-	-	3.0	-	-	-	10
TMW11-21-20120411	TMW11	4-Nov-12	EM1204007	Wharf	Overlying Sediments	-	7.0	-	-	-	-	-	8.0	-	< 1	-	-	-	6.0	-	-	-	12
TMW11-21-20121003	TMW11	4-Mar-13	EM1211778	Wharf	Overlying Sediments	-	1.0	-	-	-	-	-	11	-	< 1	-	-	-	4.0	-	-	-	19
TMW11-21-20130909	TMW11	9-Sep-13	EM1309635	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	8.0	-	< 1	-	-	-	2.0	-	-	-	< 5
TMW11_31032014	TMW11	31-Mar-14	EM1403050	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	< 1	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW11_23102014	TMW11	23-Oct-14	EM1411369	Wharf	Overlying Sediments	-	< 1	-	-	-	-	-	6.0	-	< 1	-	-	-	< 1	-	-	-	< 5
TMW11_27022015	TMW11	27-Feb-15	EM1502300	Wharf	Overlying Sediments	-	9.0	-	-	-	-	-	11	-	< 5	-	-	-	9.0	-	-	-	< 25
TMW11_20102015	TMW11	20-Oct-15	EM1516098	Wharf	Overlying Sediments	-	2.0	9.0	-	-	< 2	-	8.0	-	< 2	-	< 0.1	-	< 2	-	-	< 20	< 10

Notes:
Fractured rock * - indicates well screen is placed across bedrock interface and overlying sediments and may be subject to influence from perched water (if present).
-- not analysed
< - less than laboratory limit of reporting
LOR - Laboratory Limit of Reporting
µg/L - micrograms per litre
Bold indicates a detection above the laboratory LOR.

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					Perfluorobutane sulfonic acid (PFBS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorobutanoic acid (PFPeA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluorooctanoic acid (PFHpA)	Perfluorooctanoic acid (PFfOA)	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)	Sum of PFHxS and PFOS	Sum of PFAS (WA DER List)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Aquatic Ecosystem: Interim Marine Water Guideline Values - 99% Species Protection – High Conservation Value Systems					-	-	0.00023	-	-	-	-	19	-	-	-	-	-	-
Health based guidance values for use in site investigations in Australia – Recreational Water (NHMRC 2019)					-	2.0	2.0	-	-	-	-	10	-	-	-	-	2.0	-
Well ID	Sample Date	Laboratory Report Number	Area of Site	Groundwater System														
GW006	1-Oct-15	ES1532743	Wharf	Fractured Rock *	-	-	0.12	-	-	-	-	0.04	-	<0.1	<0.1	-	-	-
GW006	10-Nov-17	ES1728628	Wharf	Fractured Rock *	0.0454	0.141	0.166	<0.002	0.0129	0.0799	0.0425	0.0187	< 0.001	< 0.001	< 0.001	< 0.001	0.307	0.506
GW006	25-Oct-18	ES1832634	Wharf	Fractured Rock *	< 0.02	0.28	0.27	< 0.1	0.03	0.06	0.04	0.07	< 0.05	< 0.05	< 0.05	< 0.05	0.55	0.75
GW009	24-Jul-15	EM1512549	Wharf	Fractured Rock	-	-	<0.2	-	-	-	-	<0.02	-	<0.1	<0.1	-	-	-
GW009	10-Nov-17	ES1728628	Wharf	Fractured Rock	<0.0005	0.0055	0.0048	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	0.0103	0.0103
GW009	25-Oct-18	ES1832634	Wharf	Fractured Rock	< 0.002	0.004	0.005	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	0.009	0.009
GW010	11-Feb-16	EM1601410	Wharf	Fractured Rock	-	-	<0.05	-	-	-	-	<0.05	-	<0.5	<0.5	-	-	-
GW010	10-Nov-17	ES1728628	Wharf	Fractured Rock	<0.0005	0.0025	0.0016	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	< 0.001	< 0.001	< 0.001	0.0041	0.0041
GW010	25-Oct-18	ES1832634	Wharf	Fractured Rock	< 0.002	0.005	0.003	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	0.008	0.008
GW011	6-Oct-15	EM1515504	Wharf	Fractured Rock	-	-	0.47	-	-	-	-	0.08	-	<0.5	<0.5	-	-	-
GW011	10-Nov-17	ES1728628	Wharf	Fractured Rock	0.0966	0.297	0.275	<0.002	<0.0005	0.2	0.253	0.0488	<0.001	< 0.001	< 0.001	< 0.001	0.572	1.17
GW011	25-Oct-18	ES1832634	Wharf	Fractured Rock	< 0.02	0.52	0.54	< 0.1	< 0.02	0.07	0.18	0.08	< 0.05	< 0.05	< 0.05	< 0.05	1.06	1.39
GW013	24-Jul-15	EM1512549	Wharf	Fractured Rock	-	-	25	-	-	-	-	6.95	-	1.2	10	-	-	-
GW013	12-Nov-17	ES1728628	Wharf	Fractured Rock	0.489	7.38	43	<0.002	0.966	3.71	4.82	3.12	0.003	0.36	5.47	0.003	50	69.1
GW013	24-Oct-18	ES1832634	Wharf	Fractured Rock	1.25	17	41	0.9 *	4.33	7.84	7.89	6.49	< 0.05	0.8	6.07	< 0.05	58	93
GW014	23-Apr-15	EM1504236	Wharf	Fractured Rock	-	-	40	-	-	-	-	4.74	-	0.3	1.2	-	-	-
GW014	8-Oct-15	EM1515589	Wharf	Fractured Rock	-	-	5.73	-	-	-	-	5.83	-	0.4	<0.1	-	-	-
GW014	12-Nov-17	ES1728628	Wharf	Fractured Rock	2.71	41	34	0.118	3.91	10.8	7.3	5.4	<0.002	0.024	0.029	<0.002	75	105
GW014	25-Oct-18	ES1832634	Wharf	Fractured Rock	5.69	55	50	1.7	6.46	13	12	9.44	< 0.05	0.08	0.09	< 0.05	105	153
GW135	24-Jul-15	EM1601789	Wharf	Fractured Rock	-	-	5.71	-	-	-	-	0.62	-	<0.1	<0.1	-	-	-
GW135	22-Feb-16	EM1601789	Wharf	Fractured Rock	-	-	6.17	-	-	-	-	0.35	-	<0.1	<0.1	-	-	-
GW135	12-Nov-17	ES1728628	Wharf	Fractured Rock	0.822 *	4.4	7.48	0.3 *	0.366	1.33	1.36	0.689	<0.002	0.19 *	0.126	<0.002	12	16.3
GW135	25-Oct-18	ES1832634	Wharf	Fractured Rock	0.62	6.71	11	< 0.1	0.76	1.21	1.44	1.04	< 0.05	< 0.05	0.19	< 0.05	17	23
GW138	10-Nov-17	ES1728628	Wharf	Overlying sediments	0.151	0.403	0.0828	<0.002	0.107	0.126	0.0635	0.0102	<0.001	< 0.001	< 0.001	< 0.001	0.486	0.944
GW138	24-Oct-18	ES1832634	Wharf	Overlying sediments	< 0.02	0.4	0.21	< 0.1	< 0.02	0.05	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.61	0.66
GW139	10-Nov-17	ES1728628	Wharf	Fractured Rock	<0.0005	0.125	0.0637	<0.002	<0.0005	<0.0005	<0.005	0.0038	<0.001	< 0.001	< 0.001	< 0.001	0.189	0.192
GW139	25-Oct-18	ES1832634	Wharf	Fractured Rock	< 0.02	0.1	0.06	< 0.1	< 0.02	< 0.02	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.16	0.16
MW135	22-Oct-18	ES1832634	Wharf	Overlying Sediments	< 0.02	0.2	0.22	< 0.1	< 0.02	< 0.02	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.42	0.42
MW137	8-Oct-15	EM1515589	Wharf	Fractured Rock *	-	-	<0.02	-	-	-	-	0.03	-	1.2	<0.1	-	-	-
MW137	25-Feb-16	EM1601981	Wharf	Fractured Rock *	-	-	0.28	-	-	-	-	0.05	-	<0.1	<0.1	-	-	-
MW137	10-Nov-17	ES1728628	Wharf	Fractured Rock *	0.0978	0.506	0.237	<0.002	0.0315	0.142	0.0667	0.0175	<0.001	< 0.001	< 0.001	< 0.001	0.743	1.1
MW137	22-Oct-18	ES1832634	Wharf	Fractured Rock *	0.04	0.51	0.56	< 0.1	0.06	0.08	0.06	0.06	< 0.05	< 0.05	< 0.05	< 0.05	1.07	1.37
MW139	9-Oct-15	EM1515735	NBA	Fractured Rock	-	-	0.17	-	-	-	-	<0.02	-	<0.1	<0.1	-	-	-
MW139	23-Feb-16	EM1601872	NBA	Fractured Rock	-	-	0.11	-	-	-	-	<0.02	-	<0.1	<0.1	-	-	-
MW139H	27-Oct-16	EM1613055	NBA	Fractured Rock	-	0.422	0.684	-	-	-	-	0.019	-	-	-	-	1.106	-
MW139L	27-Oct-16	EM1613055	NBA	Fractured Rock	-	0.399	0.586	-	-	-	-	0.019	-	-	-	-	0.99	-
MW139	10-Nov-17	ES1728628	NBA	Fractured Rock	0.0326	0.237	0.409	<0.002	0.006	0.0507	0.0248	0.014	<0.001	< 0.001	< 0.001	< 0.001	0.646	0.774
MW139	27-Jul-18	ES1822517	NBA	Fractured Rock	<0.02	0.36	0.32	<0.1	<0.02	<0.02	<0.02	0.02	< 0.05	< 0.05	< 0.05	< 0.05	0.68	0.7
MW139	18-Oct-18	ES1831172	NBA	Fractured Rock	< 0.02	0.26	0.56	< 0.1	< 0.02	< 0.02	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.82	0.82
MW140H	27-Oct-16	EM1613055	NBA	Fractured Rock	-	5.28	0.672	-	-	-	-	0.07	-	-	-	-	5.952	-
MW140L	27-Oct-16	EM1613055	NBA	Fractured Rock	-	5.63	0.664	-	-	-	-	0.084	-	-	-	-	6.294	-
MW140H	27-Mar-17	EM1703887	NBA	Fractured Rock	0.13	1.08	0.44	< 0.1	0.05	0.11	0.04	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.52	
MW140L	27-Mar-17	EM1703887	NBA	Fractured Rock	0.12	1.24	0.16	< 0.1	< 0.02	0.22	0.07	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.4	
MW140	27-Jul-18	ES1822517	NBA	Fractured Rock	0.45	4.7	0.84	< 0.1	< 0.02	0.89	0.37	0.18	< 0.05	< 0.05	< 0.05	< 0.05	5.54	
MW140	18-Oct-18	ES1831172	NBA	Fractured Rock	0.38	4.45	0.82	<0.1	0.22	0.94	0.34	0.23	<0.05	<0.05	<0.05	<0.05	5.27	7.38
MW140	1-Aug-19	ES1925021	NBA	Fractured Rock	0.35	3.66	0.95	<0.1	0.2	0.78	0.38	0.24	< 0.05	< 0.05	< 0.05	< 0.05	4.61	6.56
MW307	24-Jul-15	EM1512549	Wharf	Sediments	-	-	4.24	-	-	-	-	0.79	-	0.1	0.6	-	-	-
MW307	10-Nov-17	ES1728628	Wharf	Sediments	0.385	4.38	18	<0.002	0.417	1.36	1.7	1.42	<0.002	0.254	1.9	<0.002	22	29.6
MW307	24-Oct-18	ES1832634	Wharf	Sediments	0.38	6.4	13	< 0.1	0.92	1.29	1.51	1.47	< 0.05	0.17 *	1.07	< 0.05	20	26
MW311	24-Jul-15	EM1512549	Wharf	Overlying sediments	-	-	0.38	-	-	-	-	<0.1	-	<0.5	<0.5	-	-	-
MW311	24-Jul-16	EM1512549	Wharf	Overlying sediments	-	-	0.38	-	-	-	-	<0.2	-	<0.1	<0.1	-	-	-
MW311	22-Feb-16	EM1601789	Wharf	Overlying sediments	-	-	0.61	-	-	-	-	0.07	-	<0.5	<0.5	-	-	-
MW311	24-Oct-18	ES1832634	Wharf	Overlying sediments	< 0.02	0.4	0.82	< 0.1	< 0.02	0.08	< 0.02	0.06	< 0.05	< 0.05	< 0.05	< 0.05	1.22	1.36
MW324	25-Sep-15	EM1515178	Wharf	Fractured Rock *	-	-	1.146	-	-	-	-	0.17	-	<0.5	<0.5	-	-	-
MW324	24-Feb-16	EM1601919	Wharf	Fractured Rock *	-	-	0.48	-	-	-	-	<0.05	-	<0.5	<0.5	-	-	-
MW324	10-Nov-17	ES1728628	Wharf	Fractured Rock *	0.14	0.723	0.886	<0.002	0.105	0.232	0.239	0.0615	<0.001	0.003	0.013	<0.001	1.61	2.4
MW324	24-Oct-18	ES1832634	Wharf	Fractured Rock *	0.12	1.24	1.26	< 0.1	< 0.02	0.26	0.16	0.16	< 0.05	< 0.05	< 0.05	< 0.05	2.5	3.2
MW325	25-Sep-15	EM1515178	Wharf	Fractured Rock *	-	-	1.39	-	-	-	-	0.42	-	<0.5	<0.5	-	-	-
MW325	24-Feb-16	EM1601919	Wharf	Fractured Rock *	-	-	1.74	-	-	-	-	0.33	-	<0.5	<0.5	-	-	-
MW325	10-Nov-17	ES1728628	Wharf	Fractured Rock *	0.276	3.07	8.55	<0.002	0.325	1.05	1.21	0.809	<0.001	0.177	0.54	<0.001	12	16
MW325	24-Oct-18	ES1832634	Wharf	Fractured Rock *	0.28	2.22	3.76	< 0.1	0.28	0.52	0.53	0.37	< 0.05	< 0.05	0.34	< 0.05	5.98	8.3
MW326	24-Jul-15	EM1512549	Wharf	Fractured Rock *	-	-	0.9	-	-	-	-	0.41	-	0.2	<0.1	-	-	-
MW326	10-Nov-17	ES1728628	Wharf	Fractured Rock *	0.23	3.09	6.59	0.052	0.614	1.15	1.71	0.45	0.002	0.491	0.551	<0.001	9.68	14.9
MW326	24-Oct-18	ES1832634	Wharf	Fractured Rock *	0.03	0.43	0.6	< 0.1	0.1	0.1	0.14	0.16	< 0.05	0.05	0.06	< 0.05	1.03	1.67
GW140	24-Jul-15	EM1512549	NBA	Fractured Rock	-	-	7.59	-	-	-	-	1.13	-	<0.1	<0.1	-	-	-
GW140	8-Oct-15	EM1515589	NBA	Fractured Rock	-	-	9.14	-	-	-	-							

