ENVIRONMENTAL SITE INVESTIGATION

Report No. ESA3300-1

PROPOSED BESS
AT THOMASTOWN TERMINAL STATION:
15 HIGH STREET (CNR MAHONEYS ROAD & HIGH STREET), THOMASTOWN, VICTORIA

PREPARED FOR

AUSNET SERVICES
c/o Statewide Geotechnical (Aust) Pty Ltd

GeoPollution Management Pty Ltd
8th March, 2022

Photo: View across the proposed BESS area, looking north east towards neighbouring industrial properties and Edgars Creek.

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This environmental site assessment report has been prepared by GeoPollution Management Pty Ltd for Mr Francisco Vizcaino on behalf of AusNet Services.

This report relates to the specified portion of the property at No. 15 High Street, Thomastown, situated west and north west of the existing Thomastown Terminal Station and northwest of the intersection of Mahoneys Road and High Street in Thomastown, Victoria.

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ABBREVIATIONS

ACM	Asbestos-Containing Materials
ANZECC	Australian and New Zealand Environment and Conservation Council
bgl	below ground level (below base of concrete where surface sealed with concrete)
BESS	Battery Energy Storage System
BTEX	Benzene, toluene, ethyl benzene, xylenes
Cat C	Category C waste soil in accordance with EPA 1828.2 (2021)
Cat B	Category B waste in accordance with EPA 1828.2 (2021)
Cat A	Category A waste soil in accordance with EPA 1828.2 (2021)
EIL	Ecological (Environmental) Investigation Level
EPA	Environment Protection Authority
ESA	Environmental Site Assessment
HIL	Health Investigation Level
LOR	Level of Reporting
m	Metres
MAH's	Monocyclic Aromatic Hydrocarbons
NEPM	National Environment Protection Measure
OCP	Organochlorine Pesticides
OPP	Organophosphate Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PID	Photoionisation Detector
RPD	Relative Percentage Difference
RSD	Relative Standard Deviation
SVCH	Semi-Volatile Chlorinated Hydrocarbons
TEQ	Toxicity Equivalent Quotient
TPH	Total Petroleum Hydrocarbons
TRH	Total Recoverable Hydrocarbons
VHH	Volatile Halogenated Hydrocarbons
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

Mr Francisco Vizcaino of AusNet Services to conduct an environmental site assessment (contaminated land testing) in the planned works area at the Thomastown Terminal Station property, situated at the corner of Mahoneys Road and High Street, Thomastown, Victoria.

It is understood that the environmental site assessment (ESA) and waste soil classification testing were required prior to the planned installation of additional infrastructure, specifically for the proposed Battery Energy Storage System (BESS; according to AusNet Services, 2021).

The purpose of the assessment was to determine the environmental quality of the site subterrain and the existence of any associated potential risks (environmental or health) at the site. Ultimately, the assessment aimed to ascertain whether the proposed works area, are suitable, from an environmental soil quality perspective, for the proposed future utility services use (in accordance with the (NEPM 2013).

In addition, the aim of the testing was to classify the soil prior to excavation, transport and off-site disposal, in accordance with EPA *'Waste Disposal Categories – Characteristics and Thresholds'* 1828.2 guidelines (2021).

PROPERTY & SITE IDENTIFICATION

The subject parcel of land corresponds to part of Lot 2 on Plan of Subdivision PS401440 (part of Council property No. 899559; see also attached property report from the maps and spatial data website (www2.delwp.vic.gov.au, copy in Appendix A), within the City of Whittlesea.

The property, No. 15 High Street, is located in the northern Melbourne Metropolitan suburb of Thomastown on the north western side of Mahoneys Road and High Street. The parcel of land is located approximately 15.1 km north/slightly north east of the Melbourne GPO (distance by road, www.whereis.com). The parcel boundaries and location of the works area are illustrated on the nearmap aerial photo overlay (Figure A) in Appendix A.

The entire property falls into an "Industrial Zone" (IN1Z) under the City of Whittlesea Planning Scheme.

SITE DESCRIPTION

The investigation area (i.e. the site) formed an, as yet undeveloped, irregular shaped area to the west of Edgars Creek in the western half of the subject parcel of land (Figure A, Appendix A). The proposed work area was accessed via Pelmet Crescent to the north. At the time of field work, whilst the works area remained undeveloped, existing Terminal Station switchyards were present to the east and south east.

The site coincided with a vacant paddock between Edgars Creek and the property boundaries to the north and west beyond which were adjoining industrial properties.

