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**ENVIRONMENTAL SITE ASSESSMENT
256-262 HUNTINGDALE ROAD
HUNTINGDALE, VICTORIA**

Submitted to:

Mr. Jim Doukas

Poly 4X4 PTY LTD
256-262 Huntingdale Road
Huntingdale VICTORIA

Prepared by:

John Watson

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1.0 INTRODUCTION

Watson Environmental Assessments Pty Ltd (WEA) was engaged by *Poly 4X4 Pty Ltd* to conduct an Environmental Site Assessment (ESA) at 256 Huntingdale Road, Huntingdale, Victoria (the site).

The general site location is shown in Figure 1, Appendix A.

The extent of the assessment area and site features as at the time of fieldwork is shown in Figure 2, Appendix A.

Watson Environmental Assessments Pty Ltd (WEA) is of the understanding that the site will be developed by the current site owners for high density residential purposes. *Watson Environmental Assessments Pty Ltd (WEA)* is of the understanding that:

- The site will not be used for manufacturing purposes;
- The site will not be used for vehicle / machinery maintenance purposes;
- Hazardous chemicals including fuels will not be stored on the site;
- The entire site will be occupied by above ground building structures, below ground basement or constructed garden / landscaped areas; and
- Access and/or exposure to in-situ soil currently within the boundaries of the site is highly unlikely in the context of the proposed development.

This Environmental Site Assessment documented in this report is intended to target in-situ natural soil representing natural soil at the bottom of the proposed 2 level basement. In-situ soil to this depth is considered to be the target soil on the basis that any potential exposure with respect to future site use will be undisturbed natural soil after overlying soil has been removed from the site to facilitate the basement construction. Furthermore, the concrete slab floor of the proposed basement will provide a physical barrier and thereby mitigate potential exposure to soil at the bottom of basement depth. Any potential risk is considered and assessed in the context of the extent and likelihood of potential exposure and reported concentrations of analytes tested. This ESA is also intended to assess and clarify if a Statement of Environmental Audit is required prior to the site being used for residential uses.

The primary objectives of this ESA were to:

- Assess the contamination status of in-situ soil within the site to a depth of 4.0 metre depth;
- Draw reasonable conclusions with respect to the suitability of the site for the proposed future residential development;
- On the basis of the findings of the environmental assessment documented in this report, determine if soil within the site requires remediation in order to render the site suitable for the proposed future residential use;
- On the basis of the findings of the environmental assessment documented in this report, determine if the beneficial uses of land associated with commercial / industrial uses are precluded;
- On the basis of the findings of the environmental assessment documented in this report, assess if intrusive groundwater investigations are warranted; and
- On the basis of the findings of the ESA, make recommendations as to whether a Statement of Environmental Audit is required prior to the site being used for residential uses.

The ESA documented in this report included the following scope of work:

- Intrusive soil investigations at 11 individual locations within the site on a broad grid sampling pattern; and
- Laboratory analysis of selected soil samples for a broad range of potential contaminants.

Further detail on the specific scope of work undertaken is provided in later sections of this report.

This report presents information and detail on:

- The extent of soil investigations undertaken by *Watson Environmental Assessments Pty Ltd*;
- The results of the soil chemical testing programs undertaken; and
- The extent and implications of any soil contamination identified.

The Priority Sites Register (PSR) is a list of all sites for which the Environment Protection Authority of Victoria (EPAV) requires active management to clean up, monitor, or prevent pollution of land and/or groundwater. The PSR is not a listing of all contaminated sites in Victoria, nor is it a list of all contaminated sites of which EPAV has knowledge. The PSR does not list sites managed by voluntary agreements or sites subject to management by planning controls (for example, sites managed in accordance with a section 173 agreement under the Planning and Environment Act 1987). Watson Environmental Assessments undertook a search of the PSR and found that the site is not listed on the EPAV PSR.

2.0 PROPOSED SITE USE

Watson Environmental Assessments Pty Ltd (WEA) is of the understanding that the site will be developed for high density residential uses incorporating a below ground basement across the entire site. Landscaped/garden areas are proposed to be raised and constructed above current ground level and proposed vegetation within the site will not come into contact with in-situ soil. Any soil imported to the site for the purposes of constructing garden/landscaped areas will be certified clean fill deemed suitable for the purposes of constructing garden/landscaped areas. *Watson Environmental Assessments Pty Ltd* (WEA) is of the understanding that:

- The site will not be used for manufacturing purposes;
- The site will not be used for vehicle / machinery maintenance purposes;
- Hazardous chemicals including fuels will not be stored on the site;
- The entire site will be occupied by above ground building structures, below ground basement or constructed garden / landscaped areas; and
- Access and/or exposure to in-situ soil currently within the boundaries of the site is highly unlikely in the context of the proposed development.

3.0 RELEVANT ASSESSMENT GUIDELINES AND STANDARDS

The investigations were undertaken generally in accordance with the following guidelines and standards:

Soil

- National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013, National Environment Protection Council.
- Australian Standard AS 4482.1, "Guide to the Sampling and Investigation of Potentially Contaminated Soil"; Parts 1 and 2.
- State Environment Protection Policy (Prevention and Management of Contamination of Land), June 2002.
- Environmental Auditor (Contaminated Land) Guidelines, EPAV Publication 759.2, February 2014.

All works were undertaken specifically in accordance with the amended NEPM (2013) and WEA did not seek a variation to the amended NEPM (2013) in undertaking the ESA.

3.1 State Environment Protection Policy Framework - Land

Given that sensitive use of the land is intended, the *State Environment Protection Policy (SEPP), Prevention and Management of Contamination of Land* (June 2002) requires the following beneficial uses to be protected:

- Maintenance of modified and highly modified ecosystems;
- Human health;
- Buildings and structures;
- Aesthetics; and
- Production of food, flora and fibre.

As per the objectives of the *SEPP (Prevention and Management of Contamination of Land)*, development of any site should consider all the relevant beneficial uses and apply appropriate assessment criteria to determine if each beneficial use is protected in the context of the current site condition.

In particular, the *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)* has been adopted as the primary reference for the assessment of soil contamination. Specifically, analyte concentrations specified in the 2013 NEPM have been adopted as the primary screening criteria. This most recent amendment supersedes any previous NEPM measure.

Report Table 1 below details the Protected Beneficial Uses of Land as per the SEPP (Prevention and Management of Contamination of Land).

Report Table 1 – Protected Beneficial Uses of Land

Beneficial Use	Land Use						
	Parks & reserves	Agricultural	Sensitive Use		Recreation / Open space	Commercial	Industrial
			High Density	Other			
Maintenance of Ecosystems							
Natural Ecosystems	✓						
Modified Ecosystems	✓	✓		✓	✓		
Highly Modified Ecosystems		✓	✓	✓	✓	✓	✓
Human Health	✓	✓	✓	✓	✓	✓	✓
Buildings and Structures	✓	✓	✓	✓	✓	✓	✓
Aesthetics	✓		✓	✓	✓	✓	
Production of food, flora and fibre	✓	✓		✓			

Report Table 2 below lists the land quality indicators and objectives relating to each Beneficial Use under the *SEPP (Prevention and Management of Contamination of Land)*.

Report Table 2 – Land Quality Indicators and Objectives

Beneficial Use	Indicators	Objectives
Maintenance of Ecosystems	Chemical substances or waste identified through the application of the National Environment Protection (Assessment of Site Contamination) Measure, (Schedule B(2), Appendix 1) or any other chemical substance or waste.	<p>Contamination must not adversely affect the maintenance of relevant ecosystems and the level of any indicator must not be greater than –</p> <ul style="list-style-type: none"> a. Any regional Ecological Investigation Level developed in accordance with the National Environment Protection (Assessment of Site Contamination) Measure and published by the Authority for a region in which the site is located. Until such time that regional Ecological Investigation Levels applicable to the site are published, the Interim Urban Ecological Investigation Levels nominated in the National Environment Protection (Assessment of Site Contamination) Measure shall be used in place of any regional Ecological Investigation Level, or b. Levels derived using the risk assessment methodology described in the National Environment Protection (Assessment of Site Contamination) Measure, or c. Levels approved by the Authority.
Human Health	Chemical substances or waste identified through the application of the National Environment Protection (Assessment of Site Contamination) Measure, (Schedule B(2), Appendix 1) or any other chemical substance or waste.	<p>Contamination must not cause an adverse effect on human health and the level of any indicator must not be greater than –</p> <ul style="list-style-type: none"> a. The Investigation Level specified for human health in the National Environment Protection (Assessment of Site Contamination) Measure, or b. Levels derived using the risk assessment methodology described in the National Environment Protection (Assessment of Site Contamination) Measure, or c. Levels approved by the Authority.
Buildings and Structures	pH, sulphate, redox potential, salinity or any chemical substance or waste that may have a detrimental impact on the structural integrity of buildings or other structures.	Contamination must not cause the land to be corrosive to or adversely affect the integrity of structures or building materials.
Aesthetics	Any chemical substance or waste that may be offensive to the senses.	Contamination must not cause the land to be offensive to the senses of human beings.
Production of food, flora and fibre	Chemical substances or waste identified through the application of the National Environment Protection (Assessment of Site Contamination) Measure, (Schedule B(2), Appendix 1) or any other chemical substance or waste.	<p>Contamination of land must not:</p> <ul style="list-style-type: none"> a. Adversely affect produce quality or yields; and b. Affect the level of any indicator in food, flora and fibre produced at the site (or that may be produced) such that the level of that indicator is greater than that specified by the Australia and New Zealand Food Authority, Food Standards Code.

4.0 GEOLOGY AND HYDROGEOLOGY

The 1:63,000 Ringwood Map of the Geological Survey of Victoria shows the site to be with tertiary Age deposits (Brighton Group) comprising fine to coarse sands with minor poorly sorted gravels, poorly consolidated.

Groundwater is expected to be at depths between 5.0 and 10.0 metres below ground level with Total Dissolved Solids (TDS) ranging from 1,000 – 3,500 mg/L. Groundwater extraction yield are expected to be very low and unlikely to be adequate to sustain a viable groundwater resource. On the basis of the above, groundwater is highly unlikely to be extracted for any use and water supply requirements are available from reticulated water supply within the local area.

5.0 CONTAMINATION SOURCES AND CONTAMINANTS OF CONCERN

Based on the known current and previous use of the site and surrounding areas, the potential on-site soil contamination sources are as described in Report Table 3 below.

Report Table 3 - Potential On-site Contaminants of Concern – Soil

Site Activities/ Processes and Receptors	Potential Contaminants	Additional Comments
Activity: <ul style="list-style-type: none"> • Site Filling Receptors: <ul style="list-style-type: none"> • Near surface soil and deeper natural soil (via leaching) • Future users / occupants of the site via dermal absorption, ingestion and inhalation. 	<ul style="list-style-type: none"> • Heavy Metals in Fill material • Polycyclic Aromatic Hydrocarbons (PAH) • Volatile and Semi-volatile Organic Compounds (VOC and SVOC) in Fill material • Pesticides and Herbicides 	The Potential Contaminants of Concern may be present across the entire site.
Activity: <ul style="list-style-type: none"> • Vehicle maintenance / repairs Receptors: <ul style="list-style-type: none"> • Near surface soil and deeper natural soil (via leaching) • Future users / occupants of the site via dermal absorption, ingestion and inhalation. 	<ul style="list-style-type: none"> • Heavy Metals • Polycyclic Aromatic Hydrocarbons (PAH) • Volatile and Semi-volatile Organic Compounds (VOC and SVOC) 	The Potential Contaminants of Concern may be present across the entire site.

Report Table 3 continued - Potential On-site Contaminants of Concern – Soil

Site Activities/ Processes and Receptors	Potential Contaminants	Additional Comments
Activity: <ul style="list-style-type: none"> • Solvent storage Receptors: <ul style="list-style-type: none"> • Near surface soil and deeper natural soil (via leaching) <p>Future users / occupants of the site via dermal absorption, ingestion and inhalation.</p>	<ul style="list-style-type: none"> • Chlorinated hydrocarbons (CHC) 	The Potential Contaminants of Concern may be present across the entire site.
Activity: <ul style="list-style-type: none"> • Oil and lubricant storage Receptors: <ul style="list-style-type: none"> • Near surface soil and deeper natural soil (via leaching) • Future users / occupants of the site via dermal absorption, ingestion and inhalation. 	<ul style="list-style-type: none"> • Heavy Metals • Polycyclic Aromatic Hydrocarbons (PAH) • Volatile and Semi-volatile Organic Compounds (VOC and SVOC) 	The Potential Contaminants of Concern may be present across the entire site.

6.0 ASSESSMENT CRITERIA - SOIL

Given that sensitive use of the land is intended, the *State Environment Protection Policy (SEPP), Prevention and Management of Contamination of Land (June 2002)* requires the following beneficial uses to be protected:

- Maintenance of modified and highly modified ecosystems;
- Human health;
- Buildings and structures;
- Aesthetics; and
- Production of food, flora and fibre.

As per the objectives of the *SEPP (Prevention and Management of Contamination of Land)*, development of any site should consider all the relevant beneficial uses and apply appropriate assessment criteria to determine if each beneficial use is protected in the context of the current site condition and proposed development of the site.

In particular, the *National Environment Protection (Assessment of Site Contamination) Measure 2013* has been adopted as the primary reference for the assessment of human health and ecological risks in the presence of site contamination. The 2013 NEPMs are relevant to soil, soil vapour and groundwater contamination.

The 2013 NEPMs, and the guidance provided therein, have been referenced for the derivation of investigation and screening levels for soil, soil vapour and groundwater. Investigation and screening levels are applicable to the first stage of site assessment and primarily assess human health and ecological risks in the context of the proposed land use and site setting. The investigation and screening levels are also used to determine the need for further investigation and evaluation.

6.1 Human Health Assessment Criteria

6.1.1 Metals and Organic Substances

Health-based Investigation Levels (HILs) have been developed for a broad range of metals and organic substances. The HILs are applicable for assessing human health risk via all relevant pathways of exposure. They are intentionally conservative and are based on a reasonable worst-case scenario for four generic land use settings. The HILs are generic to all soil types but vary for different land use scenarios which are referenced in the 2013 NEPM as follows:

- HIL A – residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake, (no poultry), also includes children's day care centres, preschools and primary schools)
- HIL B – residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high-rise buildings and flats
- HIL C – public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves) which should be subject to a site-specific assessment where appropriate
- HIL D – commercial/industrial such as shops, offices, factories and industrial sites.

It is noted that the NEPM HILs are generally applied to the arithmetic mean of specific contaminants across a given site. However, localised elevated results should be considered and not discounted on the basis of the arithmetic mean of a contaminant being below the relevant assessment criteria. The results obtained should also meet the following criteria:

- The standard deviation of the results should be less than 50% of the applicable HIL; and
- No single value should exceed 250% of the relevant HIL.

Where no NEPM HIL criteria are available for reference for particular contaminants, the following alternative assessment criteria has been adopted:

- United States Environmental Protection Agency (2010), Regional Screening Levels – Residential Soil (USEPA 2010);
- Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (2007) – Residential/Parkland Land Use; and
- Interim Canadian Environmental Quality Criteria for Contaminated Sites (CCME, 1991).

6.1.2 Interim HILs for Volatile Organic Chlorinated Hydrocarbons

Interim HIL soil vapour levels for specific volatile organic chlorinated compounds (VOCCs) have been developed to assess the vapour inhalation pathway (also known as the 'vapour intrusion' pathway when referring to indoor exposure). The interim HIL values derived for volatile compounds are driven by the vapour intrusion pathway. Interim HILs for soil have not been derived however the most relevant approach to the assessment of this pathway is through the collection of soil vapour data. On this basis, interim HILs have been developed for soil vapour.

The interim HILs provide Tier 1 guidance for health risks from soil contamination sources and groundwater plumes associated with this group of compounds. The values may be applied for general site assessment and sub-slab environments for evaluation of potential health risks for the 0–1 m sub-slab profile. The interim HILs broadly apply to the same generic land use categories as do the HILs, though the values for residential A and B are combined.

6.1.3 Health Screening Levels for Petroleum Hydrocarbon Compounds

Health Screening Levels (HSLs) for various petroleum hydrocarbon compounds were developed by the Cooperative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE) to assess human health risks primarily through inhalation of vapours from contamination sources and by direct contact with contaminated soil and/or groundwater.. The principal reference for the HSL methodology is Friebel and Nadebaum (2011a).

The CRC CARE (2011) guidelines for vapour intrusion has been superseded by 2013 NEPMs with the exception of criteria for intrusive maintenance workers and direct contact. The 2013 NEPMs provide Soil HSLs for vapour intrusion and groundwater HSLs for vapour intrusion and this criteria has been adopted for this ESA. The CRC CARE guidelines for intrusive maintenance workers and direct contact have been maintained for the purposes of this ESA.

HSLs for soil, groundwater and soil vapour apply to exposure to petroleum hydrocarbons through the dominant vapour inhalation exposure pathway only. Direct contact HSLs have been developed for the incidental soil ingestion (including dust), dermal and inhalation exposure pathways.

HSLs have been developed for BTEX and naphthalene plus four carbon chain fractions based on the fractions adopted in the *Canada-wide standard for petroleum hydrocarbons (PHC) in soil* (CCME 2008). The fractions are listed in Table 4 below:

Table 4 - HSL fractions and corresponding equivalent carbon range

Fraction number	Equivalent carbon number range
F1	C ₆ – C ₁₀
F2	>C ₁₀ – C ₁₆
F3	>C ₁₆ – C ₃₄
F4	>C ₃₄ - C ₄₀

BTEX results should be subtracted from the TRH C₆ – C₁₀ analytical results for comparison with the HSL for F1. Likewise, naphthalene should be subtracted from >C₁₀ – C₁₆ for comparison with the HSL for F2.

Chemicals in the >C₁₆-C₃₄ and >C₃₄-C₄₀ fractions are non-volatile and therefore not of concern for vapour intrusion, however, exposure can be via direct contact pathways (dermal contact and incidental ingestion and inhalation of soil particles). Direct contact HSLs for these fractions can be found in Friebel and Nadebaum (2011a).

HSLs for soil, groundwater and soil vapour have been developed for sand, silt and clay soils based on the US soil texture classification system (Friebel & Nadebaum 2011a). The HSLs assume a uniform soil profile and the soil texture making up the greatest proportion of the soil profile should be used in selecting the appropriate HSLs.

For Tier 1 soil assessment, the HSL classifications of sand, silt and clay may be broadly applied to the soil texture classification in Table A1 of Standard AS 1726. The soil classifications adopted for the purposes of this ESA are listed in Table 5 below.

Table 5 - HSL soil classification and equivalent soil classification in AS 1726

HSL soil classification	AS 1726 Equivalent
Sand	Coarse-grained soil
Silt	Fine-grained soil - silts and clays (liquid limit <50%)
Clay	Fine-grained soil - silts and clays (liquid limit >50%)

6.2 Ecological Assessment Criteria - Soil

6.2.1 Ecological Investigation Levels

Ecological investigation levels (EILs) for the protection of terrestrial ecosystems have been derived for common contaminants in soil. EILs have been derived for As, Cu, Cr(III), DDT, naphthalene, Ni, Pb and Zn.

EILs have been developed for three generic land use settings:

- areas of ecological significance
- urban residential areas and public open space
- commercial and industrial land uses

An area of ecological significance is one where the planning provisions or land use designation is for the primary intention of conserving and protecting the natural environment. This would include national parks, state parks, wilderness areas and designated conservation areas.

Urban residential/public open space is broadly equivalent to the HIL A, HIL B and HIL C land use scenarios.

EILs are not applicable to agricultural soils, which need evaluation in relation to crop toxicity, plant contaminant uptake and detailed consideration of soil type.

The protection levels for the generic land use settings are:

- 99% for areas of ecological significance
- 80% for urban residential areas and public open space
- 60% for commercial and industrial land uses.

EILs apply principally to contaminants in the top 2 m of soil at the finished surface/ground level which corresponds to the root zone and habitation zone of many species.

6.2.2 Derivation of EILs for this Environmental Site Assessment

For the purposes of this assessment and for the derivation of EILs, the appropriate land use setting is assumed to be urban residential areas and public open space.

EILs for arsenic (As), DDT, lead (Pb) and naphthalene are generic to all soils and the values listed in Table 6 below have been applied for the purposes of this ESA:

Table 6 – Generic EILs for aged Arsenic, fresh DDT and fresh Naphthalene

	Land Use Setting	Generic Ecological Investigation Levels (mg total contaminant/kg)
Arsenic	Urban residential areas and public open space	160
DDT	Urban residential areas and public open space	640
Lead	Urban residential areas and public open space	1,100
Naphthalene	Urban residential areas and public open space	370

6.2.3 Derivation of ACLs and ABCs for this Environmental Site Assessment for Copper, Nickel, Zinc and Chromium III

For the purposes of this assessment and for the derivation of EILs, the appropriate land use setting is assumed to be urban residential areas and public open space.

ACLs

ACLs for Copper, Nickel, Zinc and Chromium III require site specific data based physiochemical properties of soil and contaminants. This input data is then applied to the ASC NEPM Toolbox to derive a site specific EIL. The required data includes:

- pH;
- Cation Exchange Capacity (CEC);
- % Clay; and
- Organic Carbon (OC)

Table 7 below provides a summary of the input data applied for this ESA for determining Ecological Investigation Levels (EILs).

Report Table 7 - Summary of EIL Input data and Assumptions used in the ASC NEPM Toolbox

Contaminant	Required Data to Calculate	Measured as part of soil samples recovered on the 23 rd of February 2016 (Yes/No)	Value Used in ASC NEPM Toolbox Calculation Spreadsheet	Derivation Method and Assumptions
Copper	pH	Yes	7.23	Mean value of all soil samples recovered.
	CEC	Yes	14	Single value reported by laboratory
Nickel	CEC	Yes	14	Single value reported by laboratory
Zinc	pH	Yes	7.23	Mean value of all soil samples recovered
	CEC	Yes	14	Single value reported by laboratory
Chromium III	% Clay	Yes	60%	Single value reported by laboratory

ABCs

Ambient Background Concentrations (ABCs) are normally derived based on available chemical data recovered from nearby land which has not been adversely affected by industrial, commercial or agricultural activities. In this instance, background data from nearby sites was not available and ABCs could not be calculated on this basis. Alternatively, ABCs for copper, nickel, zinc and Chromium III were derived with reference from Schedule B5c, specifically Section 3 (Zinc), Section 7 (Copper), Section 9 (Nickel) and Section 10 (Chromium III). The ABCs defined in Schedule B5c are based on urban levels in Olszowy et al. (1995). In deriving the ABCs for copper, nickel, zinc and Chromium III, the following assumptions were made:

- Concentrations of copper, nickel, zinc and Chromium III are aged (> 2 years);
- The appropriate site setting is “Urban residential and open public spaces”;
- The site is classified as an “old suburb” with low traffic volume; and
- A combination of the LOEC and EC₃₀ has been adopted in the 2013 NEPM for the derivation of EILs reflecting an assumption of moderate toxic effects.

The ABCs adopted in this assessment for copper, nickel, zinc and Chromium III based on the above are as follows:

- Copper: 10 mg/kg
- Nickel: 5 mg/kg
- Zinc: 40 mg/kg
- Chromium III: 10 mg/kg

On the basis of the general methodology described above (EIL = Sum of ABC and ACL), the EILs adopted for this assessment with respect to copper, nickel, zinc and Chromium 3 are as follows:

- Copper: 210 mg/kg (Aged, Urban residential and open public spaces)
- Nickel: 220 mg/kg (Aged, Urban residential and open public spaces)
- Zinc: 580 mg/kg (Aged, Urban residential and open public spaces)
- Chromium III: 730 mg/kg (Aged, Urban residential and open public spaces)

6.2.4 Ecological Screening Levels

ESLs have been developed for selected petroleum hydrocarbon compounds and total petroleum hydrocarbon (TPH) fractions and are applicable for assessing risk to terrestrial ecosystems. ESLs broadly apply to coarse and fine grained soils and various land uses. The ESLs are based on the same TPH Fractions as those adopted for HSLs and generally applicable to the top 2 m of soil.

For the purposes of this assessment and for the derivation of ESLs, the appropriate land use setting is assumed to be urban residential areas and public open space and soil within the site is considered to be fine grained.

6.3 Summary of Investigation and Screening Levels and Applicability

The investigation and screening levels referred to in the 2013 NEPMs (*National Environment Protection (Assessment of Site Contamination) Measure, 2013, Schedule B1*) and their applicability are discussed in Table 8 below.

Report Table 8 – Summary of Investigation and Screening Levels and Applicability

Investigation / Screening Level as referred to in the 2013 NEPMs	Applicability to Site Assessment and target analytes	Relevant Sections and Criteria Tables in National Environment Protection (Assessment of Site Contamination) Measure, 2013
Investigation levels and screening levels	<p>The generic investigation and screening levels as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess a broad range of volatile, semi-volatile and non-volatile contaminants\ in the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Broad range of contaminants</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in various tables of Schedule B1.</p>
Ecological investigation levels (EILs)	<p>The EILs as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess selected metals and organic substances in the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Metals and organic substances.</p>	<p><u>Relevant 2013 NEPM Section</u></p> <ul style="list-style-type: none"> • Section 2.5 of Schedule B • 1 Schedule B5 (various sections) <p><u>Assessment Criteria Reference</u> As derived by application of the ASC NEPM Toolbox.</p>
Ecological screening levels (ESLs)	<p>The ESLs as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess petroleum hydrocarbon compounds and total petroleum hydrocarbon (TPH) fractions in the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Petroleum hydrocarbon compounds and total petroleum hydrocarbon (TPH) fractions</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2.6, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in Table 1B(6) of the 2013 NEPM.</p>

Report Table 8 continued – Summary of Investigation and Screening Levels and Applicability

Investigation / Screening Level as referred to in the 2013 NEPMs	Applicability to Site Assessment and target analytes	Relevant Sections and Criteria Tables in National Environment Protection (Assessment of Site Contamination) Measure, 2013
Health investigation levels (HILs)	<p>The HILs as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess a broad range of metals and organic substances in the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Metals and organic substances.</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2.2, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in Table 1A(1) of the 2013 NEPM.</p>
Interim soil vapour health investigation levels (Interim HILs)	<p>The Interim HILs as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess selected volatile organic chlorinated compounds (VOCCs) in the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Selected volatile organic chlorinated compounds (VOCCs)</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2.3, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in Table 1A(2) of the 2013 NEPM.</p>
Health screening levels (HSLs)	<p>The HSLs as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA. Specifically, they have been applied to assess selected petroleum compounds and fractions via the inhalation and direct contact pathways including soil and groundwater. In the context of a Tier 1 assessment.</p> <p><u>Target Analytes:</u> Selected petroleum compounds and fractions</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2.4, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in Table 1A(3) of the 2013 NEPM.</p>
Petroleum hydrocarbon management limits ("management limits")	<p>The Management Limits as described in the 2013 NEPMs are applicable and have been applied for the purposes of this ESA subject to initial evaluation of hydrocarbon testing results. Specifically, they have been applied to assess hydrocarbon compounds in the context of a Tier 1 assessment following evaluation of human health and ecological risks, and risks to groundwater resources.</p> <p><u>Target Analytes:</u> Hydrocarbon compounds</p>	<p><u>Relevant 2013 NEPM Section</u> Section 2.9, Schedule B1</p> <p><u>Assessment Criteria Reference</u> The investigation levels and screening levels assessment criteria is provided in Table 1B(7) of the 2013 NEPM.</p>

In this instance, the appropriate land use setting based on the proposed site use is HIL B (residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high-rise buildings and flats). All investigation and screening levels have been considered for the purposes of assessing the site, primarily in the context of the proposed high density HIL B setting.

7.0 ASSESSMENT PROCEDURES AND SCOPE OF WORK

7.1 Chronology of Events and Summary of Field Work

Report Table 9 below provides a summary of the fieldwork undertaken and the timing relevant to each Phase of Work

Report Table 9 - Summary of the Fieldwork Undertaken and Chronology of Events

Date	Description of Assessment Work Completed
23/2/2016	Intrusive soil sampling. Excavation of 11 soil investigation boreholes up to 4.0 metres depth.

7.2 General Soil Sampling Procedures

All fieldwork was carried out by an environmental scientist or engineer and in accordance with the required guidelines and standards described in Section 7.0 of this report.

7.3 Sampling Equipment Decontamination Procedures

All sampling equipment used to recover the required soil samples including soil auger sampling attachments, spatulas, trowels and stainless steel bowls were cleaned between samples in accordance with the following procedures:

- All soil and/or other matter was removed by scrubbing and rinsing with clean water;
- The sampling equipment was then scrubbed in a phosphate free detergent solution before being rinsed with deionised water supplied by the laboratory; and
- Disposable nitrile gloves worn by the environmental scientist or engineer were replaced prior to the recovery of each sample.

7.4 Field Gauging Procedures

The Soil Investigation Boreholes were logged generally in accordance with the Unified Soil Classification System. Copies of the Soil Investigation Borehole Logs are provided in Appendix B.

Each soil sample recovered from the soil boreholes were assessed both visually and by odour for evidence of contamination and given a ranking on a scale of 0 - 3 as follows:

- 0 No odour or visual evidence of contamination;
- 1 Slight visual evidence of contamination and/or slight odour;
- 2 Visual evidence of contamination and/or odour; and
- 3 Obvious visual evidence of contamination and/or strong odour.

A photoionization detector (PID) was taken to site to check for the presence of volatile organic compounds in the soil samples recovered from the soil boreholes. At each sample location, a volume of soil corresponding to the sample location was placed in a zip lock bag and sealed. After approximately 10-15 minutes, a PID measurement of the headspace in the zip lock bag was taken and recorded. The recorded PID results are documented on the Soil Borehole Logs provided in Appendix B.

7.5 Sample Handling, Preservation and Transportation Procedures

The soil samples were placed in a portable cooler supplied by the primary analysing laboratory immediately after being recovered. The portable cooler was kept chilled until delivered to the Primary Laboratory under Chain of Custody procedures. Copies of the Chain of Custody documentation are presented in Appendix C.

The soil samples recovered were delivered to the primary analysing laboratory on the 4th of March 2016 within 4 hours of recovering the final soil sample from the site.

7.6 Scope of Work - Soil Borehole and Analysis Program

On the 23rd of February 2016, a total of 11 soil investigation boreholes were manually bored to depths of up to 4.0 mBGS using a stainless steel hand auger. The location of the soil investigation boreholes are shown in Figure 2, Appendix A.

At the required sample depth, the hand auger was cleaned as per the procedures described in Section 7.3. The hand auger was then returned to the required sample depth and a soil sample recovered directly from the stainless steel hand auger.

Each soil investigation borehole was logged generally in accordance with the Unified Soil Classification system to describe the soil conditions encountered. Soil investigation borehole logs are provided in Appendix B.

A photoionization detector (PID) was taken to site to check for the presence of volatile organic compounds in the soil samples recovered from the soil boreholes. The recorded PID results are documented in the Soil Borehole Logs provided in Appendix B.

Field observations, field contamination rankings and PID readings are noted on the soil investigation borehole logs provided in Appendix B.

All sampling equipment used to recover the required soil samples including soil auger attachments, spatulas, trowels and stainless steel bowls were cleaned between samples in accordance with the procedures detailed in Section 7.3 of this report.

Each soil sample was placed in Teflon lined screw top jars and immediately sealed. The soil samples were immediately transferred to portable coolers and remained stored in the portable coolers until delivered to the primary laboratory with appropriate Chain of Custody documentation. Chain of Custody documentation is provided in Appendix C. The screw top jars were filled to capacity ensuring that no headspace was left in the sample jar.

Report Table 10 below provides a summary of the soil samples recovered as part of the intrusive soil investigation program.

Report Table 10 – Sampling and Analytical Program – Soil Investigation Program – 23rd February 2016

Sample Location	Sample Identifier	Sample Date	Sample Depth (m)	Soil Description / comments	Laboratory Analysis
SB1	SB1-0.1	23/2/2016	0.1	Fill	Analytical Suite A
	SB1-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB1-1.0		1.0	Natural – Silty Clay	Analytical Suite B
	SB1-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB1-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB1-4.0		4.0	Natural – Silty Clay	Analytical Suite A
SB2	SB2-0.1	23/2/2016	0.1	Fill	Held at Laboratory
	SB2-0.5		0.5	Disturbed Natural – Silty Clay	Analytical Suite B
	SB2-1.0		1.0	Natural – Silty Clay	Held at Laboratory
	SB2-2.0		2.0	Natural – Silty Clay	Analytical Suite B & Analytical Suite C
	SB2-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB2-4.0		4.0	Natural – Silty Clay	Analytical Suite A

Report Table 10 continued – Sampling and Analytical Program – Soil Investigation Program – 23rd February 2016

Sample Location	Sample Identifier	Sample Date	Sample Depth (m)	Soil Description / comments	Laboratory Analysis
SB3	SB3-0.1	23/2/2016	0.1	Fill	Analytical Suite B
	SB3-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB3-1.0		1.0	Natural – Silty Clay	Held at Laboratory
	SB3-2.0		2.0	Natural – Silty Clay	Analytical Suite A
SB4	SB4-0.1	23/2/2016	0.1	Fill	Held at Laboratory
	SB4-0.5		0.5	Disturbed Natural – Silty Clay	Analytical Suite A
	SB4-1.0		1.0	Natural – Silty Clay	Held at Laboratory
	SB4-2.0		2.0	Natural – Silty Clay	Analytical Suite B
SB5	SB5-0.1	23/2/2016	0.1	Fill	Analytical Suite A
	SB5-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB5-1.0		1.0	Natural – Silty Clay	Analytical Suite B
	SB5-2.0		2.0	Natural – Silty Clay	Held at Laboratory
SB6	SB6-0.1	23/2/2016	0.1	Fill	Held at Laboratory
	SB6-0.5		0.5	Disturbed Natural – Silty Clay	Analytical Suite B
	SB6-1.0		1.0	Natural – Silty Clay	Held at Laboratory
	SB6-2.0		2.0	Natural – Silty Clay	Analytical Suite A
	SB6-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB6-4.0		4.0	Natural – Silty Clay	Analytical Suite B
SB7	SB7-0.1	23/2/2016	0.1	Fill	Analytical Suite B
	SB7-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB7-1.0		1.0	Natural – Silty Clay	Analytical Suite A
	SB7-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB7-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB7-4.0		4.0	Natural – Silty Clay	Analytical Suite B
SB8	SB8-0.1	23/2/2016	0.1	Fill	Analytical Suite A
	SB8-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB8-1.0		1.0	Natural – Silty Clay	Analytical Suite B
	SB8-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB8-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB8-4.0		4.0	Natural – Silty Clay	Analytical Suite A
SB9	SB9-0.1	23/2/2016	0.1	Fill	Held at Laboratory
	SB9-0.5		0.5	Disturbed Natural – Silty Clay	Analytical Suite A
	SB9-1.0		1.0	Natural – Silty Clay	Analytical Suite B
	SB9-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB9-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB9-4.0		4.0	Natural – Silty Clay	Analytical Suite A
SB10	SB10-0.1	23/2/2016	0.1	Fill	Held at Laboratory
	SB10-0.5		0.5	Disturbed Natural – Silty Clay	Analytical Suite B
	SB10-1.0		1.0	Natural – Silty Clay	Analytical Suite A
	SB10-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB10-3.0		3.0	Natural – Silty Clay	Analytical Suite A

Report Table 10 continued – Sampling and Analytical Program – Soil Investigation Program – 23rd February 2016

Sample Location	Sample Identifier	Sample Date	Sample Depth (m)	Soil Description / comments	Laboratory Analysis
SB11	SB11-0.1	23/2/2016	0.1	Fill	Analytical Suite A
	SB11-0.5		0.5	Disturbed Natural – Silty Clay	Held at Laboratory
	SB11-1.0		1.0	Natural – Silty Clay	Analytical Suite B
	SB11-2.0		2.0	Natural – Silty Clay	Held at Laboratory
	SB11-3.0		3.0	Natural – Silty Clay	Held at Laboratory
	SB11-4.0		4.0	Natural – Silty Clay	Analytical Suite A

Analytical Suite A

- Heavy Metals
- Polycyclic Aromatic Hydrocarbons
- Total Recoverable Hydrocarbons (TRH)
- Volatile Organic Compounds (VOC)
- Phenolic Compounds
- Organochlorine Pesticides (OCP)
- Polychlorinated Biphenyls (PCB)
- Cyanide
- Fluoride
- pH
- Chromium VI

Analytical Suite B

- Total Recoverable Hydrocarbons (TRH)
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
- Heavy Metals
- Polycyclic Aromatic Hydrocarbons

Analytical Suite C

- % Iron
- Cation Exchange Capacity (CEC)
- pH
- Total Organic Carbon (TOC)
- % Clay Content

8.0 SUMMARY OF SUBSURFACE CONDITIONS

Report Tables 11 below provide a summary of the sub-surface conditions encountered at the soil investigation borehole locations. Detailed Soil Investigation Borehole Logs are provided in Appendix B.