Groundwater Criteria (refer to Table 12 in Audit report for origin of criteria)					Perfluorobutane sulfonic acid (PFBS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorobutanoic acid (PFPeA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	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)	Sum of PFHxS and PFOS	Sum of PFAS (WA DER List)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Aquatic Ecosystem: Interim Marine Water Guideline Values - 99% Species Protection – High Conservation Value Systems					--	--	0.00023	--	--	--	--	19	--	--	--	--	--	--
Health based guidance values for use in site investigations in Australia – Recreational Water (NHMRC 2019)					--	2.0	2.0	--	--	--	--	10	--	--	--	--	2.0	--
MI/05	2-Nov-17	ES1728115	NBA	Overlying Sediments	<0.05	0.36	0.4	< 0.2	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.76	0.92
MI/06	2-Nov-17	ES1728115	NBA	Overlying Sediments	<0.05	0.7	0.74	< 0.2	<0.05	0.43	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	1.44	1.95
MI/07	2-Nov-17	ES1728115	NBA	Overlying Sediments	<0.05	0.08	0.17	< 0.2	<0.02	0.05	<0.02	0.01	<0.05	<0.05	<0.05	<0.05	0.25	0.31
MI/08	2-Nov-17	ES1728115	NBA	Overlying Sediments	<0.05	0.64	1.43	< 0.2	0.06	0.22	0.12	0.14	<0.05	<0.05	<0.05	<0.05	2.07	
SP01	4-Sep-17	ES1722259	NBA	Surface Water	0.02 *	0.08	0.61 *	< 0.1	0.03	0.03	< 0.02	0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.71 *	0.78 *
SP01	6-Aug-18	ES1823893	NBA	Surface Water	0.23	6.38	3.91	1.0	0.21	2.03	0.29	0.34	< 0.05	< 0.05	< 0.05	< 0.05	10	14
SP01	7-Aug-19	ES1925390	NBA	Surface Water	<0.02	0.08	0.5	<0.1	<0.02	0.03	< 0.02	0.02	< 0.05	< 0.05	< 0.05	< 0.05	0.58	0.63
SP02	4-Sep-17	ES1722259	NBA	Surface Water	0.26	2.48	3.53	0.2	0.46	1.02	0.28	0.31	< 0.05	0.12	< 0.05	< 0.05	6.01	8.66
SP02	6-Aug-18	ES1823893	NBA	Surface Water	0.09	0.44	1.08	<0.1	0.1	0.3	0.06	0.07	< 0.05	< 0.05	< 0.05	< 0.05	1.52	2.14
SP02	7-Aug-19	ES1925390	NBA	Surface Water	<0.02	0.04	0.34	<0.1	<0.02	0.03	<0.02	0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.38	0.42
SP03	18-Aug-17		NBA	Surface Water	1.48	21	45	1.7	2.55	10	2.47	3.17	< 0.05	0.84	0.4	< 0.05	66	89
SP03	4-Sep-17	ES1722259	NBA	Surface Water	0.52	5.63	9.95	0.4	0.95	2.15	0.6	0.7	< 0.05	0.31	< 0.05	< 0.05	16	21
SP03	7-Aug-19	ES1925390	NBA	Surface Water	< 0.02	0.04	0.23	<0.01	<0.02	0.03	<0.02	0.01	<0.05	<0.05	<0.05	<0.05	0.27	0.31
SP04	4-Sep-17	ES1722259	NBA	Surface Water	< 0.02	0.1	0.37	< 0.1	0.02	0.03	< 0.02	0.02	< 0.05	< 0.05	< 0.05	< 0.05	0.47	0.54
SP04	7-Aug-19	ES1925390	NBA	Surface Water	< 0.02	0.06	0.6	<0.1	<0.02	<0.02	<0.02	0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.66	0.67
SP05	4-Sep-17	ES1722259	NBA	Surface Water	1.34	12	9.67	0.8	2.14	5.17	1.18	1.14	< 0.05	< 0.05	< 0.05	< 0.05	21	33
SP05	6-Aug-18	ES1823893	NBA	Surface Water	0.21	1.38	3.02	0.14	0.35	0.96	0.16	0.16	< 0.05	< 0.05	< 0.05	< 0.05	4.4	6.23
SP05	7-Aug-19	ES1925390	NBA	Surface Water	0.03	0.34	2.82	<0.1	0.04	0.1	<0.02	0.06	< 0.05	< 0.05	< 0.05	< 0.05	3.16	3.39
SP06	6-Aug-18	ES1823893	NBA	Surface Water	<0.02	0.1	0.34	<0.1	<0.02	0.04	<0.02	0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.44	0.49
NBA/BH1	17-Oct-18	ES1831172	NBA	Overlying Sediments	1.92	17	21	< 0.1	1.5	5.0	1.46	1.85	< 0.05	< 0.05	< 0.05	< 0.05	38	50
NBA/BH1	1-Aug-19	ES1925021	NBA	Overlying Sediments	1.82	13	22	0.90	1.48	4.86	1.48	1.88	< 0.05	< 0.05	< 0.05	< 0.05	35	47.50
NBA/BH1A	18-Oct-18	ES1831172	NBA	Overlying Sediments	0.32	4.6	8.96	< 0.1	0.3	1.07	0.36	0.57	< 0.05	< 0.05	< 0.05	< 0.05	14	16
NBA/BH1A	2-Aug-19	ES1925021	NBA	Overlying Sediments	0.23	2.67	12	< 0.1	0.20	0.64	0.28	0.46	< 0.05	< 0.05	< 0.05	< 0.05	15	16.40
NBA/BH2	17-Oct-18	ES1831172	NBA	Overlying Sediments	1.54	14	25	< 0.1	1.3	4.26	1.22	1.66	< 0.05	< 0.05	< 0.05	< 0.05	39	49
NBA/BH2	1-Aug-19	ES1925021	NBA	Overlying Sediments	1.46	11	23	0.80	1.24	3.60	1.24	1.60	< 0.05	< 0.05	< 0.05	< 0.05	34	44.00
NBA/BH2A	17-Oct-18	ES1831172	NBA	Overlying Sediments	0.09	0.96	4.7	< 0.1	0.09	0.29	0.1	0.15	< 0.05	< 0.05	< 0.05	< 0.05	5.66	6.38
NBA/BH2A	1-Aug-19	ES1925021	NBA	Overlying Sediments	0.10	0.94	4.28	< 0.1	0.10	0.30	0.11	0.19	< 0.05	< 0.05	< 0.05	< 0.05	5.22	6.02
NBA/BH3	17-Oct-18	ES1831172	NBA	Overlying Sediments	0.34	3.14	5.71	< 0.1	0.28	0.92	0.28	0.38	< 0.05	< 0.05	< 0.05	< 0.05	8.85	11
NBA/BH3	1-Aug-19	ES1925021	NBA	Overlying Sediments	0.31	2.17	4.46	< 0.1	0.24	0.68	0.26	0.34	< 0.05	< 0.05	< 0.05	< 0.05	6.63	8.46
NBA/BH3A	17-Oct-18	ES1831172	NBA	Overlying Sediments	< 0.02	0.27	0.4	< 0.1	< 0.02	0.06	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.67	0.73
NBA/BH3A	1-Aug-19	ES1925021	NBA	Overlying Sediments	< 0.02	0.12	0.21	< 0.1	< 0.02	< 0.02	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.33	0.33
NBA/BH4	18-Oct-18	ES1831172	NBA	Overlying Sediments	0.14	1.23	0.7	< 0.1	0.08	0.23	0.1	0.11	< 0.05	< 0.05	< 0.05	< 0.05	1.93	2.59
NBA/BH4	1-Aug-19	ES1925021	NBA	Overlying Sediments	0.18	1.16	0.71	< 0.1	< 0.02	0.24	0.12	0.12	< 0.05	< 0.05	< 0.05	< 0.05	1.87	2.53
NBA/BH4A	18-Oct-18	ES1831172	NBA	Overlying Sediments	0.18	1.4	1.14	< 0.1	0.08	0.28	0.12	0.13	< 0.05	< 0.05	< 0.05	< 0.05	2.54	3.33
NBA/BH4A	1-Aug-19	ES1925021	NBA	Overlying Sediments	0.14	0.90	0.74	< 0.1	< 0.02	0.24	0.11	0.10	< 0.05	< 0.05	< 0.05	< 0.05	1.64	2.23
NBA/BH5	17-Oct-18	ES1831172	NBA	Overlying Sediments	< 0.02	0.22	0.64	< 0.1	< 0.02	< 0.02	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.86	0.86
NBA/BH5	1-Aug-19	ES1925021	NBA	Overlying Sediments	< 0.02	0.22	0.73	< 0.1	< 0.02	< 0.02	< 0.02	0.06	< 0.05	< 0.05	< 0.05	< 0.05	0.95	1.01
NBA1	27-Jul-18	ES1822517	NBA	Overlying Sediments	2.18	19	22	< 0.1	1.77	5.19	1.98	1.85	< 0.05	< 0.05	< 0.05	< 0.05	41	54
NBA1A	27-Jul-18	ES1822517	NBA	Overlying Sediments	0.14	1.76	4.62	< 0.1	< 0.02	0.28	0.11	0.16	< 0.05	< 0.05	< 0.05	< 0.05	6.38	7.07
NBA1AH	27-Oct-16	EM1613055	NBA	Overlying Sediments	-	3.82	9.27	-	-	-	-	0.152	< 0.005	0.006	< 0.005	< 0.005	13	-
NBA1AH	28-Mar-17	EM1703997	NBA	Overlying Sediments	1.03	16	20	0.3	0.74	1.98	0.41	0.9	< 0.05	< 0.05	< 0.05	< 0.05	36	41
NBA1AL	27-Oct-16	EM1613055	NBA	Overlying Sediments	-	3.2	7.22	-	-	-	-	0.135	< 0.005	0.006	< 0.005	< 0.005	10	-
NBA1AL	28-Mar-17	EM1703997	NBA	Overlying Sediments	3.14	20	28	1.1	1.92	5.27	1.33	1.8	< 0.05	0.11	< 0.05	< 0.05	48	63
NBA1H	27-Oct-16	EM1613055	NBA	Overlying Sediments	-	21	27	-	-	-	-	0.517	< 0.005	0.027	0.008	< 0.005	47	-
NBA1H	28-Mar-17	EM1703997	NBA	Overlying Sediments	2.28	16	21	0.7	1.44	3.93	0.89	1.86	< 0.05	0.07	< 0.05	< 0.05	37	48
NBA1L	27-Oct-16	EM1613055	NBA	Overlying Sediments	-	20	28	-	-	-	-	0.505	< 0.005	0.021	0.011	< 0.005	48	-
NBA1L	28-Mar-17	EM1703997	NBA	Overlying Sediments	1.25	8.9	12	0.4	0.93	2.33	0.51	1.04	< 0.05	< 0.05	< 0.05	< 0.05	21	27
NBA2	27-Jul-18	ES1822517	NBA	Overlying Sediments	1.39	16	26	0.3	0.94	3.84	1.84	1.8	< 0.05	0.08	< 0.05	< 0.05	43	53
NBA2A	27-Jul-18	ES1822517	NBA	Overlying Sediments	< 0.02	0.88	3.7	< 0.1	< 0.02	0.24	0.1	0.1	< 0.05	< 0.05	< 0.05	< 0.05	4.58	5.02
NBA2AH	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	2.96	8.9	-	-	-	-	0.131	< 0.005	< 0.005	< 0.005	< 0.005	14	-
NBA2AH	28-Mar-17	EM1703997	NBA	Overlying Sediments	0.27	2.16	--	< 0.2	< 0.05	0.5	0.13	0.26	< 0.05	0.06	< 0.05	< 0.05	11	12
NBA2AL	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	2.9	12	-	-	-	-	0.134	< 0.005	< 0.005	< 0.005	< 0.005	15	-
NBA2AL	28-Mar-17	EM1703997	NBA	Overlying Sediments	0.17	1.31	6.12	< 0.2	< 0.05	0.34	0.07	0.16	< 0.05	0.26	< 0.05	< 0.05	7.43	8.43
NBA2H	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	21	42	-	-	-	-	0.345	< 0.005	0.015	0.009	< 0.005	63	-
NBA2H	28-Mar-17	EM1703997	NBA	Overlying Sediments	2.31	17	27	0.8	1.54	3.91	0.83	1.76	< 0.05	0.15	< 0.05	< 0.05	43	55
NBA2L	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	20	37	-	-	-	-	0.476	< 0.005	0.031	0.026	< 0.005	56	-
NBA2L	28-Mar-17	EM1703997	NBA	Overlying Sediments	2.54	19	29	0.9	1.66	4.44	0.93	1.96	< 0.05	0.21	< 0.05	< 0.05	48	61
NBA3	27-Jul-18	ES1822517	NBA	Overlying Sediments	0.35	3.3	4.08	< 0.1	< 0.02	0.86	0.36	0.27	< 0.05	< 0.05	< 0.05	< 0.05	7.38	9.22
NBA3A	27-Jul-18	ES1822517	NBA	Overlying Sediments	< 0.02	0.42	0.39	< 0.1	< 0.02	0.09	< 0.02	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	0.81	0.9
NBA3AH	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	0.551	0.886	-	-	-	-	0.026	< 0.005	< 0.005	< 0.005	< 0.005	1.44	-
NBA3AH	29-Mar-17	EM1703997	NBA	Overlying Sediments	< 0.05	0.31	1.18	< 0.2	< 0.05	0.08	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.0	1.57
NBA3AL	26-Oct-16	EM1613055	NBA	Overlying Sediments	-	0.501	0.862	-	-	-	-	0.023	< 0.005	< 0.005	< 0.005	< 0.005	1.36	-
NBA3AL	29-Mar-17	EM1703997	NBA															