The entire site was unsealed and featured uneven ground with grass cover, without any "site improvements". Distinct topographical gradients were noted towards the east and south, i.e. towards Edgars Creek.

SCOPE OF WORK

The field work, including excavation of test pits, field logging and soil sampling, was conducted between 27th January and 1st February, 2022. All work was carried out in accordance with approved methods to Australian Standard AS4482.1-2005, and quality assurance procedures adopted by this company (refer to Appendix F).

Samples were collected from twenty test pits, as specified in the "Scope of Work for Geotechnical Assessment and Site Investigation" document (AusNet Services, dated 19 November 2021). The positions of the twenty sample points, test pits TP01 to TP20, are shown as both an overlay over a "Geotechnical Investigation Site Layout Plan" from Ausnet Services' Specification (2021) and as overlay over an aerial photograph (nearmap.com; refer to attached Figures 1a and 1b respectively, in Appendix B).

Two or three soil samples were collected from each of the twenty test pits, typically one or two samples represented imported fill (subject to thickness of imported fill) and one sample represented underlying natural soil. Parallel to the jar samples, one plastic bag sample in the near-surface fill horizon was also collected at each location.

Each sample of surface soil (top of imported fill) was subject to broad screen testing, totalling twenty analyses. Each soil sample was analysed for an EPA 1828.2 (Table 3, 2021) screen (designed for waste categorization for off-site disposal of soils), the balance of analytes which make up a NEPM HIL screen (NEPC 2013) as well as semi-quantitative identification of presence or absence of asbestos fibres (asbestos ID). In addition, five deeper imported fill samples, where available, were also analysed for an EPA 1828.2 (Table 3, 2021) screen. Following the availability of initial results, further testing of potential analytes for leachable fractions, as required for acceptance of contaminated waste soil by EPA licensed landfills, was also conducted.

SITE ASSESSMENT SUMMARY

The findings of this environmental site assessment for the proposed BESS works envelope, (northwest and west of) the existing Thomastown Terminal Station, west of High Street and north of Mahoneys Road in Thomastown are summarized below.

Land-Use-Specific Assessment (NEPM 2013)

Broad contaminant screen analysis of twenty imported fill samples (according to Table 1A{1} in Schedule B1 of the NEPC, 2013) showed the following:

- Most analytes in the twenty samples analysed. except for benzo(a)pyrene, lead, mercury, nickel zinc, were below the *environmental screening* (EIL/ESL) criteria (NEPM 2013).
- All chemical analytes were below the health investigation levels (HIL) for the future commercial/industrial (utility services) land use (NEPM 2013).

  However, asbestos fibre concentrations at almost 50% of the test locations were above the NEPM health screening level (HSL) for commercial/industrial land use.
- Neutral to very moderately alkaline soil reaction (pH 7.0 to 9.0) was recorded across the twenty-one near-surface natural soil samples analysed.

Off-Site Disposal Assessment (EPA 1828.2, 2021)

Imported Fill

The following key findings determine the waste soil classification for the imported fill horizon:

- Peak concentrations of the EPA 1828.2 (Table 3) screen analytes lead, nickel, mercury, zinc and benzo(a)pyrene were *above* the respective EPA Fill Material threshold limits.
- The statistical (95% UCL) average concentration of zinc was *above* the EPA Fill Material threshold limit.
- Analytes of concern, the metals lead, mercury, nickel and zinc and the PAH compound benzo(a)pyrene (BaP), in the samples with the highest total concentrations were either not detected in the leachate or were *below* the respective upper limits for Category C & D Priority Waste soil.
- The peak concentrations of all other EPA screen analytes were *below* the respective EPA Fill Material threshold limits.
- The pH (soil reaction) in all samples was *within* the respective EPA Fill Material threshold range.
- Asbestos fibres were detected in more than 50% of the samples analysed.

Hence, the laboratory test results indicate that the imported fill at the subject test points falls into the ***"Category D" / "Category C"*** contaminated soil range, in accordance with EPA 1828.2, 2021), as highlighted below.

Based on laboratory test results, all imported fill material at the site is classified as ***'Reportable Priority Waste' (RPW) with Asbestos***, for the purpose of transport and off-site disposal.

Note: Twenty-five sets of results are sufficient to classify excavated soil volumes of up to 625m^3, if classified based on the highest concentrations (Table 1 in EPA IWRG702, 2009), or up to 6,250 m^3 if classified based on statistical (95% UCL) averages.