Report Table 11 – Summary of Sub-surface Soil Conditions – Soil Boreholes

Sample Location	Soil Description / comments
SB1	<p>0.0 - 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.3 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB2	<p>0.0 – 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.3 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB3	<p>0.0 – 0.2 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.2 – 2.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB4	<p>0.0 – 0.2 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.2 – 2.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>

Report Table 11 continued – Summary of Sub-surface Soil Conditions

Sample Location	Soil Description / comments
SB5	<p>0.0 – 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.3 – 2.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB6	<p>0.0 – 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.3 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB7	<p>0.0 – 0.2 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.2 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB8	<p>0.0 – 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown/black, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) – 0</p> <p>0.3 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>

Report Table 11 continued – Summary of Sub-surface Soil Conditions

Sample Location	Soil Description / comments
SB9	<p>0.0 – 0.2 mBGS – Sandy Clay with small-medium gravel Dark brown, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.2 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB10	<p>0.0 – 0.2 mBGS – Sandy Clay with small-medium gravel Dark brown/black, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.2 – 3.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>
SB11	<p>0.0 – 0.3 mBGS – Sandy Clay with small-medium gravel Dark brown/black, rootlets, slightly moist No odour. No asbestos material PID Reading (single reading) – 0.0 ppm Field ranking (all readings) - 0</p> <p>0.3 – 4.0 mBGS – Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small gravels No visible asbestos or other hard waste PID range – 0 ppm – (all readings) Field Ranking Range – 0 (all field rankings)</p>

9.0 DISCUSSION OF CHEMICAL TESTING RESULTS

The tabulated chemical testing results for soil samples recovered on the 23r of February 2016 are provided in Tables 1 to 8, Appendix D.

NATA Laboratory Certificates of Analysis for the soil testing program are presented in Appendix E.

The chemical testing results reported by the laboratory have been compared against the NEPM HIL B assessment criteria high density residential uses.

All soil samples tested reported concentrations of analytes tested below the adopted NEPM Health Investigation and Screening Levels relevant to the NEPM HIL B setting for high density residential uses.

All soil samples tested reported concentrations of analytes tested below the adopted NEPM Ecological Investigation Levels (EILs).

All soil samples tested reported concentrations of analytes tested below the Interim soil vapour health investigation levels.

All soil samples tested reported concentrations of analytes tested below the CRC Care criteria for:

- Vapour intrusion relevant to Intrusive Maintenance Workers (Shallow Trench); and
- Soil Health Screening Levels for direct contact.

The reported concentrations did not indicate potential vapour generation from soil at any of the Soil Investigation Borehole locations.

Based on the chemical testing results obtained, soil within the site is unlikely to contain contaminants of concern at concentrations above the adopted assessment criteria relevant to high density residential uses. On this basis, the site in its current condition does not pose an unacceptable human health, ecological or vapour risk to future users of the site or construction/maintenance workers operating within the site.

10.0 QUALITY CONTROL PROCEDURES, METHODOLOGY AND EVALUATION CRITERIA

10.1.1 Quality Control Sampling Procedures and Methodology

Report Table 12 below provides a summary of the field quality control sampling procedures adopted for the Soil Investigation Program.

Report Table 12 - Summary of Quality Control Sampling Methodology and Procedures

Sample Type Description	Recovery / preparation Procedures
Field Quality Control Samples	
Field Duplicate and Field Triplicate Samples	<p>Two duplicate soil samples are recovered from nominated sample locations.</p> <p>3 samples (1 X Primary sample and 2 X Field Duplicate samples) are then forwarded to the Primary Laboratory for identical analysis. Of the 2 duplicates samples recovered, 1 duplicate sample is analysed by the primary laboratory and the second duplicate sample is analysed by an external laboratory. Whilst labelling and identifiers of the duplicate samples may differ from site to site, the first duplicate sample is generically referred to as a Field Duplicate sample and the second duplicate sample is generically referred to as a Field Triplicate sample.</p>
Internal Laboratory Quality Control Samples	
RPD Duplicate	A second piece of analysis from a selected sample is undertaken to show comparison.
Spike Recovery	The analyte requested is added to the sample and reported as a percentage recovery.
Laboratory Control Sample	Laboratory Control Samples (LCS) are evaluated to assess overall method performance and are used as the primary indicator of laboratory performance. The LCS contains known concentration of analytes of interest and undergo the same preparatory procedures as the primary environmental samples. LCS are used to measure accuracy and the Relative Percentage Difference between the LCS and the LCS Duplicate used to measure precision.
Method Blank	A specific analysis is performed on a certified clean material held by the laboratory to assess the accuracy of the analytical methods applied.

10.1.2 Quality Control Results Evaluation and Criteria

The Quality Control evaluation methodology and criteria are detailed in Report Table 13 below.

Report Table 13 - Quality Control Evaluation Methodology and Criteria

Quality Control Sample Type	Evaluation Criteria and Comments
Field Quality Control Samples	
Field Duplicates and Field Triplicates	<p>The quality control data for Field Duplicate and Field Triplicate samples has been assessed in terms of:</p> <ul style="list-style-type: none"> Precision, Variability and Reproducibility - The duplicate and field split results are assessed in terms of the Relative Percent Difference (RPD) between matching pairs of results, where $\text{RPD}(\%) = (\text{Result No 1} - \text{Result No 2} / \text{Mean of Results 1 \& 2}) \times 100$ <p>Typical RPD values may vary between 0% and 50%, but may be higher where:</p> <ul style="list-style-type: none"> low concentrations of analytes are reported; a value of half the laboratory LOR is assumed for a concentration reported below the LOR; Samples containing high levels of Suspended Solids are tested; or organic compounds are tested. <p><i>Evaluation Criteria</i></p> <ul style="list-style-type: none"> Accuracy – RPD% results should be within $\pm 50\%$. Completeness - The overall proportion of quality control test results within acceptable ranges should be 95% or more.
Internal Laboratory Quality Control	
RPD Duplicate	<ul style="list-style-type: none"> Results <10 times the LOR : No Limit Results between 10-20 times the LOR : RPD must be between $\pm 50\%$ Results >20 times the LOR : RPD must be between $\pm 50\%$
Spike Recovery	Recoveries must be between 70-130% (Phenols 30-130%)
Laboratory Control Sample	Recoveries must be between 70-130% (Phenols 30-130%)
Method Blank	Not to exceed LOR

It is noted that where results for both the Primary and Duplicate sample are below the LOR, RPD% results cannot be calculated. However where this is the case, an acceptable quality control result is assumed on the basis that matching <LOR results reflect low concentrations of analytes tested and potentially small differences in actual concentrations.

The field quality control samples recovered in the field or prepared by the testing laboratory for the Soil Assessment Programs undertaken on the 23rd of February 2016 are summarised in Report Table 14 below.

Report Table 14 - Summary of Quality Control Sampling Program

QA/QC Sample Type	Sample Identifier	Sample Matrix	Sample / Preparation Date	Corresponding Primary Sample	Sample Analysed	Analysing Laboratory
Field Duplicate	DUP1	Soil	23/2/2016	SB8-1.0	Yes	mgt-Eurofins - Victoria
Field Duplicate	DUP3	Soil	23/2/2016	SB9-1.0	Yes	mgt-Eurofins - Victoria
Field Triplicate	DUP2	Soil	23/2/2016	SB8-1.0	Yes	mgt-Eurofins - NSW
Field Triplicate	DUP4	Soil	23/2/2016	SB9-1.0	Yes	mgt-Eurofins - NSW

10.2 Discussion of Field Duplicate and Field Triplicate Results - Soil Assessment Program

The individual RPD% results for the Field Duplicate and the Field Triplicate samples for the soil investigation program undertaken on the 23rd of February 2016 are presented in Table 9 (Appendix D) whilst Report Table 15 below provides a summary of the overall RPD% results calculated.

The sample recovery frequency of Field Duplicates and Field Triplicates was in accordance with requirements specified in the relevant soil sampling guidelines and standards.

**Report Table 15 - RPD% Results Summary – Field Duplicate and Field Triplicate Samples
Soil Investigation Program – 23rd February 2016**

	Number of Matching Pairs	RPD% Range	Number of Acceptable Results (Including results not calculated due to both matching pairs being below the Laboratory LOR)	Percentage of Acceptable Results
Field Duplicates	92	0 – (-93.62)	91	98.91%
Field Triplicates	92	0 – (-155.56)	89	95.65%
Totals & Overall Completeness	184	NA	180	97.28%

The following comments are provided with respect to the RPDs calculated for the February 2016 soil investigation program:

Field Duplicates – Soil Investigation Program

- Of the 92 matching pairs of Field Duplicate results, 1 RPD result was able to be calculated. This RPD result was outside the acceptable range of $\pm 50\%$ but may have been exaggerated due to:
 - the relatively low concentrations reported where high RPD% results may result despite relatively small differences in actual reported concentrations; and
 - a concentration of half the laboratory LOR being assumed for 1 of the 2 matching results which may result in a high RPD% despite relatively small differences in actual reported concentrations .
- Of the 92 matching pairs of Field Duplicate results, 91 RPD results could not be calculated on the basis that both the primary and secondary results were below the laboratory LOR. However, the consistent <LOR results reflect low concentrations of analytes tested and indicate potentially small differences in actual concentrations. On this basis, these results have been assumed to indicate an acceptable level of precision and accuracy.

- Assuming an acceptable result for RPD results which could not be calculated, the completeness calculated for the Field Duplicate samples with respect to the soil sampling undertaken on the 23rd of February 2016 was calculated to be 98.91% which is above the acceptable range of 95% or higher. This result indicates an acceptable level of precision and accuracy in the chemical testing results reported by the primary laboratory.

Field Triplicates – Soil Investigation Program

- Of the 92 matching pairs of Field Duplicate results, 3 RPD results were able to be calculated; all of which were outside the acceptable range of $\pm 50\%$. However, these RPD% results may have been exaggerated due to:
 - the relatively low concentrations reported where high RPD% results may result despite relatively small differences in actual reported concentrations; and
 - a concentration of half the laboratory LOR being assumed for 1 of the 2 matching results which may result in a high RPD% despite relatively small differences in actual reported concentrations .
- Of the 92 matching pairs of Field Duplicate results, 88 RPD results could not be calculated on the basis that both the primary and secondary results were below the laboratory LOR. However, the consistent <LOR results reflect low concentrations of analytes tested and indicate potentially small differences in actual concentrations. On this basis, these results have been assumed to indicate an acceptable level of precision and accuracy.
- Assuming an acceptable result for RPD results which could not be calculated, the completeness calculated for the Field Duplicate samples with respect to the soil sampling undertaken on the 23rd of February 2016 was calculated to be 95.65% which is above the acceptable range of 95% or higher. This result indicates an acceptable level of precision and accuracy in the chemical testing results reported by the primary laboratory.

Overall Completeness – Soil Investigation Program

The overall completeness for the Field Duplicate and Field Triplicate results with respect the soil sampling undertaken on the 23rd of February 2016 was calculated to be 97.28% which is above the acceptable range of 95% or higher. This result indicates an acceptable level of precision and accuracy in the chemical testing results reported by the primary laboratory.

10.3 Laboratory Analytical Methods

The analytical methods applied by the primary laboratory and secondary laboratories are documented in the NATA endorsed Certificates of Analysis included as Appendix E. The analytical methods applied by the primary and secondary laboratories were considered:

- Appropriate for the requested analysis;
- Consistent for all individual samples within each batch of samples analysed by the Primary Laboratory and the Secondary Laboratory; and
- Consistent between the Primary Laboratory and the Secondary Laboratory.

10.4 Internal Laboratory Quality Control Testing

The following internal quality control testing was undertaken by the primary and secondary laboratories for the batch of soil samples delivered to the primary laboratory on the 23rd of February 2016:

- Method Blank
- Duplicate Sample
- Matrix Spike
- Laboratory Control Sample (LCS)

The quality control results for internal method blanks, duplicates, matrix spikes and laboratory controlled samples reported by the Primary Laboratory and Secondary laboratories were within acceptable tolerance limits. Overall, the quality control results for method blanks, duplicates, matrix spikes and laboratory controlled samples reported by both the Primary and Secondary laboratories for the soil sampling program undertaken on the 23rd of February 2016 indicate a satisfactory level of precision and accuracy in the reported results.

The results of the internal laboratory Control Testing are documented in the NATA endorsed Certificates of Analysis included in Appendix E.

11.0 CONCLUSIONS AND RECOMENDATIONS

11.1 General Conclusions and Recommendations

Watson Environmental Assessment considers that the site has been adequately characterised with respect to soil in accordance with:

- National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013, National Environment Protection Council.
- Australian Standard AS 4482.1, "Guide to the Sampling and Investigation of Potentially Contaminated Soil"; Parts 1 and 2.
- State Environment Protection Policy (Prevention and Management of Contamination of Land), June 2002.

The findings of this ESA and the conclusions drawn from it have been considered in the context of the proposed high density development; specifically with consideration to the potential for future occupants and users of the site (including maintenance workers) coming into direct contact with soil within the site.

The occurrence of Acid Sulphate Soil has the potential to damage structures over time. However Acid Sulphate soil was not encountered during the intrusive soil sampling program and the occurrence of Acid Sulphate Soil within the site is considered unlikely on the basis of field indicators published in EPAV Publication 655, "Acid Sulphate and Rock (August 1999)" used to assess the potential for Acid Sulphate to be present. On this basis, potential corrosive damage to the proposed structures as a result of contact with acid sulphate soil is considered unlikely.

Asbestos waste was not encountered within the site. As such, adverse impacts from Asbestos materials are considered unlikely.

Watson Environmental Assessments Pty Ltd is satisfied that below ground structures including underground fuel/chemical storage tanks do not exist within the site.

At the time of writing, WEA considered that the condition of the site was not aesthetically unpleasing or offensive to human senses.

As previously discussed, soil above approximately 7.0 metres depth will be removed to facilitate the construction of a 2 level basement. As such, the reported chemical testing results from undisturbed natural soil at or near 3 – 4 metres depth are particularly relevant for the purposes of assessing potential risks to future users / occupants of the site including the potential for vapour accumulation within the proposed basement. All reported contaminant concentrations in soil at 3 – 4 metres depth were below the adopted NEPM HIL D assessment criteria and on this basis, WEA is satisfied that soil at 3 – 4 metres depth and deeper does not pose an unacceptable human health risk to future users/occupants of the site. Furthermore, the potential for direct contact with soil at the bottom of basement level will be mitigated by construction of a concrete slab basement floor which provides a physical barrier to underlying in-situ soil below the bottom of basement depth. Volatile compounds were not detected in soil at 3 – 4 metres depth and on this basis, the potential for vapour accumulation within the proposed basement and vapour risk to future users/occupants of the site is considered to be low. On the basis of the above, WEA is satisfied that the construction of a 2 level basement will not give rise to potentially detrimental human health impacts.

On the basis of the soil investigations undertaken and documented in this report, the beneficial use of land associated with commercial / industrial uses are not precluded. Specifically, the proposed high density residential use is not precluded. The current condition of soil within the site does not preclude the site from the proposed high density residential use.

The need for intrusive groundwater investigations was assessed on the basis of:

- the condition of soil within the site and the potential for contaminants to leach to groundwater;
- the likelihood of groundwater being extracted and used for beneficial uses including drinking water and irrigation; and
- Whether the site is a likely to be a source of off-site of groundwater contamination/pollution.

In assessing potential impacts to on-site and off-site groundwater, all pathways to groundwater are considered along with an assessment of whether contaminant concentrations in overlying soil are likely to impact underlying groundwater. Where contaminant concentrations in overlying soil are low, it can be reasonably inferred that the potential for adverse impacts to groundwater is also low. In this instance, contaminant concentrations in overlying soil are low and are therefore unlikely to adversely impact underlying groundwater. The contaminant concentrations in overlying soil provide an indication of whether soil within the site provides an ongoing risk to groundwater quality. In this instance, soil within the site is not contaminated above acceptable human health and ecological threshold limits and potential risk to groundwater quality beneath the site and down gradient of the site is considered low. Given that the site is unlikely to be a source site with respect to groundwater quality, it is inferred that the site in its current condition is unlikely to adversely impact on-site and off-site groundwater quality. Furthermore, volatile compounds were not identified above acceptable threshold limits and therefore, the risk of vapour intrusion and accumulation in the proposed basement is highly unlikely. Groundwater is unlikely to be extracted and used for drinking and irrigation purposes given that groundwater yield is insufficient to provide a sustainable groundwater resource. On the basis of the above, the risk to groundwater beneficial uses is considered to be low and intrusive groundwater investigations were not considered to be warranted. The current condition of groundwater beneath the site does not pose an unacceptable risk to future users / occupants of the site including maintenance workers.

Watson Environmental Assessments Pty Ltd is of the opinion that:

- further intrusive soil investigations are not required; and
- Remediation of soil within the site is not required.

A summary of the evaluation of potential risk to future occupants and users of the site (including maintenance workers), and ecological receptors is provided in Table 16 below:

Table 16 – Summary of the Evaluation of Potential Risk

Potential Risk	Evaluation of Risk	Additional comments
Human Health via direct contact with soil and/or digestion of soil.	Very low risk	<ul style="list-style-type: none"> • All contaminant concentrations reported below adopted assessment criteria relevant to NEPM HIL D criteria for residential uses. • All contaminant concentrations at or near bottom of proposed basement level reported below adopted assessment criteria relevant to NEPM HIL D criteria for residential uses.
Human Health via inhalation of volatile compounds	Very low risk	All contaminant concentrations reported below adopted vapour intrusion assessment criteria.
Ecological risks via direct contact with soil	Very low risk	All contaminant concentrations reported below adopted NEPM Ecological assessment criteria.

Table 16 continued – Summary of the Evaluation of Potential Risk

Potential Risk	Evaluation of Risk	Additional comments
Risk to groundwater resources	Very low risk	Soil overlying groundwater within the site is not contaminated above acceptable human health and ecological threshold limits and potential risk to groundwater quality beneath the site and down gradient of the site is considered low. Given that the site is unlikely to be a source site with respect to groundwater quality, it is inferred that the site in its current condition is unlikely to adversely impact on-site and off-site groundwater quality. Furthermore, volatile compounds were not identified above acceptable threshold limits and therefore, the risk of vapour intrusion and accumulation in the proposed basement is highly unlikely. Groundwater is unlikely to be extracted and used for drinking and irrigation purposes given that groundwater yield is insufficient to provide a sustainable groundwater resource. On the basis of the above, the risk to groundwater beneficial uses is considered to be low and intrusive groundwater investigations were not considered to be warranted. The current condition of groundwater beneath the site does not pose an unacceptable risk to future users / occupants of the site including maintenance workers.

On the basis of the findings of this ESA, WEA is satisfied that the site in its current condition is suitable for the proposed high density residential use and that beneficial uses of land are not precluded and beneficial uses of groundwater are unlikely to be precluded. The site in its current condition does not pose an unacceptable risk to future users / occupants of the site including maintenance workers. On the basis of the findings of this ESA, WEA is satisfied that further assessment and / or remediation of soil and groundwater is not warranted.

Where beneficial uses of land and/or groundwater are or are likely to be precluded on the basis of contamination, a Statement or Certificate of Environmental Audit may be required prior to the site being used for sensitive uses. WEA is satisfied that beneficial uses of land and groundwater as defined by the respective State Environmental Protection Policies for land and groundwater are not precluded. On this basis, WEA is also satisfied that a Statement or Certificate of Environmental Audit is not warranted prior to the site being used for sensitive uses.

12.0 REPORT LIMITATIONS

The soil assessment undertaken and as documented in this report was intended to provide an assessment of contaminant concentrations at the specific sampling reference points and provide sufficient supporting data to draw reasonable conclusions regarding the general condition of soil within the site.

The soil investigation logs indicate the subsurface conditions only at the specific test locations indicated on the bore logs. The geological transition zones and interfaces have been inferred for locations other than those recorded on the bore logs at specific locations. Geological conditions may vary across the site between specific sampling locations.

Chemical conditions described in this report refer only to those conditions indicated by analysis of the soil samples obtained and at the specific points noted in this report. These conditions may vary due to changes in sub-surface conditions which cannot be reasonably anticipated, or as a consequence of activities on the site or adjacent sites post this assessment.

It is a condition of this report that where conditions encountered at the site or the proposed development differ significantly from those anticipated in this report, Watson Environmental Assessments be informed and provided with an opportunity to review the findings and recommendations of the assessment against the altered site conditions.

Watson Environmental Assessments



John Watson

Senior Environmental Engineer

16th March 2016

Appendix A

Report Figures

- | | |
|----------|-----------------------|
| Figure 1 | General Site Location |
| Figure 2 | Sample Location Plan |



SITE LOCATION

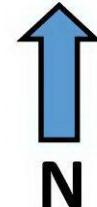


FIGURE 1

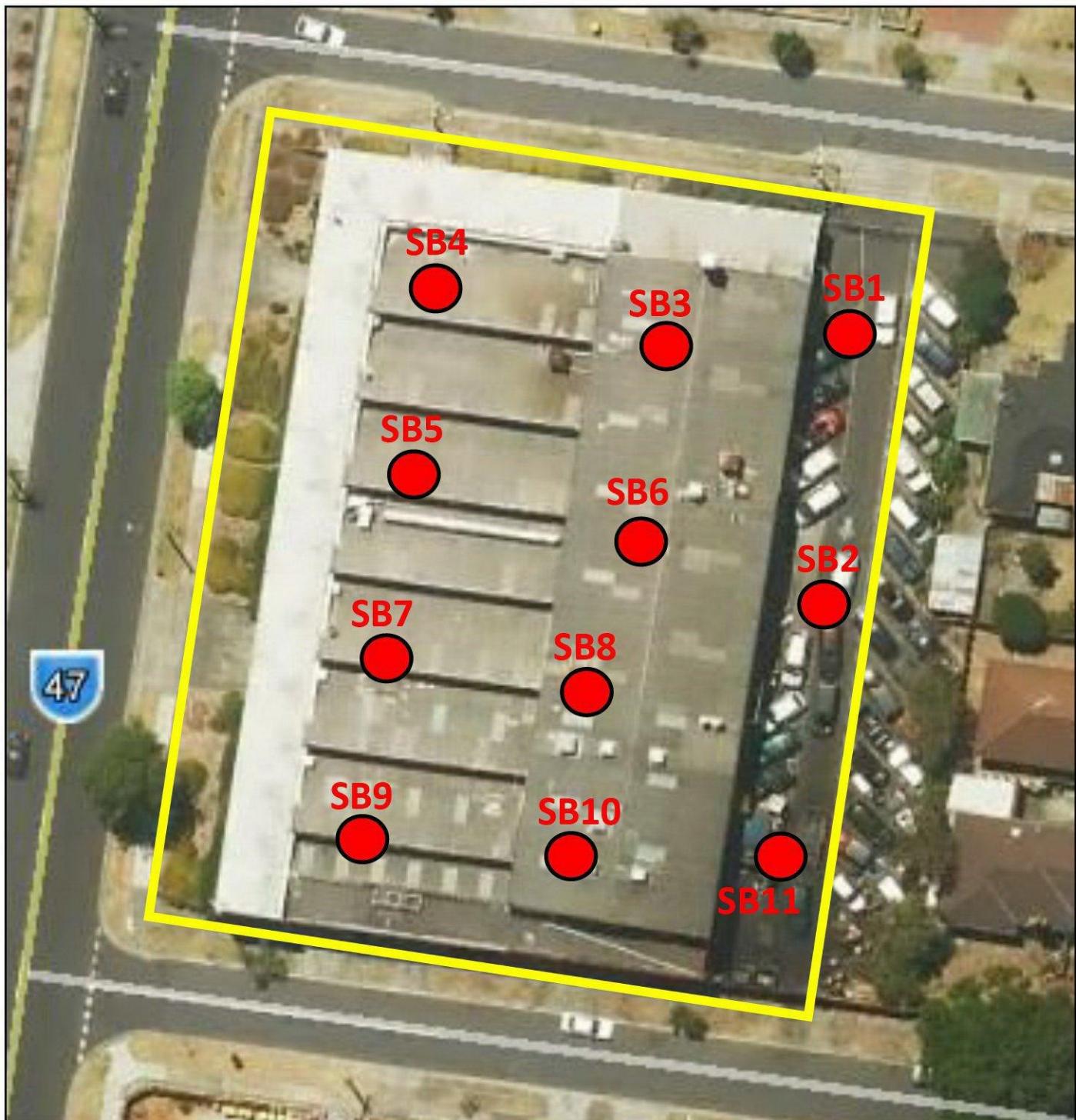
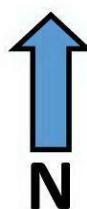
GENERAL SITE LOCATION
ENVIRONMENTAL ASSESSMENT
256-262 HUNTINGDALE RD, HUNTINGDALE
FEBRUARY 2016

FIGURE 2

SAMPLE LOCATION PLAN

PHASE 1 ENVIRONMENTAL ASSESSMENT

256-262 HUNTINGDALE RD, HUNTINGDALE

**Site Boundary****Soil Borehole Location**

Appendix B

Soil Borehole Logs

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson		
Project:	Environmental Site Assessment			Checked:	John Watson		
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016		
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB1		
Surface Conditions	Soil						
Method:	Hand Auger	Borehole Width (mm)		80mm			
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB1-0.1
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB1-0.5
1.0					0	0	SB1-1.0
2.0					0	0	SB1-2.0
3.0					0	0	SB1-3.0
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB1-4.0
2.5							

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB2			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB2-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB2-0.5	
1.0					0	0	SB2-1.0	
2.0					0	0	SB2-2.0	
3.0					0	0	SB2-3.0	
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB2-4.0	
2.5								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		2.0	SB3			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL		0	0	SB3-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour	Natural undisturbed soil			0	0	SB3-0.5	
1.0					0	0	SB3-1.0	
2.0	END OF BOREHOLE @ 2.0 mBGS				0	0	SB3-2.0	
2.5								
3.0								
4.0								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		2.0	SB4			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL		0	0	SB4-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour	Natural undisturbed soil			0	0	SB4-0.5	
1.0					0	0	SB4-1.0	
2.0	END OF BOREHOLE @ 2.0 mBGS				0	0	SB4-2.0	
2.5								
3.0								
4.0								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		2.0	SB5			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL		0	0	SB5-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour	Natural undisturbed soil			0	0	SB5-0.5	
1.0					0	0	SB5-1.0	
2.0	END OF BOREHOLE @ 2.0 mBGS				0	0	SB5-2.0	
3.0								
4.0								
2.5								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson		
Project:	Environmental Site Assessment			Checked:	John Watson		
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016		
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB6		
Surface Conditions	Soil						
Method:	Hand Auger	Borehole Width (mm)		80mm			
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB6-0.1
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB6-0.5
1.0					0	0	SB6-1.0
2.0					0	0	SB6-2.0
3.0					0	0	SB6-3.0
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB6-4.0
2.5							

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson		
Project:	Environmental Site Assessment			Checked:	John Watson		
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016		
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB7		
Surface Conditions	Soil						
Method:	Hand Auger	Borehole Width (mm)		80mm			
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	Natural undisturbed soil		0	0	SB7-0.1
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB7-0.5
1.0					0	0	SB7-1.0
2.0					0	0	SB7-2.0
3.0					0	0	SB7-3.0
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB7-4.0
2.5							

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB8			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB8-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB8-0.5	
1.0					0	0	SB8-1.0	
2.0					0	0	SB8-2.0	
3.0					0	0	SB8-3.0	
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB8-4.0	
2.5								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson		
Project:	Environmental Site Assessment			Checked:	John Watson		
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016		
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB9		
Surface Conditions	Soil						
Method:	Hand Auger	Borehole Width (mm)		80mm			
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB9-0.1
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB9-0.5
1.0					0	0	SB9-1.0
2.0					0	0	SB9-2.0
3.0					0	0	SB9-3.0
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB9-4.0
2.5							

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB10			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL		0	0	SB10-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour	Natural undisturbed soil			0	0	SB10-0.5	
1.0					0	0	SB10-1.0	
2.0					0	0	SB10-2.0	
3.0	END OF BOREHOLE @ 3.0 mBGS				0	0	SB10-3.0	
4.0								
2.5								

Soil Borehole Log

Client:	Poly 4X4			Logged by:	John Watson			
Project:	Environmental Site Assessment			Checked:	John Watson			
Site Location:	256 Huntingdale Road, Huntingdale			Date:	23/02/2016			
Weather Conditions	Dry	Borehole Depth (mBGS)		4.0	SB11			
Surface Conditions	Soil							
Method:	Hand Auger	Borehole Width (mm)		80mm				
Depth (m)	Material Description / Observations	Generic Profile Description	USC Description	Graphic Log	PID Reading (ppm)	Contamination Ranking	Sample Details	
	Sandy Clay Fill with small to medium gravel Dark brown, Dry No odour No asbestos material	Fill	CL Natural undisturbed soil		0	0	SB11-0.1	
	Silty Clay (Undisturbed) Light brown / tan / orange Stiff, Dry, Occasional small rounded gravels No visible asbestos or other hard waste No odour				0	0	SB11-0.5	
1.0					0	0	SB11-1.0	
2.0					0	0	SB11-2.0	
3.0					0	0	SB11-3.0	
4.0	END OF BOREHOLE @ 4.0 mBGS				0	0	SB11-4.0	
2.5								

Appendix C

Chain of Custody Documentation

WATSON ENVIRONMENTAL ASSESSMENTS (WEA) Pty Ltd

Unit 2/14 Moor Street, Bentleigh East, Vic, 3165

ABN: 43 606 473 769

wea.enviro@bigpond.com

Job No:	2015042
Page:	1 of 3

Sample Details

Client:	Polly 4X4	Sampled by:	John Watson
Project:	ENVIRONMENTAL SITE ASSESSMENT - Our Reference: 2015042		
Location:	256 Huntingdale Road, Huntingdale	Date sampled:	23-Feb-16

3 Day Turnaround

Sample Number	Sample Date	Depth below surface (m)	Sample Type	Material Description	Testing Required		
					R1 SUITE	B7 Suite	R21 Suite
SB1-0.1	23/02/2016	---	SOIL	Fill	X		
SB1-0.5	23/02/2016	---	SOIL	Disturbed Natural	HOLD		
SB1-1.0	23/02/2016	---	SOIL	Natural		X	
SB1-2.0	23/02/2016	---	SOIL	Natural			
SB1-3.0	23/02/2016	---	SOIL	Natural			
SB1-4.0	23/02/2016	---	SOIL	Natural	X		
SB2-0.1	23/02/2016	---	SOIL	Fill	HOLD		
SB2-0.5	23/02/2016	---	SOIL	Disturbed Natural		X	
SB2-1.0	23/02/2016	---	SOIL	Natural			
SB2-2.0	23/02/2016	---	SOIL	Natural		X	X
SB2-3.0	23/02/2016	---	SOIL	Natural			
SB2-4.0	23/02/2016	---	SOIL	Natural	X		
SB3-0.1	23/02/2016	---	SOIL	Fill		X	
SB3-0.5	23/02/2016	---	SOIL	Disturbed Natural	HOLD		
SB3-1.0	23/02/2016	---	SOIL	Natural			
SB3-2.0	23/02/2016	---	SOIL	Natural	X		
SB4-0.1	23/02/2016	---	SOIL	Fill	HOLD		
SB4-0.5	23/02/2016	---	SOIL	Disturbed Natural	X		
SB4-1.0	23/02/2016	---	SOIL	Natural			
SB4-2.0	23/02/2016	---	SOIL	Natural		X	
SB5-0.1	23/02/2016	---	SOIL	Fill	X		
SB5-0.5	23/02/2016	---	SOIL	Disturbed Natural	HOLD		
SB5-1.0	23/02/2016	---	SOIL	Natural		X	
SB5-2.0	23/02/2016	---	SOIL	Natural			

NOTES**3 Day Turnaround****CHAIN OF CUSTODY**

	Name	Company	Signature	Date	Time
Relinquished by	John Watson	Watson Environmental Assessments		23/2 23/2	4:31
Received by	Tony W	Eurofins/mgt		23/2	4:31
Relinquished by					
Received by	JIMMY N	EFIMGT		23/2	6:00pm

OFFICE USE ONLY - Internal Quality Control

Prepared by:	Name:	Diane Garnham	Signature:	Date:
Checked by:	Name:		Signature:	Date:

WATSON ENVIRONMENTAL ASSESSMENTS (WEA) Pty Ltd

Unit 2/14 Moor Street, Bentleigh East, Vic, 3165

ABN: 43 606 473 769

wea.enviro@bigpond.com

Job No:	2015042
Page:	2 of 3

Sample Details

Client:	Polly 4X4	Sampled by:	John Watson
Project:	ENVIRONMENTAL SITE ASSESSMENT - Our Reference: 2015042	Date sampled:	23-Feb-16
Location:	256 Huntingdale Road, Huntingdale		

3 Day Turnaround

Sample Number	Sample Date	Depth below surface (m)	Sample Type	Material Description	Testing Required				
					R1 SUITE	B7 Suite	R21 Suite		
SB6-0.1	23/02/2016	---	SOIL	Fill	HOLD				
SB6-0.5	23/02/2016	---	SOIL	Disturbed Natural		X			
SB6-1.0	23/02/2016	---	SOIL	Natural					
SB6-2.0	23/02/2016	---	SOIL	Natural	X				
SB6-3.0	23/02/2016	---	SOIL	Natural					
SB6-4.0	23/02/2016	---	SOIL	Natural		X			
SB7-0.1	23/02/2016	---	SOIL	Fill		X			
SB7-0.5	23/02/2016	---	SOIL	Disturbed Natural	HOLD				
SB7-1.0	23/02/2016	---	SOIL	Natural	X				
SB7-2.0	23/02/2016	---	SOIL	Natural					
SB7-3.0	23/02/2016	---	SOIL	Natural					
SB7-4.0	23/02/2016	---	SOIL	Natural		X			
SB8-0.1	23/02/2016	---	SOIL	Fill	X				
SB8-0.5	23/02/2016	---	SOIL	Disturbed Natural	HOLD				
SB8-1.0	23/02/2016	---	SOIL	Natural		X			
SB8-2.0	23/02/2016	---	SOIL	Natural					
SB8-3.0	23/02/2016	---	SOIL	Natural					
SB8-4.0	23/02/2016	---	SOIL	Natural	X				
SB9-0.1	23/02/2016	---	SOIL	Fill	HOLD				
SB9-0.5	23/02/2016	---	SOIL	Disturbed Natural	X				
SB9-1.0	23/02/2016	---	SOIL	Natural		X			
SB9-2.0	23/02/2016	---	SOIL	Natural					
SB9-3.0	23/02/2016	---	SOIL	Natural					
SB9-4.0	23/02/2016	---	SOIL	Natural	X				
SB10-0.1	23/02/2016	---	SOIL	Fill	HOLD				
SB10-0.5	23/02/2016	---	SOIL	Disturbed Natural		X			
SB10-1.0	23/02/2016	---	SOIL	Natural	X				
SB10-2.0	23/02/2016	---	SOIL	Natural					
SB10-3.0	23/02/2016	---	SOIL	Natural	X				

NOTES

3 Day Turnaround

CHAIN OF CUSTODY

	Name	Company	Signature	Date	Time
Relinquished by	John Watson	Watson Environmental Assessments		23/2	4:31
Received by	Tony W	EA mgmt		23/2	4:31
Relinquished by					
Received by					

OFFICE USE ONLY - Internal Quality Control

Prepared by:	Name: Diane Garnham	Signature:	Date:	
Checked by:	Name:	Signature:	Date:	

WATSON ENVIRONMENTAL ASSESSMENTS (WEA) Pty Ltd

Unit 2/14 Moor Street, Bentleigh East, Vic, 3165

ABN: 43 606 473 769

wae.enviro@bigpond.com

Job No:	2015042
Page:	3 of 3

Sample Details

NOTES

3 Day Turnaround

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at john.smith@researchinstitute.org.