Table T13 – Soil Vapour Results - Health Screening Levels

			BTEXN							Alkanes			Trimethylbenzenes				TRH		TPH		TRH		Aliphatic TRH		Aromatic TRH				Permanent Gases				
			Benzene	Toluene	Ethylbenzene	o-Xylene	meta- & para-Xylene	Total Xylenes	Naphthalene	Hexane	Heptane	Cyclohexane	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	1,2,3-Trimethylbenzene	Total Trimethylbenzenes	C ₆ - C ₁₀ Fraction	>C ₁₀ - C ₁₆ Fraction	C ₆ - C ₉ Fraction	C ₁₀ - C ₁₄ Fraction	C ₆ - C ₁₀ Fraction minus BTEX (F1)	>C ₁₀ -C ₁₆ minus Naphthalene (F2)	Aliphatic C ₆ -C ₁₀	Aliphatic >C ₁₀ -C ₁₆	Aromatics C ₆ -C ₁₀	Aromatics C ₆ -C ₁₀ minus BTEX	Aromatic >C ₁₀ -C ₁₆	Aromatics >C ₁₀ -C ₁₆ minus Naphthalene	Carbon dioxide	Methane	Oxygen		
HSL C - SAND (NEPM 2013)		1 m - <2 m	2,400	NL	NL	NE	NE	NL	NL	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NL	NL	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HSL D - SAND (NEPM 2013)		1 m - <2 m	10	16,000	4,600	NE	NE	3,200	15	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	2,800	2,400	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample Name	Sample Date	Probe Depth (m)	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
SVP10	22-May-15	1.4 - 1.6	0.141	< 0.190	0.42	< 0.220	1.53	1.53	< 0.100	< 0.180	0.265	< 0.170	< 0.240	< 0.240	< 0.240	< 0.720	< 20.0	< 40.0	< 20.0	< 35.0	< 20.0	< 40.0	< 20.0	< 37.0	< 3.00	< 1.40	< 1.40	< 1.40	119,000	< 3,300	< 1,310		
	14-Oct-15		< 0.200	< 0.200	< 0.220	< 0.220	< 0.430	< 0.700	< 0.100	< 0.200	< 0.200	< 0.200	< 0.240	< 0.240	< 0.240	< 0.720	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 3.00	< 1.40	< 1.40	< 1.40	137,000	< 3,300	154,000		
	4-Mar-16		< 0.100	< 0.200	< 0.220	< 0.220	0.573	< 0.700	< 0.100	< 0.200	< 0.200	< 0.200	< 0.240	< 0.240	< 0.240	< 0.720	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 3.00	< 1.40	< 1.40	< 1.40	184,000	< 660	122,000		
SVP11	22-May-15	1.4 - 1.6	2.09	1.2	2.63	0.803	7.38	8.18	< 0.100	5.56	5.12	2.12	< 0.240	0.658	< 0.240	< 0.720	72	< 40.0	102	< 35.0	57	< 40.0	56	< 37.0	16	< 1.40	< 1.40	< 1.40	22,200	< 3,300	249,000		
	14-Oct-15		< 0.100	< 0.200	< 0.220	< 0.220	< 0.430	< 0.700	< 0.100	< 0.200	< 0.200	< 0.200	< 0.240	< 0.240	< 0.240	< 0.720	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 20.0	< 40.0	< 3.00	< 1.40	< 1.40	< 1.40	45,600	< 3,300	228,000		
	2-Mar-16		< 0.100	< 0.200	< 0.220	< 0.220	< 0.430	< 0.700	< 0.100	< 0.200	< 0.200	< 0.200	< 0.240	< 0.240	< 0.240	< 0.720	34	< 40.0	32	54	34	< 40.0	34	39	< 3.00	< 1.40	< 1.40	< 1.40	58,200	< 660	226,000		