CONCLUSIONS

The following conclusions are drawn in line with AusNet Services' specification (2021):

- The data show that potential EPA 1828.2 screen analytes and asbestos-containing materials occur in pockets of the heterogeneous imported fill material across the site. The likelihood of excavating contaminated material is, therefore, considered to be high. The widespread distribution of contaminants, in particular bonded asbestos (ACM) materials is illustrated in Figures 2a and 2b (Appendix B).
- The data indicate that both average and peak concentrations of Vic EPA screen analytes meet the EPA guideline levels for disposal of excavated soil as *Reportable Priority Waste* soil according to EPA Publication 1828.2 (2021). Therefore, restrictions apply to the reuse or off-site disposal of excavated soil.
- The risk of harm from exposure to the soil by workers or site occupiers, under the current condition of the site, is considered moderate to high, the latter based on the presence of ACM materials.
- The soil pH of the near-surface soil (imported fill) varies is within the neutral to alkaline range.

RECOMMENDATIONS

Soil Remaining On-Site (Land Use-Specific Assessment)

No further environmental site assessment if required for the proposed commercial/industrial land use. According to the NEPM (2013), a detailed site investigation for asbestos contamination is not considered necessary, due to the exclusive presence of bonded (non-friable) asbestos (ACM) in surficial soil. The presence of buried asbestos is unlikely, as imported fill in all test pits was found to be underlain by natural silty clay.

Therefore, the site may be remediated, by removal of ACM fragments, via clean up of the imported fill, either scraping of all surface fill and/or via hand picking, if necessary, without further investigation. The site will be cleaned up sufficiently, once no further ACM or suspect/potential ACM materials are visible. The status of the site should be confirmed by site inspection and/or via validation testing, if deemed necessary (the latter may be necessary, if less than the entire imported fill is removed from the site).

Soil Disposed Off-Site (EPA 1828.2)

All imported fill materials to be disposed off-site will be classified as Reportable Priority Waste (Category C) with asbestos. Generic regulations and requirements for Category C soil with asbestos are outlined below.

Regulations and Requirements

Reportable Priority Waste

Restrictions pertaining to re-use on-site, off-site transport and disposal apply to soil classified as *"Reportable Priority Waste"*, and soil containing asbestos, in accordance with the current Vic EPA waste classification guidelines (1828,2, 2021). The waste soil designated for excavation must be disposed off-site to an appropriately licensed landfill, in accordance with EPA regulations and requirements.

All "Reportable Priority Waste" (RPW) must have a transport permission and be tracked using EPA's digital tool, Waste Tracker (https://www.epa.vic.gov.au/for-business/businessforms-permits-online-tools/waste-tracker).

The Waste Transport Codes (EPA IWRG822.4, 2021) are listed below.

Waste Transport Codes

The Waste Codes for the ***"RPW"*** (Reportable Priority Waste) soil to be entered onto the Waste Transport Certificates are:

Category C / Contains Asbestos:

Waste Code No. (List 1)	**N120**
UN No. (List 1)	**9**
Contaminants (List 1)	**3, 10, 12, 13, 65, contains asbestos**
Waste Origin (List 2)	**3212**
Treatment/Disposal (List 3)**:**	**D1 or D18**

1. INTRODUCTION

GeoPollution Management was engaged by Statewide Geotechnical (Aust) Pty Ltd on behalf of Mr Francisco Vizcaino of AusNet Services to conduct an environmental site assessment (contaminated land testing) in the planned works area at the Thomastown Terminal Station property, situated at the corner of Mahoneys Road and High Street, Thomastown, Victoria.

It is understood that the environmental site assessment (ESA) and waste soil classification testing were required prior to the planned installation of additional infrastructure, specifically for the proposed Battery Energy Storage System (BESS; according to AusNet Services, 2021).

This assessment of in-situ soil quality relative to the future land use was carried out in accordance with the following publication:

- NEPM (2013) Schedule B(2) Section 6.

The waste soil categorization testing was carried out according to the following Vic EPA Publications

- EPA 1828.2 (2021)
- EPA IWRG702 (2009b).

This investigation has been carried out in accordance with the scope of work outlined in GeoPollution Management's quotation No. Q3300/2 dated 10th January, 2022, as authorised by the client.

1.1 Objectives

The purpose of the assessment was to determine the environmental quality of the site subterrain and the existence of any associated potential risks (environmental or health) at the site. Ultimately, the assessment aimed to ascertain whether the proposed works area, is suitable, from an environmental soil quality perspective, for the proposed utility infrastructure use.