CHAIN OF CUSTODY

Chain of Custody					
	Name	Company	Signature	Date	Time
Relinquished by	John Watson	Watson Environmental Assessments		23/2	4:31
Received by	Tony W	eflmg		23/2	4:31
Relinquished by					
Received by					

OFFICE USE ONLY - Internal Quality Control

Prepared by:	Name:	Signature:	Date:
Checked by:	Name:	Signature:	Date:

Sample Receipt Advice

Company name:	Watson Environmental Assessments
Contact name:	John Watson
Project name:	ENVIRONMENTAL SITE ASSESSMENT
Project ID:	2015042
COC number:	Not provided
Turn around time:	3 Day
Date/Time received:	Feb 23, 2016 4:32 PM
Eurofins mgt reference:	490202

Sample information

- A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- All samples have been received as described on the above COC.
- COC has been completed correctly.
- Attempt to chill was evident.
- Appropriately preserved sample containers have been used.
- All samples were received in good condition.
- Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- Appropriate sample containers have been used.
- Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Andrew Black on Phone : (+61) 2 9900 8490 or by e.mail: AndrewBlack@eurofins.com

Results will be delivered electronically via e.mail to John Watson - wea.enviro@bigpond.com.

WATSON ENVIRONMENTAL ASSESSMENTS (WEA) Pty Ltd

Unit 2/14 Moor Street, Bentleigh East, Vic, 3165

ABN: 43 606 473 769

wea enviro@bigpond.com

Job No:	2015042
Page	3 of 3

Sample Details

Client:	Polly 4X4	Sampled by:	John Watson
Project:	ENVIRONMENTAL SITE ASSESSMENT - Our Reference: 2015042	Date sampled:	23-Feb-16
Location:	256 Huntingdale Road, Huntingdale		

3 Day Turnaround

NOTES

3 Day Turnaround

CHAIN OF CUSTODY

	Name	Company	Signature	Date	Time
Relinquished by	John Watson	Watson Environmental Assessments		23/2	4.31
Received by	Tony W	EE MGT		23/2	4.31
Relinquished by					
Received by	Sigmak	EE MGT		25/2	9:00 am

OFFICE USE ONLY - Internal Quality Control

Prepared by:	Name:	Signature:	Date:
Checked by:	Name	Signature	Date:

Sample Receipt Advice

Company name:	Watson Environmental Assessments
Contact name:	John Watson
Project name:	ENVIRONMENTAL SITE ASSESSMENT
Project ID:	2015042
COC number:	Not provided
Turn around time:	3 Day
Date/Time received:	Feb 25, 2016 9:00 AM
Eurofins mgt reference:	490521

Sample information

- A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- All samples have been received as described on the above COC.
- COC has been completed correctly.
- Attempt to chill was evident.
- Appropriately preserved sample containers have been used.
- All samples were received in good condition.
- Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- Appropriate sample containers have been used.
- Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Andrew Black on Phone : (+61) 2 9900 8490 or by e.mail: AndrewBlack@eurofins.com

Results will be delivered electronically via e.mail to John Watson - wea.enviro@bigpond.com.

Appendix D

Tabulated Soil Results

	Assessment Criteria			TABLE 1 CHEMICAL TESTING RESULTS HEAVY METALS 256 Huntingdale Rd, Huntingdale 23/02/2016												
	2013 NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - Residential with garden/accessible soil	2013 NEPM Health Investigation Level B - Residential with minimal opportunities for soil access	SAMPLE DETAILS						SB 2						
ANALYTE	Reporting Unit			RESULT												
Arsenic	100	100	500	mg/kg	20	---	12	---	---	14	---	120	---	29	---	15
Cadmium	-	20	150	mg/kg	< 0.4	---	< 0.4	---	---	< 0.4	---	< 0.4	---	< 0.4	---	< 0.4
Chromium (total)	-	-	-	mg/kg	83	---	< 5	---	---	65	---	10	---	66	---	47
Chromium III	730	-	-	mg/kg	83	---	---	---	---	65	---	---	---	---	---	47
Copper	210	6000	30000	mg/kg	40	---	< 5	---	---	< 5	---	140	---	< 5	---	< 5
Iron	-	-	-	mg/kg	---	---	---	---	---	---	---	---	---	30000	---	< 1
Lead	1100	300	1200	mg/kg	16	---	14	---	---	21	---	33	---	27	---	16
Mercury	-	40	120	mg/kg	< 0.1	---	< 0.1	---	---	< 0.1	---	< 0.1	---	0.1	---	< 0.1
Molybdenum	-	-	-	mg/kg	< 10	---	---	---	---	< 10	---	---	---	---	---	< 10
Nickel	220	400	1200	mg/kg	50	---	< 5	---	---	11	---	6.4	---	14	---	8.2
Selenium	-	200	1400	mg/kg	< 2	---	---	---	---	< 2	---	---	---	---	---	< 2
Silver	-	-	-	mg/kg	< 5	---	---	---	---	< 5	---	---	---	---	---	< 5
Tin	-	-	-	mg/kg	< 10	---	---	---	---	< 10	---	---	---	---	---	< 10
Zinc	580	7400	60000	mg/kg	72	---	< 5	---	---	7.6	---	340	---	15	---	11
Chromium (VI)	-	100	500	mg/kg	< 1	---	---	---	---	< 1	---	---	---	---	---	< 1

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	TABLE 1 CHEMICAL TESTING RESULTS HEAVY METALS 256 Huntingdale Rd, Huntingdale 23/02/2016												
		SAMPLE DETAILS												
		Sample Location	SB 3						SB 4					
		Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
ANALYTE	Reporting Unit		RESULT											
Arsenic	100	100	500	mg/kg	7.4	---	---	15	---	---	< 2	---	14	---
Cadmium	-	20	150	mg/kg	< 0.4	---	---	< 0.4	---	---	< 0.4	---	< 0.4	---
Chromium (total)	-	-	-	mg/kg	13	---	---	37	---	---	< 5	---	24	---
Chromium III	730	-	-	mg/kg	---	---	---	37	---	---	---	---	---	---
Copper	210	6000	30000	mg/kg	1500	---	---	41	---	---	190	---	< 5	---
Iron	-	-	-	mg/kg	---	---	---	---	---	---	---	---	---	---
Lead	1100	300	1200	mg/kg	100	---	---	21	---	---	15	---	25	---
Mercury	-	40	120	mg/kg	< 0.1	---	---	0.1	---	---	< 0.1	---	< 0.1	---
Molybdenum	-	-	-	mg/kg	---	---	---	< 10	---	---	< 10	---	---	---
Nickel	220	400	1200	mg/kg	10	---	---	9.6	---	---	< 5	---	< 5	---
Selenium	-	200	1400	mg/kg	---	---	---	< 2	---	---	< 2	---	---	---
Silver	-	-	-	mg/kg	---	---	---	< 5	---	---	< 5	---	---	---
Tin	-	-	-	mg/kg	---	---	---	< 10	---	---	< 10	---	---	---
Zinc	580	7400	60000	mg/kg	800	---	---	29	---	---	75	---	9.4	---
Chromium (VI)	-	100	500	mg/kg	---	---	---	< 1	---	---	---	---	---	---

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria		2013 NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	TABLE 1 CHEMICAL TESTING RESULTS HEAVY METALS 256 Huntingdale Rd, Huntingdale 23/02/2016											
						SAMPLE DETAILS						SB 6					
ANALYTE	Reporting Unit	RESULT															
Arsenic	100	100	500	mg/kg	4.9	---	23	---	---	---	---	4.7	---	14	---	18	
Cadmium	-	20	150	mg/kg	< 0.4	---	< 0.4	---	---	---	---	< 0.4	---	< 0.4	---	< 0.4	
Chromium (total)	-	-	-	mg/kg	9.9	---	49	---	---	---	---	16	---	60	---	92	
Chromium III	730	-	-	mg/kg	9.9	---	-	---	---	---	---	-	-	60	---	-	
Copper	210	6000	30000	mg/kg	320	---	20	---	---	---	---	< 5	---	< 5	---	< 5	
Iron	-	-	-	mg/kg	-	---	-	---	---	---	---	-	-	-	---	-	
Lead	1100	300	1200	mg/kg	31	---	19	---	---	---	---	8	---	16	---	23	
Mercury	-	40	120	mg/kg	< 0.1	---	< 0.1	---	---	---	---	< 0.1	---	< 0.1	---	0.1	
Molybdenum	-	-	-	mg/kg	< 10	---	-	---	---	---	---	-	-	< 10	---	-	
Nickel	220	400	1200	mg/kg	15	---	13	---	---	---	---	< 5	---	11	---	23	
Selenium	-	200	1400	mg/kg	< 2	---	-	---	---	---	---	-	-	< 2	---	-	
Silver	-	-	-	mg/kg	< 5	---	-	---	---	---	---	-	-	< 5	---	-	
Tin	-	-	-	mg/kg	< 10	---	-	---	---	---	---	-	-	< 10	---	-	
Zinc	580	7400	60000	mg/kg	300	---	33	---	---	---	---	5.3	---	8.5	---	6.8	
Chromium (VI)	-	100	500	mg/kg	< 1	---	-	---	---	---	---	-	-	< 1	---	-	

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria																						
	2013 NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - Residential with garden/accessible soil	2013 NEPM Health Investigation Level B - Residential with minimal opportunities for soil access																				
TABLE 1																							
CHEMICAL TESTING RESULTS																							
HEAVY METALS																							
1268 Mountain Hwy, The Basin																							
23/02/2016																							
SAMPLE DETAILS																							
				SB 7						SB 8													
				Sample Location	SB7-0.1	SB7-0.5	SB7-1.0	SB7-2.0	SB7-3.0	SB7-4.0	SB8-0.1	SB8-0.5	SB8-1.0	SB8-2.0	SB8-3.0	SB8-4.0							
				Sample Number	100	100	500	mg/kg	< 2	---	15	---	---	11	4.2	---	< 2	---	---	---	13		
				Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0							
				Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural							
				Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016							
ANALYTE				REPORTING UNIT						RESULT													
Arsenic	100	100	500	mg/kg	< 2	---	15	---	---	11	4.2	---	< 2	---	---	---	13						
Cadmium	-	20	150	mg/kg	< 0.4	---	< 0.4	---	---	< 0.4	< 0.4	---	< 0.4	---	---	< 0.4							
Chromium (total)	-	-	-	mg/kg	< 5	---	37	---	---	33	6.1	---	< 5	---	---	38							
Chromium III	730	-	-	mg/kg	---	---	37	---	---	---	6.1	---	---	---	---	38							
Copper	210	6000	30000	mg/kg	590	---	< 5	---	---	< 5	800	---	< 5	---	---	< 5							
Iron	-	-	-	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---							
Lead	1100	300	1200	mg/kg	33	---	13	---	---	14	43	---	< 5	---	---	14							
Mercury	-	40	120	mg/kg	< 0.1	---	0.2	---	---	< 0.1	< 0.1	---	< 0.1	---	---	0.1							
Molybdenum	-	-	-	mg/kg	---	---	< 10	---	---	---	< 10	---	---	---	---	< 10							
Nickel	220	400	1200	mg/kg	7	---	7.4	---	---	6.7	9.2	---	< 5	---	---	8.6							
Selenium	-	200	1400	mg/kg	---	---	< 2	---	---	---	< 2	---	---	---	---	< 2							
Silver	-	-	-	mg/kg	---	---	< 5	---	---	---	< 5	---	---	---	---	< 5							
Tin	-	-	-	mg/kg	---	---	< 10	---	---	---	< 10	---	---	---	---	< 10							
Zinc	580	7400	60000	mg/kg	410	---	7.2	---	---	12	930	---	< 5	---	---	9.8							
Chromium (VI)	-	100	500	mg/kg	---	---	< 1	---	---	---	< 1	---	---	---	---	< 1							

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria		TABLE 1 CHEMICAL TESTING RESULTS HEAVY METALS 256 Huntingdale Rd, Huntingdale 23/02/2016												
	2013 NEPM Ecological Investigation Levels		SAMPLE DETAILS												
	2013 NEPM Health Investigation Level A - residential with garden/accessible soil		SB 9						SB 10						
	Sample Location		Sample Number	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0
	Sample Depth		0.1	0.5	1.0	2.0	3.0	4.0		0.1	0.5	1	2	3.0	4.0
	Soil Description		Fill	Natural	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
	Analysis Date		23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	
	ANALYTE	Reporting Unit	RESULT												
Arsenic	100	100	500	mg/kg	---	2.7	< 2	---	---	21	---	3.4	10	---	15
Cadmium	-	20	150	mg/kg	---	< 0.4	< 0.4	---	---	< 0.4	---	0.5	< 0.4	---	< 0.4
Chromium (total)	-	-	-	mg/kg	---	< 5	< 5	---	---	46	---	6.1	35	---	36
Chromium III	730	-	-	mg/kg	---	< 5	---	---	---	46	---	---	35	---	36
Copper	210	6000	30000	mg/kg	---	24	< 5	---	---	< 5	---	170	17	---	9.1
Iron	-	-	-	mg/kg	---	---	---	---	---	---	---	---	---	---	---
Lead	1100	300	1200	mg/kg	---	11	< 5	---	---	24	---	25	17	---	18
Mercury	-	40	120	mg/kg	---	< 0.1	< 0.1	---	---	0.1	---	< 0.1	< 0.1	---	< 0.1
Molybdenum	-	-	-	mg/kg	---	< 10	---	---	---	< 10	---	---	< 10	---	< 10
Nickel	220	400	1200	mg/kg	---	5	< 5	---	---	17	---	11	9.9	---	10
Selenium	-	200	1400	mg/kg	---	< 2	---	---	---	< 2	---	---	< 2	---	< 2
Silver	-	-	-	mg/kg	---	< 5	---	---	---	< 5	---	---	< 5	---	< 5
Tin	-	-	-	mg/kg	---	< 10	---	---	---	< 10	---	---	< 10	---	< 10
Zinc	580	7400	60000	mg/kg	---	130	< 5	---	---	11	---	250	22	---	14
Chromium (VI)	-	100	500	mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria		2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	TABLE 1 CHEMICAL TESTING RESULTS HEAVY METALS 256 Huntingdale Rd, Huntingdale 23/02/2016					
	2013 NEPM Ecological Investigation Levels	SB 11			Sample Location	SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0
ANALYTE		Reporting Unit	RESULT							
Arsenic	100	100	500	mg/kg	9.8	---	< 2	---	---	3.6
Cadmium	-	20	150	mg/kg	1.4	---	< 0.4	---	---	< 0.4
Chromium (total)	-	-	-	mg/kg	15	---	< 5	---	---	8.1
Chromium III	730	-	-	mg/kg	15	---	---	---	---	8.1
Copper	210	6000	30000	mg/kg	3100	---	6.8	---	---	7.1
Iron	-	-	-	mg/kg	---	---	---	---	---	---
Lead	1100	300	1200	mg/kg	210	---	< 5	---	---	5.7
Mercury	-	40	120	mg/kg	< 0.1	---	< 0.1	---	---	< 0.1
Molybdenum	-	-	-	mg/kg	< 10	---	---	---	---	< 10
Nickel	220	400	1200	mg/kg	44	---	< 5	---	---	< 5
Selenium	-	200	1400	mg/kg	< 2	---	---	---	---	< 2
Silver	-	-	-	mg/kg	< 5	---	---	---	---	< 5
Tin	-	-	-	mg/kg	45	---	---	---	---	< 10
Zinc	580	7400	60000	mg/kg	1300	---	< 5	---	---	6.1
Chromium (VI)	-	100	500	mg/kg	< 1	---	---	---	---	< 1



- Indicates Reported Concentration Exceeds NEPM EIL
- Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
- Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessmentn Criteria		
	NEPM Ecological Screening / Investigation Levels (Fine Grained Soils)	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access

TABLE 2

**CHEMICAL TESTING RESULTS - SOIL
POLYCYCLIC AROMATIC HYDROCARBONS
256 Huntingdale Rd, Huntingdale**

23/02/2016

SAMPLE DETAILS

ANALYTE	Reporting Unit	SB 1						SB 2						
		Sample Number	SB1-0.1	SB1-0.5	SB1-1.0	SB1-2.0	SB1-3.0	SB1-4.0	Sample Number	SB2-0.1	SB2-0.5	SB2-1.0	SB2-2.0	SB2-3.0
Acenaphthene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5
Acenaphthylene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5
Anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5
Benz(a)anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(a)pyrene	0.7	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	-	3	4	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Benzo(a)pyrene TEQ (medium bound)*	-	3	4	mg/kg	0.6	---	0.6	---	0.6	---	0.6	---	0.6	---
Benzo(a)pyrene TEQ (upper bound)*	-	3	4	mg/kg	1.2	---	1.2	---	1.2	---	1.2	---	1.2	---
Benzo(b&j)fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Benzo(g,h,i)perylene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Benzo(k)fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Chrysene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Dibenz(a,h)anthracene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Fluorene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Indeno(1,2,3-cd)pyrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Naphthalene	170	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Phenanthrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Pyrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---
Total PAH	-	300	400	mg/kg	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEPM Ecological Screening / Investigation Levels (Fine Grained Soils)	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access
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TABLE 2

**CHEMICAL TESTING RESULTS - SOIL
POLYCYCLIC AROMATIC HYDROCARBONS
256 Huntingdale Rd, Huntingdale**

23/02/2016

SAMPLE DETAILS

ANALYTE	Reporting Unit	RESULT									
		SB 3					SB 4				
Acenaphthene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Acenaphthylene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Anthracene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Benz(a)anthracene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Benzo(a)pyrene	0.7 mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	3 mg/kg	4	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	3 mg/kg	4	mg/kg	0.6	---	0.6	---	---	0.6	---	0.6
Benzo(a)pyrene TEQ (upper bound)*	3 mg/kg	4	mg/kg	1.2	---	1.2	---	---	1.2	---	1.2
Benzo(b&i;)fluoranthene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Benzo(g,h,i)perylene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Benzo(k)fluoranthene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Chrysene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Dibenz(a,h)anthracene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Fluoranthene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Fluorene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Naphthalene	170 mg/kg	-	-	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5
Phenanthrene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Pyrene	mg/kg	< 0.5	---	---	< 0.5	---	---	---	< 0.5	---	< 0.5
Total PAH	300 mg/kg	400	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessmentn Criteria		
	NEPM Ecological Screening / Investigation Levels (Fine Grained Soils)	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access

TABLE 2

**CHEMICAL TESTING RESULTS - SOIL
POLYCYCLIC AROMATIC HYDROCARBONS
256 Huntingdale Rd, Huntingdale**

23/02/2016

SAMPLE DETAILS

ANALYTE	Reporting Unit	SB 5						SB 6						
		Sample Number	SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
Acenaphthene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Acenaphthylene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Benz(a)anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(a)pyrene	0.7	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	-	3	4	mg/kg	< 0.5	---	< 0.5	---	---	---	< 0.5	---	< 0.5	---
Benzo(a)pyrene TEQ (medium bound)*	-	3	4	mg/kg	0.6	---	0.6	---	---	---	0.6	---	0.6	---
Benzo(a)pyrene TEQ (upper bound)*	-	3	4	mg/kg	1.2	---	1.2	---	---	---	1.2	---	1.2	---
Benzo(b&j)fluoranthene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(g,h,i)perylene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Benzo(k)fluoranthene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Chrysene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Dibenz(a,h)anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Fluoranthene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Fluorene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Indeno(1,2,3-cd)pyrene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Naphthalene	170	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Phenanthrene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Pyrene	-	mg/kg	< 0.5	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	< 0.5
Total PAH	-	300	400	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

Assessmentn Criteria			
NEPM Ecological Screening / Investigation Levels (Fine Grained Soils)	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	

TABLE 2

**CHEMICAL TESTING RESULTS - SOIL
POLYCYCLIC AROMATIC HYDROCARBONS
256 Huntingdale Rd, Huntingdale**

23/02/2016

SAMPLE DETAILS

ANALYTE	Reporting Unit	SB 7						SB 8						
		Sample Number	SB7-0.1	SB7-0.5	SB7-1.0	SB7-2.0	SB7-3.0	SB7-4.0	SB8-0.1	SB8-0.5	SB8-1.0	SB8-2.0	SB8-3.0	SB8-4.0
Acenaphthene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5	---	< 0.5	---	---	< 0.5
Acenaphthylene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5	---	< 0.5	---	---	< 0.5
Anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5	---	< 0.5	---	---	< 0.5
Benz(a)anthracene	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(a)pyrene	0.7	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	-	3	4	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	-	3	4	mg/kg	0.6	---	0.6	---	0.6	0.6	---	0.6	---	0.6
Benzo(a)pyrene TEQ (upper bound)*	-	3	4	mg/kg	1.2	---	1.2	---	1.2	1.2	---	1.2	---	1.2
Benzo(b&i;)fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Benzo(g.h.i;)perylene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Benzo(k)fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Chrysene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Dibenz(a.h)anthracene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Fluoranthene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Fluorene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Indeno(1,2,3-cd)pyrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Naphthalene	170	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Phenanthrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Pyrene	-	-	-	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
Total PAH	-	300	400	mg/kg	< 0.5	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

Assessmentn Criteria		
NEPM Ecological Screening / Investigation Levels (Fine Grained Soils)	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access

TABLE 2

**CHEMICAL TESTING RESULTS - SOIL
POLYCYCLIC AROMATIC HYDROCARBONS
256 Huntingdale Rd, Huntingdale**

23/02/2016

SAMPLE DETAILS

ANALYTE	Reporting Unit	RESULT									
		SB 9					SB 10				
Acenaphthene	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5
Acenaphthylene	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5
Anthracene	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5
Benz(a)anthracene	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5
Benzo(a)pyrene	0.7	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	-	3	4	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	-	3	4	mg/kg	---	0.6	0.6	---	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound)*	-	3	4	mg/kg	---	1.2	1.2	---	1.2	1.2	1.2
Benzo(b&i;)fluoranthene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Benzo(g.h.i;)perylene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Benzo(k)fluoranthene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Chrysene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Dibenz(a.h)anthracene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Fluoranthene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Fluorene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Naphthalene	170	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Phenanthrene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Pyrene	-	-	-	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5
Total PAH	-	300	400	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	< 0.5

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

ANALYTE	Assessment Criteria			TABLE 2 CHEMICAL TESTING RESULTS - SOIL POLYCYCLIC AROMATIC HYDROCARBONS 256 Huntingdale Rd, Huntingdale 23/02/2016					
				SAMPLE DETAILS					
				SB 11					
	Sample Location	Sample Number	Sample Depth	SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0	SB11-4.0
Acenaphthene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Acenaphthylene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Anthracene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benz(a)anthracene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(a)pyrene	0.7	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	-	3	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	-	3	mg/kg	0.6	---	0.6	---	---	0.6
Benzo(a)pyrene TEQ (upper bound)*	-	3	mg/kg	1.2	---	1.2	---	---	1.2
Benzo(b&i;)fluoranthene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(g.h.i;)perylene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Benzo(k)fluoranthene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Chrysene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Dibenz(a.h)anthracene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Fluoranthene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Fluorene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Indeno(1,2,3-cd)pyrene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Naphthalene	170	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Phenanthrene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Pyrene	-	-	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5
Total PAH	-	300	400	mg/kg	< 0.5	---	< 0.5	---	< 0.5

XXX Indicates Reported Concentration Exceeds NEPM EIL
 XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
 XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

ANALYTE	Assessment Criteria										TABLE 3 CHEMICAL TESTING RESULTS TOTAL PETROLEUM HYDROCARBONS (TPH) and MONOCYCLIC AROMATIC HYDROCARBONS (MAH) 256 Huntingdale Rd, Huntingdale 23/02/2016											
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil (fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 1					SAMPLE DETAILS					SB 2				
TRH - 1999 NEPM Fractions	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH C10-36 (Total)	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20
TRH C10-C14	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH C15-C28	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH C29-C36	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH C6-C9	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20
TRH - 2013 NEPM Fractions	-	5	-	-	-	1,400	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	
Naphthalene	-	-	-	1,000	-	3,300	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	
TRH >C10-C16	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50	---	< 50
TRH >C16-C34	1300	-	-	3,500	-	4,500	mg/kg	< 100	---	< 100	---	---	< 100	---	< 100	---	< 100	---	< 100	---	< 100	
TRH >C34-C40	5600	-	-	10,000	-	6,300	mg/kg	< 100	---	< 100	---	---	< 100	---	< 100	---	< 100	---	< 100	---	< 100	
TRH C6-C10	-	-	-	800	-	4,400	mg/kg	< 20	---	< 20	---	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20	
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	mg/kg	< 20	---	< 20	---	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20	---	< 20
BTEX	65	0.7	1	-	350	100	mg/kg	---	---	< 0.1	---	---	---	---	---	---	< 0.1	---	< 0.1	---	< 0.1	
Benzene	125	-	-	-	-	4,500	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1	---	< 0.1	---	< 0.1		
Ethylbenzene	-	-	-	-	-	mg/kg	---	---	< 0.2	---	---	---	---	---	< 0.2	---	< 0.2	---	< 0.2			
m&p-Xylenes	-	-	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1	---	< 0.1	---	< 0.1			
o-Xylene	-	-	-	-	-	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Toluene	105	-	-	-	-	14,000	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1	---	< 0.1	---	< 0.1		
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	---	---	< 0.3	---	---	---	---	---	< 0.3	---	< 0.3	---	< 0.3		
Total MAH	-	-	-	-	-	mg/kg	---	---	< 0.6	---	---	---	---	---	< 0.6	---	< 0.6	---	< 0.6			

XXX Indicates Reported Concentration Exceeds NEPM ESL
 XXX Indicates Reported Concentration Exceeds NEPM HSL
 XXX Indicates Reported Concentration Exceeds NEPM Management Limits
 XXX Indicates Reported Concentration Exceeds CRC Care Guideline

ANALYTE	Assessment Criteria										Chemical Testing Results									
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 3					SB 4							
TPH - 1999 NEPM Fractions						Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0		
TRH C10-36 (Total)	-	-	-	-	-	-	mg/kg	200	---	---	< 50	---	---	---	---	< 50	---	< 50	---	
TRH C10-C14	-	-	-	-	-	-	mg/kg	< 20	---	---	< 20	---	---	---	---	< 20	---	< 20	---	
TRH C15-C28	-	-	-	-	-	-	mg/kg	100	---	---	< 50	---	---	---	---	< 50	---	< 50	---	
TRH C29-C36	-	-	-	-	-	-	mg/kg	100	---	---	< 50	---	---	---	---	< 50	---	< 50	---	
TRH C6-C9	-	-	-	-	-	-	mg/kg	< 20	---	---	< 20	---	---	---	---	< 20	---	< 20	---	
TRH - 2013 NEPM Fractions																				
Naphthalene	-	5	-	-	-	1,400	mg/kg	< 0.5	---	---	< 0.5	---	---	---	---	< 0.5	---	< 0.5	---	
TRH >C10-C16	-	-	-	1,000	-	3,300	mg/kg	< 50	---	---	< 50	---	---	---	---	< 50	---	< 50	---	
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	-	mg/kg	< 50	---	---	< 50	---	---	---	---	< 50	---	< 50	---	
TRH >C16-C34	1300	-	-	3,500	-	4,500	mg/kg	150	---	---	< 100	---	---	---	---	< 100	---	< 100	---	
TRH >C34-C40	5600	-	-	10,000	-	6,300	mg/kg	< 100	---	---	< 100	---	---	---	---	< 100	---	< 100	---	
TRH C6-C10	-	-	-	800	-	4,400	mg/kg	< 20	---	---	< 20	---	---	---	---	< 20	---	< 20	---	
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	-	mg/kg	< 20	---	---	< 20	---	---	---	---	< 20	---	< 20	---	
BTEX																				
Benzene	65	0.7	1	-	350	100	mg/kg	< 0.1	---	---	---	---	---	---	---	---	---	< 0.1	---	
Ethylbenzene	125	-	-	-	-	4,500	mg/kg	< 0.1	---	---	---	---	---	---	---	---	---	< 0.1	---	
m&p-Xylenes	-	-	-	-	-	-	mg/kg	< 0.2	---	---	---	---	---	---	---	---	---	< 0.2	---	
o-Xylene	-	-	-	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	---	< 0.1	---	
Toluene	105	-	-	-	-	14,000	mg/kg	< 0.1	---	---	---	---	---	---	---	---	---	< 0.1	---	
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	< 0.3	---	---	---	---	---	---	---	---	---	< 0.3	---	
Total MAH	-	-	-	-	-	-	mg/kg	<0.6	---	---	---	---	---	---	---	---	---	<0.6	---	

XXX Indicates Reported Concentration Exceeds NEPM ESL
 XXX Indicates Reported Concentration Exceeds NEPM HSL
 XXX Indicates Reported Concentration Exceeds NEPM Management Limits
 XXX Indicates Reported Concentration Exceeds CRC Care Guideline

TABLE 3

CHEMICAL TESTING RESULTS
TOTAL PETROLEUM HYDROCARBONS (TPH) and
MONOCYCLIC AROMATIC HYDROCARBONS (MAH)
256 Huntingdale Rd, Huntingdale
23/02/2016

SAMPLE DETAILS

ANALYTE	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 3	SB 4
TPH - 1999 NEPM Fractions							Sample Number	SB3-0.1	SB4-0.1
TRH C10-36 (Total)	-	-	-	-	-	-	Sample Depth	0.1	0.1
TRH C10-C14	-	-	-	-	-	-	Sample Depth	0.5	0.5
TRH C15-C28	-	-	-	-	-	-	Soil Description	Natural	Natural
TRH C29-C36	-	-	-	-	-	-	Analysis Date	23/02/2016	23/02/2016
TRH C6-C9	-	-	-	-	-	-	Reporting Unit	23/02/2016	23/02/2016
TRH - 2013 NEPM Fractions		RESULT							
Naphthalene	-	5	-	-	1,400	mg/kg	< 0.5	---	---
TRH >C10-C16	-	-	-	1,000	-	3,300	mg/kg	< 50	---
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	mg/kg	< 50	---	---
TRH >C16-C34	1300	-	-	3,500	-	4,500	mg/kg	150	---
TRH >C34-C40	5600	-	-	10,000	-	6,300	mg/kg	< 100	---
TRH C6-C10	-	-	-	800	-	4,400	mg/kg	< 20	---
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	mg/kg	< 20	---	---
BTEX									
Benzene	65	0.7	1	-	350	100	mg/kg	< 0.1	---
Ethylbenzene	125	-	-	-	4,500	mg/kg	< 0.1	---	---
m&p-Xylenes	-	-	-	-	-	mg/kg	< 0.2	---	---
o-Xylene	-	-	-	-	-	mg/kg	< 0.1	---	---
Toluene	105	-	-	-	14,000	mg/kg	< 0.1	---	---
Xylenes - Total	45	-	-	-	12,000	mg/kg	< 0.3	---	---
Total MAH	-	-	-	-	-	mg/kg	<0.6	---	---