Notes:
- - not analysed
< - less than laboratory limit of reporting
NL - Not Limiting
NE - Guideline value not established or adopted
BTEX - Benzene, toluene, ethylbenzene, xylenes
Bold indicates a detection above the laboratory LOR.
italics - indicates that duplicate/triplicate value was adopted due to RPD exceedence
Highlighting indicates an exceedance of the corresponding criteria (highlighting corresponds to the guideline with the highest criteria value where analytical result exceeds more than one guideline).

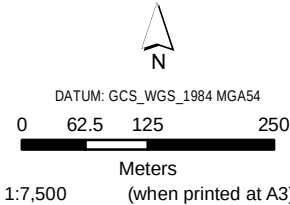
Figures

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LEGEND

- █ Adelaide Refinery Wharf/NBA Audit Boundary
- Adelaide Refinery Plateau Audit Area
- Cadastre

1	269448.223	6111206.484
2	269956.270	6112770.238
3	270023.963	6112773.348
4	269499.078	6111209.448

GDA94-MGA54

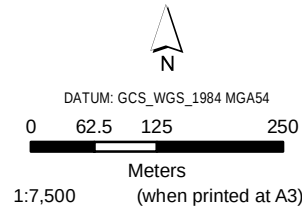


Site Locality Plan

Exxon Mobil
Adelaide Refinery Wharf Audit
Refinery Road Lonsdale SA

Figure
F1

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- LEGEND**
- Adelaide Refinery Wharf/NBA Audit Boundary
 - Adelaide Refinery Plateau Audit Area

**Overall facility layout
- Adelaide Refinery, Final Site
Condition Report, 2 September
2020, Kleinfelder Reference
ADL18R87298**

Exxon Mobil
*Adelaide Refinery Wharf and Northern
Beach Area Site Contamination Audit
Report*
Refinery Road Lonsdale SA

Figure
F2

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Legend

- Approximate Former Stormwater Collection Sump
- ▭ Audit Area Boundary

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Coordinate System: GDA 1994 MGA Zone 55

0 85 170 340

metres

1:7,273 (when printed at A3)

Note:
Infrastructure outlined in figure relate to location for former infrastructure. No active infrastructure or buildings remain

Wharf Area Site Plan
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September 2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F3

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Anecdotal Location	Description
1	Former storage hut (including Ethyl Mercaptan)
2	Crude lines drained into pits in sand
3	Crude lines drained into vacuum trucks after decommissioning
4	Leaks from crude pipelines reported, product down cliff face, (including 120 litres in 2000)
5	Asbestos observed by refinery staff in rocks after storm surge

Observed Impact/Leaks/Spills	Description
1	Wasted Observed in rocks (reinforcement bar, old storage drums, etc)
2	Hydrocarbon staining on sample bay

Potential Area of Interest	Description
1	Demulsifier injected to crude oil
2	Cleaning/painting of marine equipment
3	Leaks/collapse of Tank 1
4	Drainage pipe for surface water from cliff face

Septic Tank	Description
ST8	Septic tank 8, wharf
ST9	Septic tank 9, divers administration building
ST22	Septic tank 22, wharf operators hut (off map)
ST Unknown	Septic tank Unknown, unrecorded septic tank, reported by site security

Legend

Potential Sources

- Approximate Anecdotal Location
- Approximate Potential Area of Interest
- Approximate Leak/Spill Location
- Approximate Observed Impact/Leak or Spill/Surface Scar etc.
- Approximate Septic Tank Area
- Approximate Stormwater Collection Sump
- Approximate Waste Locations
- Audit Area Boundary

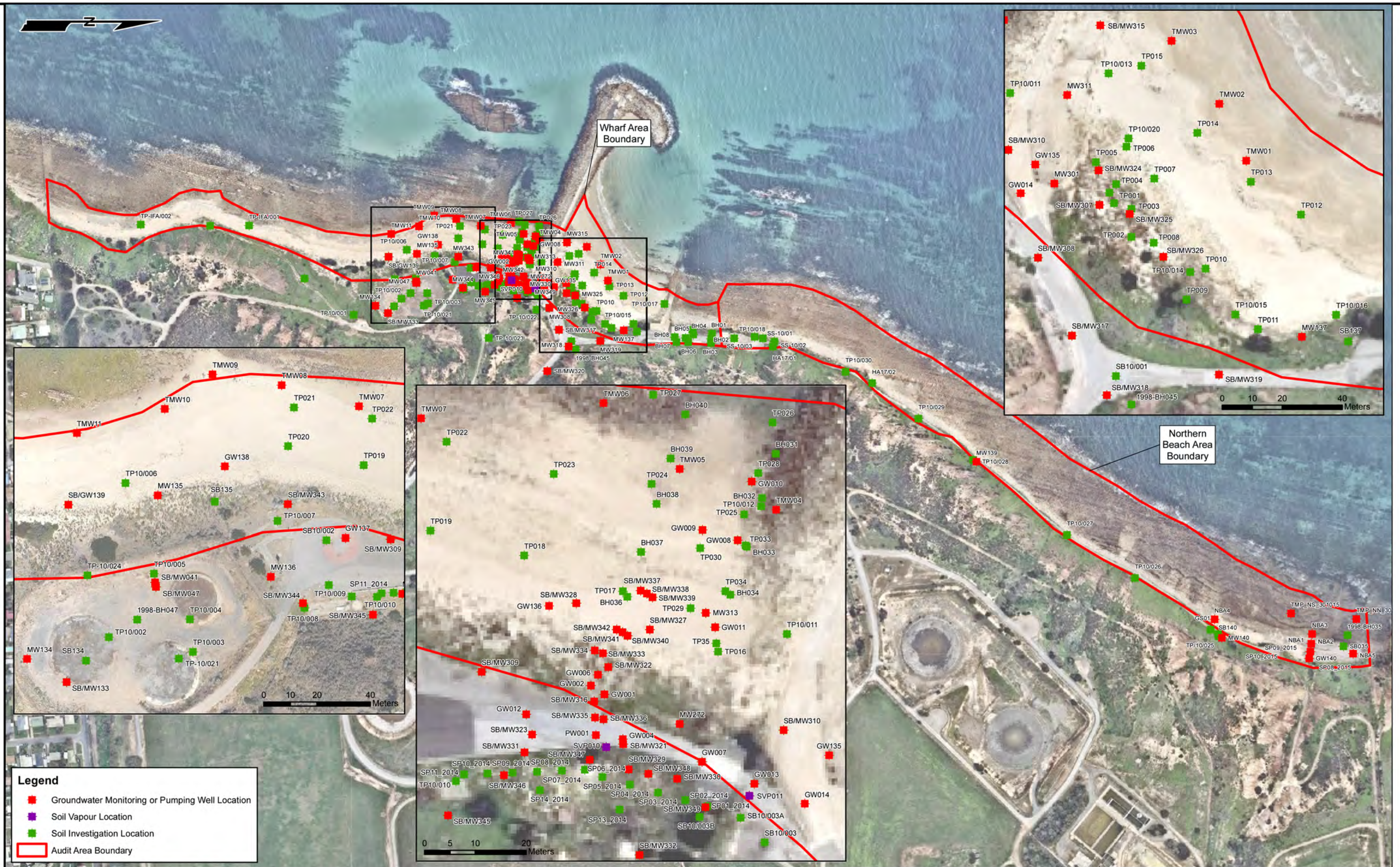
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Coordinate System: GDA 1994 MGA Zone 55

0 85 170 340
metres
1:7,273 (when printed at A3)

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Coordinate System: GDA 1994 MGA Zone 55
0 85 170 340 metres
1:7,273 (when printed at A3)

Wharf Investigation Locations
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F5

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Coordinate System: GDA 1994 MGA Zone 55

085170340

metres

1:7,273 (when printed at A3)