In addition, the aims of the testing were to classify the soil prior to excavation, transport and off-site disposal, in accordance with Vic EPA's '*Waste Disposal Categories & Thresholds'* Publication 1828.2 Table 3 (2021).

The primary objectives of the soil investigation included:

- Determine the environmental status of soil from a designated number of test locations across the proposed works area;
- Determine whether the site is suitable for the proposed future land use, designated to become part of an electrical utility facility;
- Draw conclusions from the results in accordance with the NEPM (2013), and EPA (2009 and 2021) requirements
- Recommend further work or appropriate remedial action, if required.

2. SITE IDENTIFICATION AND DESCRIPTION

2.1 Location, Zoning and Surrounding Land Uses

The subject parcel of land corresponds to part of Lot 2 on Plan of Subdivision PS401440 (part of Council property No. 899559; see also attached property report from the maps and spatial data website (www2.delwp.vic.gov.au, copy in Appendix A), within the City of Whittlesea.

The property, No. 15 High Street, is located in the northern Melbourne Metropolitan suburb of Thomastown on the north western side of Mahoneys Road and High Street. The parcel of land is located approximately 15.1 km north/slightly north east of the Melbourne GPO (distance by road, www.whereis.com). The parcel boundaries and location of the works area are illustrated on the nearmap aerial photo overlay (Figure A) in Appendix A.

The entire property falls into an “Industrial Zone” (IN1Z) under the City of Whittlesea Planning Scheme.

At the time of this assessment, the site and property were surrounded by the following:

- Edgars Creek, diagonally - north east-south west - transecting the parcel of land, to the east and south east
- the existing Thomastown Terminal Station across Edgars Creek to the east, south east and south
- Industrial properties adjoining the site to the west and north.

2.2 Site Description

The investigation area (i.e. the site) formed an, as yet undeveloped, irregular shaped area to the west of Edgars Creek in the western half of the subject parcel of land (Figure A, Appendix A). The proposed work area was accessed via Pelmet Crescent to the north. At the time of field work, whilst the works area remained undeveloped, existing Terminal Station switchyards were present to the east and south east.

The site coincided with a vacant paddock between Edgars Creek and the property boundaries to the north and west beyond which were adjoining industrial properties.

The entire site was unsealed and featured uneven ground with grass cover, without any “site improvements”. Distinct topographical gradients were noted towards the east and south, i.e. towards Edgars Creek.

Site overviews and features are illustrated in the photos (Plates 1-2) on the following page.

Plate 1: Panoramic view of the site, looking south/south west and west from the north east portion of the site, with the Edgars Creek Reserve in the left and adjoining industrial properties in the centre and right backgrounds.

Plate 2: Panoramic view of the site, looking north east, east and south east from the north east portion of the site, with adjoining industrial properties in the left background, Edgards Creek (behind which are existing Terminal Station switchyards, in the centre and right background,
and additional industrial properties, towards Mahoneys Road, in the right background.

3. POTENTIAL SOURCES OF CONTAMINATION

Based on the available information, an appraisal of the likelihood of site contamination was undertaken. Information is summarized below:

3.1 Potential On-Site Sources of Contamination

There is a low risk of potential on-site (property) sources of contamination to impact the site. Existing Terminal Station infrastructure on the same parcel of land is distanced some 100m away across Edgars Creek.

Historically, pesticides and fertilizers may have been used during possible earlier pastoral or cropping use. However, no point sources of potential release of contaminants such as chemical storage areas, or underground storage tanks or pits, are known to have existed or currently exist on the site.

Based on potential or likely past site uses (a review of which was beyond the scope of the current investigation), the potential of soil contamination from on-site sources appears to be low. However, historically, fill may have been imported onto the site from an unknown source or sources. If fill was imported from industrial or demolition sites without controls in place, this may pose an unknown contamination risk.

3.2 Potential Off-Site Sources of Contamination

There is a low to moderate risk of potential sources of contamination from the nearby industrial land uses. This may have occurred or may occur, if the subject site receives contaminated runoff or deposition of airborne contaminants from off-site areas or properties.

A review of the off-site historical land uses was beyond the scope of this project.

The overall potential for soil contamination from off-site sources is deemed to be low.

4. SOIL SAMPLING AND CHEMICAL ANALYSIS

4.1 Soil Sampling

The field work, including excavation of test pits, field logging and soil sampling, was conducted between 27th January and 1st February, 2022. All work was carried out in accordance with approved methods to Australian Standard AS4482.1-2005, and quality assurance procedures adopted by this company (refer to Appendix F).