ANALYTE	Assessment Criteria											TABLE 3 CHEMICAL TESTING RESULTS TOTAL PETROLEUM HYDROCARBONS (TPH) and MONOCYCLIC AROMATIC HYDROCARBONS (MAH) 256 Huntingdale Rd, Huntingdale 23/02/2016 SAMPLE DETAILS										
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL B) - Clay - 1 m to <2 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 Management Limits for TPH fractions F+I-F4 in soil (fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0 m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 5						SB 6							
TPH - 1999 NEPM Fractions								Sample Number	SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0		
TRH C10-36 (Total)	-	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	---	< 50	---	< 50	---	< 50	---	< 50	
TRH C10-C14	-	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	---	< 20	---	< 20	---	< 20	---	< 20	
TRH C15-C28	-	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	---	< 50	---	< 50	---	< 50	---	< 50	
TRH C29-C36	-	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	---	< 50	---	< 50	---	< 50	---	< 50	
TRH C6-C9	-	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	---	< 20	---	< 20	---	< 20	---	< 20	
TRH - 2013 NEPM Fractions								Reporting Unit	RESULT													
Naphthalene	-	5	-	-	-	-	1,400	mg/kg	< 0.5	---	< 0.5	---	---	---	< 0.5	---	< 0.5	---	< 0.5	---	< 0.5	
TRH >C10-C16	-	-	-	1,000	-	-	3,300	mg/kg	< 50	---	< 50	---	---	---	< 50	---	< 50	---	< 50	---	< 50	
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	---	< 50	---	< 50	---	< 50	---	< 50	
TRH >C16-C34	1300	-	-	3,500	-	4,500	-	mg/kg	< 100	---	< 100	---	---	---	< 100	---	< 100	---	< 100	---	< 100	
TRH >C34-C40	5600	-	-	10,000	-	6,300	-	mg/kg	< 100	---	< 100	---	---	---	< 100	---	< 100	---	< 100	---	< 100	
TRH C6-C10	-	-	-	800	-	4,400	-	mg/kg	< 20	---	< 20	---	---	---	< 20	---	< 20	---	< 20	---	< 20	
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	-	-	mg/kg	< 20	---	< 20	---	---	---	< 20	---	< 20	---	< 20	---	< 20	
BTEX									RESULT													
Benzene	65	0.7	1	-	350	100	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---	< 0.1	
Ethylbenzene	125	-	-	-	-	4,500	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---	< 0.1	
m&p-Xylenes	-	-	-	-	-	-	mg/kg	---	---	< 0.2	---	---	---	---	< 0.2	---	---	---	---	---	< 0.2	
o-Xylene	-	-	-	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---	< 0.1	
Toluene	105	-	-	-	-	14,000	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---	< 0.1	
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	---	---	< 0.3	---	---	---	---	< 0.3	---	---	---	---	---	< 0.3	
Total MAH	-	-	-	-	-	-	mg/kg	---	---	<0.6	---	---	---	---	<0.6	---	---	---	---	---	<0.6	
XXX	Indicates Reported Concentration Exceeds NEPM ESL																					
XXX	Indicates Reported Concentration Exceeds NEPM HSL																					
XXX	Indicates Reported Concentration Exceeds NEPM Management Limits																					
XXX	Indicates Reported Concentration Exceeds CRC Care Guideline																					

ANALYTE	Assessment Criteria										TABLE 3									
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil (fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	CHEMICAL TESTING RESULTS TOTAL PETROLEUM HYDROCARBONS (TPH) and MONOCYCLIC AROMATIC HYDROCARBONS (MAH) 256 Huntingdale Rd, Huntingdale 23/02/2016													
Reporting Unit	SAMPLE DETAILS										RESULT									
	Sample Location	SB 7	SB 7	SB 7	SB 7	SB 7	SB 7	SB 7	SB 7	SB 7	SB 8	SB 8	SB 8	SB 8	SB 8	SB 8	SB 8	SB 8	SB 8	SB 8
TPH - 1999 NEPM Fractions																				
TRH C10-36 (Total)	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	220		< 50	---	---	< 50	
TRH C10-C14	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	< 20	< 20		< 20	---	---	< 20	
TRH C15-C28	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	120		< 50	---	---	< 50	
TRH C29-C36	-	-	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	95		< 50	---	---	< 50	
TRH C6-C9	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---	---	< 20	< 20		< 20	---	---	< 20	
TRH - 2013 NEPM Fractions																				
Naphthalene	-	5	-	-	-	-	1,400	mg/kg	< 0.5	---	< 0.5	---	---	< 0.5	< 0.5		< 0.5	---	---	< 0.5
TRH >C10-C16	-	-	-	1,000	-	-	3,300	mg/kg	< 50	---	< 50	---	---	< 50	< 50		< 50	---	---	< 50
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	-	mg/kg	< 50	---	< 50	---	---	< 50	< 50		< 50	---	---	< 50	
TRH >C16-C34	1300	-	-	3,500	-	-	4,500	mg/kg	< 100	---	< 100	---	---	< 100	190		< 100	---	---	< 100
TRH >C34-C40	5600	-	-	10,000	-	-	6,300	mg/kg	< 100	---	< 100	---	---	< 100	< 100		< 100	---	---	< 100
TRH C6-C10	-	-	-	800	-	-	4,400	mg/kg	< 20	---	< 20	---	---	< 20	< 20		< 20	---	---	< 20
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	-	mg/kg	< 20	---	< 20	---	---	< 20	< 20		< 20	---	---	< 20	
BTEX																				
Benzene	65	0.7	1	-	350	100	mg/kg	< 0.1	---	---	---	---	< 0.1	---	---	< 0.1	---	---	< 0.1	
Ethylbenzene	125	-	-	-	-	4,500	mg/kg	< 0.1	---	---	---	---	< 0.1	---	---	< 0.1	---	---	< 0.1	
m&p-Xylenes	-	-	-	-	-	-	mg/kg	< 0.2	---	---	---	---	< 0.2	---	---	< 0.2	---	---	< 0.2	
o-Xylene	-	-	-	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1	---	---	< 0.1	---	---	< 0.1	
Toluene	105	-	-	-	-	14,000	mg/kg	< 0.1	---	---	---	---	< 0.1	---	---	< 0.1	---	---	< 0.1	
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	< 0.3	---	---	---	---	< 0.3	---	---	< 0.3	---	---	< 0.3	
Total MAH	-	-	-	-	-	-	mg/kg	<0.6	---	---	---	---	<0.6	---	---	<0.6	---	---	<0.6	

XXX Indicates Reported Concentration Exceeds NEPM ESL
 XXX Indicates Reported Concentration Exceeds NEPM HSL
 XXX Indicates Reported Concentration Exceeds NEPM Management Limits
 XXX Indicates Reported Concentration Exceeds CRC Care Guideline

ANALYTE	Assessment Criteria										TABLE 3 CHEMICAL TESTING RESULTS TOTAL PETROLEUM HYDROCARBONS (TPH) and MONOCYCLIC AROMATIC HYDROCARBONS (MAH) 256 Huntingdale Rd, Huntingdale 23/02/2016 SAMPLE DETAILS									
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil (fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 9					Sample Depth	SB 10						
TPH - 1999 NEPM Fractions						Sample Number	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	Sample Depth	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0	
TRH C10-36 (Total)	-	-	-	-	-	mg/kg	---	< 50	< 50	---	---	< 50	---	< 50	< 50	---	< 50	---	< 50	
TRH C10-C14	-	-	-	-	-	mg/kg	---	< 20	< 20	---	---	< 20	---	< 20	< 20	---	< 20	---	< 20	
TRH C15-C28	-	-	-	-	-	mg/kg	---	< 50	< 50	---	---	< 50	---	< 50	< 50	---	< 50	---	< 50	
TRH C29-C36	-	-	-	-	-	mg/kg	---	< 50	< 50	---	---	< 50	---	< 50	< 50	---	< 50	---	< 50	
TRH C6-C9	-	-	-	-	-	mg/kg	---	< 20	< 20	---	---	< 20	---	< 20	< 20	---	< 20	---	< 20	
TRH - 2013 NEPM Fractions												RESULT								
Naphthalene	-	5	-	-	-	1,400	mg/kg	---	< 0.5	< 0.5	---	---	< 0.5	---	< 0.5	< 0.5	---	< 0.5	---	< 0.5
TRH >C10-C16	-	-	-	1,000	-	3,300	mg/kg	---	< 50	< 50	---	---	< 50	---	< 50	< 50	---	< 50	---	< 50
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	-	mg/kg	---	< 50	< 50	---	---	< 50	---	< 50	< 50	---	< 50	---	< 50
TRH >C16-C34	1300	-	-	3,500	-	4,500	mg/kg	---	< 100	< 100	---	---	< 100	---	< 100	< 100	---	< 100	---	< 100
TRH >C34-C40	5600	-	-	10,000	-	6,300	mg/kg	---	< 100	< 100	---	---	< 100	---	< 100	< 100	---	< 100	---	< 100
TRH C6-C10	-	-	-	800	-	4,400	mg/kg	---	< 20	< 20	---	---	< 20	---	< 20	< 20	---	< 20	---	< 20
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	-	mg/kg	---	< 20	< 20	---	---	< 20	---	< 20	< 20	---	< 20	---	< 20
BTEX																				
Benzene	65	0.7	1	-	350	100	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---
Ethylbenzene	125	-	-	-	-	4,500	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---
m&p-Xylenes	-	-	-	-	-	-	mg/kg	---	---	< 0.2	---	---	---	---	< 0.2	---	---	---	---	---
c-Xylene	-	-	-	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---
Toluene	105	-	-	-	-	14,000	mg/kg	---	---	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	---	---	< 0.3	---	---	---	---	< 0.3	---	---	---	---	---
Total MAH	-	-	-	-	-	-	mg/kg	---	---	< 0.6	---	---	---	---	< 0.6	---	---	---	---	---

XXX Indicates Reported Concentration Exceeds NEPM ESL
 XXX Indicates Reported Concentration Exceeds NEPM HSL
 XXX Indicates Reported Concentration Exceeds NEPM Management Limits
 XXX Indicates Reported Concentration Exceeds CRC Care Guideline

ANALYTE	Assessment Criteria						TABLE 3 CHEMICAL TESTING RESULTS TOTAL PETROLEUM HYDROCARBONS (TPH) and MONOCYCLIC AROMATIC HYDROCARBONS (MAH) 256 Huntingdale Rd, Huntingdale 23/02/2016					
	NEPM Ecological Screening Levels (Fine Grained Soil)	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 0 m to <1 m	NEPM 2013 Health Screening Levels for Vapour Intrusion (HSL A & HSL B) - Clay - 1 m to <2 m	NEPM 2013 - Management Limits for TPH fractions F1-F4 in soil (fine grained) - Residential, parkland and public open spaces	CRC care Health Screening Levels for Vapour Intrusion - Technical Report No. 10 - HSL-A - Intrusive Maintenance Worker (Shallow Trench) - 0m to <2m	CRC care Health Screening Levels for Direct Contact - Technical Report No. 10 - HSL-A	Sample Location	SB 11				
	Sample Number	SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0	SB11-4.0	Sample Depth	Natural	Natural	Natural	Natural
TPH - 1999 NEPM Fractions												
TRH C10-36 (Total)	-	-	-	-	-	-	-	mg/kg	120	---	< 50	---
TRH C10-C14	-	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---
TRH C15-C28	-	-	-	-	-	-	-	mg/kg	65	---	< 50	---
TRH C29-C36	-	-	-	-	-	-	-	mg/kg	58	---	< 50	---
TRH C6-C9	-	-	-	-	-	-	-	mg/kg	< 20	---	< 20	---
TRH - 2013 NEPM Fractions												
Naphthalene	-	5	-	-	-	1,400	mg/kg	< 0.5	---	< 0.5	---	< 0.5
TRH >C10-C16	-	-	-	1,000	-	3,300	mg/kg	< 50	---	< 50	---	< 50
TRH >C10-C16 less Naphthalene (F2)	120	280	-	-	-	-	mg/kg	< 50	---	< 50	---	< 50
TRH >C16-C34	1300	-	-	3,500	-	4,500	mg/kg	< 100	---	< 100	---	< 100
TRH >C34-C40	5600	-	-	10,000	-	6,300	mg/kg	< 100	---	< 100	---	< 100
TRH C6-C10	-	-	-	800	-	4,400	mg/kg	< 20	---	< 20	---	< 20
TRH C6-C10 less BTEX (F1)	180	50	90	-	-	-	mg/kg	< 20	---	< 20	---	< 20
BTEX												
Benzene	65	0.7	1	-	350	100	mg/kg	---	---	< 0.1	---	---
Ethylbenzene	125	-	-	-	-	4,500	mg/kg	---	---	< 0.1	---	---
m&p-Xylenes	-	-	-	-	-	-	mg/kg	---	---	< 0.2	---	---
o-Xylene	-	-	-	-	-	-	mg/kg	---	---	< 0.1	---	---
Toluene	105	-	-	-	-	14,000	mg/kg	---	---	< 0.1	---	---
Xylenes - Total	45	-	-	-	-	12,000	mg/kg	---	---	< 0.3	---	---
Total MAH	-	-	-	-	-	-	mg/kg	---	---	<0.6	---	---
XXX		Indicates Reported Concentration Exceeds NEPM ESL										
XXX		Indicates Reported Concentration Exceeds NEPM HSL										
XXX		Indicates Reported Concentration Exceeds NEPM Management Limits										
XXX		Indicates Reported Concentration Exceeds CRC Care Guideline										

	Assessment Criteria	NEPM Ecological Investigation Levels	TABLE 4 CHEMICAL TESTING RESULTS Phenolic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016											
			SAMPLE DETAILS				RESULT							
		Sample Location	SB 1						SB 2					
		Sample Number	SB1-0.1	SB1-0.5	SB1-1.0	SB1-2.0	SB1-3.0	SB1-4.0	SB2-0.1	SB2-0.5	SB2-1.0	SB2-2.0	SB2-3.0	SB2-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
ANALYTE		Reporting Unit												
Phenols (Halogenated)														
2,4,5-Trichlorophenol	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	---
2,4,6-Trichlorophenol	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	---
2,4-Dichlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	< 0.5	---	---	---	---	< 0.5
2,6-Dichlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	< 0.5	---	---	---	---	< 0.5
2-Chlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	< 0.5	---	---	---	---	< 0.5
4-Chloro-3-methylphenol	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
Pentachlorophenol	-	100	130	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
Tetrachlorophenols - Total	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
Total Halogenated Phenol	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
Non-Halogenated Phenols														
2,4-Dimethylphenol	-	-	-	mg/kg	< 0.5	---	---	---	< 0.5	---	---	---	---	< 0.5
2,4-Dinitrophenol	-	-	-	mg/kg	< 5	---	---	---	< 5	---	---	---	---	< 5
2-Cyclohexyl-4,6-dinitrophenol	-	-	-	mg/kg	< 20	---	---	---	< 20	---	---	---	---	< 20
2-Methyl-4,6-dinitrophenol	-	-	-	mg/kg	< 5	---	---	---	< 5	---	---	---	---	< 5
2-Methylphenol (o-Cresol)	-	-	-	mg/kg	< 0.2	---	---	---	< 0.2	---	---	---	---	< 0.2
2-Nitrophenol	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
3&4-Methylphenol (m&p-Cresol)	-	-	-	mg/kg	< 0.4	---	---	---	< 0.4	---	---	---	---	< 0.4
4-Nitrophenol	-	-	-	mg/kg	< 5	---	---	---	< 5	---	---	---	---	< 5
Dinoseb	-	-	-	mg/kg	< 20	---	---	---	< 20	---	---	---	---	< 20
Phenol	-	3000	45000	mg/kg	< 0.5	---	---	---	< 0.5	---	---	---	---	< 0.5
Cresols (total)	-	400	4700	mg/kg	<0.6	---	---	---	<0.6	---	---	---	---	<0.6
Total Non-Halogenated Phenol	-	-	-	mg/kg	< 20	---	---	---	< 20	---	---	---	---	< 20

XXX

Indicates Reported Concentration Exceeds NEPM EIL

XXX

Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX

Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEPM Ecological Investigation Levels 2013 NEPM Health Investigation Level A - residential with garden/accessible soil 2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	TABLE 4 CHEMICAL TESTING RESULTS Phenolic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016																										
			SAMPLE DETAILS																										
			Sample Location	SB 3						SB 4																			
			Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0														
			Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0														
			Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural														
			Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016														
			ANALYTE	REPORTING UNIT																									
			Phenols (Halogenated)	RESULT																									
			2,4,5-Trichlorophenol	-	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---													
2,4,6-Trichlorophenol																													
2,4-Dichlorophenol																													
2,6-Dichlorophenol																													
2-Chlorophenol																													
4-Chloro-3-methylphenol																													
Pentachlorophenol																													
Tetrachlorophenols - Total																													
Total Halogenated Phenol																													
Non-Halogenated Phenols			RESULT																										
2,4-Dimethylphenol																													
2,4-Dinitrophenol																													
2-Cyclohexyl-4,6-dinitrophenol																													
2-Methyl-4,6-dinitrophenol																													
2-Methylphenol (o-Cresol)																													
2-Nitrophenol																													
3&4-Methylphenol (m&p-Cresol)																													
4-Nitrophenol																													
Dinoseb																													
Phenol				3000	45000	mg/kg	---	---	---	< 0.5	---	---	---	< 0.5	---	---													
Cresols (total)				400	4700	mg/kg	---	---	---	< 0.6	---	---	---	< 0.6	---	---													
Total Non-Halogenated Phenol				-	-	mg/kg	---	---	---	< 20	---	---	---	< 20	---	---													
XXX																													
Indicates Reported Concentration Exceeds NEPM EIL																													
XXX																													
Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria																													
XXX																													
Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria																													

	TABLE 4 CHEMICAL TESTING RESULTS Phenolic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016														
	SAMPLE DETAILS														
	Sample Location		SB 5						SB 6						
	Sample Number	SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0		
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0		
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural		
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016		
	ANALYTE	REPORTING UNIT													
	Phenols (Halogenated)	RESULT													
2,4,5-Trichlorophenol	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
2,4,6-Trichlorophenol	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
2,4-Dichlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	---	---	---	---	< 0.5	---	---
2,6-Dichlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	---	---	---	---	< 0.5	---	---
2-Chlorophenol	-	-	-	mg/kg	< 0.5	---	---	---	---	---	---	---	< 0.5	---	---
4-Chloro-3-methylphenol	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
Pentachlorophenol	-	100	130	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
Tetrachlorophenols - Total	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
Total Halogenated Phenol	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
Non-Halogenated Phenols															
2,4-Dimethylphenol	-	-	-	mg/kg	< 0.5	---	---	---	---	---	---	---	< 0.5	---	---
2,4-Dinitrophenol	-	-	-	mg/kg	< 5	---	---	---	---	---	---	---	< 5	---	---
2-Cyclohexyl-4,6-dinitrophenol	-	-	-	mg/kg	< 20	---	---	---	---	---	---	---	< 20	---	---
2-Methyl-4,6-dinitrophenol	-	-	-	mg/kg	< 5	---	---	---	---	---	---	---	< 5	---	---
2-Methylphenol (o-Cresol)	-	-	-	mg/kg	< 0.2	---	---	---	---	---	---	---	< 0.2	---	---
2-Nitrophenol	-	-	-	mg/kg	< 1	---	---	---	---	---	---	---	< 1	---	---
3&4-Methylphenol (m&p-Cresol)	-	-	-	mg/kg	< 0.4	---	---	---	---	---	---	---	< 0.4	---	---
4-Nitrophenol	-	-	-	mg/kg	< 5	---	---	---	---	---	---	---	< 5	---	---
Dinoseb	-	-	-	mg/kg	< 20	---	---	---	---	---	---	---	< 20	---	---
Phenol	-	3000	45000	mg/kg	< 0.5	---	---	---	---	---	---	---	< 0.5	---	---
Cresols (total)	-	400	4700	mg/kg	< 0.6	---	---	---	---	---	---	---	< 0.6	---	---
Total Non-Halogenated Phenol	-	-	-	mg/kg	< 20	---	---	---	---	---	---	---	< 20	---	---
XXX	Indicates Reported Concentration Exceeds NEPM EIL														
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria														
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria														

	Assessment Criteria	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - Residential with garden/accessible soil	2013 NEPM Health Investigation Level B - Residential with minimal opportunities for soil access
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TABLE 4

CHEMICAL TESTING RESULTS
Phenolic Compounds
256 Huntingdale Rd, Huntingdale

23/02/2016

SAMPLE DETAILS

Sample Location	SB 7						SB 8					
Sample Number	SB7-0.1	SB7-0.5	SB7-1.0	SB7-2.0	SB7-3.0	SB7-4.0	SB8-0.1	SB8-0.5	SB8-1.0	SB8-2.0	SB8-3.0	SB8-4.0
Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016

ANALYTE		Reporting Unit	RESULT									
Phenols (Halogenated)												
2,4,5-Trichlorophenol	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---
2,4,6-Trichlorophenol	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---
2,4-Dichlorophenol	-	-	mg/kg	---	---	< 0.5	---	---	---	< 0.5	---	---
2,6-Dichlorophenol	-	-	mg/kg	---	---	< 0.5	---	---	---	< 0.5	---	---
2-Chlorophenol	-	-	mg/kg	---	---	< 0.5	---	---	---	< 0.5	---	---
4-Chloro-3-methylphenol	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---
Pentachlorophenol	-	100	130	mg/kg	---	< 1	---	---	---	< 1	---	---
Tetrachlorophenols - Total	-	-	-	mg/kg	---	< 1	---	---	---	< 1	---	---
Total Halogenated Phenol	-	-	-	mg/kg	---	< 1	---	---	---	< 1	---	---
Non-Halogenated Phenols												
2,4-Dimethylphenol	-	-	mg/kg	---	---	< 0.5	---	---	---	< 0.5	---	---
2,4-Dinitrophenol	-	-	mg/kg	---	---	< 5	---	---	---	< 5	---	---
2-Cyclohexyl-4,6-dinitrophenol	-	-	mg/kg	---	---	< 20	---	---	---	< 20	---	---
2-Methyl-4,6-dinitrophenol	-	-	mg/kg	---	---	< 5	---	---	---	< 5	---	---
2-Methylphenol (o-Cresol)	-	-	mg/kg	---	---	< 0.2	---	---	---	< 0.2	---	---
2-Nitrophenol	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---
3&4-Methylphenol (m&p-Cresol)	-	-	mg/kg	---	---	< 0.4	---	---	---	< 0.4	---	---
4-Nitrophenol	-	-	mg/kg	---	---	< 5	---	---	---	< 5	---	---
Dinoseb	-	-	mg/kg	---	---	< 20	---	---	---	< 20	---	---
Phenol	-	3000	45000	mg/kg	---	< 0.5	---	---	---	< 0.5	---	---
Cresols (total)	-	400	4700	mg/kg	---	< 0.6	---	---	---	< 0.6	---	---
Total Non-Halogenated Phenol	-	-	-	mg/kg	---	< 20	---	---	---	< 20	---	---

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	TABLE 4												
		NEPM Ecological Investigation Levels		2013 NEPM Health Investigation Level A - residential with garden/accessible soil		2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access		SAMPLE DETAILS						
ANALYTE	Reporting Unit	SB 9						SB 10						
		Sample Location	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0
		Sample Number	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
Phenols (Halogenated)		RESULT												
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 0.5	---	---	---	< 0.5	---	---	< 0.5	---	< 0.5	
		mg/kg	---	< 0.5	---	---	---	< 0.5	---	---	< 0.5	---	< 0.5	
		mg/kg	---	< 0.5	---	---	---	< 0.5	---	---	< 0.5	---	< 0.5	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	100	130	---	---	---	---	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
Non-Halogenated Phenols		mg/kg	---	< 0.5	---	---	---	< 0.5	---	---	< 0.5	---	< 0.5	
		mg/kg	---	< 5	---	---	---	< 5	---	---	< 5	---	< 5	
		mg/kg	---	< 20	---	---	---	< 20	---	---	< 20	---	< 20	
		mg/kg	---	< 5	---	---	---	< 5	---	---	< 5	---	< 5	
		mg/kg	---	< 0.2	---	---	---	< 0.2	---	---	< 0.2	---	< 0.2	
		mg/kg	---	< 1	---	---	---	< 1	---	---	< 1	---	< 1	
		mg/kg	---	< 0.4	---	---	---	< 0.4	---	---	< 0.4	---	< 0.4	
		mg/kg	---	< 5	---	---	---	< 5	---	---	< 5	---	< 5	
		mg/kg	---	< 20	---	---	---	< 20	---	---	< 20	---	< 20	
		mg/kg	3000	45000	---	< 0.5	---	< 0.5	---	---	< 0.5	---	< 0.5	
		mg/kg	400	4700	---	< 0.6	---	< 0.6	---	---	< 0.6	---	< 0.6	
		mg/kg	---	< 20	---	---	---	< 20	---	---	< 20	---	< 20	
		mg/kg	---	< 20	---	---	---	< 20	---	---	< 20	---	< 20	
		mg/kg	---	< 20	---	---	---	< 20	---	---	< 20	---	< 20	
XXX	Indicates Reported Concentration Exceeds NEPM EIL													
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria													
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria													

	Assessment Criteria		TABLE 4 CHEMICAL TESTING RESULTS Phenolic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016						
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	SAMPLE DETAILS					
ANALYTE			Reporting Unit	RESULT					
Phenols (Halogenated)			mg/kg	< 1	---	---	---	---	< 1
2,4,5-Trichlorophenol	-	-	mg/kg	< 1	---	---	---	---	< 1
2,4,6-Trichlorophenol	-	-	mg/kg	< 0.5	---	---	---	---	< 0.5
2,4-Dichlorophenol	-	-	mg/kg	< 0.5	---	---	---	---	< 0.5
2,6-Dichlorophenol	-	-	mg/kg	< 0.5	---	---	---	---	< 0.5
2-Chlorophenol	-	-	mg/kg	< 0.5	---	---	---	---	< 0.5
4-Chloro-3-methylphenol	-	-	mg/kg	< 1	---	---	---	---	< 1
Pentachlorophenol	-	100	mg/kg	< 1	---	---	---	---	< 1
Tetrachlorophenols - Total	-	-	mg/kg	< 1	---	---	---	---	< 1
Total Halogenated Phenol	-	-	mg/kg	< 1	---	---	---	---	< 1
Non-Halogenated Phenols			mg/kg	< 0.5	---	---	---	---	< 0.5
2,4-Dimethylphenol	-	-	mg/kg	< 5	---	---	---	---	< 5
2,4-Dinitrophenol	-	-	mg/kg	< 20	---	---	---	---	< 20
2-Cyclohexyl-4,6-dinitrophenol	-	-	mg/kg	< 5	---	---	---	---	< 5
2-Methyl-4,6-dinitrophenol	-	-	mg/kg	< 0.2	---	---	---	---	< 0.2
2-Methylphenol (o-Cresol)	-	-	mg/kg	< 1	---	---	---	---	< 1
3&4-Methylphenol (m&p-Cresol)	-	-	mg/kg	< 0.4	---	---	---	---	< 0.4
4-Nitrophenol	-	-	mg/kg	< 5	---	---	---	---	< 5
Dinoseb	-	-	mg/kg	< 20	---	---	---	---	< 20
Phenol	-	3000	mg/kg	< 0.5	---	---	---	---	< 0.5
Cresols (total)	-	400	mg/kg	< 0.6	---	---	---	---	< 0.6
Total Non-Halogenated Phenol	-	-	mg/kg	< 20	---	---	---	---	< 20
XXX	Indicates Reported Concentration Exceeds NEPM EIL								
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria								
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria								

	Assessment Criteria	TABLE 5 CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale														
		2013 NEPM Health Investigation Level A - residential with garden-accessible soil		2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access		SAMPLE DETAILS										
	NEPM Ecological Investigation Levels	Sample Location	SB1	SB1.0.1	SB1.0.5	SB1.1.0	SB1.2.0	SB1.3.0	SB1.4.0	SB2	SB2.0.1	SB2.0.5	SB2.1.0	SB2.2.0	SB2.3.0	SB2.4.0
		Sample Number	SB1	SB1.0.1	SB1.0.5	SB1.1.0	SB1.2.0	SB1.3.0	SB1.4.0	SB2	SB2.0.1	SB2.0.5	SB2.1.0	SB2.2.0	SB2.3.0	SB2.4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0		
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural	
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	
		Reporting Unit	RESULT													
	ANALYTE		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1,1,2-Tetrachloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1,1-Trichloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1,2,2-Tetrachloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1,2-Trichloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1-Dichloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,1-Dichloroethene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2,3-Trichloropropane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2,4-Trichlorobenzene		mg/kg	<0.2	---	---	---	---	<0.2	---	---	---	---	---	<0.2	
	1,2,4-Trimethylbenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2-Dibromoethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2-Dichlorobenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2-Dichloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,2-Dichloropropane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,3,5-Trimethylbenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,3-Dichlorobenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,3-Dichloropropane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	1,4-Dichlorobenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	2-Butanone (MEK)		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	2-Propanone (Acetone)		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	4-Chlorotoluene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	4-Methyl-2-pentanone (MIBK)		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Allyl chloride		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Benzene		mg/kg	<0.1	---	---	---	---	<0.1	---	---	---	---	---	<0.1	
	Bromobenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Bromochloromethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Bromodichloromethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Bromoform		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Bromomethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Carbon disulfide		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Carbon Tetrachloride		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Chlorobenzene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Chloroethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Chloroform		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Chlormethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	cis-1,2-Dichloroethene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	cis-1,3-Dichloropropene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Dibromochloromethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Dibromomethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Dichlorodifluoromethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Ethylbenzene		mg/kg	<0.1	---	---	---	---	<0.1	---	---	---	---	---	<0.1	
	Hexachlorobutadiene		mg/kg	<0.2	---	---	---	---	<0.2	---	---	---	---	---	<0.2	
	Iodomethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Isopropyl benzene (Cumene)		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	m,p-Xylenes		mg/kg	<0.2	---	---	---	---	<0.2	---	---	---	---	---	<0.2	
	Methylene Chloride		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	o-Xylene		mg/kg	<0.1	---	---	---	---	<0.1	---	---	---	---	---	<0.1	
	Sterene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Tetrachloroethene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Toluene		mg/kg	<0.1	---	---	---	---	<0.1	---	---	---	---	---	<0.1	
	trans-1,2-Dichloroethene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	trans-1,3-Dichloropropene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Trichloroethene		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Trichlorofluoromethane		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Vinyl chloride		mg/kg	<0.05	---	---	---	---	<0.05	---	---	---	---	---	<0.05	
	Xylenes - Total		mg/kg	<0.3	---	---	---	---	<0.3	---	---	---	---	---	<0.3	

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEPM Ecological Investigation Levels	TABLE 5 CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale											
			2013 NEPM Health Investigation Level A - residential with garden accessible soil					2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access					SAMPLE DETAILS	
		Sample Location	SB 3					SB 4					23/02/2016	
		Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
ANALYTE	Reporting Unit		RESULT											
1,1,1,2-Tetrachloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,1,1-Trichloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,1,2,2-Tetrachloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,1,2-Trichloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,1-Dichloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,1-Dichloroethene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2,3-Trichloropropane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2,4-Trichlorobenzene	mg/kg	-	---	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---
1,2,4-Trimethylbenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2-Dibromoethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2-Dichlorobenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2-Dichloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,2-Dichloropropane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,3,5-Trimethylbenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,3-Dichlorobenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,3-Dichloropropane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
1,4-Dichlorobenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
2-Butanone (MEK)	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
2-Propanone (Acetone)	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
4-Chlorotoluene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
4-Methyl-2-pentanone (MIBK)	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Allyl chloride	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Benzene	mg/kg	-	---	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---
Bromobenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Bromoform	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Bromochloromethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Bromodichloromethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Bromomethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Carbon disulfide	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Carbon Tetrachloride	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Chlorobenzene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Chloroethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Chloroform	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Chloromethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
cis-1,2-Dichloroethene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
cis-1,3-Dichloropropene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Dibromochloromethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Dibromomethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Ethylenedibromide	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Ethylnitrosoether	mg/kg	-	---	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---
Hexachlorobutadiene	mg/kg	-	---	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---
Iodomethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Isopropyl benzene (Cumene)	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
m,p-Xylenes	mg/kg	-	---	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---
Methylene Chloride	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
o-Xylene	mg/kg	-	---	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---
Styrene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Tetrachloroethene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Toluene	mg/kg	-	---	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---
trans-1,2-Dichloroethene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
trans-1,3-Dichloropropene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Trichloroethene	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Trichlorofluoromethane	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Vinyl chloride	mg/kg	-	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---
Xylenes - Total	mg/kg	-	---	---	---	< 0.3	---	---	---	< 0.3	---	---	---	---

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEPM Ecological Investigation Levels	TABLE 5													
			2013 NEPM Health Investigation Level A - residential with garden accessible soil		2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access		CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale									
		Sample Location	SB 5					SAMPLE DETAILS					SB 6			
	Sample Number	SB5.0.1	SB5.0.5	SB5.1.0	SB5.2.0	SB5.3.0	SB5.4.0	SB6.0.1	SB6.0.5	SB6.1.0	SB6.2.0	SB6.3.0	SB6.4.0			
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0			
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural			
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016			
ANALYTE	Reporting Unit	RESULT														
1,1,1,2-Tetrachloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,1,1-Trichloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,1,2,2-Tetrachloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,1,2-Trichloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,1-Dichloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,1-Dichloroethene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2,3-Trichloropropane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2,4-Trichlorobenzene	mg/kg	< 0.2	---	---	---	---	---	---	---	---	< 0.2	---	---			
1,2,4-Trimethylbenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2-Dibromoethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2-Dichloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,2-Dichloropropane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,3,5-Trimethylbenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,3-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,3-Dichloropropane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
1,4-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
2-Butanone (MEK)	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
2-Propanone (Acetone)	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
4-Chlorotoluene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Allyl chloride	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Benzene	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---			
Bromobenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Bromoform	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Bromochloromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Bromodichloromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Bromomethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Carbon disulfide	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Carbon Tetrachloride	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Chlorobenzene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Chloroethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Chloroform	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Chloromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
cis-1,2-Dichloroethene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
cis-1,3-Dichloropropene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Dibromochloromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Dibromomethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Dichlorodifluoromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Ethylnitrobenzene	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---			
Hexachlorobutadiene	mg/kg	< 0.2	---	---	---	---	---	---	---	---	< 0.2	---	---			
Iodomethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Isopropyl benzene (Cumene)	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
m,p-Xylenes	mg/kg	< 0.2	---	---	---	---	---	---	---	---	< 0.2	---	---			
Methylene Chloride	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
o-Xylene	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---			
Styrene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Tetrachloroethene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Toluene	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---			
trans-1,2-Dichloroethene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
trans-1,3-Dichloropropene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Trichloroethene	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Trichlorofluoromethane	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Vinyl chloride	mg/kg	< 0.05	---	---	---	---	---	---	---	---	< 0.05	---	---			
Xylenes - Total	mg/kg	< 0.3	---	---	---	---	---	---	---	---	< 0.3	---	---			