Legend

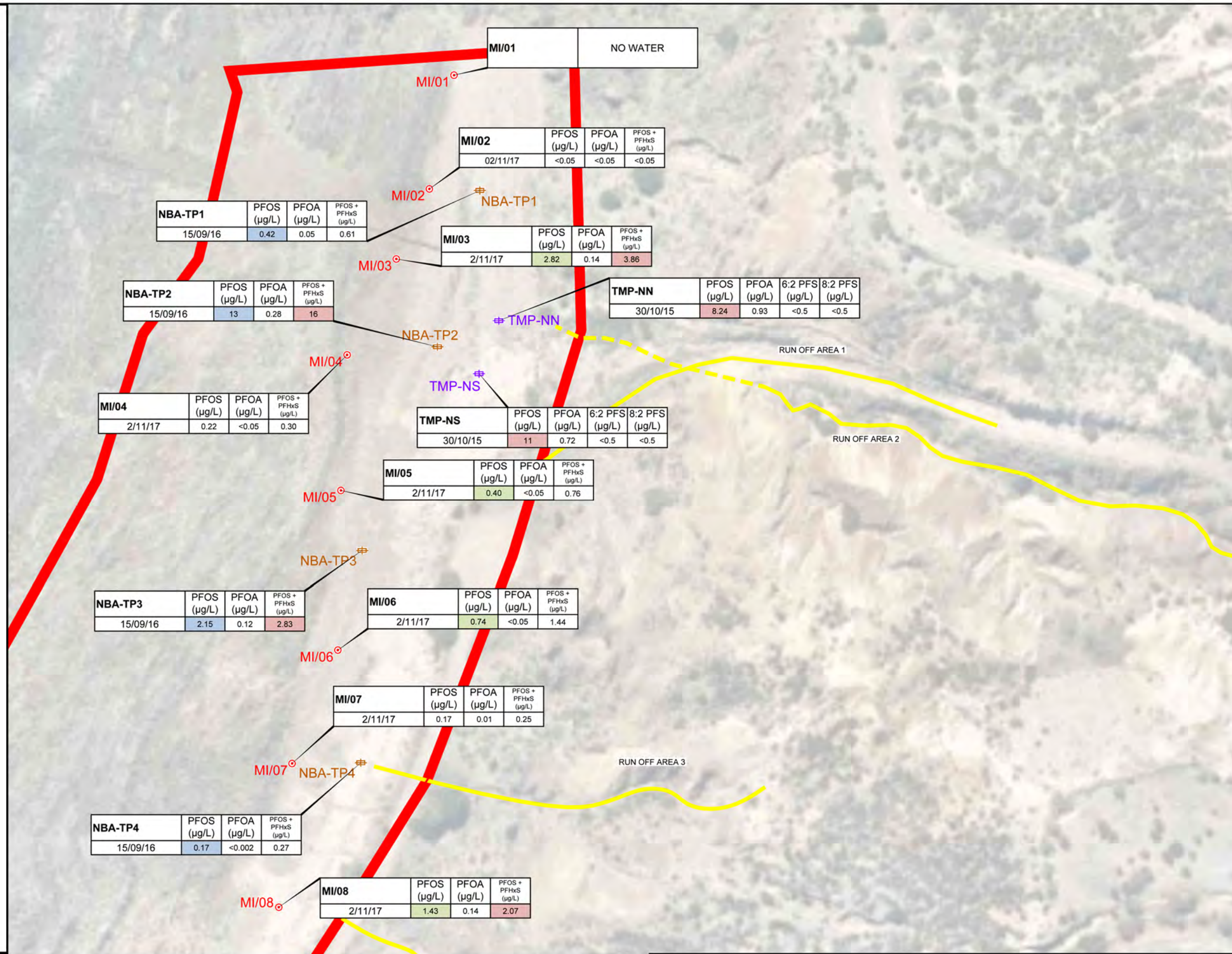
 Marine Discharge Temporary Monitoring Well Location

Marine Discharge Monitoring (MDM) Temporary Monitoring Wells Location
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September 2020,
Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F6

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Coordinate System: GDA 1994 MGA Zone 55

0 10 20 40 metres
1:866 (when printed at A3)

RUN OFF AREA

MARINE INTERFACE SAMPLING LOCATION

TRENCH

HISTORICAL TEST PIT LOCATION

AUDIT AREA BOUNDARY

KEY

µg/L = MICROGRAMS PER LITRE

* = DUPLICATE/TRIPPLICATE RESULT ADOPTED DUE TO RPD EXCEEDANCE

VALUES EXCEED NEMP 99% SPECIES PROTECTION - HIGH CONSERVATION VALUE SYSTEMS

VALUES EXCEED NEMP 95% SPECIES PROTECTION - SLIGHTLY TO MODERATELY DISTURBED SYSTEMS

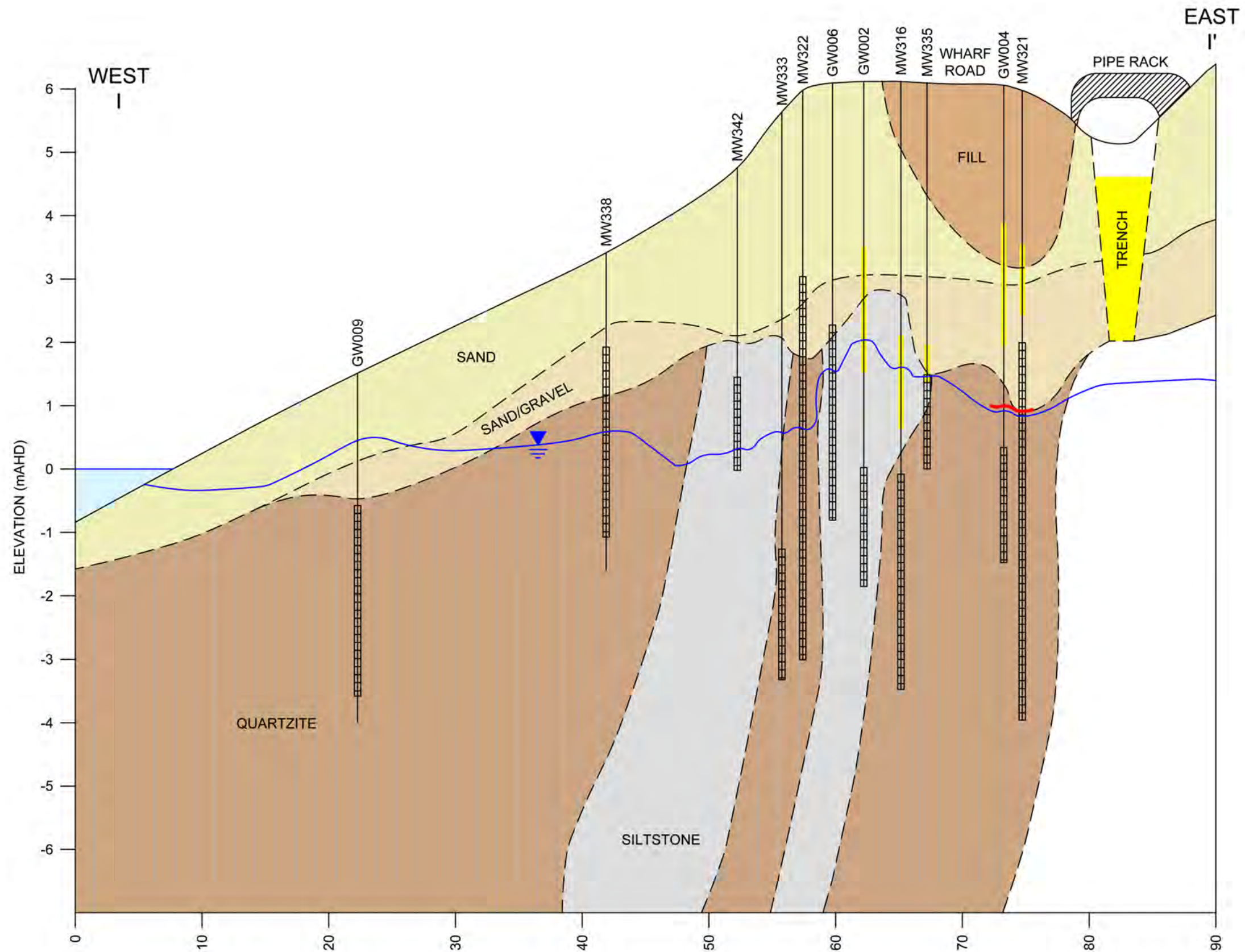
VALUES EXCEED NHMRC RECREATIONAL WATER CRITERIA

NBA Marine Discharge PFAS
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September 2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure

F7



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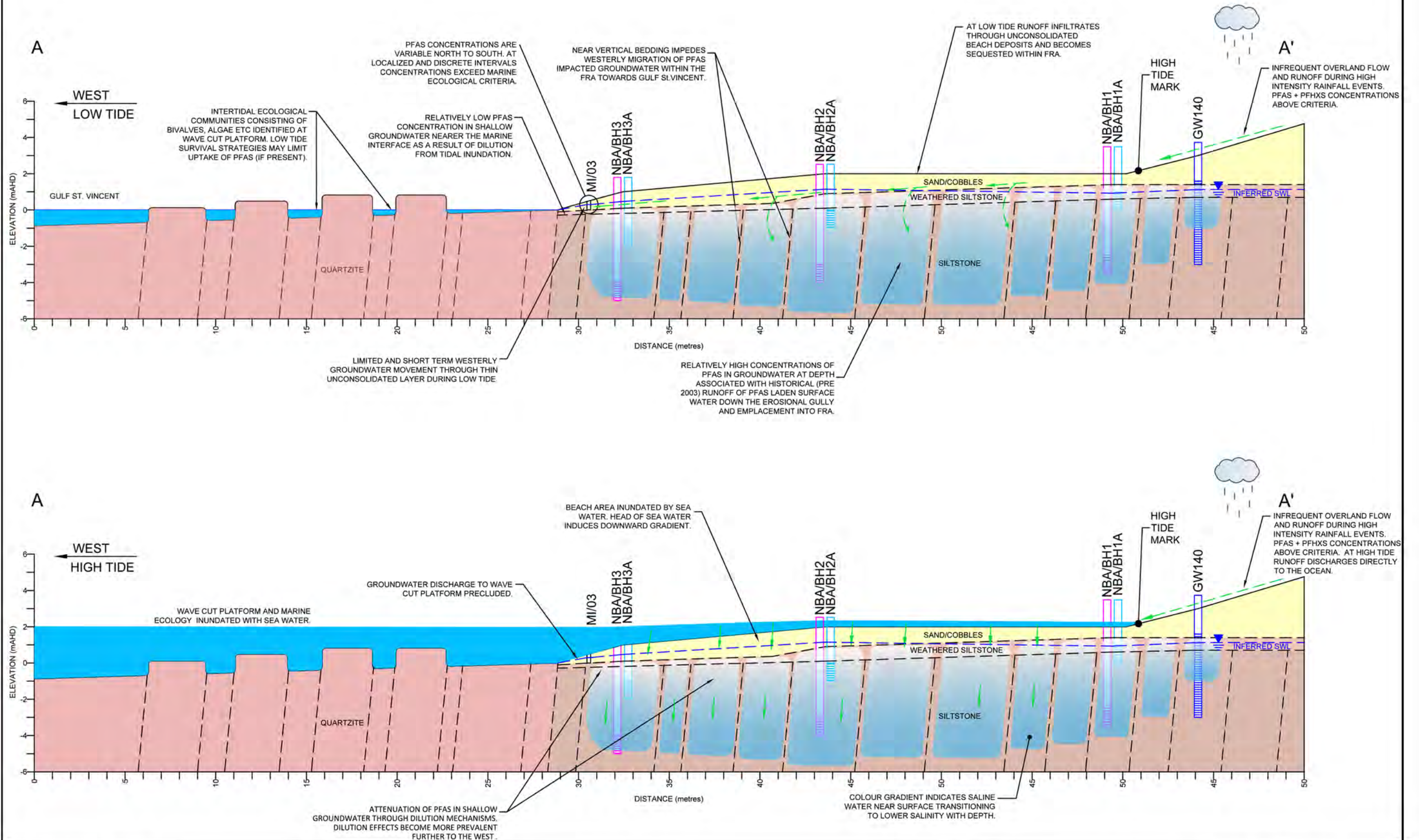
LEGEND