Samples were collected from twenty test pits, as specified in the "Scope of Work for Geotechnical Assessment and Site Investigation" document (AusNet Services, dated 19 November 2021). The positions of the twenty sample points, test pits TP01 to TP20, are shown as both an overlay over a "Geotechnical Investigation Site Layout Plan" from Ausnet Services' Specification (2021) and as overlay over an aerial photograph (nearmap.com; refer to attached Figures 1a and 1b respectively, in Appendix B).

Two or three soil samples were collected from each of the twenty test pits, typically one or two samples represented imported fill (subject to thickness of imported fill) and one sample represented underlying natural soil. Parallel to the jar samples, one plastic bag sample in the near-surface fill horizon was also collected at each location.

4.2 Chemical Analysis Schedule

All twenty near-surface samples (0.0 to 0.1m depth) plus five deeper fill samples, as available, were subject to initial laboratory testing. The samples, accompanied by chain of custody documentation, were dispatched to the NATA accredited laboratory of Eurofins Environment Testing, Dandenong South (chain of custody form and NATA endorsed laboratory reports attached in Appendices D and E respectively).

Each surface soil sample was analysed for an EPA 1828.2 (Table 3, 2021) screen (intended for the waste categorization for off-site disposal of soils), the balance of analytes which make up a NEPM HIL screen (NEPC 2013) as well as inspected for presence of asbestos fibres (asbestos ID). Deeper fill samples were analysed for an EPA 1828.2 (Table 3, 2021) screen only.

Following availability of the initial results, selected samples were subject to leachability testing (as required for off-site disposal of contaminated soil).

Table 1 summarises the range and number of initial and further chemical analyses for the soil samples.

TABLE 1: Range and Number of Chemical Analyses

ANALYTICAL PARAMETERS	No. INDIVIDUAL SAMPLES
Near-Surface Fill	
Heavy Metals (17) [1]: Total As, B, Be, Cd, Cr / CrVI, Co, Cu, Pb, Hg, Ni, Zn, Mo, Mn, Se, Sn, Ag	20
Soil Reaction (pH Value)	
Total Petroleum Hydrocarbons (TPH's)	
Volatile Organics incl. Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX)	
Polycyclic Aromatic Hydrocarbons	
Speciated Phenols	
Organochlorine (OC) & Organophosphorus (OP) Pesticides	
Acid Herbicides & Triazine Pesticides	
Synthetic Pyrethroids (incl. Bifenthrin)	
Polychlorinated Biphenyl's (PCB's)	
Cyanide (total)	
Fluoride (total)	
Asbestos ID (semi-quantitative)	
Deeper Fill	
Heavy Metals (12) [2]: Total As, Cd, Cr / CrVI, Cu, Pb, Hg, Ni, Zn, Mo, Se, Sn, Ag	5
Soil Reaction (pH Value)	
Total Petroleum Hydrocarbons (TPH's)	
Volatile Organics incl. Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX)	
Polycyclic Aromatic Hydrocarbons	
Speciated Phenols	
Organochlorine (OC) Pesticides	
Polychlorinated Biphenyl's (PCB's)	
Cyanide (total)	
Fluoride (total)	
Additional Analysis (Leachability)	
ASLP - Heavy Metals: Pb, Ni, Hg, Zn	5
ASLP - PAH	5

[1] The heavy metals screen comprised those metals specified by EPA 1828.2 (2021) plus additional metals for which guideline limits are available in NEPM (2013).

[2] The heavy metals screen comprised those metals specified by EPA 1828.2 (2021) only.

5. RESULTS OF THE INVESTIGATION

5.1 Field Assessment

5.1.1 Visual and Olfactory Observations

- Visual evidence of potential contamination was typically noted in imported fill in the form of foreign matter mixed with soil particles. Foreign matter included building debris, with scattered brick fragments, tiles, concrete rubble, and occasional plastic, wire, timber and metals.
- Potential asbestos-containing materials were also observed in imported fill at several test pits.
- No olfactory evidence of potential contamination was noted in imported fill or natural soils at any of the test points.
- No visual signs of potential acid-sulphate soils were identified.

5.1.2 Soil Profiles Intercepted

Imported fill materials were encountered at all test locations. Summary profile information is contained in Table 2 for the twenty test pits. The test pit locations are shown in Figures 1a and 1b in Appendix B.