XXX Indicates Reported Concentration Exceeds NEPM EIL
 XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
 XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEPM Ecological Investigation Levels	TABLE 5 CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016											
			SAMPLE DETAILS						SB 8					
	Sample Location	SB7	SB7.0.1	SB7.0.5	SB7.1.0	SB7.2.0	SB7.3.0	SB7.4.0	SB8.0.1	SB8.0.5	SB8.1.0	SB8.2.0	SB8.3.0	SB8.4.0
ANALYTE	Reporting Unit													
1,1,1,2-Tetrachloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,1,1-Trichloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,1,2,2-Tetrachloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,1,2-Trichloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,1-Dichloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,1-Dichloroethene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2,3-Trichloropropane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2,4-Trichlorobenzene	mg/kg	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---	---	< 0.2
1,2,4-Trimethylbenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2-Dibromoethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2-Dichlorobenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2-Dichloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,2-Dichloropropane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,3,5-Trimethylbenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,3-Dichlorobenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,3-Dichloropropane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
1,4-Dichlorobenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
2-Butanone (Mek)	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
2-Propanone (Acetone)	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
4-Chlorotoluene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
4-Methyl-2-pentanone (MIBK)	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Amyl chloride	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Benzene	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	---	< 0.1
Bromobenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Bromochloromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Bromodichloromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Bromoform	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Bromomethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Carbon disulfide	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Carbon Tetrachloride	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Chlorobenzene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Chloroethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Chloroform	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Chloromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
cis-1,2-Dichloroethene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
cis-1,3-Dichloropropene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Dibromochloromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Dibromomethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Dichlorodifluoromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Ethylbenzene	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	---	< 0.1
Hexachlorobutadiene	mg/kg	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---	---	< 0.2
Iodomethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Isopropyl benzene (Cumene)	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
m,p-Xylenes	mg/kg	---	---	< 0.2	---	---	---	< 0.2	---	---	---	---	---	< 0.2
Methylene Chloride	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
o-Xylene	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	---	< 0.1
Styrene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Tetrachloroethene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Toluene	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	---	< 0.1
trans-1,2-Dichloroethene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
trans-1,3-Dichloropropene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Trichloroethene	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Trichlorofluoromethane	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Vinyl chloride	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	---	< 0.05
Xylenes - Total	mg/kg	---	---	< 0.3	---	---	---	< 0.3	---	---	---	---	---	< 0.3

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	NEMP Ecological Investigation Levels	TABLE 5 CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016															
			SAMPLE DETAILS						TEST RESULTS									
		2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	Sample Location	SB9	SB9.0.1	SB9.0.5	SB9.1.0	SB9.2.0	SB9.3.0	SB9.4.0	SB10	SB10.0.1	SB10.0.5	SB10.1.0	SB10.2.0	SB10.3.0	SB10.4.0
ANALYTE	Reporting Unit																	
1,1,1,2-Tetrachloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,1,1-Trichloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,1,2,2-Tetrachloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,1,2-Trichloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,1-Dichloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,1-Dichloroethene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2,3-Trichloropropane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2,4-Trichlorobenzene	mg/kg	---	< 0.2	---	---	---	---	---	< 0.2	---	---	< 0.2	---	< 0.2	---	---	---	
1,2,4-Trimethylbenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2-Dibromoethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2-Dichlorobenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2-Dichloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,2-Dichloropropane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,3,5-Trimethylbenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,3-Dichlorobenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,3-Dichloropropane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
1,4-Dichlorobenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
2-Butanone (Mek)	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
2-Propanone (Acetone)	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
4-Chlorotoluene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
4-Methyl-2-pentanone (MIBK)	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Allyl chloride	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Benzene	mg/kg	---	< 0.1	---	---	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---	---	---	
Bromobenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Bromochloromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Bromodichloromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Bromoform	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Bromomethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Carbon disulfide	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Carbon Tetrachloride	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Chlorobenzene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Chloroethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Chloroform	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Chloromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
cis-1,2-Dichloroethene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
cis-1,3-Dichloropropene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Dibromochloromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Dibromomethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Dichlorodifluoromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	---	---	
Ethylbenzene	mg/kg	---	< 0.1	---	---	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---	---	---	
Hexachlorobutadiene	mg/kg	---	< 0.2	---	---	---	---	---	< 0.2	---	---	< 0.2	---	< 0.2	---	< 0.2	---	
Iodomethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Isopropyl benzene (Cumene)	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
m,p-Xylenes	mg/kg	---	< 0.2	---	---	---	---	---	< 0.2	---	---	< 0.2	---	< 0.2	---	< 0.2	---	
Methylene Chloride	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
o-Xylene	mg/kg	---	< 0.1	---	---	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---	< 0.1	---	
Styrene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Tetrachloroethene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Toluene	mg/kg	---	< 0.1	---	---	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---	< 0.1	---	
trans-1,2-Dichloroethene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
trans-1,3-Dichloropropene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Trichloroethene	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Trichlorofluoromethane	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Vinyl chloride	mg/kg	---	< 0.05	---	---	---	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	< 0.05	---	
Xylenes - Total	mg/kg	---	< 0.3	---	---	---	---	---	< 0.3	---	---	< 0.3	---	< 0.3	---	< 0.3	---	

XXX Indicates Reported Concentration Exceeds NEPM EIL
 XXXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
 XXXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	TABLE 5 CHEMICAL TESTING RESULTS Volatile Organic Compounds 256 Huntingdale Rd, Huntingdale 23/02/2016					
		NEPM Ecological Investigation Levels		2013 NEPM Health Investigation Level A - residential with garden/accessible soil		2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	
ANALYTE	Reporting Unit	SB 11					
	Sample Location	SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0	SB11-4.0
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
1,1,1,2-Tetrachloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,1,1-Trichloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,1,2,2-Tetrachloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,1,2-Trichloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,1-Dichloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,1-Dichloroethene	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2,3-Trichloropropane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2,4-Trichlorobenzene	mg/kg	< 0.2	---	---	---	---	< 0.2
1,2,4-Trimethylbenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2-Dibromoethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2-Dichloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,2-Dichloropropane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,3,5-Trimethylbenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
1,3-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
1,3-Dichloropropane	mg/kg	< 0.05	---	---	---	---	< 0.05
1,4-Dichlorobenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
2-Butanone (MEK)	mg/kg	< 0.05	---	---	---	---	< 0.05
2-Propanone (Acetone)	mg/kg	< 0.05	---	---	---	---	< 0.05
4-Chlorotoluene	mg/kg	< 0.05	---	---	---	---	< 0.05
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.05	---	---	---	---	< 0.05
Allyl chloride	mg/kg	< 0.05	---	---	---	---	< 0.05
Benzene	mg/kg	< 0.1	---	---	---	---	< 0.1
Bromobenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
Bromochloromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Bromodichloromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Bromoform	mg/kg	< 0.05	---	---	---	---	< 0.05
Bromomethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Carbon disulfide	mg/kg	< 0.05	---	---	---	---	< 0.05
Carbon Tetrachloride	mg/kg	< 0.05	---	---	---	---	< 0.05
Chlorobenzene	mg/kg	< 0.05	---	---	---	---	< 0.05
Chloroethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Chloroform	mg/kg	< 0.05	---	---	---	---	< 0.05
Chloromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
cis-1,2-Dichloroethene	mg/kg	< 0.05	---	---	---	---	< 0.05
cis-1,3-Dichloropropene	mg/kg	< 0.05	---	---	---	---	< 0.05
Dibromochloromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Dibromomethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Dichlorodifluoromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Ethylbenzene	mg/kg	< 0.1	---	---	---	---	< 0.1
Hexachlorobutadiene	mg/kg	< 0.2	---	---	---	---	< 0.2
Iodomethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Isopropyl benzene (Cumene)	mg/kg	< 0.05	---	---	---	---	< 0.05
m,p-Xylenes	mg/kg	< 0.2	---	---	---	---	< 0.2
Methylene Chloride	mg/kg	< 0.05	---	---	---	---	< 0.05
c-Xylene	mg/kg	< 0.1	---	---	---	---	< 0.1
Styrene	mg/kg	< 0.05	---	---	---	---	< 0.05
Tetrachloroethene	mg/kg	< 0.05	---	---	---	---	< 0.05
Toluene	mg/kg	< 0.1	---	---	---	---	< 0.1
trans-1,2-Dichloroethene	mg/kg	< 0.05	---	---	---	---	< 0.05
trans-1,3-Dichloropropene	mg/kg	< 0.05	---	---	---	---	< 0.05
Trichloroethene	mg/kg	< 0.05	---	---	---	---	< 0.05
Trichlorofluoromethane	mg/kg	< 0.05	---	---	---	---	< 0.05
Vinyl chloride	mg/kg	< 0.05	---	---	---	---	< 0.05
Xylenes - Total	mg/kg	< 0.3	---	---	---	---	< 0.3

XXX Indicates Reported Concentration Exceeds NEPM EIL.
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

		TABLE 6 CHEMICAL TESTING RESULTS ORGANOCHLORINE PESTICIDES (OCP) 256 Huntingdale Rd, Huntingdale 23/02/2016												
		SAMPLE DETAILS												
ANALYTE	NEPM Ecological Investigation Levels 2013 NEPM Health Investigation Level A - residential with garden/accessible soil 2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	Sample Location	SB 1						SB 2					
		Sample Number	SB1-0.1	SB1-0.5	SB1-1.0	SB1-2.0	SB1-3.0	SB1-4.0	SB2-0.1	SB2-0.5	SB2-1.0	SB2-2.0	SB2-3.0	SB2-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
REPORTING UNIT		RESULT												
4,4'-DDD	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
4,4'-DDE	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
4,4'-DDT	180	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
a-BHC	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Aldrin	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
b-BHC	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Chlordane	-	50	90	mg/kg	< 0.1	---	---	---	< 0.1	---	---	---	---	< 0.1
d-BHC	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Dieldrin	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan I	-	270	400	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan II	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan sulphate	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin	-	10	20	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin aldehyde	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin ketone	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
g-BHC (Lindane)	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Heptachlor	-	6	10	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Heptachlor epoxide	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Hexachlorobenzene	-	10	15	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Methoxychlor	-	300	500	mg/kg	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Toxaphene	-	-	-	mg/kg	< 1	---	---	---	< 1	---	---	---	---	< 1
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	<0.1	---	---	---	<0.1	---	---	---	---	<0.1
Sum of DDD + DDE + DDT	200	240	600	mg/kg	<0.15	---	---	---	<0.15	---	---	---	---	<0.15
Sum of organochlorine pesticides	-	-	-	mg/kg	<2.05	---	---	---	<2.05	---	---	---	---	<2.05

XXX

Indicates Reported Concentration Exceeds NEPM EIL

XXX

Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX

Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	TABLE 6																	
	CHEMICAL TESTING RESULTS ORGANOCHLORINE PESTICIDES (OCP) 256 Huntingdale Rd, Huntingdale 23/02/2016																	
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil		2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access		SAMPLE DETAILS												
		Sample Location	SB 3						SB 4									
		Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0				
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0				
ANALYTE	Reporting Unit	RESULT																
4,4'-DDD	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
4,4'-DDE	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
4,4'-DDT	180	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
a-BHC	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Aldrin	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
b-BHC	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Chlordane	-	50	90	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---				
d-BHC	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Dieldrin	-	-	mg/kg	---	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endosulfan I	-	270	400	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endosulfan II	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endosulfan sulphate	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endrin	-	10	20	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endrin aldehyde	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Endrin ketone	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
g-BHC (Lindane)	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Heptachlor	-	6	10	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Heptachlor epoxide	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Hexachlorobenzene	-	10	15	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Methoxychlor	-	300	500	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---				
Toxaphene	-	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---	---				
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---				
Sum of DDD + DDE + DDT	200	240	600	mg/kg	---	---	< 0.15	---	---	---	< 0.15	---	---	---				
Sum of organochlorine pesticides	-	-	-	mg/kg	---	---	< 2.05	---	---	---	< 2.05	---	---	---				

XXX

Indicates Reported Concentration Exceeds NEPM EIL

XXX

Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX

Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	TABLE 6 CHEMICAL TESTING RESULTS ORGANOCHLORINE PESTICIDES (OCP) 256 Huntingdale Rd, Huntingdale 23/02/2016															
	Assessment Criteria			SAMPLE DETAILS												
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	Sample Location	SB 5						SB 6					
	Sample Number	SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0			
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0			
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural			
ANALYTE	Reporting Unit	RESULT														
4,4'-DDD	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
4,4'-DDE	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
4,4'-DDT	180	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
a-BHC	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Aldrin	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
b-BHC	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Chlordane	-	50	90	mg/kg	< 0.1	---	---	---	---	---	---	< 0.1	---	---		
d-BHC	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Dieldrin	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endosulfan I	-	270	400	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endosulfan II	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endosulfan sulphate	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endrin	-	10	20	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endrin aldehyde	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Endrin ketone	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
g-BHC (Lindane)	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Heptachlor	-	6	10	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Heptachlor epoxide	-	-	-	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Hexachlorobenzene	-	10	15	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Methoxychlor	-	300	500	mg/kg	< 0.05	---	---	---	---	---	---	< 0.05	---	---		
Toxaphene	-	-	-	mg/kg	< 1	---	---	---	---	---	---	< 1	---	---		
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	<0.1	---	---	---	---	---	---	<0.1	---	---		
Sum of DDD + DDE + DDT	200	240	600	mg/kg	<0.15	---	---	---	---	---	---	<0.15	---	---		
Sum of organochlorine pesticides	-	-	-	mg/kg	<2.05	---	---	---	---	---	---	<2.05	---	---		

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria	TABLE 6 CHEMICAL TESTING RESULTS ORGANOCHLORINE PESTICIDES (OCP) 256 Huntingdale Rd, Huntingdale 23/02/2016														
		SAMPLE DETAILS														
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	Sample Location	SB 7						SB 8					
	Sample Number	SB7-0.1	SB7-0.5	SB7-1.0	SB7-2.0	SB7-3.0	SB7-4.0	SB8-0.1	SB8-0.5	SB8-1.0	SB8-2.0	SB8-3.0	SB8-4.0			
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0			
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural			
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016			
ANALYTE	Reporting Unit	RESULT														
4,4'-DDD	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
4,4'-DDE	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
4,4'-DDT	180	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
a-BHC	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Aldrin	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
b-BHC	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Chlordane	-	50	90	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	< 0.1
d-BHC	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Dieldrin	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan I	-	270	400	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan II	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endosulfan sulphate	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin	-	10	20	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin aldehyde	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Endrin ketone	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
g-BHC (Lindane)	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Heptachlor	-	6	10	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Heptachlor epoxide	-	-	-	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Hexachlorobenzene	-	10	15	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Methoxychlor	-	300	500	mg/kg	---	---	< 0.05	---	---	---	< 0.05	---	---	---	---	< 0.05
Toxaphene	-	-	-	mg/kg	---	---	< 1	---	---	---	< 1	---	---	---	---	< 1
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---	---	---	---	< 0.1
Sum of DDD + DDE + DDT	200	240	600	mg/kg	---	---	< 0.15	---	---	---	< 0.15	---	---	---	---	< 0.15
Sum of organochlorine pesticides	-	-	-	mg/kg	---	---	< 2.05	---	---	---	< 2.05	---	---	---	---	< 2.05

XXX Indicates Reported Concentration Exceeds NEPM EII

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria																																																																																																																																																																																																																																																																																																																																																																																																																																					
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016																																																																																																																																																																																																																																																																																																																																																																																																																										
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<td>a-BHC</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Aldrin</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>b-BHC</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Chlordane</td><td>-</td><td>50</td><td>90</td><td>mg/kg</td><td>---</td><td>< 0.1</td><td>---</td><td>---</td><td>< 0.1</td><td>---</td><td>---</td><td>< 0.1</td><td>---</td><td>< 0.1</td><td>---</td></tr> <tr> <td>d-BHC</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Dieldrin</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endosulfan I</td><td>-</td><td>270</td><td>400</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endosulfan II</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endosulfan sulphate</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endrin</td><td>-</td><td>10</td><td>20</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endrin aldehyde</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Endrin ketone</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>g-BHC (Lindane)</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Heptachlor</td><td>-</td><td>6</td><td>10</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Heptachlor epoxide</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Hexachlorobenzene</td><td>-</td><td>10</td><td>15</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Methoxychlor</td><td>-</td><td>300</td><td>500</td><td>mg/kg</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>---</td><td>< 0.05</td><td>---</td><td>< 0.05</td><td>---</td></tr> <tr> <td>Toxaphene</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td>< 1</td><td>---</td><td>---</td><td>< 1</td><td>---</td><td>---</td><td>< 1</td><td>---</td><td>< 1</td><td>---</td></tr> <tr> <td>Sum of Aldrin + Dieldrin</td><td>10</td><td>6</td><td>10</td><td>mg/kg</td><td>---</td><td><0.1</td><td>---</td><td>---</td><td><0.1</td><td>---</td><td>---</td><td><0.1</td><td>---</td><td><0.1</td><td>---</td></tr> <tr> <td>Sum of DDD + DDE + DDT</td><td>200</td><td>240</td><td>600</td><td>mg/kg</td><td>---</td><td><0.15</td><td>---</td><td>---</td><td><0.15</td><td>---</td><td>---</td><td><0.15</td><td>---</td><td><0.15</td><td>---</td></tr> <tr> <td>Sum of organochlorine pesticides</td><td>-</td><td>-</td><td>-</td><td>mg/kg</td><td>---</td><td><2.05</td><td>---</td><td>---</td><td><2.05</td><td>---</td><td>---</td><td><2.05</td><td>---</td><td><2.05</td><td>---</td></tr> </tbody> </table>													ANALYTE	RESULT												ANALYTE	Reporting Unit												4,4'-DDD	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	4,4'-DDE	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	4,4'-DDT	180	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	a-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Aldrin	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	b-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Chlordane	-	50	90	mg/kg	---	< 0.1	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---	d-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Dieldrin	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endosulfan I	-	270	400	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endosulfan II	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endosulfan sulphate	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endrin	-	10	20	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endrin aldehyde	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Endrin ketone	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	g-BHC (Lindane)	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Heptachlor	-	6	10	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Heptachlor epoxide	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Hexachlorobenzene	-	10	15	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Methoxychlor	-	300	500	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---	Toxaphene	-	-	-	mg/kg	---	< 1	---	---	< 1	---	---	< 1	---	< 1	---	Sum of Aldrin + Dieldrin	10	6	10	mg/kg	---	<0.1	---	---	<0.1	---	---	<0.1	---	<0.1	---	Sum of DDD + DDE + DDT	200	240	600	mg/kg	---	<0.15	---	---	<0.15	---	---	<0.15	---	<0.15	---	Sum of organochlorine pesticides	-	-	-	mg/kg	---	<2.05	---	---	<2.05	---	---	<2.05	---	<2.05	---
ANALYTE	RESULT																																																																																																																																																																																																																																																																																																																																																																																																																																					
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4,4'-DDD	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
4,4'-DDE	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
4,4'-DDT	180	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
a-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Aldrin	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
b-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Chlordane	-	50	90	mg/kg	---	< 0.1	---	---	< 0.1	---	---	< 0.1	---	< 0.1	---																																																																																																																																																																																																																																																																																																																																																																																																																							
d-BHC	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Dieldrin	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endosulfan I	-	270	400	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endosulfan II	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endosulfan sulphate	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endrin	-	10	20	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endrin aldehyde	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Endrin ketone	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
g-BHC (Lindane)	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Heptachlor	-	6	10	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Heptachlor epoxide	-	-	-	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Hexachlorobenzene	-	10	15	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Methoxychlor	-	300	500	mg/kg	---	< 0.05	---	---	< 0.05	---	---	< 0.05	---	< 0.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Toxaphene	-	-	-	mg/kg	---	< 1	---	---	< 1	---	---	< 1	---	< 1	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	---	<0.1	---	---	<0.1	---	---	<0.1	---	<0.1	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Sum of DDD + DDE + DDT	200	240	600	mg/kg	---	<0.15	---	---	<0.15	---	---	<0.15	---	<0.15	---																																																																																																																																																																																																																																																																																																																																																																																																																							
Sum of organochlorine pesticides	-	-	-	mg/kg	---	<2.05	---	---	<2.05	---	---	<2.05	---	<2.05	---																																																																																																																																																																																																																																																																																																																																																																																																																							

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria		TABLE 6 CHEMICAL TESTING RESULTS ORGANOCHLORINE PESTICIDES (OCP) 256 Huntingdale Rd, Huntingdale 23/02/2016						
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - Residential with garden/accessible soil	SAMPLE DETAILS						
ANALYTE		Reporting Unit	RESULT						
4,4'-DDD	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
4,4'-DDE	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
4,4'-DDT	180	-	mg/kg	< 0.05	---	---	---	---	< 0.05
a-BHC	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
Aldrin	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
b-BHC	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
Chlordane	-	50	mg/kg	< 0.1	---	---	---	---	< 0.1
d-BHC	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
Dieldrin	-	-	mg/kg	< 0.05	---	---	---	---	< 0.05
Endosulfan I	-	270	400	mg/kg	< 0.05	---	---	---	< 0.05
Endosulfan II	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
Endosulfan sulphate	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
Endrin	-	10	20	mg/kg	< 0.05	---	---	---	< 0.05
Endrin aldehyde	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
Endrin ketone	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
g-BHC (Lindane)	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
Heptachlor	-	6	10	mg/kg	< 0.05	---	---	---	< 0.05
Heptachlor epoxide	-	-	-	mg/kg	< 0.05	---	---	---	< 0.05
Hexachlorobenzene	-	10	15	mg/kg	< 0.05	---	---	---	< 0.05
Methoxychlor	-	300	500	mg/kg	< 0.05	---	---	---	< 0.05
Toxaphene	-	-	-	mg/kg	< 1	---	---	---	< 1
Sum of Aldrin + Dieldrin	10	6	10	mg/kg	< 0.1	---	---	---	< 0.1
Sum of DDD + DDE + DDT	200	240	600	mg/kg	< 0.15	---	---	---	< 0.15
Sum of organochlorine pesticides	-	-	-	mg/kg	< 2.05	---	---	---	< 2.05

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	TABLE 7 CHEMICAL TESTING RESULTS POLYCHLORINATED BIPHENYLS (PCB) 256 Huntingdale Rd, Huntingdale 23/02/2016														
	SAMPLE DETAILS														
	Sample Location		SB 1						SB 2						
	Sample Number	SB1-0.1	SB1-0.5	SB1-1.0	SB1-2.0	SB1-3.0	SB1-4.0	SB2-0.1	SB2-0.5	SB2-1.0	SB2-2.0	SB2-3.0	SB2-4.0		
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0		
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural		
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016		
	ANALYTE	RESULT													
	Reporting Unit	mg/kg	< 0.1	---	---	---	---	< 0.1	---	---	---	---	---	< 0.1	
	Aroclor-1016	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	
Aroclor-1221	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Aroclor-1232	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Aroclor-1242	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Aroclor-1248	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Aroclor-1254	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Aroclor-1260	-	-	-	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	
Total Polychlorinated biphenylsDB	-	10	40	mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	TABLE 7 CHEMICAL TESTING RESULTS POLYCHLORINATED BIPHENYLS (PCB) 256 Huntingdale Rd, Huntingdale 23/02/2016													
	SAMPLE DETAILS													
	Assessment Criteria	Sample Location		SB 3						SB 4				
		Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
		Reporting Unit	RESULT											
		Aroclor-1016	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1221	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1232	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1242	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1248	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1254	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Aroclor-1260	-	-	-	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
		Total Polychlorinated biphenylsDB	-	10	40	mg/kg	---	---	< 0.1	---	---	---	< 0.1	---
XXX	Indicates Reported Concentration Exceeds NEPM EIL													
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria													
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria													

Assessment Criteria	TABLE 7 CHEMICAL TESTING RESULTS POLYCHLORINATED BIPHENYLS (PCB) 256 Huntingdale Rd, Huntingdale 23/02/2016 SAMPLE DETAILS													
	NEPM Ecological Investigation Levels 2013 NEPM Health Investigation Level A - residential with garden/accessible soil 2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	SB 5						SB 6						
		Sample Location	SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0
		Sample Number	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Sample Depth	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Soil Description												
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
		Reporting Unit	RESULT											
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		mg/kg	< 0.1	---	---	---	---	---	---	---	---	< 0.1	---	---
		Total Polychlorinated biphenylsDB	10	40	mg/kg	< 0.1	---	---	---	---	---	< 0.1	---	---
XXX	Indicates Reported Concentration Exceeds NEPM EIL													
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria													
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria													

	TABLE 7 CHEMICAL TESTING RESULTS POLYCHLORINATED BIPHENYLS (PCB) 256 Huntingdale Rd, Huntingdale 23/02/2016														
	SAMPLE DETAILS														
	Assessment Criteria	Sample Location	SB 7						SB 8						
		Sample Number	SB7-0.1	SB7-0.5	SB7-1.0	SB7-2.0	SB7-3.0	SB7-4.0	SB8-0.1	SB8-0.5	SB8-1.0	SB8-2.0	SB8-3.0	SB8-4.0	
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0	
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural	
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	
		Reporting Unit	RESULT												
		Aroclor-1016	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1221	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1232	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1242	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1248	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1254	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Aroclor-1260	-	-	-	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
		Total Polychlorinated biphenylsDB	-	10	40	mg/kg	---	---	< 0.1	---	---	---	---	---	< 0.1
XXX	Indicates Reported Concentration Exceeds NEPM EIL														
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria														
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria														

Assessment Criteria	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	SAMPLE DETAILS												
	SB 9						SB 10									
	Sample Location	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0			
	Sample Number	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0			
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0			
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural			
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016			
	ANALYTE	Reporting Unit						RESULT								
	Aroclor-1016	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1221	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1232	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1242	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1248	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1254	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Aroclor-1260	-	-	-	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
	Total Polychlorinated biphenylsDB	-	10	40	mg/kg	---	< 0.1	---	---	---	< 0.1	---	---	< 0.1	---	< 0.1
XXX	Indicates Reported Concentration Exceeds NEPM EIL															
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria															
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria															

		TABLE 7								
		CHEMICAL TESTING RESULTS POLYCHLORINATED BIPHENYLS (PCB) 256 Huntingdale Rd, Huntingdale 23/02/2016								
ANALYTE	SAMPLE DETAILS									
	Sample Location	SB 11								
	Sample Number	SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0	SB11-4.0			
	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0			
	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural			
	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016			
	Reporting Unit	RESULT								
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	-	-	-	mg/kg	< 0.1	---	---	---	---	< 0.1
	Total Polychlorinated biphenylsDB	10	40	mg/kg	< 0.1	---	---	---	---	< 0.1
XXX	Indicates Reported Concentration Exceeds NEPM EIL									
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria									
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria									

		Assessment Criteria	TABLE 8												
			NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	CHEMICAL TESTING RESULTS MISCELLANEOUS ANALYTES 256 Huntingdale Rd, Huntingdale 23/02/2016						SAMPLE DETAILS			
ANALYTE	Reporting Unit	SB 1						SB 2							
		Sample Number	SB1-0.1	SB1-0.5	SB1-1.0	SB1-2.0	SB1-3.0	SB1-4.0	SB2-0.1	SB2-0.5	SB2-1.0	SB2-2.0	SB2-3.0	SB2-4.0	
		Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0	
		Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural	
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	
Cyanide (total)	mg/kg		< 5	---	---	---	---	---	< 5	---	---	---	---	---	< 5
pH (1:5 Aqueous extract)	-	-	mg/kg	8.8	---	---	---	---	6.5	---	---	---	---	---	6.6
Cation Exchange Capacity (CEC)	-	-	meq/100g	---	---	---	---	---	---	---	---	---	14	---	---
Fluoride	-	-	mg/kg	280	---	---	---	---	<100	---	---	---	---	---	<100
% Clay	-	-	%	---	---	---	---	---	---	---	---	---	60	---	---
Iron %	-	-	%	---	---	---	---	---	---	---	---	---	3	---	---

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria																																																																																																
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access																																																																																														
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256 Huntingdale Rd, Huntingdale																																																																																																	
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SAMPLE DETAILS																																																																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Sample Location</th> <th colspan="5" style="text-align: center;">SB 3</th> <th colspan="5" style="text-align: center;">SB 4</th> </tr> <tr> <th>Sample Number</th> <th>SB3-0.1</th> <th>SB3-0.5</th> <th>SB3-1.0</th> <th>SB3-2.0</th> <th>SB3-3.0</th> <th>SB3-4.0</th> <th>SB4-0.1</th> <th>SB4-0.5</th> <th>SB4-1.0</th> <th>SB4-2.0</th> <th>SB4-3.0</th> <th>SB4-4.0</th> </tr> </thead> <tbody> <tr> <td>Sample Depth</td> <td>0.1</td> <td>0.5</td> <td>1.0</td> <td>2.0</td> <td>3.0</td> <td>4.0</td> <td>0.1</td> <td>0.5</td> <td>1</td> <td>2</td> <td>3.0</td> <td>4.0</td> </tr> <tr> <td>Soil Description</td> <td>Fill</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> <td>Fill</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> <td>Natural</td> </tr> <tr> <td>Analysis Date</td> <td>23/02/2016</td> </tr> </tbody> </table>														Sample Location	SB 3					SB 4					Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0	Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0	Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural	Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016																					
Sample Location	SB 3					SB 4																																																																																											
Sample Number	SB3-0.1	SB3-0.5	SB3-1.0	SB3-2.0	SB3-3.0	SB3-4.0	SB4-0.1	SB4-0.5	SB4-1.0	SB4-2.0	SB4-3.0	SB4-4.0																																																																																					
Sample Depth	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0																																																																																					
Soil Description	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural																																																																																					
Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016																																																																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">ANALYTE</th> <th colspan="13" style="text-align: center;">RESULT</th> </tr> <tr> <th>Reporting Unit</th> <th>SB 3</th> <th>SB 3</th> <th>SB 3</th> <th>SB 3</th> <th>SB 3</th> <th>SB 3</th> <th>SB 4</th> </tr> </thead> <tbody> <tr> <td>Cyanide (total)</td> <td>-</td> <td>-</td> <td>-</td> <td>mg/kg</td> <td>---</td> <td>---</td> <td>---</td> <td>< 5</td> <td>---</td> <td>---</td> <td>---</td> <td>< 5</td> <td>---</td> </tr> <tr> <td>pH (1:5 Aqueous extract)</td> <td>-</td> <td>-</td> <td>-</td> <td>mg/kg</td> <td>---</td> <td>---</td> <td>---</td> <td>6.7</td> <td>---</td> <td>---</td> <td>---</td> <td>5.4</td> <td>---</td> </tr> <tr> <td>Cation Exchange Capacity (CEC)</td> <td>-</td> <td>-</td> <td>-</td> <td>meq/100g</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> </tr> <tr> <td>Fluoride</td> <td>-</td> <td>-</td> <td>-</td> <td>mg/kg</td> <td>---</td> <td>---</td> <td>---</td> <td><100</td> <td>---</td> <td>---</td> <td>---</td> <td><100</td> <td>---</td> </tr> </tbody> </table>														ANALYTE	RESULT													Reporting Unit	SB 3	SB 4	SB 4	SB 4	SB 4	SB 4	SB 4	SB 4	Cyanide (total)	-	-	-	mg/kg	---	---	---	< 5	---	---	---	< 5	---	pH (1:5 Aqueous extract)	-	-	-	mg/kg	---	---	---	6.7	---	---	---	5.4	---	Cation Exchange Capacity (CEC)	-	-	-	meq/100g	---	---	---	---	---	---	---	---	---	Fluoride	-	-	-	mg/kg	---	---	---	<100	---	---	---	<100	---					
ANALYTE	RESULT																																																																																																
Reporting Unit	SB 3	SB 3	SB 3	SB 3	SB 3	SB 3	SB 4	SB 4																																																																																									
Cyanide (total)	-	-	-	mg/kg	---	---	---	< 5	---	---	---	< 5	---																																																																																				
pH (1:5 Aqueous extract)	-	-	-	mg/kg	---	---	---	6.7	---	---	---	5.4	---																																																																																				
Cation Exchange Capacity (CEC)	-	-	-	meq/100g	---	---	---	---	---	---	---	---	---																																																																																				
Fluoride	-	-	-	mg/kg	---	---	---	<100	---	---	---	<100	---																																																																																				

XXX Indicates Reported Concentration Exceeds NEPM EIL

XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria																						
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A residential with garden/accessible soil	2013 NEPM Health Investigation Level B residential with minimal opportunities for soil access																				
TABLE 8																							
CHEMICAL TESTING RESULTS																							
MISCELLANEOUS ANALYTES																							
256 Huntingdale Rd, Huntingdale																							
23/02/2016																							
SAMPLE DETAILS																							
SB 5																							
Sample Location				SB5-0.1	SB5-0.5	SB5-1.0	SB5-2.0	SB5-3.0	SB5-4.0	SB6-0.1	SB6-0.5	SB6-1.0	SB6-2.0	SB6-3.0	SB6-4.0								
Sample Number				0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0								
Sample Depth				Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural								
Soil Description																							
Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016								
ANALYTE														RESULT									
Cyanide (total)	-	-	-	mg/kg	< 5	---	---	---	---	---	---	---	< 5	---	---								
pH (1:5 Aqueous extract)	-	-	-	mg/kg	9.1	---	---	---	---	---	---	---	7.1	---	---								
Cation Exchange Capacity (CEC)	-	-	-	meq/100g	---	---	---	---	---	---	---	---	---	---	---								
Fluoride	-	-	-	mg/kg	< 100	---	---	---	---	---	---	---	<100	---	---								
XXX	Indicates Reported Concentration Exceeds NEPM EIL																						
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria																						
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria																						

	Assessment Criteria	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	TABLE 8 CHEMICAL TESTING RESULTS MISCELLANEOUS ANALYTES 256 Huntingdale Rd, Huntingdale 23/02/2016												
					SAMPLE DETAILS						SB 8						
ANALYTE	Reporting Unit	SB 7						RESULT									
Cyanide (total)	-	-	-	-	mg/kg	---	---	< 5	---	---	---	< 5	---	---	---	---	< 5
pH (1:5 Aqueous extract)	-	-	-	-	mg/kg	---	---	7.2	---	---	---	9.1	---	---	---	---	6.9
Cation Exchange Capacity (CEC)	-	-	-	-	meq/100g	---	---	---	---	---	---	---	---	---	---	---	
Fluoride	-	-	-	-	mg/kg	---	---	< 100	---	---	---	< 100	---	---	---	---	< 100

XXX

Indicates Reported Concentration Exceeds NEPM EIL

XXX

Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria

XXX

Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

Assessment Criteria	NEPM Ecological Investigation Levels	Chemical Testing Results - Miscellaneous Analytes												
	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	SB 9						SB 10						
	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access	Sample Location	SB9-0.1	SB9-0.5	SB9-1.0	SB9-2.0	SB9-3.0	SB9-4.0	SB10-0.1	SB10-0.5	SB10-1.0	SB10-2.0	SB10-3.0	SB10-4.0
		Sample Number	0.1	0.5	1.0	2.0	3.0	4.0	0.1	0.5	1	2	3.0	4.0
		Sample Depth	Fill	Natural	Natural	Natural	Natural	Natural	Fill	Natural	Natural	Natural	Natural	Natural
		Soil Description												
		Analysis Date	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016
	ANALYTE	Reporting Unit	RESULT											
Cyanide (total)	-	mg/kg	---	< 5	---	---	---	< 5	---	---	< 5	---	< 5	---
pH (1:5 Aqueous extract)	-	mg/kg	---	7.4	---	---	---	6.9	---	---	6.7	---	6.6	---
Cation Exchange Capacity (CEC)	-	meq/100g	---	---	---	---	---	---	---	---	---	---	---	---
Fluoride	-	mg/kg	---	< 100	---	---	---	< 100	---	---	100	---	< 100	---