-
- MONITORING WELL AND SCREENED INTERVAL
- INFERRED GEOLOGICAL BOUNDARY
- AESTHETIC HYDROCARBON IMPACT (STAINING, OLFACTORY, PID)
- INTERPRETED GROUNDWATER LEVEL (mAHD)
- LNAPL DETECTED >0.05m

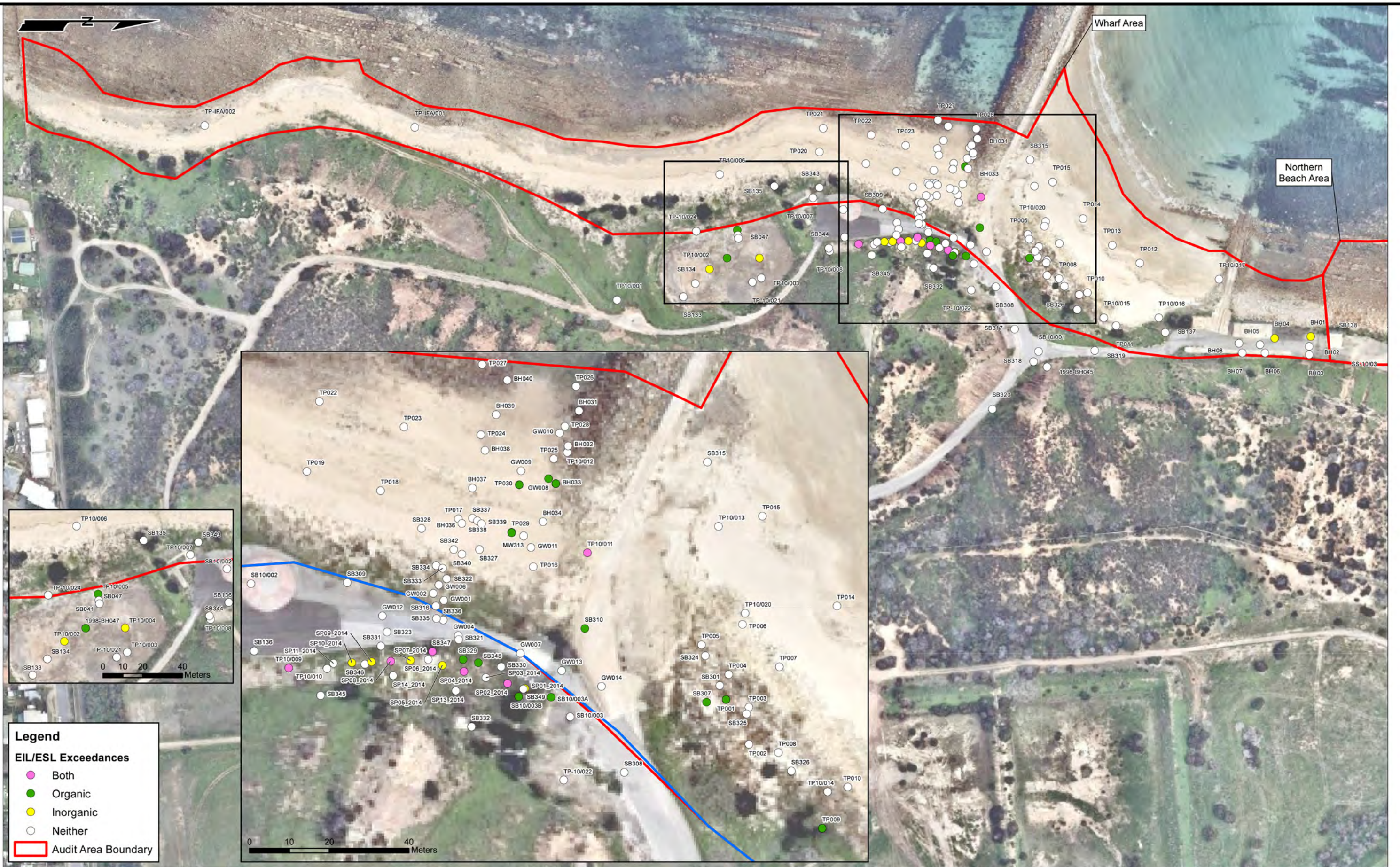
**Wharf Area Cross Section October 2018
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298**

Exxon Mobil
*Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report*
Refinery Road Lonsdale SA

Figure
F9



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Coordinate System: GDA 1994 MGA Zone 55
0 25 50 100
metres
1:2,135 (when printed at A3)

Wharf Area Soil EIL ESL
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F12

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Legend

EIL/ESL Exceedances

- Both
- Organic
- Inorganic
- Neither

— Surveyed High Tide Mark

▭ Wharf Study Area

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0 25 50 100
metres
1:2,241 (when printed at A3)

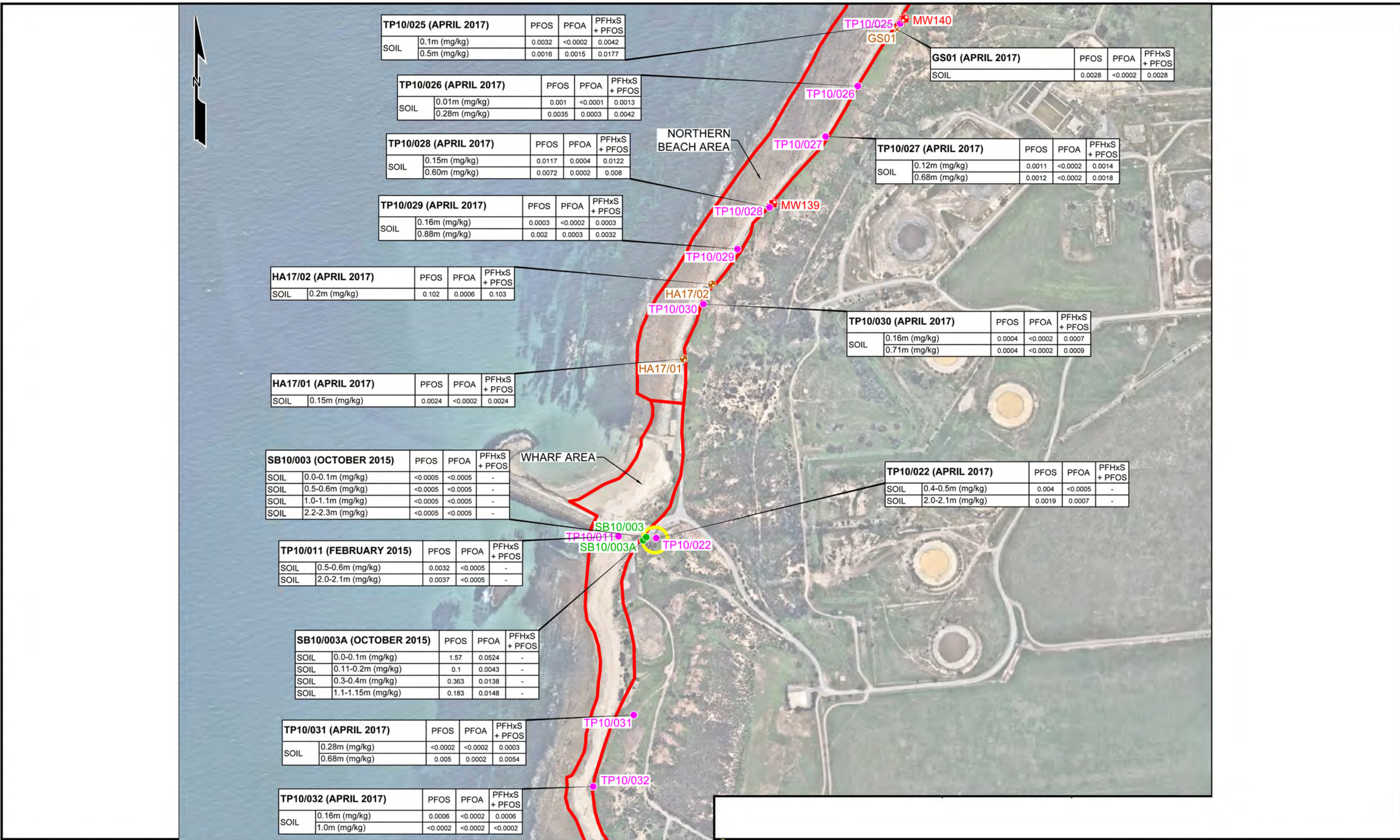
NBA EIL ESL
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure

F13

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Coordinate System: GDA 1994 MGA Zone 55

0 60 120 240
metres
1:5,037 (when printed at A3)