XXX Indicates Reported Concentration Exceeds NEPM EIL
XXX Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria
XXX Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria

	Assessment Criteria									
	NEPM Ecological Investigation Levels	2013 NEPM Health Investigation Level A - residential with garden/accessible soil	2013 NEPM Health Investigation Level B - residential with minimal opportunities for soil access							
TABLE 8										
CHEMICAL TESTING RESULTS										
MISCELLANEOUS ANALYTES										
256 Huntingdale Rd, Huntingdale										
23/02/2016										
SAMPLE DETAILS										
				SB 11						
Sample Location				SB11-0.1	SB11-0.5	SB11-1.0	SB11-2.0	SB11-3.0	SB11-4.0	
Sample Number				0.1	0.5	1.0	2.0	3.0	4.0	
Sample Depth				Fill	Natural	Natural	Natural	Natural	Natural	
Soil Description										
Analysis Date				23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	23/02/2016	
ANALYTE										
REPORTING UNIT										
Cyanide (total)	-	-	-	mg/kg	< 5	---	---	---	---	< 5
pH (1:5 Aqueous extract)	-	-	-	mg/kg	7.9	---	---	---	---	6.8
Cation Exchange Capacity (CEC)	-	-	-	meq/100g	---	---	---	---	---	---
Fluoride	-	-	-	mg/kg	< 100	---	---	---	---	< 100
RESULT										
XXX	Indicates Reported Concentration Exceeds NEPM EIL									
XXX	Indicates Reported Concentration Exceeds NEPM HIL A or alternative Assessment Criteria									
XXX	Indicates Reported Concentration Exceeds NEPM HIL B or alternative Assessment Criteria									

TABLE 9
Tabulated Quality Assurance Results
256 Huntingdale Rd, Huntingdale
23/02/2016

Analyte	Field Duplicate			Field Triplicate	
	mgt-Eurofins (Vic)		RPD% for Duplicate Sample	MGT -Eurofins (NSW)	
	Concentration (mg/kg)	Concentration (mg/kg)		Concentration (mg/kg)	RPD% for Triplicate Sample
	Primary Sample	Duplicate Sample		Triplicate Sample	DUP2
	SB8-1.0	DUP1			
Heavy Metals					
Arsenic	< 2	< 2	Not Calculated	4.2	-123.08
Cadmium	< 0.4	< 0.4	Not Calculated	< 0.4	Not Calculated
Chromium (total)	< 5	6.9	-93.62	20	-155.56
Copper	<5	< 5	Not Calculated	< 5	Not Calculated
Lead	<5	<5	Not Calculated	6.9	-93.62
Mercury	<0.1	<0.1	Not Calculated	0.06	-18.18
Nickel	<5	<5	Not Calculated	<5	Not Calculated
Zinc	<5	<5	Not Calculated	<5	Not Calculated
PAH					
Acenaphthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Acenaphthylene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benz(a)anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benz(a)pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(a)pyrene TEQ (lower bound)*	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(a)pyrene TEQ (medium bound)*	0.6	0.6	Not Calculated	0.6	Not Calculated
Benzo(a)pyrene TEQ (upper bound)*	1.2	1.2	Not Calculated	1.2	Not Calculated
Benzo(b&j)fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(g.h.i)perylene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benz(k)fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Chrysene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Dibenz(a,h)anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Fluorene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Indeno(1,2,3-cd)pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Naphthalene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Phenanthrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Total PAH	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
BTEX					
Benzene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Ethylbenzene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
m&p-Xylenes	< 0.2	< 0.2	Not Calculated	< 0.2	Not Calculated
o-Xylene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Toluene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Xylenes - Total	< 0.3	< 0.3	Not Calculated	< 0.3	Not Calculated
TPH - 1999 NEPM Fractions					
TRH C10-36 (Total)	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C10-C14	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH C15-C28	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C29-C36	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C6-C9	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH - 2013 NEPM Fractions					
Naphthalene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
TRH >C10-C16	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH >C10-C16 less Naphthalene (F2)	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH >C16-C34	< 100	< 100	Not Calculated	< 100	Not Calculated
TRH >C34-C40	< 100	< 100	Not Calculated	< 100	Not Calculated
TRH C6-C10	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH C6-C10 less BTEX (F1)	< 20	< 20	Not Calculated	< 20	Not Calculated

XXX Indicates half LOR assumed for either the primary or secondary which may result in RPD% calculations being exaggerated

XXX Indicates RPD% result outside the acceptable range of ±50%

TABLE 9
Tabulated Quality Assurance Results
256 Huntingdale Rd, Huntingdale
23/02/2016

Analyte	Field Duplicate			Field Triplicate	
	mgt-Eurofins (Vic)		RPD% for Duplicate Sample	MGT -Eurofins (NSW)	
	Concentration (mg/kg)	Concentration (mg/kg)		Concentration (mg/kg)	RPD% for Triplicate Sample
	Primary Sample	Duplicate Sample		Triplicate Sample	DUP4
Arsenic	< 2	< 2	Not Calculated	< 2	Not Calculated
Cadmium	< 0.4	< 0.4	Not Calculated	< 0.4	Not Calculated
Chromium (total)	<5	<5	Not Calculated	<5	Not Calculated
Copper	< 5	< 5	Not Calculated	< 5	Not Calculated
Lead	<5	<5	Not Calculated	<5	Not Calculated
Mercury	<0.1	<0.1	Not Calculated	<0.05	Not Calculated
Nickel	<5	<5	Not Calculated	<5	Not Calculated
Zinc	<5	<5	Not Calculated	<5	Not Calculated
PAH					
Acenaphthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Acenaphthylene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benz(a)anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(a)pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(a)pyrene TEQ (lower bound)*	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(a)pyrene TEQ (medium bound)*	0.6	0.6	Not Calculated	0.6	Not Calculated
Benzo(a)pyrene TEQ (upper bound)*	1.2	1.2	Not Calculated	1.2	Not Calculated
Benzo(b&j)fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(g.h.i)perylene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Benzo(k)fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Chrysene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Dibenz(a,h)anthracene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Fluoranthene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Fluorene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Indeno(1,2,3-cd)pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Naphthalene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Phenanthrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Pyrene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
Total PAH	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
BTEX					
Benzene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Ethylbenzene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
m&p-Xylenes	< 0.2	< 0.2	Not Calculated	< 0.2	Not Calculated
o-Xylene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Toluene	< 0.1	< 0.1	Not Calculated	< 0.1	Not Calculated
Xylenes - Total	< 0.3	< 0.3	Not Calculated	< 0.3	Not Calculated
TPH - 1999 NEPM Fractions					
TRH C10-36 (Total)	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C10-C14	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH C15-C28	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C29-C36	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH C6-C9	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH - 2013 NEPM Fractions					
Naphthalene	< 0.5	< 0.5	Not Calculated	< 0.5	Not Calculated
TRH >C10-C16	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH >C10-C16 less Naphthalene (F2)	< 50	< 50	Not Calculated	< 50	Not Calculated
TRH >C16-C34	< 100	< 100	Not Calculated	< 100	Not Calculated
TRH >C34-C40	< 100	< 100	Not Calculated	< 100	Not Calculated
TRH C6-C10	< 20	< 20	Not Calculated	< 20	Not Calculated
TRH C6-C10 less BTEX (F1)	< 20	< 20	Not Calculated	< 20	Not Calculated

XXX Indicates half LOR assumed for either the primary or secondary which may result in RPD% calculations being exaggerated

XXX Indicates RPD% result outside the acceptable range of ±50%

Appendix E

NATA Endorsed Certificates of Analysis

Watson Environmental Assessments
37 Gowrie St
East Bentleigh
VIC 3165



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or
measurements included in this document are traceable
to Australian/national standards.

Attention: John Watson

Report 490202-S
Project name ENVIRONMENTAL SITE ASSESSMENT
Project ID 2015042
Received Date Feb 23, 2016

Client Sample ID	LOR	Unit	SB1-0.1 Soil M16-Fe21774 Feb 23, 2016	SB1-1.0 Soil M16-Fe21775 Feb 23, 2016	SB1-4.0 Soil M16-Fe21776 Feb 23, 2016	SB2-0.5 Soil M16-Fe21777 Feb 23, 2016
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	57	-	54
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	< 0.2	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	< 0.2	-
1,1-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,1-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,1,2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,2-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,2,2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dibromoethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2,3-Trichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2,4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3,5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	< 0.05	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	< 0.05	-

Client Sample ID			SB1-0.1 Soil M16-Fe21774	SB1-1.0 Soil M16-Fe21775	SB1-4.0 Soil M16-Fe21776	SB2-0.5 Soil M16-Fe21777
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	< 0.05	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromoform	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroform	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
cis-1,2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
cis-1,3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	< 0.05	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.05	mg/kg	< 0.05	-	< 0.05	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1,2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
trans-1,3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	80	-	72	-
4-Bromofluorobenzene (surr.)	1	%	84	-	81	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SB1-0.1 Soil M16-Fe21774	SB1-1.0 Soil M16-Fe21775	SB1-4.0 Soil M16-Fe21776	SB2-0.5 Soil M16-Fe21777
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	86	88	83	81
p-Terphenyl-d14 (surr.)	1	%	79	90	85	83
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchloroendate (surr.)	1	%	89	-	121	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	124	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB*	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchloroendate (surr.)	1	%	89	-	121	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	124	-

Client Sample ID			SB1-0.1 Soil M16-Fe21774	SB1-1.0 Soil M16-Fe21775	SB1-4.0 Soil M16-Fe21776	SB2-0.5 Soil M16-Fe21777
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4,5-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,4,6-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	< 1	-
Pentachlorophenol	1.0	mg/kg	< 1	-	< 1	-
Tetrachlorophenols - Total	1.0	mg/kg	< 1	-	< 1	-
Total Halogenated Phenol*	1	mg/kg	< 1	-	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	-	< 20	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	-	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	-
2-Nitrophenol	1.0	mg/kg	< 1	-	< 1	-
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dinitrophenol	5	mg/kg	< 5	-	< 5	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	-
4-Nitrophenol	5	mg/kg	< 5	-	< 5	-
Dinoseb	20	mg/kg	< 20	-	< 20	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Total Non-Halogenated Phenol*	20	mg/kg	< 20	-	< 20	-
Phenol-d6 (surr.)	1	%	71	-	95	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	< 1	-	< 1	-
Cyanide (total)	5	mg/kg	< 5	-	< 5	-
Fluoride	100	mg/kg	280	-	< 100	-
pH (1:5 Aqueous extract)	0.1	pH Units	8.8	-	6.5	-
% Moisture	1	%	4.3	7.4	21	7.7
Heavy Metals						
Arsenic	2	mg/kg	20	12	14	120
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	83	< 5	65	10
Copper	5	mg/kg	40	< 5	< 5	140
Lead	5	mg/kg	16	14	21	33
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	< 10	-
Nickel	5	mg/kg	50	< 5	11	6.4
Selenium	2	mg/kg	< 2	-	< 2	-
Silver	5	mg/kg	< 5	-	< 5	-
Tin	10	mg/kg	< 10	-	< 10	-
Zinc	5	mg/kg	72	< 5	7.6	340

Client Sample ID			SB2-2.0 Soil M16-Fe21778	SB2-4.0 Soil M16-Fe21779	SB3-0.1 Soil M16-Fe21780	SB3-2.0 Soil M16-Fe21781
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	100	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	100	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	200	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	57	-	58	-
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	-	< 0.2	-	< 0.2
Hexachlorobutadiene	0.2	mg/kg	-	< 0.2	-	< 0.2
1,1-Dichloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,1-Dichloroethene	0.05	mg/kg	-	< 0.05	-	< 0.05
1,1,1-Trichloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,1,1,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,1,2-Trichloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,1,2,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2-Dibromoethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2-Dichloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2-Dichloropropane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2,3-Trichloropropane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,2,4-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
1,3-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
1,3-Dichloropropane	0.05	mg/kg	-	< 0.05	-	< 0.05
1,3,5-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
1,4-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
2-Butanone (MEK)	0.05	mg/kg	-	< 0.05	-	< 0.05
2-Propanone (Acetone)	0.05	mg/kg	-	< 0.05	-	< 0.05
4-Chlorotoluene	0.05	mg/kg	-	< 0.05	-	< 0.05
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	-	< 0.05	-	< 0.05
Allyl chloride	0.05	mg/kg	-	< 0.05	-	< 0.05
Benzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Bromobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Bromochloromethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Bromodichloromethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Bromoform	0.05	mg/kg	-	< 0.05	-	< 0.05
Bromomethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Carbon disulfide	0.05	mg/kg	-	< 0.05	-	< 0.05
Carbon Tetrachloride	0.05	mg/kg	-	< 0.05	-	< 0.05
Chlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Chloroethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Chloroform	0.05	mg/kg	-	< 0.05	-	< 0.05
Chloromethane	0.05	mg/kg	-	< 0.05	-	< 0.05

Client Sample ID			SB2-2.0 Soil M16-Fe21778	SB2-4.0 Soil M16-Fe21779	SB3-0.1 Soil M16-Fe21780	SB3-2.0 Soil M16-Fe21781
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
cis-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	< 0.05
cis-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	< 0.05
Dibromochloromethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Dibromomethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Dichlorodifluoromethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Iodomethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Isopropyl benzene (Cumene)	0.05	mg/kg	-	< 0.05	-	< 0.05
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	< 0.2
Methylene Chloride	0.05	mg/kg	-	< 0.05	-	< 0.05
o-Xylene	0.1	mg/kg	-	< 0.1	-	< 0.1
Styrene	0.05	mg/kg	-	< 0.05	-	< 0.05
Tetrachloroethene	0.05	mg/kg	-	< 0.05	-	< 0.05
Toluene	0.1	mg/kg	-	< 0.1	-	< 0.1
trans-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	< 0.05
trans-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	< 0.05
Trichloroethene	0.05	mg/kg	-	< 0.05	-	< 0.05
Trichlorofluoromethane	0.05	mg/kg	-	< 0.05	-	< 0.05
Vinyl chloride	0.05	mg/kg	-	< 0.05	-	< 0.05
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	< 0.3
Fluorobenzene (surr.)	1	%	-	59	-	75
4-Bromofluorobenzene (surr.)	1	%	-	72	-	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	85	89	79	84
p-Terphenyl-d14 (surr.)	1	%	85	91	83	87

Client Sample ID			SB2-2.0 Soil M16-Fe21778	SB2-4.0 Soil M16-Fe21779	SB3-0.1 Soil M16-Fe21780	SB3-2.0 Soil M16-Fe21781
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Toxaphene	1	mg/kg	-	< 1	-	< 1
Dibutylchlorendate (surr.)	1	%	-	120	-	109
Tetrachloro-m-xylene (surr.)	1	%	-	121	-	119
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	< 0.1
Total PCB*	0.1	mg/kg	-	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	120	-	109
Tetrachloro-m-xylene (surr.)	1	%	-	121	-	119
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4,5-Trichlorophenol	1.0	mg/kg	-	< 1	-	< 1
2,4,6-Trichlorophenol	1.0	mg/kg	-	< 1	-	< 1
2,6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
4-Chloro-3-methylphenol	1.0	mg/kg	-	< 1	-	< 1
Pentachlorophenol	1.0	mg/kg	-	< 1	-	< 1
Tetrachlorophenols - Total	1.0	mg/kg	-	< 1	-	< 1
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	-	< 20	-	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	-	< 5	-	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	< 0.2
2-Nitrophenol	1.0	mg/kg	-	< 1	-	< 1

Client Sample ID			SB2-2.0 Soil M16-Fe21778	SB2-4.0 Soil M16-Fe21779	SB3-0.1 Soil M16-Fe21780	SB3-2.0 Soil M16-Fe21781
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Phenols (non-Halogenated)						
2,4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4-Dinitrophenol	5	mg/kg	-	< 5	-	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	< 0.4
4-Nitrophenol	5	mg/kg	-	< 5	-	< 5
Dinoseb	20	mg/kg	-	< 20	-	< 20
Phenol	0.5	mg/kg	-	< 0.5	-	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	< 20
Phenol-d6 (surr.)	1	%	-	99	-	96
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	150	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
% Clay	1	%	60	-	-	-
Chromium (hexavalent)	1	mg/kg	-	< 1	-	< 1
Conductivity (1:5 aqueous extract at 25°C)	10	uS/cm	420	-	-	-
Cyanide (total)	5	mg/kg	-	< 5	-	< 5
Fluoride	100	mg/kg	-	< 100	-	< 100
pH (1:5 Aqueous extract)	0.1	pH Units	-	6.6	-	6.7
pH (units)(1:5 soil:CaCl ₂ extract)	0.1	pH Units	5.9	-	-	-
Total Organic Carbon ^{M10}	0.1	%	0.5	-	-	-
% Moisture	1	%	26	20	13	18
Heavy Metals						
Arsenic	2	mg/kg	29	15	7.4	15
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	66	47	13	37
Copper	5	mg/kg	< 5	< 5	1500	41
Iron	5	mg/kg	30000	-	-	-
Lead	5	mg/kg	27	16	100	21
Mercury	0.1	mg/kg	0.1	< 0.1	< 0.1	0.1
Molybdenum	10	mg/kg	-	< 10	-	< 10
Nickel	5	mg/kg	14	8.2	10	9.6
Selenium	2	mg/kg	-	< 2	-	< 2
Silver	5	mg/kg	-	< 5	-	< 5
Tin	10	mg/kg	-	< 10	-	< 10
Zinc	5	mg/kg	15	11	800	29
Heavy Metals						
Iron (%)	0.01	%	3.0	-	-	-
Ion Exchange Properties						
Cation Exchange Capacity	0.05	meq/100g	14	-	-	-

Client Sample ID			SB4-0.5 Soil M16-Fe21782	SB4-2.0 Soil M16-Fe21783	SB5-0.1 Soil M16-Fe21784	SB5-1.0 Soil M16-Fe21785
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	54	-	96
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	< 0.2	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	< 0.2	-
1,1-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,1-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,1,2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,2-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,2,2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dibromoethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2,3-Trichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,2,4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,3,5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	< 0.05	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	< 0.05	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	< 0.05	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromochloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromodichloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromoform	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroform	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-

Client Sample ID			SB4-0.5 Soil M16-Fe21782	SB4-2.0 Soil M16-Fe21783	SB5-0.1 Soil M16-Fe21784	SB5-1.0 Soil M16-Fe21785
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
cis-1,2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
cis-1,3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	< 0.05	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.05	mg/kg	< 0.05	-	< 0.05	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1,2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
trans-1,3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	63	-	77	-
4-Bromofluorobenzene (surr.)	1	%	67	-	89	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	75	89	95	81
p-Terphenyl-d14 (surr.)	1	%	76	94	92	80

Client Sample ID			SB4-0.5 Soil M16-Fe21782	SB4-2.0 Soil M16-Fe21783	SB5-0.1 Soil M16-Fe21784	SB5-1.0 Soil M16-Fe21785
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	111	-	112	-
Tetrachloro-m-xylene (surr.)	1	%	125	-	129	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB*	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	111	-	112	-
Tetrachloro-m-xylene (surr.)	1	%	125	-	129	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4,5-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,4,6-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	< 1	-
Pentachlorophenol	1.0	mg/kg	< 1	-	< 1	-
Tetrachlorophenols - Total	1.0	mg/kg	< 1	-	< 1	-
Total Halogenated Phenol*	1	mg/kg	< 1	-	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	-	< 20	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	-	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	-
2-Nitrophenol	1.0	mg/kg	< 1	-	< 1	-

Client Sample ID			SB4-0.5 Soil M16-Fe21782	SB4-2.0 Soil M16-Fe21783	SB5-0.1 Soil M16-Fe21784	SB5-1.0 Soil M16-Fe21785
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Phenols (non-Halogenated)						
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dinitrophenol	5	mg/kg	< 5	-	< 5	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	-
4-Nitrophenol	5	mg/kg	< 5	-	< 5	-
Dinoseb	20	mg/kg	< 20	-	< 20	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Total Non-Halogenated Phenol*	20	mg/kg	< 20	-	< 20	-
Phenol-d6 (surr.)	1	%	85	-	83	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	< 1	-	< 1	-
Cyanide (total)	5	mg/kg	< 5	-	< 5	-
Fluoride	100	mg/kg	< 100	-	< 100	-
pH (1:5 Aqueous extract)	0.1	pH Units	5.4	-	9.1	-
% Moisture	1	%	9.5	17	9.8	17
Heavy Metals						
Arsenic	2	mg/kg	< 2	14	4.9	23
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	24	9.9	49
Copper	5	mg/kg	190	< 5	320	20
Lead	5	mg/kg	15	25	31	19
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	< 10	-
Nickel	5	mg/kg	< 5	< 5	15	13
Selenium	2	mg/kg	< 2	-	< 2	-
Silver	5	mg/kg	< 5	-	< 5	-
Tin	10	mg/kg	< 10	-	< 10	-
Zinc	5	mg/kg	75	9.4	300	33

Client Sample ID			SB6-0.5 Soil M16-Fe21786	SB6-2.0 Soil M16-Fe21787	SB6-4.0 Soil M16-Fe21788	SB7-0.1 Soil M16-Fe21789
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			SB6-0.5 Soil M16-Fe21786	SB6-2.0 Soil M16-Fe21787	SB6-4.0 Soil M16-Fe21788	SB7-0.1 Soil M16-Fe21789
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
BTEX						
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	51	-	51	79
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	-	< 0.2	-	-
Hexachlorobutadiene	0.2	mg/kg	-	< 0.2	-	-
1,1-Dichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
1,1,1-Trichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,1,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,2-Trichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,2,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dibromoethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichloropropane	0.05	mg/kg	-	< 0.05	-	-
1,2,3-Trichloropropane	0.05	mg/kg	-	< 0.05	-	-
1,2,4-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	-
1,3-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
1,3-Dichloropropane	0.05	mg/kg	-	< 0.05	-	-
1,3,5-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	-
1,4-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
2-Butanone (MEK)	0.05	mg/kg	-	< 0.05	-	-
2-Propanone (Acetone)	0.05	mg/kg	-	< 0.05	-	-
4-Chlorotoluene	0.05	mg/kg	-	< 0.05	-	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	-	< 0.05	-	-
Allyl chloride	0.05	mg/kg	-	< 0.05	-	-
Benzene	0.1	mg/kg	-	< 0.1	-	-
Bromobenzene	0.05	mg/kg	-	< 0.05	-	-
Bromochloromethane	0.05	mg/kg	-	< 0.05	-	-
Bromodichloromethane	0.05	mg/kg	-	< 0.05	-	-
Bromoform	0.05	mg/kg	-	< 0.05	-	-
Bromomethane	0.05	mg/kg	-	< 0.05	-	-
Carbon disulfide	0.05	mg/kg	-	< 0.05	-	-
Carbon Tetrachloride	0.05	mg/kg	-	< 0.05	-	-
Chlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Chloroethane	0.05	mg/kg	-	< 0.05	-	-
Chloroform	0.05	mg/kg	-	< 0.05	-	-
Chloromethane	0.05	mg/kg	-	< 0.05	-	-
cis-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
cis-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	-
Dibromochloromethane	0.05	mg/kg	-	< 0.05	-	-
Dibromomethane	0.05	mg/kg	-	< 0.05	-	-
Dichlorodifluoromethane	0.05	mg/kg	-	< 0.05	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
Iodomethane	0.05	mg/kg	-	< 0.05	-	-
Isopropyl benzene (Cumene)	0.05	mg/kg	-	< 0.05	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-
Methylene Chloride	0.05	mg/kg	-	< 0.05	-	-

Client Sample ID			SB6-0.5 Soil M16-Fe21786	SB6-2.0 Soil M16-Fe21787	SB6-4.0 Soil M16-Fe21788	SB7-0.1 Soil M16-Fe21789
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Styrene	0.05	mg/kg	-	< 0.05	-	-
Tetrachloroethene	0.05	mg/kg	-	< 0.05	-	-
Toluene	0.1	mg/kg	-	< 0.1	-	-
trans-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
trans-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	-
Trichloroethene	0.05	mg/kg	-	< 0.05	-	-
Trichlorofluoromethane	0.05	mg/kg	-	< 0.05	-	-
Vinyl chloride	0.05	mg/kg	-	< 0.05	-	-
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	-
Fluorobenzene (surr.)	1	%	-	63	-	-
4-Bromofluorobenzene (surr.)	1	%	-	71	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	74	94	72	88
p-Terphenyl-d14 (surr.)	1	%	76	101	74	88
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	-
4,4'-DDD	0.05	mg/kg	-	< 0.05	-	-
4,4'-DDE	0.05	mg/kg	-	< 0.05	-	-
4,4'-DDT	0.05	mg/kg	-	< 0.05	-	-
a-BHC	0.05	mg/kg	-	< 0.05	-	-
Aldrin	0.05	mg/kg	-	< 0.05	-	-
b-BHC	0.05	mg/kg	-	< 0.05	-	-
d-BHC	0.05	mg/kg	-	< 0.05	-	-

Client Sample ID			SB6-0.5 Soil M16-Fe21786	SB6-2.0 Soil M16-Fe21787	SB6-4.0 Soil M16-Fe21788	SB7-0.1 Soil M16-Fe21789
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Organochlorine Pesticides						
Dieldrin	0.05	mg/kg	-	< 0.05	-	-
Endosulfan I	0.05	mg/kg	-	< 0.05	-	-
Endosulfan II	0.05	mg/kg	-	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	-
Endrin	0.05	mg/kg	-	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	-
Endrin ketone	0.05	mg/kg	-	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	-
Heptachlor	0.05	mg/kg	-	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Methoxychlor	0.05	mg/kg	-	< 0.05	-	-
Toxaphene	1	mg/kg	-	< 1	-	-
Dibutylchlorethane (surr.)	1	%	-	129	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	128	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	-
Total PCB*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorethane (surr.)	1	%	-	129	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	128	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	-
2,4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
2,4,5-Trichlorophenol	1.0	mg/kg	-	< 1	-	-
2,4,6-Trichlorophenol	1.0	mg/kg	-	< 1	-	-
2,6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
4-Chloro-3-methylphenol	1.0	mg/kg	-	< 1	-	-
Pentachlorophenol	1.0	mg/kg	-	< 1	-	-
Tetrachlorophenols - Total	1.0	mg/kg	-	< 1	-	-
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	-	< 20	-	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	-	< 5	-	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	-
2-Nitrophenol	1.0	mg/kg	-	< 1	-	-
2,4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	-
2,4-Dinitrophenol	5	mg/kg	-	< 5	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	-
4-Nitrophenol	5	mg/kg	-	< 5	-	-
Dinoseb	20	mg/kg	-	< 20	-	-
Phenol	0.5	mg/kg	-	< 0.5	-	-
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	-
Phenol-d6 (surr.)	1	%	-	111	-	-

Client Sample ID			SB6-0.5 Soil M16-Fe21786	SB6-2.0 Soil M16-Fe21787	SB6-4.0 Soil M16-Fe21788	SB7-0.1 Soil M16-Fe21789
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	-	< 1	-	-
Cyanide (total)	5	mg/kg	-	< 5	-	-
Fluoride	100	mg/kg	-	< 100	-	-
pH (1:5 Aqueous extract)	0.1	pH Units	-	7.1	-	-
% Moisture	1	%	11	26	24	7.2
Heavy Metals						
Arsenic	2	mg/kg	4.7	14	18	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	60	92	< 5
Copper	5	mg/kg	< 5	< 5	< 5	590
Lead	5	mg/kg	8.0	16	23	33
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.1	< 0.1
Molybdenum	10	mg/kg	-	< 10	-	-
Nickel	5	mg/kg	< 5	11	23	7.0
Selenium	2	mg/kg	-	< 2	-	-
Silver	5	mg/kg	-	< 5	-	-
Tin	10	mg/kg	-	< 10	-	-
Zinc	5	mg/kg	5.3	8.5	6.8	410

Client Sample ID			SB7-1.0 Soil M16-Fe21790	SB7-4.0 Soil M16-Fe21791	SB8-0.1 Soil M16-Fe21792	SB8-1.0 Soil M16-Fe21793
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	120	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	95	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	220	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	60	-	63
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	< 0.2	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	< 0.2	-
1,1-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
1,1,1-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-

Client Sample ID			SB7-1.0 Soil M16-Fe21790	SB7-4.0 Soil M16-Fe21791	SB8-0.1 Soil M16-Fe21792	SB8-1.0 Soil M16-Fe21793
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
1.1.1.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.1.2-Trichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.1.2.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2-Dibromoethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2-Dichloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2.3-Trichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.2.4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1.3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1.3-Dichloropropane	0.05	mg/kg	< 0.05	-	< 0.05	-
1.3.5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
1.4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	< 0.05	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	< 0.05	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	< 0.05	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	< 0.05	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromochloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromodichloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromoform	0.05	mg/kg	< 0.05	-	< 0.05	-
Bromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	< 0.05	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloroform	0.05	mg/kg	< 0.05	-	< 0.05	-
Chloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
cis-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
cis-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dibromomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	< 0.05	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.05	mg/kg	< 0.05	-	< 0.05	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
trans-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichloroethene	0.05	mg/kg	< 0.05	-	< 0.05	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	< 0.05	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-

Client Sample ID			SB7-1.0 Soil M16-Fe21790	SB7-4.0 Soil M16-Fe21791	SB8-0.1 Soil M16-Fe21792	SB8-1.0 Soil M16-Fe21793
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	64	-	66	-
4-Bromofluorobenzene (surr.)	1	%	66	-	68	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	81	82	90	80
p-Terphenyl-d14 (surr.)	1	%	84	78	84	77
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-

Client Sample ID			SB7-1.0 Soil M16-Fe21790	SB7-4.0 Soil M16-Fe21791	SB8-0.1 Soil M16-Fe21792	SB8-1.0 Soil M16-Fe21793
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Organochlorine Pesticides						
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	115	-	108	-
Tetrachloro-m-xylene (surr.)	1	%	118	-	121	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB*	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	115	-	108	-
Tetrachloro-m-xylene (surr.)	1	%	118	-	121	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4,5-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,4,6-Trichlorophenol	1.0	mg/kg	< 1	-	< 1	-
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	< 1	-
Pentachlorophenol	1.0	mg/kg	< 1	-	< 1	-
Tetrachlorophenols - Total	1.0	mg/kg	< 1	-	< 1	-
Total Halogenated Phenol*	1	mg/kg	< 1	-	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	-	< 20	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	-	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	-
2-Nitrophenol	1.0	mg/kg	< 1	-	< 1	-
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2,4-Dinitrophenol	5	mg/kg	< 5	-	< 5	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	-
4-Nitrophenol	5	mg/kg	< 5	-	< 5	-
Dinoseb	20	mg/kg	< 20	-	< 20	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Total Non-Halogenated Phenol*	20	mg/kg	< 20	-	< 20	-
Phenol-d6 (surr.)	1	%	73	-	78	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	190	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	< 1	-	< 1	-
Cyanide (total)	5	mg/kg	< 5	-	< 5	-
Fluoride	100	mg/kg	< 100	-	< 100	-
pH (1:5 Aqueous extract)	0.1	pH Units	7.2	-	9.1	-
% Moisture	1	%	25	27	9.3	11

Client Sample ID			SB7-1.0 Soil M16-Fe21790	SB7-4.0 Soil M16-Fe21791	SB8-0.1 Soil M16-Fe21792	SB8-1.0 Soil M16-Fe21793
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Heavy Metals						
Arsenic	2	mg/kg	15	11	4.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	37	33	6.1	< 5
Copper	5	mg/kg	< 5	< 5	800	< 5
Lead	5	mg/kg	13	14	43	< 5
Mercury	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	< 10	-
Nickel	5	mg/kg	7.4	6.7	9.2	< 5
Selenium	2	mg/kg	< 2	-	< 2	-
Silver	5	mg/kg	< 5	-	< 5	-
Tin	10	mg/kg	< 10	-	< 10	-
Zinc	5	mg/kg	7.2	12	930	< 5

Client Sample ID			SB8-4.0 Soil M16-Fe21794	SB9-0.5 Soil M16-Fe21795	SB9-1.0 Soil M16-Fe21796	SB9-4.0 Soil M16-Fe21797
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	-	< 0.1	-
Toluene	0.1	mg/kg	-	-	< 0.1	-
Ethylbenzene	0.1	mg/kg	-	-	< 0.1	-
m&p-Xylenes	0.2	mg/kg	-	-	< 0.2	-
o-Xylene	0.1	mg/kg	-	-	< 0.1	-
Xylenes - Total	0.3	mg/kg	-	-	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	-	65	-
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Hexachlorobutadiene	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
1,1-Dichloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,1-Dichloroethene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,1,1-Trichloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,1,1,2-Tetrachloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,1,2-Trichloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,1,2,2-Tetrachloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2-Dibromoethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2-Dichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2-Dichloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2-Dichloropropane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2,3-Trichloropropane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,2,4-Trimethylbenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,3-Dichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05

Client Sample ID			SB8-4.0 Soil M16-Fe21794	SB9-0.5 Soil M16-Fe21795	SB9-1.0 Soil M16-Fe21796	SB9-4.0 Soil M16-Fe21797
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
1,3-Dichloropropane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,3,5-Trimethylbenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
1,4-Dichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
2-Butanone (MEK)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4-Chlorotoluene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Allyl chloride	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Bromobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Bromoform	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Bromomethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Bromodichloromethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Carbon disulfide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Carbon Tetrachloride	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chloroethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chloroform	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chloromethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
cis-1,2-Dichloroethene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
cis-1,3-Dichloropropene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dibromochloromethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dibromomethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Iodomethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methylene Chloride	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Styrene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Tetrachloroethene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
trans-1,2-Dichloroethene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
trans-1,3-Dichloropropene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Trichloroethene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Trichlorofluoromethane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vinyl chloride	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
Fluorobenzene (surr.)	1	%	66	82	-	61
4-Bromofluorobenzene (surr.)	1	%	72	94	-	71
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			SB8-4.0 Soil M16-Fe21794	SB9-0.5 Soil M16-Fe21795	SB9-1.0 Soil M16-Fe21796	SB9-4.0 Soil M16-Fe21797
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	82	83	87	86
p-Terphenyl-d14 (surr.)	1	%	81	82	84	84
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Dibutylchloroendate (surr.)	1	%	130	87	-	145
Tetrachloro-m-xylene (surr.)	1	%	138	93	-	149