LEGEND
AUDIT AREA BOUNDARY
AFFF STORAGE LOCATION
MONITORING WELL
TEST PIT
SOIL BORE
HAND AUGER
GRAB SAMPLE

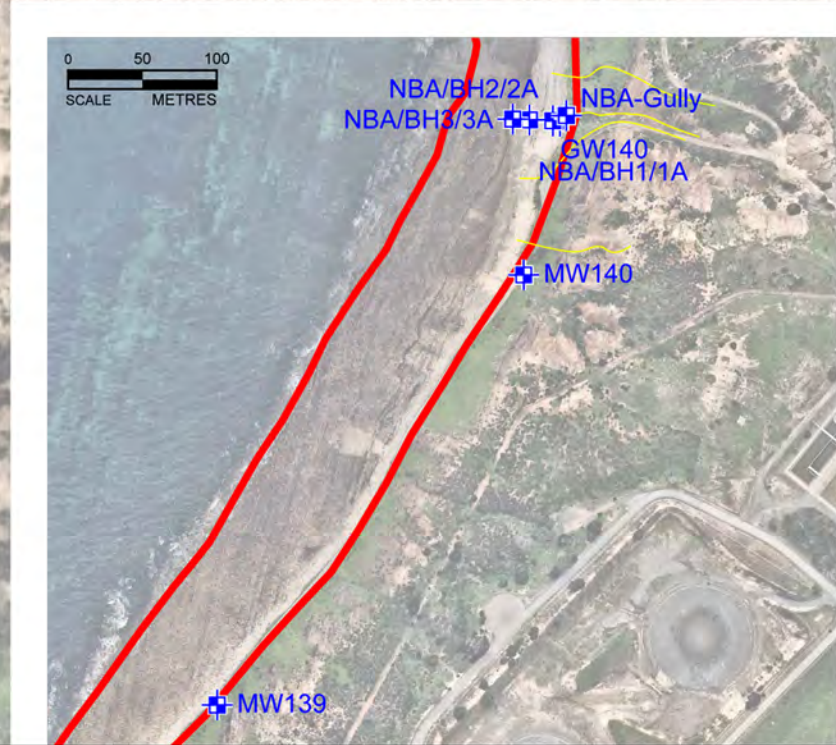
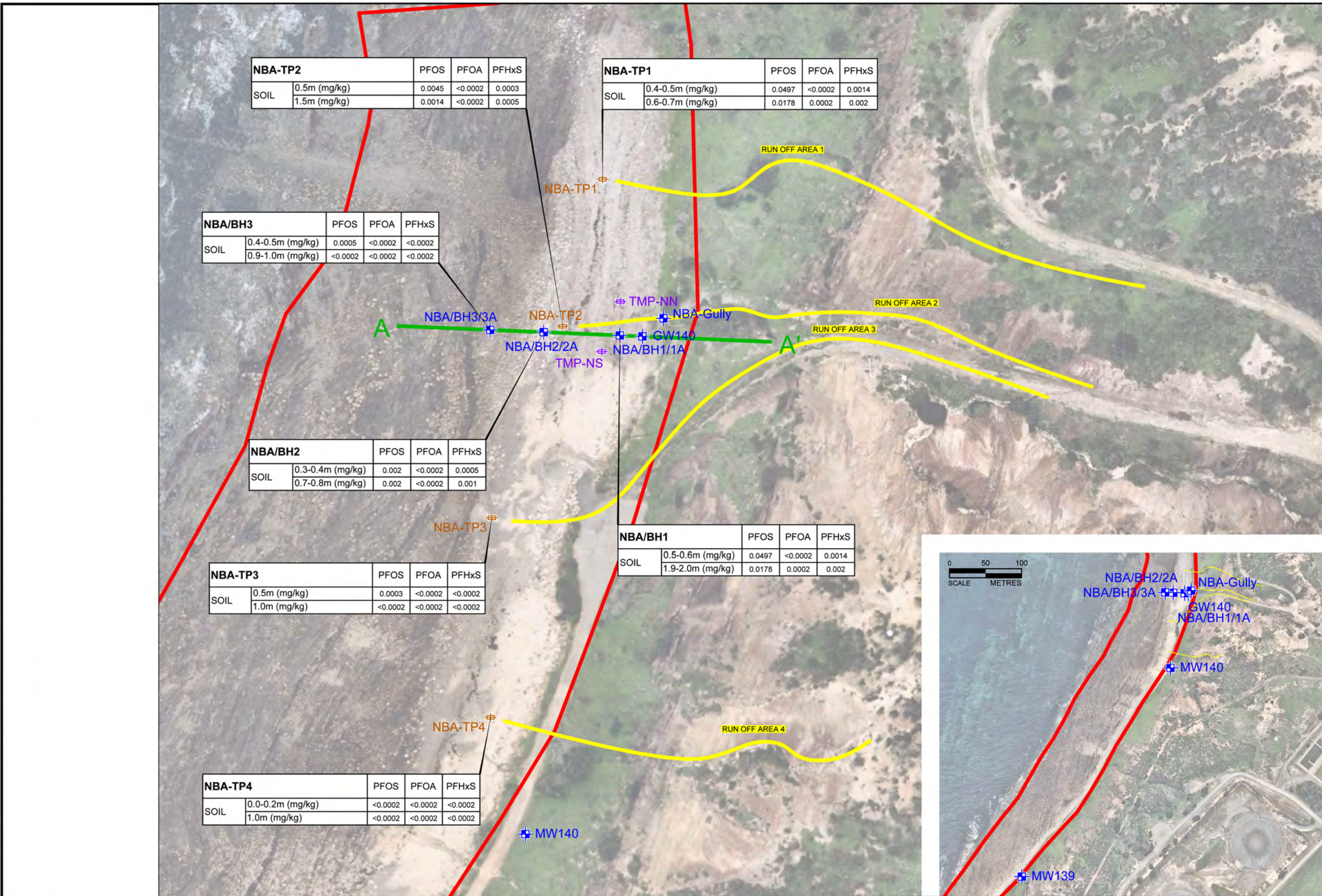
Wharf Area PFAS
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F14

Map Document: (P:\604X\60487638\6. Draft Docs\6.1 Reports\SCAR - Wharf\APPENDICES\Appendix B Figures\MXD\F14_Wharf Area PFAS.mxd)

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1:866 (when printed at A3)

LEGEND
CROSS SECTION A-A' (REFER FIGURE 5)
RUN OFF AREA
MONITORING WELL
TRENCH
HISTORICAL TEST PIT LOCATION
AUDIT AREA BOUNDARY

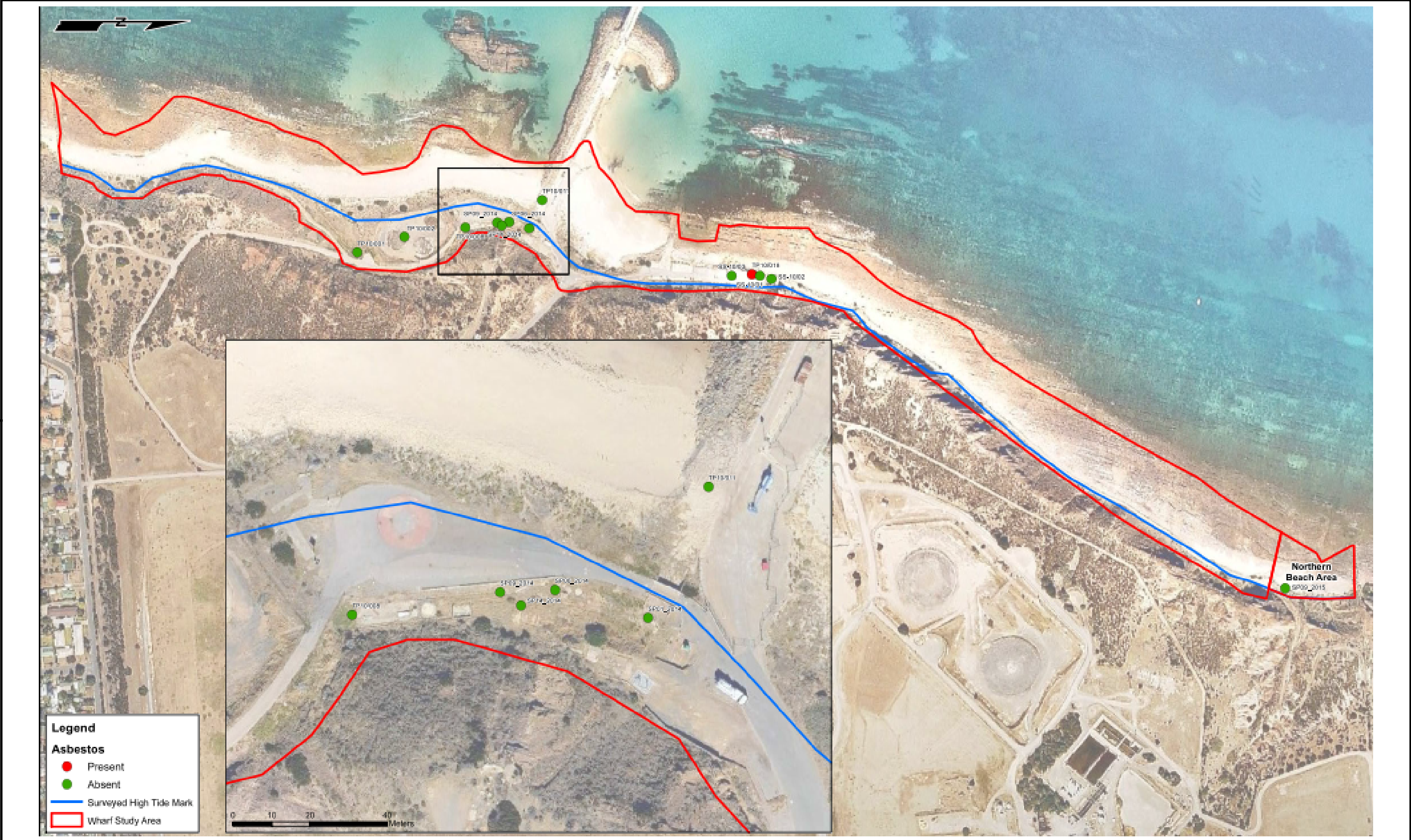
KEY
mg/kg = MILLIGRAMS PER KILOGRAM

NBA Soil PFAS HIL
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

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Refinery Road Lonsdale SA

Figure
F15

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Coordinate System: GDA 1994 MGA Zone 55
0 25 50 100
metres
1:2,135 (when printed at A3)

**Wharf Area Aesthetics and Asbestos
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298**

Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

**Figure
F16**

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Coordinate System: GDA 1994 MGA Zone 55
0 25 50 100 metres
1:2,135 (when printed at A3)

**Wharf Area Historic LNAPL
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298**

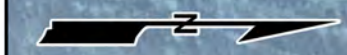
Exxon Mobil Adelaide Refinery Wharf and Northern Beach Area Site Contamination Audit Report Refinery Road Lonsdale SA	Figure F17
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Legend

PROD_XOM_Adelaide.GIS.Monitoring

Sum_TRH_C10_C40

Monitoring Well - sampled

Monitoring Well - not sampled**TRH****Sum_TRH_C10_C40**Below LORLOR to <1,000 µg/L1,000 to <5,000 µg/L5,000 to <9,000 µg/L9,000+ µg/LObserved LNAPLObserved SheenAudit Area Boundary

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Coordinate System: GDA 1994 MGA Zone 55

metres

1:4,369 (when printed at A3)

Wharf Area TPH Concentrations
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

Exxon Mobil

Adelaide Refinery Wharf and Northern Beach

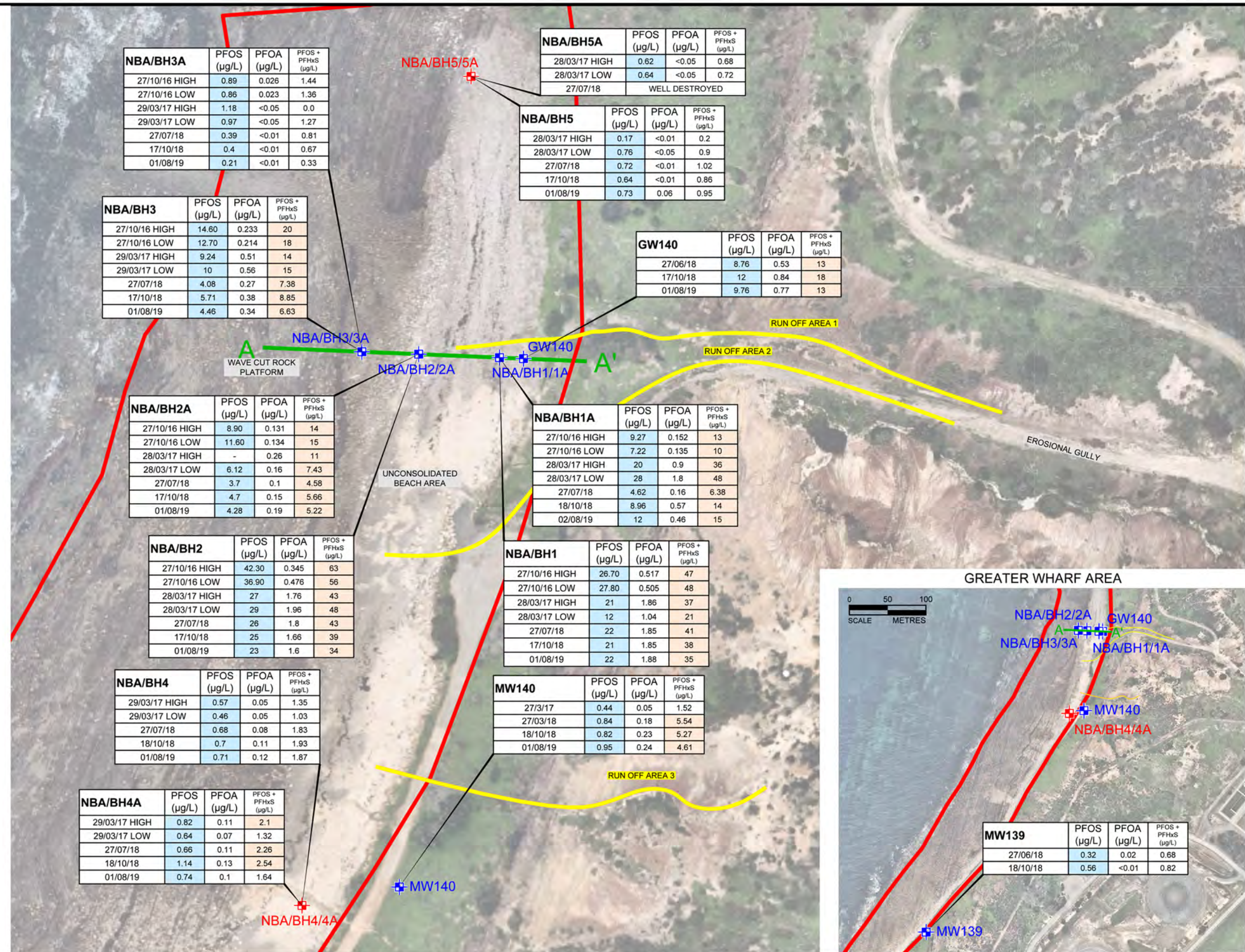
Area Site Contamination Audit Report

Refinery Road Lonsdale SA

Figure

F20

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Coordinate System: GDA 1994 MGA Zone 55

0 10 20 40 metres
1:866 (when printed at A3)

RUN OFF AREA

MONITORING WELL INSTALLED OCT 2016
MONITORING WELL INSTALLED MAR 2017

AUDIT AREA BOUNDARY

A-A' CROSS SECTION - REFER FIGURE 2H

µg/L = MICROGRAMS PER LITRE

VALUES EXCEED AQUATIC ECOSYSTEM: FRESHWATER/INTERIM MARINE GUIDELINES VALUES - 95% SPECIES PROTECTION (NEMP 2018)

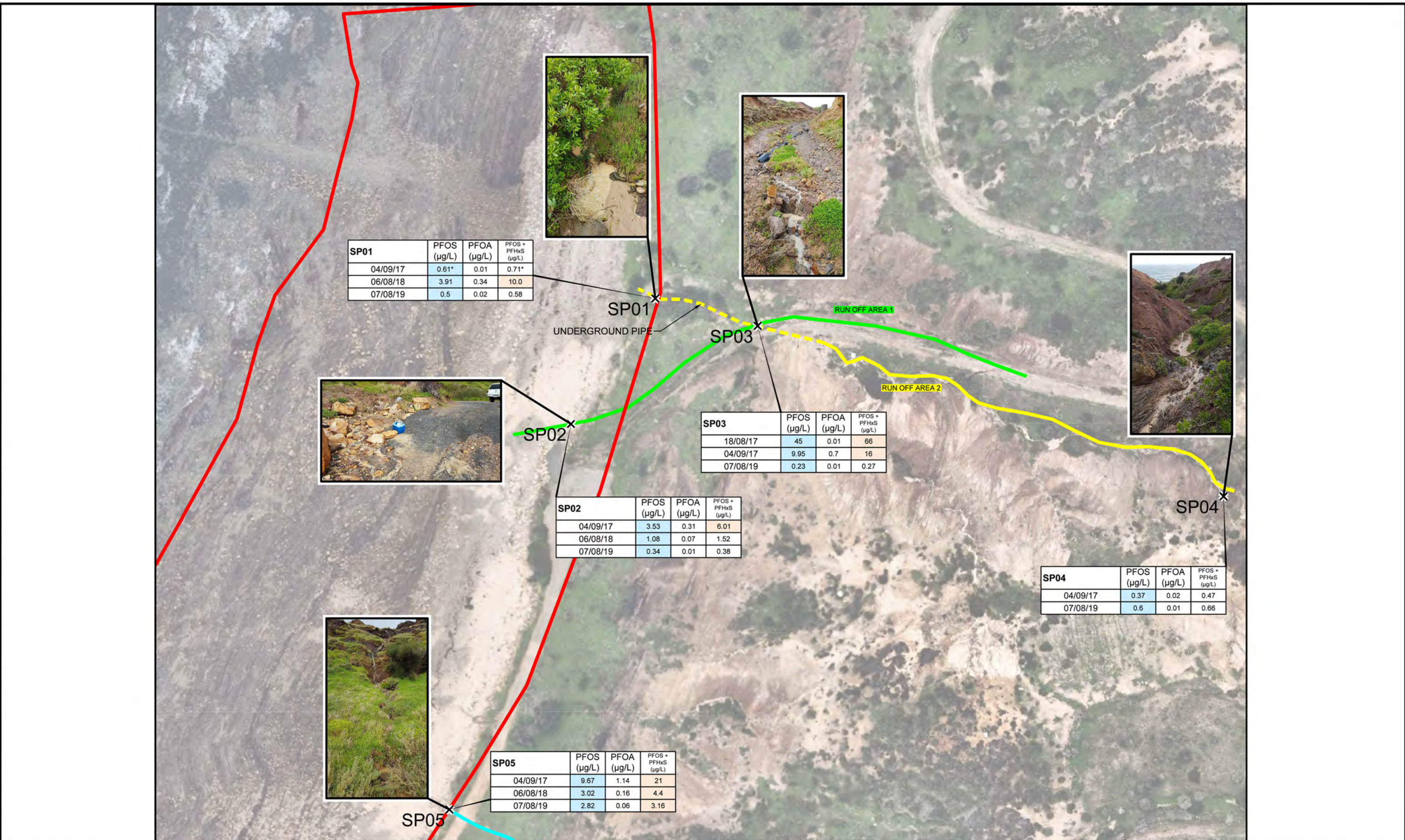
VALUES EXCEED PRIMARY CONTACT & RECREATION (HEALTH) CRITERIA

NBA Groundwater PFAS
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September
2020, Kleinfelder Reference ADL18R87298

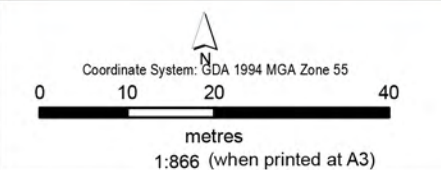
Exxon Mobil
Adelaide Refinery Wharf and Northern Beach
Area Site Contamination Audit Report
Refinery Road Lonsdale SA

Figure
F22

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LEGEND

- RUN OFF AREA
- RUNOFF SAMPLING POINT
- AUDIT AREA

KEY

- µg/L = MICROGRAMS PER LITRE
- * = DUPLICATE/TRIPPLICATE RESULT ADOPTED DUE TO RPD EXCEEDANCE
- VALUES EXCEED DEPARTMENT OF HEALTH PRIMARY CONTACT CRITERIA
- VALUES EXCEED AQUATIC ECOSYSTEM: FRESHWATER/INTERIM MARINE GUIDELINES VALUES - 95% SPECIES PROTECTION

Stormwater Runoff Analytical Results -PFAS
- Adelaide Refinery, Wharf Area and NBA
Environmental Investigation, 2 September 2020,
Kleinfelder Reference ADL18R87298

Exxon Mobil Adelaide Refinery Wharf and Northern Beach Area Site Contamination Audit Report Refinery Road Lonsdale SA	Figure F23
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