Client Sample ID			SB8-4.0 Soil M16-Fe21794	SB9-0.5 Soil M16-Fe21795	SB9-1.0 Soil M16-Fe21796	SB9-4.0 Soil M16-Fe21797
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	130	87	-	145
Tetrachloro-m-xylene (surr.)	1	%	138	93	-	149
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2,4,5-Trichlorophenol	1.0	mg/kg	< 1	< 1	-	< 1
2,4,6-Trichlorophenol	1.0	mg/kg	< 1	< 1	-	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	< 1	-	< 1
Pentachlorophenol	1.0	mg/kg	< 1	< 1	-	< 1
Tetrachlorophenols - Total	1.0	mg/kg	< 1	< 1	-	< 1
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	-	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	-	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	-	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	-	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	-	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	-	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	-	< 5
Dinoseb	20	mg/kg	< 20	< 20	-	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	-	< 20
Phenol-d6 (surr.)	1	%	95	95	-	94
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	< 1	< 1	-	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	-	< 5
Fluoride	100	mg/kg	< 100	< 100	-	< 100
pH (1:5 Aqueous extract)	0.1	pH Units	6.9	7.4	-	6.9
% Moisture	1	%	23	12	6.3	26
Heavy Metals						
Arsenic	2	mg/kg	13	2.7	< 2	21
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	38	< 5	< 5	46
Copper	5	mg/kg	< 5	24	< 5	< 5
Lead	5	mg/kg	14	11	< 5	24

Client Sample ID			SB8-4.0 Soil M16-Fe21794	SB9-0.5 Soil M16-Fe21795	SB9-1.0 Soil M16-Fe21796	SB9-4.0 Soil M16-Fe21797
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Heavy Metals						
Mercury	0.1	mg/kg	0.1	< 0.1	< 0.1	0.1
Molybdenum	10	mg/kg	< 10	< 10	-	< 10
Nickel	5	mg/kg	8.6	5.0	< 5	17
Selenium	2	mg/kg	< 2	< 2	-	< 2
Silver	5	mg/kg	< 5	< 5	-	< 5
Tin	10	mg/kg	< 10	< 10	-	< 10
Zinc	5	mg/kg	9.8	130	< 5	11

Client Sample ID			SB10-0.5 Soil M16-Fe21798	SB10-1.0 Soil M16-Fe21799	SB10-3.0 Soil M16-Fe21800	SB11-0.1 Soil M16-Fe21801
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	65
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	58
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	120
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	-
Toluene	0.1	mg/kg	< 0.1	-	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	-
o-Xylene	0.1	mg/kg	< 0.1	-	-	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	-	-
4-Bromofluorobenzene (surr.)	1	%	76	-	-	-
Volatile Organics						
1.2.4-Trichlorobenzene	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Hexachlorobutadiene	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
1.1-Dichloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.1-Dichloroethene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.1.1-Trichloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.1.1.2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.1.2-Trichloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.1.2.2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2-Dibromoethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2-Dichlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2-Dichloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2-Dichloropropane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2.3-Trichloropropane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.2.4-Trimethylbenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.3-Dichlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.3-Dichloropropane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.3.5-Trimethylbenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
1.4-Dichlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
2-Butanone (MEK)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
2-Propanone (Acetone)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05

Client Sample ID			SB10-0.5 Soil M16-Fe21798	SB10-1.0 Soil M16-Fe21799	SB10-3.0 Soil M16-Fe21800	SB11-0.1 Soil M16-Fe21801
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
4-Chlorotoluene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Allyl chloride	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Bromobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Bromoform	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Bromomethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Carbon disulfide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Carbon Tetrachloride	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chloroethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chloroform	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chloromethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
cis-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
cis-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dibromochloromethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dibromomethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dichlorodifluoromethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Iodomethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Isopropyl benzene (Cumene)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Styrene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Tetrachloroethene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
trans-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Trichloroethene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Trichlorofluoromethane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Vinyl chloride	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Xylenes - Total	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
Fluorobenzene (surr.)	1	%	-	68	69	69
4-Bromofluorobenzene (surr.)	1	%	-	76	76	79
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SB10-0.5 Soil M16-Fe21798	SB10-1.0 Soil M16-Fe21799	SB10-3.0 Soil M16-Fe21800	SB11-0.1 Soil M16-Fe21801
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Polycyclic Aromatic Hydrocarbons						
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	86	79	83	83
p-Terphenyl-d14 (surr.)	1	%	86	76	86	83
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toxaphene	1	mg/kg	-	< 1	< 1	< 1
Dibutylchlorendate (surr.)	1	%	-	133	118	101
Tetrachloro-m-xylene (surr.)	1	%	-	135	125	117
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1

Client Sample ID			SB10-0.5 Soil M16-Fe21798	SB10-1.0 Soil M16-Fe21799	SB10-3.0 Soil M16-Fe21800	SB11-0.1 Soil M16-Fe21801
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Polychlorinated Biphenyls						
Dibutylchlorendate (surr.)	1	%	-	133	118	101
Tetrachloro-m-xylene (surr.)	1	%	-	135	125	117
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1.0	mg/kg	-	< 1	< 1	< 1
2,4,6-Trichlorophenol	1.0	mg/kg	-	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1.0	mg/kg	-	< 1	< 1	< 1
Pentachlorophenol	1.0	mg/kg	-	< 1	< 1	< 1
Tetrachlorophenols - Total	1.0	mg/kg	-	< 1	< 1	< 1
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	-	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	-	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	-	< 5	< 5	< 5
Dinoseb	20	mg/kg	-	< 20	< 20	< 20
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	-	88	94	90
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	-	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	-	< 5	< 5	< 5
Fluoride	100	mg/kg	-	100	< 100	< 100
pH (1:5 Aqueous extract)	0.1	pH Units	-	6.7	6.6	7.9
% Moisture	1	%	12	25	22	17
Heavy Metals						
Arsenic	2	mg/kg	3.4	10	15	9.8
Cadmium	0.4	mg/kg	0.5	< 0.4	< 0.4	1.4
Chromium	5	mg/kg	6.1	35	36	15
Copper	5	mg/kg	170	17	9.1	3100
Lead	5	mg/kg	25	17	18	210
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	-	< 10	< 10	< 10
Nickel	5	mg/kg	11	9.9	10	44
Selenium	2	mg/kg	-	< 2	< 2	< 2
Silver	5	mg/kg	-	< 5	< 5	< 5
Tin	10	mg/kg	-	< 10	< 10	45
Zinc	5	mg/kg	250	22	14	1300

Client Sample ID			SB11-1.0 Soil M16-Fe21802	SB11-4.0 Soil M16-Fe21803	DUP1 Soil M16-Fe21804	DUP3 Soil M16-Fe21805
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	56	-	57	58
Volatile Organics						
1,2,4-Trichlorobenzene	0.2	mg/kg	-	< 0.2	-	-
Hexachlorobutadiene	0.2	mg/kg	-	< 0.2	-	-
1,1-Dichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
1,1,1-Trichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,1,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,2-Trichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,1,2,2-Tetrachloroethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dibromoethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichloroethane	0.05	mg/kg	-	< 0.05	-	-
1,2-Dichloropropane	0.05	mg/kg	-	< 0.05	-	-
1,2,3-Trichloropropene	0.05	mg/kg	-	< 0.05	-	-
1,2,4-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	-
1,3-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
1,3-Dichloropropane	0.05	mg/kg	-	< 0.05	-	-
1,3,5-Trimethylbenzene	0.05	mg/kg	-	< 0.05	-	-
1,4-Dichlorobenzene	0.05	mg/kg	-	< 0.05	-	-
2-Butanone (MEK)	0.05	mg/kg	-	< 0.05	-	-
2-Propanone (Acetone)	0.05	mg/kg	-	< 0.05	-	-
4-Chlorotoluene	0.05	mg/kg	-	< 0.05	-	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	-	< 0.05	-	-
Allyl chloride	0.05	mg/kg	-	< 0.05	-	-
Benzene	0.1	mg/kg	-	< 0.1	-	-
Bromobenzene	0.05	mg/kg	-	< 0.05	-	-
Bromochloromethane	0.05	mg/kg	-	< 0.05	-	-
Bromodichloromethane	0.05	mg/kg	-	< 0.05	-	-
Bromoform	0.05	mg/kg	-	< 0.05	-	-
Bromomethane	0.05	mg/kg	-	< 0.05	-	-
Carbon disulfide	0.05	mg/kg	-	< 0.05	-	-
Carbon Tetrachloride	0.05	mg/kg	-	< 0.05	-	-
Chlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Chloroethane	0.05	mg/kg	-	< 0.05	-	-
Chloroform	0.05	mg/kg	-	< 0.05	-	-
Chloromethane	0.05	mg/kg	-	< 0.05	-	-

Client Sample ID			SB11-1.0 Soil M16-Fe21802	SB11-4.0 Soil M16-Fe21803	DUP1 Soil M16-Fe21804	DUP3 Soil M16-Fe21805
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Volatile Organics						
cis-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
cis-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	-
Dibromochloromethane	0.05	mg/kg	-	< 0.05	-	-
Dibromomethane	0.05	mg/kg	-	< 0.05	-	-
Dichlorodifluoromethane	0.05	mg/kg	-	< 0.05	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
Iodomethane	0.05	mg/kg	-	< 0.05	-	-
Isopropyl benzene (Cumene)	0.05	mg/kg	-	< 0.05	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-
Methylene Chloride	0.05	mg/kg	-	< 0.05	-	-
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Styrene	0.05	mg/kg	-	< 0.05	-	-
Tetrachloroethene	0.05	mg/kg	-	< 0.05	-	-
Toluene	0.1	mg/kg	-	< 0.1	-	-
trans-1,2-Dichloroethene	0.05	mg/kg	-	< 0.05	-	-
trans-1,3-Dichloropropene	0.05	mg/kg	-	< 0.05	-	-
Trichloroethene	0.05	mg/kg	-	< 0.05	-	-
Trichlorofluoromethane	0.05	mg/kg	-	< 0.05	-	-
Vinyl chloride	0.05	mg/kg	-	< 0.05	-	-
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	-
Fluorobenzene (surr.)	1	%	-	53	-	-
4-Bromofluorobenzene (surr.)	1	%	-	55	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	81	77	85	82
p-Terphenyl-d14 (surr.)	1	%	82	79	81	79

Client Sample ID			SB11-1.0 Soil M16-Fe21802	SB11-4.0 Soil M16-Fe21803	DUP1 Soil M16-Fe21804	DUP3 Soil M16-Fe21805
Date Sampled	LOR	Unit	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Test/Reference						
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	-
4,4'-DDD	0.05	mg/kg	-	< 0.05	-	-
4,4'-DDE	0.05	mg/kg	-	< 0.05	-	-
4,4'-DDT	0.05	mg/kg	-	< 0.05	-	-
a-BHC	0.05	mg/kg	-	< 0.05	-	-
Aldrin	0.05	mg/kg	-	< 0.05	-	-
b-BHC	0.05	mg/kg	-	< 0.05	-	-
d-BHC	0.05	mg/kg	-	< 0.05	-	-
Dieldrin	0.05	mg/kg	-	< 0.05	-	-
Endosulfan I	0.05	mg/kg	-	< 0.05	-	-
Endosulfan II	0.05	mg/kg	-	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	-
Endrin	0.05	mg/kg	-	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	-
Endrin ketone	0.05	mg/kg	-	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	-
Heptachlor	0.05	mg/kg	-	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Methoxychlor	0.05	mg/kg	-	< 0.05	-	-
Toxaphene	1	mg/kg	-	< 1	-	-
Dibutylchlorendate (surr.)	1	%	-	128	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	137	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	-
Total PCB*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	-	128	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	137	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	-
2,4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
2,4,5-Trichlorophenol	1.0	mg/kg	-	< 1	-	-
2,4,6-Trichlorophenol	1.0	mg/kg	-	< 1	-	-
2,6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
4-Chloro-3-methylphenol	1.0	mg/kg	-	< 1	-	-
Pentachlorophenol	1.0	mg/kg	-	< 1	-	-
Tetrachlorophenols - Total	1.0	mg/kg	-	< 1	-	-
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	-	< 20	-	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	-	< 5	-	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	-
2-Nitrophenol	1.0	mg/kg	-	< 1	-	-

Client Sample ID			SB11-1.0 Soil M16-Fe21802	SB11-4.0 Soil M16-Fe21803	DUP1 Soil M16-Fe21804	DUP3 Soil M16-Fe21805
Sample Matrix			Feb 23, 2016	Feb 23, 2016	Feb 23, 2016	Feb 23, 2016
Date Sampled	LOR	Unit				
Test/Reference						
Phenols (non-Halogenated)						
2,4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	-
2,4-Dinitrophenol	5	mg/kg	-	< 5	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	-
4-Nitrophenol	5	mg/kg	-	< 5	-	-
Dinoseb	20	mg/kg	-	< 20	-	-
Phenol	0.5	mg/kg	-	< 0.5	-	-
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	-
Phenol-d6 (surr.)	1	%	-	85	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Chromium (hexavalent)	1	mg/kg	-	< 1	-	-
Cyanide (total)	5	mg/kg	-	< 5	-	-
Fluoride	100	mg/kg	-	< 100	-	-
pH (1:5 Aqueous extract)	0.1	pH Units	-	6.8	-	-
% Moisture	1	%	8.6	8.2	11	6.7
Heavy Metals						
Arsenic	2	mg/kg	< 2	3.6	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	8.1	6.9	< 5
Copper	5	mg/kg	6.8	7.1	< 5	< 5
Lead	5	mg/kg	< 5	5.7	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	-	< 10	-	-
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Selenium	2	mg/kg	-	< 2	-	-
Silver	5	mg/kg	-	< 5	-	-
Tin	10	mg/kg	-	< 10	-	-
Zinc	5	mg/kg	< 5	6.1	< 5	< 5

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Vic EPA IWRG 621 (Solids)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Feb 24, 2016	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
Volatile Organics	Melbourne	Feb 24, 2016	7 Day
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 24, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Melbourne	Feb 24, 2016	14 Day
- Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons			
Organochlorine Pesticides	Melbourne	Feb 24, 2016	14 Day
- Method: USEPA 8081 Organochlorine Pesticides			
Polychlorinated Biphenyls	Melbourne	Feb 24, 2016	28 Day
- Method: USEPA 8082 Polychlorinated Biphenyls			
Phenols (Halogenated)	Melbourne	Feb 24, 2016	14 Day
- Method: USEPA 8270 Phenols			
Phenols (non-Halogenated)	Melbourne	Feb 24, 2016	14 Day
- Method: USEPA 8270 Phenols			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 24, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Chromium (hexavalent)	Melbourne	Feb 24, 2016	28 Day
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Feb 24, 2016	14 Day
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride	Melbourne	Feb 25, 2016	28 Day
- Method: NEPC 404 (Fusion followed by ISE)			
pH (1:5 Aqueous extract)	Melbourne	Feb 24, 2016	7 Day
- Method: LTM-GEN-7090 pH in soil by ISE			
IWRG 621 Metals : Metals M12	Melbourne	Feb 24, 2016	28 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
Eurofins mgt Suite B7			
BTEX	Melbourne	Feb 24, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Melbourne	Feb 24, 2016	28 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
NEPM Screen for Soil Classification			
% Clay	Brisbane	Feb 25, 2016	6 Day
- Method: LTM-GEN-7040			
Conductivity (1:5 aqueous extract at 25°C)	Melbourne	Feb 24, 2016	7 Day
- Method: LTM-INO-4030			
pH (units)(1:5 soil:CaCl ₂ extract)	Melbourne	Feb 24, 2016	7 Day
- Method: LTM-GEN-7090 pH in soil by ISE			
Total Organic Carbon	Melbourne	Feb 26, 2016	28 Day
- Method: APHA 5310B Total Organic Carbon			
Heavy Metals	Melbourne	Feb 24, 2016	180 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
Ion Exchange Properties	Melbourne	Feb 25, 2016	
% Moisture	Melbourne	Feb 23, 2016	14 Day
- Method: LTM-GEN-7080 Moisture			

Company Name:	Watson Environmental Assessments	Order No.:		Received:	Feb 23, 2016 4:32 PM
Address:	37 Gowrie St East Bentleigh VIC 3165	Report #:	490202	Due:	Feb 26, 2016
Project Name:	ENVIRONMENTAL SITE ASSESSMENT	Phone:	9570 2949	Priority:	3 Day
Project ID:	2015042	Fax:	9570 2861	Contact Name:	John Watson
Eurofins mgt Client Manager: Andrew Black					

Sample Detail**Laboratory where analysis is conducted**

Melbourne Laboratory - NATA Site # 1254 & 14271	X	X	X	X	X
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Sydney Laboratory - NATA Site # 18217					
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Brisbane Laboratory - NATA Site # 20794			X		
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External Laboratory

Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
SB1-0.1	Feb 23, 2016		Soil	M16-Fe21774	X		X
SB1-1.0	Feb 23, 2016		Soil	M16-Fe21775	X		X
SB1-4.0	Feb 23, 2016		Soil	M16-Fe21776	X		X
SB2-0.5	Feb 23, 2016		Soil	M16-Fe21777	X		X
SB2-2.0	Feb 23, 2016		Soil	M16-Fe21778	X	X	X
SB2-4.0	Feb 23, 2016		Soil	M16-Fe21779	X		X
SB3-0.1	Feb 23, 2016		Soil	M16-Fe21780	X		X
SB3-2.0	Feb 23, 2016		Soil	M16-Fe21781	X		X
SB4-0.5	Feb 23, 2016		Soil	M16-Fe21782	X		X

Company Name: Watson Environmental Assessments
Address:
 37 Gowrie St
 East Bentleigh
 VIC 3165

Order No.:
Report #: 490202
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Fax: 9570 2861

Received: Feb 23, 2016 4:32 PM
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Priority: 3 Day
Contact Name: John Watson

Project Name: ENVIRONMENTAL SITE ASSESSMENT
Project ID: 2015042

Eurofins | mgt Client Manager: Andrew Black

Sample Detail

Laboratory where analysis is conducted

Melbourne Laboratory - NATA Site # 1254 & 14271

X X X X X

Sydney Laboratory - NATA Site # 18217

X X X X X

Brisbane Laboratory - NATA Site # 20794

X

External Laboratory

SB4-2.0	Feb 23, 2016		Soil	M16-Fe21783	X	X	
SB5-0.1	Feb 23, 2016		Soil	M16-Fe21784	X		X
SB5-1.0	Feb 23, 2016		Soil	M16-Fe21785	X		X
SB6-0.5	Feb 23, 2016		Soil	M16-Fe21786	X		X
SB6-2.0	Feb 23, 2016		Soil	M16-Fe21787	X		X
SB6-4.0	Feb 23, 2016		Soil	M16-Fe21788	X		X
SB7-0.1	Feb 23, 2016		Soil	M16-Fe21789	X		X
SB7-1.0	Feb 23, 2016		Soil	M16-Fe21790	X		X
SB7-4.0	Feb 23, 2016		Soil	M16-Fe21791	X		X
SB8-0.1	Feb 23, 2016		Soil	M16-Fe21792	X		X

Vic EPA IWRC 621 (Solids)

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NEPM Screen for Soil Classification

Moisture Set

HOLD

Company Name: Watson Environmental Assessments
Address: 37 Gowrie St
 East Bentleigh
 VIC 3165

Order No.:
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Phone: 9570 2949
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Received: Feb 23, 2016 4:32 PM
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Project ID: 2015042

Eurofins | mgt Client Manager: Andrew Black

Sample Detail

Laboratory where analysis is conducted

Melbourne Laboratory - NATA Site # 1254 & 14271

X X X X X

Sydney Laboratory - NATA Site # 18217

X X X X X

Brisbane Laboratory - NATA Site # 20794

X

External Laboratory

SB8-1.0	Feb 23, 2016		Soil	M16-Fe21793	X	X	
SB8-4.0	Feb 23, 2016		Soil	M16-Fe21794	X		X
SB9-0.5	Feb 23, 2016		Soil	M16-Fe21795	X		X
SB9-1.0	Feb 23, 2016		Soil	M16-Fe21796	X	X	
SB9-4.0	Feb 23, 2016		Soil	M16-Fe21797	X		X
SB10-0.5	Feb 23, 2016		Soil	M16-Fe21798	X	X	
SB10-1.0	Feb 23, 2016		Soil	M16-Fe21799	X		X
SB10-3.0	Feb 23, 2016		Soil	M16-Fe21800	X		X
SB11-0.1	Feb 23, 2016		Soil	M16-Fe21801	X		X
SB11-1.0	Feb 23, 2016		Soil	M16-Fe21802	X	X	

Vic EPA IWRC 621 (Solids)

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NEPM Screen for Soil Classification

Moisture Set

HOLD

Company Name:	Watson Environmental Assessments	Order No.:		Received:	Feb 23, 2016 4:32 PM
Address:	37 Gowrie St East Bentleigh VIC 3165	Report #:	490202	Due:	Feb 26, 2016
Project Name:	ENVIRONMENTAL SITE ASSESSMENT	Phone:	9570 2949	Priority:	3 Day
Project ID:	2015042	Fax:	9570 2861	Contact Name:	John Watson
Eurofins mgt Client Manager: Andrew Black					

Sample Detail**Laboratory where analysis is conducted**

Melbourne Laboratory - NATA Site # 1254 & 14271

X X X X X

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794

X

External Laboratory

SB11-4.0	Feb 23, 2016		Soil	M16-Fe21803	X		X
DUP1	Feb 23, 2016		Soil	M16-Fe21804	X		X
DUP3	Feb 23, 2016		Soil	M16-Fe21805	X		X
SB1-0.5	Feb 23, 2016		Soil	M16-Fe21806	X		
SB1-2.0	Feb 23, 2016		Soil	M16-Fe21807	X		
SB1-3.0	Feb 23, 2016		Soil	M16-Fe21808	X		
SB2-0.1	Feb 23, 2016		Soil	M16-Fe21809	X		
SB2-1.0	Feb 23, 2016		Soil	M16-Fe21810	X		
SB2-3.0	Feb 23, 2016		Soil	M16-Fe21811	X		
SB3-0.5	Feb 23, 2016		Soil	M16-Fe21812	X		

Company Name:	Watson Environmental Assessments	Order No.:		Received:	Feb 23, 2016 4:32 PM
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Project Name:	ENVIRONMENTAL SITE ASSESSMENT	Phone:	9570 2949	Priority:	3 Day
Project ID:	2015042	Fax:	9570 2861	Contact Name:	John Watson
Eurofins mgt Client Manager: Andrew Black					

Sample Detail**Laboratory where analysis is conducted**

Melbourne Laboratory - NATA Site # 1254 & 14271

X X X X X

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794

X

External Laboratory

SB3-1.0	Feb 23, 2016		Soil	M16-Fe21813	X			
SB4-0.1	Feb 23, 2016		Soil	M16-Fe21814	X			
SB4-1.0	Feb 23, 2016		Soil	M16-Fe21815	X			
SB5-0.5	Feb 23, 2016		Soil	M16-Fe21816	X			
SB5-2.0	Feb 23, 2016		Soil	M16-Fe21817	X			
SB6-0.1	Feb 23, 2016		Soil	M16-Fe21818	X			
SB6-1.0	Feb 23, 2016		Soil	M16-Fe21819	X			
SB6-3.0	Feb 23, 2016		Soil	M16-Fe21820	X			
SB7-0.5	Feb 23, 2016		Soil	M16-Fe21821	X			
SB7-2.0	Feb 23, 2016		Soil	M16-Fe21822	X			

Company Name: Watson Environmental Assessments
Address: 37 Gowrie St
East Bentleigh
VIC 3165

Project Name: ENVIRONMENTAL SITE ASSESSMENT
Project ID: 2015042

Order No.: 490202
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Phone: 9570 2949
Fax: 9570 2861

Received: Feb 23, 2016 4:32 PM
Due: Feb 26, 2016
Priority: 3 Day
Contact Name: John Watson

Eurofins | mgt Client Manager: Andrew Black

Sample Detail

Laboratory where analysis is conducted

Melbourne Laboratory - NATA Site # 1254 & 14271 X X X X X

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794 X

External Laboratory

SB7-3.0	Feb 23, 2016		Soil	M16-Fe21823	X				
SB8-0.5	Feb 23, 2016		Soil	M16-Fe21824	X				
SB8-2.0	Feb 23, 2016		Soil	M16-Fe21825	X				
SB8-3.0	Feb 23, 2016		Soil	M16-Fe21826	X				
SB9-0.1	Feb 23, 2016		Soil	M16-Fe21827	X				
SB9-2.0	Feb 23, 2016		Soil	M16-Fe21828	X				
SB9-3.0	Feb 23, 2016		Soil	M16-Fe21829	X				
SB10-0.1	Feb 23, 2016		Soil	M16-Fe21830	X				
SB10-2.0	Feb 23, 2016		Soil	M16-Fe21831	X				
SB11-0.5	Feb 23, 2016		Soil	M16-Fe21832	X				

Company Name: Watson Environmental Assessments
Address: 37 Gowrie St
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VIC 3165

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Report #: 490202
Phone: 9570 2949
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Received: Feb 23, 2016 4:32 PM
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Contact Name: John Watson

Project Name: ENVIRONMENTAL SITE ASSESSMENT
Project ID: 2015042

Eurofins | mgt Client Manager: Andrew Black

Sample Detail

Laboratory where analysis is conducted

Melbourne Laboratory - NATA Site # 1254 & 14271

X X X X X

Sydney Laboratory - NATA Site # 18217

X X X X X

Brisbane Laboratory - NATA Site # 20794

X X X X X

External Laboratory

SB11-2.0	Feb 23, 2016		Soil	M16-Fe21833	X			
SB11-3.0	Feb 23, 2016		Soil	M16-Fe21834	X			
DUP5	Feb 23, 2016		Soil	M16-Fe21835	X			
DUP6	Feb 23, 2016		Soil	M16-Fe21836	X			

Vic EPA IWRC 621 (Solids)

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NEPM Screen for Soil Classification

Moisture Set

HOLD

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per Kilogram

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1,2,4-Trichlorobenzene	mg/kg	< 0.2			0.2	Pass	
Hexachlorobutadiene	mg/kg	< 0.2			0.2	Pass	
1,1-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1,1-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
1,1,1-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1,1,1,2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1,1,2-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1,1,2,2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1,2-Dibromoethane	mg/kg	< 0.05			0.05	Pass	
1,2-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1,2-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1,2-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1,2,3-Trichloropropane	mg/kg	< 0.05			0.05	Pass	
1,2,4-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1,3-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1,3-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1,3,5-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1,4-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
2-Butanone (MEK)	mg/kg	< 0.05			0.05	Pass	
2-Propanone (Acetone)	mg/kg	< 0.05			0.05	Pass	
4-Chlorotoluene	mg/kg	< 0.05			0.05	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.05			0.05	Pass	
Allyl chloride	mg/kg	< 0.05			0.05	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.05			0.05	Pass	
Bromochloromethane	mg/kg	< 0.05			0.05	Pass	
Bromodichloromethane	mg/kg	< 0.05			0.05	Pass	
Bromoform	mg/kg	< 0.05			0.05	Pass	
Bromomethane	mg/kg	< 0.05			0.05	Pass	
Carbon disulfide	mg/kg	< 0.05			0.05	Pass	
Carbon Tetrachloride	mg/kg	< 0.05			0.05	Pass	
Chlorobenzene	mg/kg	< 0.05			0.05	Pass	
Chloroethane	mg/kg	< 0.05			0.05	Pass	
Chloroform	mg/kg	< 0.05			0.05	Pass	
Chloromethane	mg/kg	< 0.05			0.05	Pass	
cis-1,2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
cis-1,3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Dibromochloromethane	mg/kg	< 0.05			0.05	Pass	
Dibromomethane	mg/kg	< 0.05			0.05	Pass	
Dichlorodifluoromethane	mg/kg	< 0.05			0.05	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.05			0.05	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.05			0.05	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.05			0.05	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.05			0.05	Pass	
Tetrachloroethene	mg/kg	< 0.05			0.05	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1,2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
trans-1,3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Trichloroethene	mg/kg	< 0.05			0.05	Pass	
Trichlorofluoromethane	mg/kg	< 0.05			0.05	Pass	
Vinyl chloride	mg/kg	< 0.05			0.05	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4,4'-DDD	mg/kg	< 0.05			0.05	Pass	
4,4'-DDE	mg/kg	< 0.05			0.05	Pass	
4,4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1			1.0	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1			1.0	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1.0	Pass	
Pentachlorophenol	mg/kg	< 1			1.0	Pass	
Tetrachlorophenols - Total	mg/kg	< 1			1.0	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
% Clay	%	< 1			1	Pass	
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Conductivity (1:5 aqueous extract at 25°C)	uS/cm	< 10			10	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride	mg/kg	< 100			100	Pass	
Total Organic Carbon	%	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Iron	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 10			10	Pass	
Nickel	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 5			5	Pass	
Tin	mg/kg	< 10			10	Pass	
Zinc	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Ion Exchange Properties							
Cation Exchange Capacity	meq/100g	< 0.05			0.05	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	97			70-130	Pass	
TRH C10-C14	%	92			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	75			70-130	Pass	
Toluene	%	81			70-130	Pass	
Ethylbenzene	%	83			70-130	Pass	
m&p-Xylenes	%	88			70-130	Pass	
Xylenes - Total	%	87			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1,1-Dichloroethene	%	72			70-130	Pass	
1,1,1-Trichloroethane	%	87			70-130	Pass	
1,2-Dichlorobenzene	%	88			70-130	Pass	
1,2-Dichloroethane	%	80			70-130	Pass	
Trichloroethene	%	75			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	74			70-130	Pass	
TRH C6-C10	%	99			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	113			70-130	Pass	
Acenaphthylene	%	118			70-130	Pass	
Anthracene	%	123			70-130	Pass	
Benz(a)anthracene	%	112			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(a)pyrene	%	115			70-130	Pass	
Benzo(b&j)fluoranthene	%	129			70-130	Pass	
Benzo(g.h.i)perylene	%	81			70-130	Pass	
Benzo(k)fluoranthene	%	111			70-130	Pass	
Chrysene	%	112			70-130	Pass	
Dibenz(a.h)anthracene	%	101			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	120			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	93			70-130	Pass	
Naphthalene	%	109			70-130	Pass	
Phenanthrene	%	117			70-130	Pass	
Pyrene	%	101			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
4,4'-DDD	%	119			70-130	Pass	
4,4'-DDE	%	98			70-130	Pass	
4,4'-DDT	%	73			70-130	Pass	
a-BHC	%	102			70-130	Pass	
Aldrin	%	100			70-130	Pass	
b-BHC	%	96			70-130	Pass	
d-BHC	%	107			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	93			70-130	Pass	
Endosulfan II	%	92			70-130	Pass	
Endosulfan sulphate	%	92			70-130	Pass	
Endrin	%	81			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	95			70-130	Pass	
g-BHC (Lindane)	%	99			70-130	Pass	
Heptachlor	%	79			70-130	Pass	
Heptachlor epoxide	%	94			70-130	Pass	
Hexachlorobenzene	%	89			70-130	Pass	
Methoxychlor	%	80			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	107			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	75			30-130	Pass	
2,4-Dichlorophenol	%	72			30-130	Pass	
2,4,5-Trichlorophenol	%	81			30-130	Pass	
2,4,6-Trichlorophenol	%	80			30-130	Pass	
2,6-Dichlorophenol	%	82			30-130	Pass	
4-Chloro-3-methylphenol	%	75			30-130	Pass	
Pentachlorophenol	%	56			30-130	Pass	
Tetrachlorophenols - Total	%	85			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	%	33			30-130	Pass	
2-Methyl-4,6-dinitrophenol	%	56			30-130	Pass	
2-Methylphenol (o-Cresol)	%	75			30-130	Pass	
2-Nitrophenol	%	81			30-130	Pass	
2,4-Dimethylphenol	%	67			30-130	Pass	
2,4-Dinitrophenol	%	51			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
3&4-Methylphenol (m&p-Cresol)	%	74			30-130	Pass		
4-Nitrophenol	%	59			30-130	Pass		
Dinoseb	%	63			30-130	Pass		
Phenol	%	75			30-130	Pass		
LCS - % Recovery								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions								
TRH >C10-C16	%	87			70-130	Pass		
LCS - % Recovery								
% Clay	%	100			70-130	Pass		
Chromium (hexavalent)	%	106			70-130	Pass		
Cyanide (total)	%	97			70-130	Pass		
Fluoride	%	117			70-130	Pass		
LCS - % Recovery								
Heavy Metals								
Arsenic	%	81			80-120	Pass		
Cadmium	%	104			80-120	Pass		
Cadmium	%	103			80-120	Pass		
Chromium	%	113			80-120	Pass		
Chromium	%	110			80-120	Pass		
Copper	%	112			80-120	Pass		
Copper	%	110			80-120	Pass		
Lead	%	109			80-120	Pass		
Lead	%	106			80-120	Pass		
Mercury	%	106			75-125	Pass		
Mercury	%	118			75-125	Pass		
Molybdenum	%	103			80-120	Pass		
Nickel	%	106			80-120	Pass		
Nickel	%	105			80-120	Pass		
Selenium	%	82			80-120	Pass		
Silver	%	105			80-120	Pass		
Zinc	%	109			80-120	Pass		
Zinc	%	108			80-120	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions								
TRH C10-C14	M16-Fe21774	CP	%	99		70-130	Pass	
Spike - % Recovery								
Volatile Organics								
1.1-Dichloroethene	M16-Fe19697	NCP	%	85		70-130	Pass	
1.1.1-Trichloroethane	M16-Fe19697	NCP	%	85		70-130	Pass	
1.2-Dichlorobenzene	M16-Fe19697	NCP	%	92		70-130	Pass	
1.2-Dichloroethane	M16-Fe19697	NCP	%	82		70-130	Pass	
Trichloroethene	M16-Fe19697	NCP	%	74		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	M16-Fe21774	CP	%	85		70-130	Pass	
Acenaphthylene	M16-Fe21774	CP	%	84		70-130	Pass	
Anthracene	M16-Fe21774	CP	%	89		70-130	Pass	
Benz(a)anthracene	M16-Fe21774	CP	%	75		70-130	Pass	
Benzo(a)pyrene	M16-Fe21774	CP	%	82		70-130	Pass	
Benzo(b&j)fluoranthene	M16-Fe21774	CP	%	79		70-130	Pass	
Benzo(g.h.i)perylene	M16-Fe21774	CP	%	74		70-130	Pass	
Benzo(k)fluoranthene	M16-Fe21774	CP	%	99		70-130	Pass	
Chrysene	M16-Fe21774	CP	%	86		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a,h)anthracene	M16-Fe21774	CP	%	80			70-130	Pass	
Fluoranthene	M16-Fe21774	CP	%	78			70-130	Pass	
Fluorene	M16-Fe21774	CP	%	84			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M16-Fe21774	CP	%	81			70-130	Pass	
Naphthalene	M16-Fe21774	CP	%	81			70-130	Pass	
Phenanthrene	M16-Fe21774	CP	%	85			70-130	Pass	
Pyrene	M16-Fe21774	CP	%	78			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDD	M16-Fe21774	CP	%	119			70-130	Pass	
4,4'-DDE	M16-Fe21774	CP	%	110			70-130	Pass	
4,4'-DDT	M16-Fe21774	CP	%	129			70-130	Pass	
a-BHC	M16-Fe21774	CP	%	108			70-130	Pass	
Aldrin	M16-Fe21774	CP	%	113			70-130	Pass	
b-BHC	M16-Fe21774	CP	%	105			70-130	Pass	
d-BHC	M16-Fe21774	CP	%	107			70-130	Pass	
Dieldrin	M16-Fe21774	CP	%	107			70-130	Pass	
Endosulfan I	M16-Fe21774	CP	%	108			70-130	Pass	
Endosulfan II	M16-Fe21774	CP	%	111			70-130	Pass	
Endosulfan sulphate	M16-Fe21774	CP	%	115			70-130	Pass	
Endrin	M16-Fe21774	CP	%	116			70-130	Pass	
Endrin aldehyde	M16-Fe21774	CP	%	110			70-130	Pass	
Endrin ketone	M16-Fe21774	CP	%	114			70-130	Pass	
g-BHC (Lindane)	M16-Fe21774	CP	%	108			70-130	Pass	
Heptachlor	M16-Fe21774	CP	%	114			70-130	Pass	
Heptachlor epoxide	M16-Fe21774	CP	%	110			70-130	Pass	
Hexachlorobenzene	M16-Fe21774	CP	%	102			70-130	Pass	
Methoxychlor	M16-Fe21774	CP	%	123			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	M16-Fe21774	CP	%	81			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M16-Fe21774	CP	%	74			30-130	Pass	
2,4-Dichlorophenol	M16-Fe21774	CP	%	73			30-130	Pass	
2,4,5-Trichlorophenol	M16-Fe21774	CP	%	82			30-130	Pass	
2,4,6-Trichlorophenol	M16-Fe21774	CP	%	85			30-130	Pass	
2,6-Dichlorophenol	M16-Fe21774	CP	%	78			30-130	Pass	
4-Chloro-3-methylphenol	M16-Fe21774	CP	%	71			30-130	Pass	
Pentachlorophenol	M16-Fe21774	CP	%	68			30-130	Pass	
Tetrachlorophenols - Total	M16-Fe21774	CP	%	89			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4,6-dinitrophenol	M16-Fe21774	CP	%	34			30-130	Pass	
2-Methyl-4,6-dinitrophenol	M16-Fe21774	CP	%	52			30-130	Pass	
2-Methylphenol (o-Cresol)	M16-Fe21774	CP	%	74			30-130	Pass	
2-Nitrophenol	M16-Fe21774	CP	%	79			30-130	Pass	
2,4-Dimethylphenol	M16-Fe21774	CP	%	74			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M16-Fe21774	CP	%	73			30-130	Pass	
4-Nitrophenol	M16-Fe21774	CP	%	64			30-130	Pass	
Dinoseb	M16-Fe21774	CP	%	62			30-130	Pass	
Phenol	M16-Fe21774	CP	%	79			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16	M16-Fe21774	CP	%	107			70-130	Pass	
Spike - % Recovery									
Chromium (hexavalent)	M16-Fe21774	CP	%	102			70-130	Pass	
Cyanide (total)	M16-Fe21774	CP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals									
Arsenic	M16-Fe21779	CP	%	81			75-125	Pass	
Cadmium	M16-Fe21779	CP	%	113			75-125	Pass	
Chromium	M16-Fe21779	CP	%	117			75-125	Pass	
Copper	M16-Fe21779	CP	%	120			75-125	Pass	
Lead	M16-Fe21779	CP	%	103			75-125	Pass	
Mercury	M16-Fe21779	CP	%	114			70-130	Pass	
Molybdenum	M16-Fe21779	CP	%	110			75-125	Pass	
Nickel	M16-Fe21779	CP	%	106			75-125	Pass	
Silver	M16-Fe21779	CP	%	118			75-125	Pass	
Zinc	M16-Fe21779	CP	%	113			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions									
TRH C10-C14	M16-Fe21784	CP	%	102			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	M16-Fe21784	CP	%	78			70-130	Pass	
Acenaphthylene	M16-Fe21784	CP	%	79			70-130	Pass	
Anthracene	M16-Fe21784	CP	%	82			70-130	Pass	
Benz(a)anthracene	M16-Fe21784	CP	%	71			70-130	Pass	
Benzo(a)pyrene	M16-Fe21784	CP	%	77			70-130	Pass	
Benzo(b&j)fluoranthene	M16-Fe21784	CP	%	71			70-130	Pass	
Benzo(g.h.i)perylene	M16-Fe21784	CP	%	70			70-130	Pass	
Benzo(k)fluoranthene	M16-Fe21784	CP	%	90			70-130	Pass	
Chrysene	M16-Fe21784	CP	%	74			70-130	Pass	
Dibenz(a.h)anthracene	M16-Fe21784	CP	%	74			70-130	Pass	
Fluoranthene	M16-Fe21784	CP	%	73			70-130	Pass	
Fluorene	M16-Fe21784	CP	%	78			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M16-Fe21784	CP	%	76			70-130	Pass	
Naphthalene	M16-Fe21784	CP	%	75			70-130	Pass	
Phenanthrene	M16-Fe21784	CP	%	80			70-130	Pass	
Pyrene	M16-Fe21784	CP	%	72			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)									
2-Chlorophenol	M16-Fe21784	CP	%	81			30-130	Pass	
2,4-Dichlorophenol	M16-Fe21784	CP	%	79			30-130	Pass	
2,4,5-Trichlorophenol	M16-Fe21784	CP	%	86			30-130	Pass	
2,4,6-Trichlorophenol	M16-Fe21784	CP	%	90			30-130	Pass	
2,6-Dichlorophenol	M16-Fe21784	CP	%	84			30-130	Pass	
4-Chloro-3-methylphenol	M16-Fe21784	CP	%	81			30-130	Pass	
Pentachlorophenol	M16-Fe21784	CP	%	67			30-130	Pass	
Tetrachlorophenols - Total	M16-Fe21784	CP	%	91			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)									
2-Cyclohexyl-4,6-dinitrophenol	M16-Fe21784	CP	%	31			30-130	Pass	
2-Methyl-4,6-dinitrophenol	M16-Fe21784	CP	%	46			30-130	Pass	
2-Methylphenol (o-Cresol)	M16-Fe21784	CP	%	79			30-130	Pass	
2-Nitrophenol	M16-Fe21784	CP	%	81			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2,4-Dimethylphenol	M16-Fe21784	CP	%	79			30-130	Pass	
2,4-Dinitrophenol	M16-Fe21784	CP	%	53			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M16-Fe21784	CP	%	76			30-130	Pass	
4-Nitrophenol	M16-Fe21784	CP	%	73			30-130	Pass	
Dinoseb	M16-Fe21784	CP	%	58			30-130	Pass	
Phenol	M16-Fe21784	CP	%	81			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1				
TRH >C10-C16	M16-Fe21784	CP	%	111			70-130	Pass	
Spike - % Recovery									
Heavy Metals					Result 1				
Arsenic	M16-Fe21789	CP	%	83			75-125	Pass	
Cadmium	M16-Fe21789	CP	%	106			75-125	Pass	
Chromium	M16-Fe21789	CP	%	111			75-125	Pass	
Mercury	M16-Fe21789	CP	%	91			70-130	Pass	
Molybdenum	M16-Fe21789	CP	%	109			75-125	Pass	
Nickel	M16-Fe21789	CP	%	103			75-125	Pass	
Selenium	M16-Fe21789	CP	%	78			75-125	Pass	
Silver	M16-Fe21789	CP	%	118			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1				
TRH C6-C9	M16-Fe21794	CP	%	95			70-130	Pass	
TRH C10-C14	M16-Fe21794	CP	%	99			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1				
TRH C6-C10	M16-Fe21794	CP	%	97			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons					Result 1				
Acenaphthene	M16-Fe21794	CP	%	94			70-130	Pass	
Acenaphthylene	M16-Fe21794	CP	%	95			70-130	Pass	
Anthracene	M16-Fe21794	CP	%	99			70-130	Pass	
Benz(a)anthracene	M16-Fe21794	CP	%	82			70-130	Pass	
Benzo(a)pyrene	M16-Fe21794	CP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	M16-Fe21794	CP	%	97			70-130	Pass	
Benzo(g.h.i)perylene	M16-Fe21794	CP	%	77			70-130	Pass	
Benzo(k)fluoranthene	M16-Fe21794	CP	%	84			70-130	Pass	
Chrysene	M16-Fe21794	CP	%	83			70-130	Pass	
Dibenz(a.h)anthracene	M16-Fe21794	CP	%	89			70-130	Pass	
Fluoranthene	M16-Fe21794	CP	%	77			70-130	Pass	
Fluorene	M16-Fe21794	CP	%	96			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M16-Fe21794	CP	%	85			70-130	Pass	
Naphthalene	M16-Fe21794	CP	%	89			70-130	Pass	
Phenanthrene	M16-Fe21794	CP	%	95			70-130	Pass	
Pyrene	M16-Fe21794	CP	%	77			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)					Result 1				
2-Chlorophenol	M16-Fe21794	CP	%	95			30-130	Pass	
2,4-Dichlorophenol	M16-Fe21794	CP	%	106			30-130	Pass	
2,4,5-Trichlorophenol	M16-Fe21794	CP	%	105			30-130	Pass	
2,4,6-Trichlorophenol	M16-Fe21794	CP	%	106			30-130	Pass	
2,6-Dichlorophenol	M16-Fe21794	CP	%	106			30-130	Pass	
4-Chloro-3-methylphenol	M16-Fe21794	CP	%	108			30-130	Pass	
Pentachlorophenol	M16-Fe21794	CP	%	91			30-130	Pass	
Tetrachlorophenols - Total	M16-Fe21794	CP	%	114			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Phenols (non-Halogenated)									
2-Cyclohexyl-4,6-dinitrophenol	M16-Fe21794	CP	%	84			30-130	Pass	
2-Methyl-4,6-dinitrophenol	M16-Fe21794	CP	%	68			30-130	Pass	
2-Methylphenol (o-Cresol)	M16-Fe21794	CP	%	100			30-130	Pass	
2-Nitrophenol	M16-Fe21794	CP	%	94			30-130	Pass	
2,4-Dimethylphenol	M16-Fe21794	CP	%	100			30-130	Pass	
2,4-Dinitrophenol	M16-Fe21794	CP	%	116			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M16-Fe21794	CP	%	105			30-130	Pass	
4-Nitrophenol	M16-Fe21794	CP	%	114			30-130	Pass	
Dinoseb	M16-Fe21794	CP	%	94			30-130	Pass	
Phenol	M16-Fe21794	CP	%	101			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1				
TRH >C10-C16	M16-Fe21794	CP	%	105			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides					Result 1				
4,4'-DDD	M16-Fe21795	CP	%	129			70-130	Pass	
4,4'-DDE	M16-Fe21795	CP	%	123			70-130	Pass	
4,4'-DDT	M16-Fe21795	CP	%	107			70-130	Pass	
a-BHC	M16-Fe21795	CP	%	123			70-130	Pass	
Aldrin	M16-Fe21795	CP	%	128			70-130	Pass	
b-BHC	M16-Fe21795	CP	%	120			70-130	Pass	
d-BHC	M16-Fe21795	CP	%	121			70-130	Pass	
Dieldrin	M16-Fe21795	CP	%	121			70-130	Pass	
Endosulfan I	M16-Fe21795	CP	%	120			70-130	Pass	
Endosulfan II	M16-Fe21795	CP	%	87			70-130	Pass	
Endosulfan sulphate	M16-Fe21795	CP	%	124			70-130	Pass	
Endrin	M16-Fe21795	CP	%	117			70-130	Pass	
Endrin aldehyde	M16-Fe21795	CP	%	118			70-130	Pass	
Endrin ketone	M16-Fe21795	CP	%	120			70-130	Pass	
g-BHC (Lindane)	M16-Fe21795	CP	%	124			70-130	Pass	
Heptachlor	M16-Fe21795	CP	%	126			70-130	Pass	
Heptachlor epoxide	M16-Fe21795	CP	%	125			70-130	Pass	
Hexachlorobenzene	M16-Fe21795	CP	%	117			70-130	Pass	
Methoxychlor	M16-Fe21795	CP	%	102			70-130	Pass	
Spike - % Recovery									
					Result 1				
Chromium (hexavalent)	M16-Fe21795	CP	%	95			70-130	Pass	
Spike - % Recovery									
Heavy Metals					Result 1				
Arsenic	M16-Fe21799	CP	%	85			75-125	Pass	
Cadmium	M16-Fe21799	CP	%	104			75-125	Pass	
Chromium	M16-Fe21799	CP	%	115			75-125	Pass	
Copper	M16-Fe21799	CP	%	103			75-125	Pass	
Lead	M16-Fe21799	CP	%	101			75-125	Pass	
Mercury	M16-Fe21799	CP	%	112			70-130	Pass	
Molybdenum	M16-Fe21799	CP	%	101			75-125	Pass	
Nickel	M16-Fe21799	CP	%	98			75-125	Pass	
Silver	M16-Fe21799	CP	%	122			75-125	Pass	
Zinc	M16-Fe21799	CP	%	113			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1				
TRH C6-C9	M16-Fe21804	CP	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14	M16-Fe21804	CP	%	101			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M16-Fe21804	CP	%	127			70-130	Pass	
Toluene	M16-Fe21804	CP	%	109			70-130	Pass	
Ethylbenzene	M16-Fe21804	CP	%	95			70-130	Pass	
m&p-Xylenes	M16-Fe21804	CP	%	97			70-130	Pass	
o-Xylene	M16-Fe21804	CP	%	93			70-130	Pass	
Xylenes - Total	M16-Fe21804	CP	%	96			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1				
Naphthalene	M16-Fe21804	CP	%	85			70-130	Pass	
TRH C6-C10	M16-Fe21804	CP	%	108			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons					Result 1				
Acenaphthene	M16-Fe21804	CP	%	78			70-130	Pass	
Acenaphthylene	M16-Fe21804	CP	%	77			70-130	Pass	
Anthracene	M16-Fe21804	CP	%	97			70-130	Pass	
Benz(a)anthracene	M16-Fe21804	CP	%	71			70-130	Pass	
Benzo(a)pyrene	M16-Fe21804	CP	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	M16-Fe21804	CP	%	71			70-130	Pass	
Benzo(g.h.i)perylene	M16-Fe21804	CP	%	83			70-130	Pass	
Benzo(k)fluoranthene	M16-Fe21804	CP	%	71			70-130	Pass	
Chrysene	M16-Fe21804	CP	%	108			70-130	Pass	
Dibenz(a.h)anthracene	M16-Fe21804	CP	%	71			70-130	Pass	
Fluoranthene	M16-Fe21804	CP	%	78			70-130	Pass	
Fluorene	M16-Fe21804	CP	%	80			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M16-Fe21804	CP	%	71			70-130	Pass	
Naphthalene	M16-Fe21804	CP	%	80			70-130	Pass	
Phenanthrene	M16-Fe21804	CP	%	71			70-130	Pass	
Pyrene	M16-Fe21804	CP	%	77			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1				
TRH >C10-C16	M16-Fe21804	CP	%	110			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M16-Fe21775	CP	%	7.4	6.8	9.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Clay	B15-Jn02588	NCP	%	30	25	18	30%	Pass	
Conductivity (1:5 aqueous extract at 25°C)	M16-Fe21778	CP	uS/cm	420	420	<1	30%	Pass	
pH (units)(1:5 soil:CaCl ₂ extract)	M16-Fe21778	CP	pH Units	5.9	5.9	pass	30%	Pass	
Total Organic Carbon	M16-Fe21778	CP	%	0.5	0.5	2.0	30%	Pass	
Duplicate									
Heavy Metals					Result 1	Result 2	RPD		
Arsenic	M16-Fe21778	CP	mg/kg	29	26	11	30%	Pass	
Cadmium	M16-Fe21778	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M16-Fe21778	CP	mg/kg	66	64	2.0	30%	Pass	
Copper	M16-Fe21778	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Iron	M16-Fe21778	CP	mg/kg	30000	27000	11	30%	Pass	
Lead	M16-Fe21778	CP	mg/kg	27	28	3.0	30%	Pass	
Mercury	M16-Fe21778	CP	mg/kg	0.1	< 0.1	63	30%	Fail	Q15

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Molybdenum	M16-Fe21778	CP	mg/kg	< 10	< 10	<1	30%	Pass
Nickel	M16-Fe21778	CP	mg/kg	14	14	4.0	30%	Pass
Selenium	M16-Fe21778	CP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M16-Fe21778	CP	mg/kg	< 5	< 5	<1	30%	Pass
Tin	M16-Fe21778	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M16-Fe21778	CP	mg/kg	15	16	7.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Iron (%)	M16-Fe21778	CP	%	3.0	2.7	11	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M16-Fe21779	CP	mg/kg	15	11	28	30%	Pass
Cadmium	M16-Fe21779	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M16-Fe21779	CP	mg/kg	47	47	1.0	30%	Pass
Copper	M16-Fe21779	CP	mg/kg	< 5	< 5	<1	30%	Pass
Lead	M16-Fe21779	CP	mg/kg	16	15	8.0	30%	Pass
Mercury	M16-Fe21779	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M16-Fe21779	CP	mg/kg	< 10	< 10	<1	30%	Pass
Nickel	M16-Fe21779	CP	mg/kg	8.2	8.7	6.0	30%	Pass
Selenium	M16-Fe21779	CP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M16-Fe21779	CP	mg/kg	< 5	< 5	<1	30%	Pass
Tin	M16-Fe21779	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M16-Fe21779	CP	mg/kg	11	11	4.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	M16-Fe21783	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	M16-Fe21783	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M16-Fe21783	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M16-Fe21783	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	M16-Fe21783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M16-Fe21783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M16-Fe21783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M16-Fe21783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M16-Fe21783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	M16-Fe21783	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M16-Fe21783	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Fluorene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M16-Fe21783	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M16-Fe21783	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M16-Fe21783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
2-Nitrophenol	M16-Fe21783	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M16-Fe21783	CP	mg/kg	< 5	< 5	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M16-Fe21783	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M16-Fe21783	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M16-Fe21783	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M16-Fe21783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	M16-Fe21783	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M16-Fe21783	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M16-Fe21783	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Fluoride	M16-Fe21784	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M16-Fe21785	CP	%	17	15	8.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M16-Fe21788	CP	mg/kg	18	16	10	30%	Pass
Cadmium	M16-Fe21788	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M16-Fe21788	CP	mg/kg	92	72	25	30%	Pass
Copper	M16-Fe21788	CP	mg/kg	< 5	< 5	<1	30%	Pass
Lead	M16-Fe21788	CP	mg/kg	23	21	8.0	30%	Pass
Mercury	M16-Fe21788	CP	mg/kg	0.1	< 0.1	44	30%	Fail Q15
Molybdenum	M16-Fe21788	CP	mg/kg	< 10	< 10	<1	30%	Pass
Nickel	M16-Fe21788	CP	mg/kg	23	18	22	30%	Pass
Selenium	M16-Fe21788	CP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M16-Fe21788	CP	mg/kg	< 5	< 5	<1	30%	Pass
Tin	M16-Fe21788	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M16-Fe21788	CP	mg/kg	6.8	5.1	29	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M16-Fe21789	CP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	M16-Fe21789	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M16-Fe21789	CP	mg/kg	< 5	< 5	<1	30%	Pass
Copper	M16-Fe21789	CP	mg/kg	590	670	12	30%	Pass
Lead	M16-Fe21789	CP	mg/kg	33	33	1.0	30%	Pass
Mercury	M16-Fe21789	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M16-Fe21789	CP	mg/kg	< 10	< 10	<1	30%	Pass
Nickel	M16-Fe21789	CP	mg/kg	7.0	7.0	<1	30%	Pass
Selenium	M16-Fe21789	CP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M16-Fe21789	CP	mg/kg	< 5	< 5	<1	30%	Pass
Tin	M16-Fe21789	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M16-Fe21789	CP	mg/kg	410	450	10	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	M16-Fe21793	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	M16-Fe21793	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M16-Fe21793	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M16-Fe21793	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	M16-Fe21793	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M16-Fe21793	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M16-Fe21793	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M16-Fe21793	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M16-Fe21793	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	M16-Fe21793	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M16-Fe21793	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M16-Fe21793	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	M16-Fe21793	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M16-Fe21793	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M16-Fe21793	CP	mg/kg	< 100	< 100	<1	30%	Pass

Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	M16-Fe21794	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M16-Fe21794	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	M16-Fe21794	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1,2,4-Trichlorobenzene	M16-Fe21794	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Hexachlorobutadiene	M16-Fe21794	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
1,1-Dichloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1-Dichloroethene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,1-Trichloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,1,2-Tetrachloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,2-Trichloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,2,2-Tetrachloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dibromoethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichlorobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichloropropane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2,3-Trichloropropane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2,4-Trimethylbenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3-Dichlorobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3-Dichloropropane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3,5-Trimethylbenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,4-Dichlorobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
2-Butanone (MEK)	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
2-Propanone (Acetone)	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4-Chlorotoluene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Allyl chloride	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromochloromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromodichloromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromoform	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromomethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Carbon disulfide	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Carbon Tetrachloride	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chlorobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloroethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloroform	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
cis-1,2-Dichloroethene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
cis-1,3-Dichloropropene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dibromochloromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dibromomethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dichlorodifluoromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Iodomethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Isopropyl benzene (Cumene)	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methylene Chloride	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Styrene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Tetrachloroethene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
trans-1,2-Dichloroethene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
trans-1,3-Dichloropropene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Trichloroethene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Trichlorofluoromethane	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Vinyl chloride	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M16-Fe21794	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M16-Fe21794	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M16-Fe21794	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M16-Fe21794	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M16-Fe21794	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M16-Fe21794	CP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	M16-Fe21794	CP	mg/kg	< 5	< 5	<1	30%	Pass
pH (1:5 Aqueous extract)	M16-Fe21794	CP	pH Units	6.9	6.8	pass	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M16-Fe21795	CP	%	12	13	6.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Mercury	M16-Fe21798	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M16-Fe21799	CP	mg/kg	10	13	22	30%	Pass
Cadmium	M16-Fe21799	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M16-Fe21799	CP	mg/kg	35	36	2.0	30%	Pass
Copper	M16-Fe21799	CP	mg/kg	17	17	<1	30%	Pass
Lead	M16-Fe21799	CP	mg/kg	17	20	17	30%	Pass
Mercury	M16-Fe21799	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M16-Fe21799	CP	mg/kg	< 10	< 10	<1	30%	Pass
Nickel	M16-Fe21799	CP	mg/kg	9.9	9.7	1.0	30%	Pass
Selenium	M16-Fe21799	CP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M16-Fe21799	CP	mg/kg	< 5	< 5	<1	30%	Pass
Tin	M16-Fe21799	CP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M16-Fe21799	CP	mg/kg	22	21	6.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	M16-Fe21803	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	M16-Fe21803	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M16-Fe21803	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M16-Fe21803	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	M16-Fe21803	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M16-Fe21803	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M16-Fe21803	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M16-Fe21803	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M16-Fe21803	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	M16-Fe21803	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1,2,4-Trichlorobenzene	M16-Fe21803	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Hexachlorobutadiene	M16-Fe21803	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
1,1-Dichloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1-Dichloroethene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,1-Trichloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,1,2-Tetrachloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,2-Trichloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,1,2,2-Tetrachloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dibromoethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichlorobenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2-Dichloropropane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2,3-Trichloropropane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,2,4-Trimethylbenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3-Dichlorobenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3-Dichloropropane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,3,5-Trimethylbenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
1,4-Dichlorobenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
2-Butanone (MEK)	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
2-Propanone (Acetone)	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4-Chlorotoluene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Allyl chloride	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromobenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromochloromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromodichloromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Bromoform	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Bromomethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Carbon disulfide	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Carbon Tetrachloride	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chlorobenzene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloroethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloroform	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Chloromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
cis-1,2-Dichloroethene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
cis-1,3-Dichloropropene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dibromochloromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dibromomethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dichlorodifluoromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Iodomethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Isopropyl benzene (Cumene)	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methylene Chloride	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Styrene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Tetrachloroethene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
trans-1,2-Dichloroethene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
trans-1,3-Dichloropropene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Trichloroethene	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Trichlorofluoromethane	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Vinyl chloride	M16-Fe21803	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	M16-Fe21803	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30%	Pass

Duplicate							
Phenols (non-Halogenated)				Result 1	Result 2	RPD	
2-Cyclohexyl-4,6-dinitrophenol	M16-Fe21803	CP	mg/kg	< 20	< 20	<1	30% Pass
2-Methyl-4,6-dinitrophenol	M16-Fe21803	CP	mg/kg	< 5	< 5	<1	30% Pass
2-Methylphenol (o-Cresol)	M16-Fe21803	CP	mg/kg	< 0.2	< 0.2	<1	30% Pass
2-Nitrophenol	M16-Fe21803	CP	mg/kg	< 1	< 1	<1	30% Pass
2,4-Dimethylphenol	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30% Pass
2,4-Dinitrophenol	M16-Fe21803	CP	mg/kg	< 5	< 5	<1	30% Pass
3&4-Methylphenol (m&p-Cresol)	M16-Fe21803	CP	mg/kg	< 0.4	< 0.4	<1	30% Pass
4-Nitrophenol	M16-Fe21803	CP	mg/kg	< 5	< 5	<1	30% Pass
Dinoseb	M16-Fe21803	CP	mg/kg	< 20	< 20	<1	30% Pass
Phenol	M16-Fe21803	CP	mg/kg	< 0.5	< 0.5	<1	30% Pass
Duplicate							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD	
TRH >C10-C16	M16-Fe21803	CP	mg/kg	< 50	< 50	<1	30% Pass
TRH >C16-C34	M16-Fe21803	CP	mg/kg	< 100	< 100	<1	30% Pass
TRH >C34-C40	M16-Fe21803	CP	mg/kg	< 100	< 100	<1	30% Pass
Duplicate							
% Moisture	M16-Fe21805	CP	%	6.7	6.6	2.0	30% Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
M10	NATA accreditation does not cover the performance of this service in soil matrices
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Andrew Black	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Huong Le	Senior Analyst-Inorganic (VIC)
Mele Singh	Senior Analyst-Organic (VIC)
Richard Corner	Senior Analyst-Inorganic (QLD)



Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

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Watson Environmental Assessments
37 Gowrie St
East Bentleigh
VIC 3165



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or
measurements included in this document are traceable
to Australian/national standards.

Attention: John Watson

Report 490521-S
Project name ENVIRONMENTAL SITE ASSESSMENT
Project ID 2015042
Received Date Feb 25, 2016

Client Sample ID	LOR	Unit	DUP2 Soil S16-Fe24015 Feb 23, 2016	DUP4 Soil S16-Fe24016 Feb 23, 2016
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	86	86
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			DUP2	DUP4
Sample Matrix			Soil	Soil
Eurofins mgt Sample No.			S16-Fe24015	S16-Fe24016
Date Sampled			Feb 23, 2016	Feb 23, 2016
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	101	98
p-Terphenyl-d14 (surr.)	1	%	104	102
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
Heavy Metals				
Arsenic	2	mg/kg	4.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	20	< 5
Copper	5	mg/kg	< 5	< 5
Lead	5	mg/kg	6.9	< 5
Mercury	0.05	mg/kg	0.06	< 0.05
Nickel	5	mg/kg	< 5	< 5
Zinc	5	mg/kg	< 5	< 5
% Moisture	1	%	14	6.3

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Feb 25, 2016	14 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Feb 25, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Feb 25, 2016	14 Day
Polycyclic Aromatic Hydrocarbons - Method: E007 Polyaromatic Hydrocarbons (PAH)	Sydney	Feb 25, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Feb 25, 2016	14 Day
Metals M8 - Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS	Sydney	Feb 25, 2016	28 Day
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Feb 25, 2016	14 Day

Company Name: Watson Environmental Assessments
Address: 37 Gowrie St
East Bentleigh
VIC 3165

Order No.:
Report #: 490521
Phone: 9570 2949
Fax: 9570 2861

Received: Feb 25, 2016 9:00 AM
Due: Mar 1, 2016
Priority: 3 Day
Contact Name: John Watson

Project Name: ENVIRONMENTAL SITE ASSESSMENT
Project ID: 2015042

Eurofins | mgt Client Manager: Andrew Black

Sample Detail

Moisture Set	Eurofins mgt Suite B7
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Laboratory where analysis is conducted

Melbourne Laboratory - NATA Site # 1254 & 14271

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794

External Laboratory

Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
DUP2	Feb 23, 2016		Soil	S16-Fe24015	X	X
DUP4	Feb 23, 2016		Soil	S16-Fe24016	X	X

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per Kilogram

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.05			0.05	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions								
TRH C6-C9	%	91			70-130	Pass		
TRH C10-C14	%	88			70-130	Pass		
LCS - % Recovery								
BTEX								
Benzene	%	89			70-130	Pass		
Toluene	%	105			70-130	Pass		
Ethylbenzene	%	103			70-130	Pass		
m&p-Xylenes	%	109			70-130	Pass		
o-Xylene	%	107			70-130	Pass		
Xylenes - Total	%	108			70-130	Pass		
LCS - % Recovery								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions								
Naphthalene	%	112			70-130	Pass		
TRH C6-C10	%	94			70-130	Pass		
LCS - % Recovery								
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	%	86			70-130	Pass		
Acenaphthylene	%	89			70-130	Pass		
Anthracene	%	109			70-130	Pass		
Benz(a)anthracene	%	82			70-130	Pass		
Benzo(a)pyrene	%	75			70-130	Pass		
Benzo(b&j)fluoranthene	%	72			70-130	Pass		
Benzo(g.h.i)perylene	%	97			70-130	Pass		
Benzo(k)fluoranthene	%	104			70-130	Pass		
Chrysene	%	111			70-130	Pass		
Dibenz(a.h)anthracene	%	85			70-130	Pass		
Fluoranthene	%	81			70-130	Pass		
Fluorene	%	87			70-130	Pass		
Indeno(1.2.3-cd)pyrene	%	90			70-130	Pass		
Naphthalene	%	92			70-130	Pass		
Phenanthrene	%	75			70-130	Pass		
Pyrene	%	87			70-130	Pass		
LCS - % Recovery								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions								
TRH >C10-C16	%	94			70-130	Pass		
LCS - % Recovery								
Heavy Metals								
Arsenic	%	87			70-130	Pass		
Cadmium	%	92			70-130	Pass		
Chromium	%	91			70-130	Pass		
Copper	%	91			70-130	Pass		
Lead	%	88			70-130	Pass		
Mercury	%	85			70-130	Pass		
Nickel	%	90			70-130	Pass		
Zinc	%	92			70-130	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1				
TRH C6-C9	S16-Fe24016	CP	%	78			70-130	Pass
TRH C10-C14	S16-Fe24016	CP	%	99			70-130	Pass
Spike - % Recovery								
BTEX				Result 1				
Benzene	S16-Fe24016	CP	%	88			70-130	Pass

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Toluene	S16-Fe24016	CP	%	101			70-130	Pass	
Ethylbenzene	S16-Fe24016	CP	%	99			70-130	Pass	
m&p-Xylenes	S16-Fe24016	CP	%	104			70-130	Pass	
o-Xylene	S16-Fe24016	CP	%	103			70-130	Pass	
Xylenes - Total	S16-Fe24016	CP	%	104			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Fe24016	CP	%	101			70-130	Pass	
TRH C6-C10	S16-Fe24016	CP	%	82			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Fe24016	CP	%	80			70-130	Pass	
Acenaphthylene	S16-Fe24016	CP	%	76			70-130	Pass	
Anthracene	S16-Fe24016	CP	%	98			70-130	Pass	
Benz(a)anthracene	S16-Fe24016	CP	%	80			70-130	Pass	
Benzo(a)pyrene	S16-Fe24016	CP	%	77			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Fe24016	CP	%	76			70-130	Pass	
Benzo(g.h.i)perylene	S16-Fe24016	CP	%	71			70-130	Pass	
Benzo(k)fluoranthene	S16-Fe24016	CP	%	114			70-130	Pass	
Chrysene	S16-Fe24016	CP	%	104			70-130	Pass	
Dibenz(a.h)anthracene	S16-Fe24016	CP	%	88			70-130	Pass	
Fluoranthene	S16-Fe24016	CP	%	75			70-130	Pass	
Fluorene	S16-Fe24016	CP	%	79			70-130	Pass	
Indeno(1,2,3-cd)pyrene	S16-Fe24016	CP	%	78			70-130	Pass	
Naphthalene	S16-Fe24016	CP	%	85			70-130	Pass	
Phenanthrene	S16-Fe24016	CP	%	77			70-130	Pass	
Pyrene	S16-Fe24016	CP	%	83			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Fe24016	CP	%	99			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Fe24016	CP	%	90			70-130	Pass	
Cadmium	S16-Fe24016	CP	%	96			70-130	Pass	
Chromium	S16-Fe24016	CP	%	91			70-130	Pass	
Copper	S16-Fe24016	CP	%	93			70-130	Pass	
Lead	S16-Fe24016	CP	%	89			70-130	Pass	
Mercury	S16-Fe24016	CP	%	87			70-130	Pass	
Nickel	S16-Fe24016	CP	%	93			70-130	Pass	
Zinc	S16-Fe24016	CP	%	94			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S16-Fe24015	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S16-Fe24015	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S16-Fe24015	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S16-Fe24015	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Fe24015	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S16-Fe24015	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S16-Fe24015	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S16-Fe24015	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S16-Fe24015	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S16-Fe24015	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	

Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S16-Fe24015	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Fe24015	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	S16-Fe24015	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Fe24015	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Fe24015	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Fe24651	NCP	mg/kg	3.3	3.4	3.0	30%	Pass
Cadmium	S16-Fe24651	NCP	mg/kg	0.6	0.5	8.0	30%	Pass
Chromium	S16-Fe24651	NCP	mg/kg	43	44	2.0	30%	Pass
Copper	S16-Fe24651	NCP	mg/kg	36	34	6.0	30%	Pass
Lead	S16-Fe24651	NCP	mg/kg	71	58	20	30%	Pass
Mercury	S16-Fe24651	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Fe24651	NCP	mg/kg	40	32	20	30%	Pass
Zinc	S16-Fe24651	NCP	mg/kg	95	110	16	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Fe24015	CP	%	14	12	17	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Andrew Black	Analytical Services Manager
Bob Symons	Senior Analyst-Inorganic (NSW)
Ivan Taylor	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)



Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

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