Table 2: Summary of Profiles

Borehole No.	Imported Fill		Natural Soil	
	Type	Max. Depth	Type	Max. Depth
TP01-TP02, TP9, TP11, TP12, TP17	Admixed silt, clay, building debris (brick, tile & concrete fragments), asbestos materials, dark grey/brown	0.1 to 0.6m	Silty Clay	0.6 – 1.1m [1]
TP03 & TP07	Admixed silt, clay, building debris (brick, tile & concrete fragments), plastic, wire, timber, asbestos materials observed at TP03, dark grey/brown	0.4 – 0.5m		
TP05-TP06, TP08, TP10, TP13-16, TP18-20	Admixed silt, clay, building debris (brick, tile & concrete fragments) dark grey/brown	0.2 - 0.7m		

[1] Details in Geotechnical Site Investigation Report (Statewide Geotechnical, 2022)

Further details regarding soil profiles are included in the geotechnical report by Statewide Geotechnical (File No. 28216-1).

5.2 Analytical Results

5.2.1 Assessment Criteria

The adopted soil quality screening criteria, published in the NEPM 2013 National Environment Protection *(Assessment of Site Contamination)* Measure, comprise ecological screening levels (ESL, as specified in the NEPM 1999), health investigation levels (HIL), health screening levels (HSL) and management limits (the latter for petroleum hydrocarbons only; NEPM 2013).

The 2013 NEPM focuses on a health-risk-based approach to assessing contaminant levels. These criteria are, in part, site-specific, as they take soil types, depth of contamination and land use into account (NEPM 2013).

Health investigation levels are specified in Schedule B1 of the NEPM (2013). These include Residential A and B (HIL A and HIL B) levels (for low and high-density residential land uses), Recreational C (HIL C) level and Commercial/Industrial D (HIL D) levels. For this site, the HIL D levels were the reference values for final evaluation purposes, as appropriate for the proposed land use.

Reference is also made to the Victorian EPA waste soil classification thresholds as published in EPA 1828.2 (2021). It is noted that this set of threshold limits is only applicable to waste soil that is excavated and disposed off-site, and not to soil remaining undisturbed on the site.

5.2.2 Evaluation of Analysis Results Against Adopted Criteria

Analytical results for near-surface samples are presented in tabulated format as Tables C1a/C1b to C4 in Appendix C. The NATA endorsed laboratory reports are included in Appendix E.

The analytical results were evaluated according to two sets of guideline criteria (a) the NEPM 2013 guidelines, designed to assess suitability of soils remaining on site for a specific land use, and (b) the EPA 1828.2 (Table 3) 2021 guidelines, intended to assess the classification of soils for excavation and off-site disposal, as summarized below.

(a) <u>Comparison with NEPM 2013 Guideline Levels</u>

The test points with analytes (and asbestos) concentrations above NEPM guideline limits are highlighted in Figure 2a in Appendix B.

Heavy Metals (Table C1a)

- Most heavy metals tested showed concentrations either below laboratory reporting limits (LOR) throughout or below the NEPM environmental investigation levels (EIL or ESL), except for lead, manganese, mercury, nickel and zinc.
  - Elevated lead concentrations in two samples varied between 330 and 910 mg/kg, above the NEPM health investigation (HIL A) level of 300 mg/kg (NEPM 2013). Whilst lead in both samples exceeded the NEPM HIL A level for sensitive (residential) land use, all lead concentrations remained below the NEPM health investigation (HIL D) level for commercial/industrial land use of 1,500 mg/kg.
  - Elevated manganese concentrations varied between 520 and 700 mg/kg, above the NEPM environmental investigation (ESL) level of 500 mg/kg (NEPM 1999) but below all NEPM 2013 health investigation (HIL) levels for any land use.

- A single mercury concentration above the NEPM environmental investigation (ESL) level was recorded (1.1 mg/kg compared to 1 mg/kg; NEPM 1999) but below all NEPM 2013 health investigation (HIL) levels for any land use.
- Elevated nickel concentrations varied between 69 and 87 mg/kg, above the NEPM environmental investigation (ESL) level of 60 mg/kg (NEPM 1999) but below all NEPM 2013 health investigation (HIL) levels for any land use.
- Elevated zinc concentrations varied between 210 and 340 mg/kg, above the NEPM 1999 environmental investigation (ESL) level of 200 mg/kg but below all NEPM 2013 health investigation (HIL) levels for any land use.

Petroleum Hydrocarbons (TPH's) and Monocyclic Aromatic Hydrocarbons (MAH's) and Halogenated Volatiles (VOC's) (Table C2a)

- The Total Petroleum Hydrocarbons (TPH's/TRH) NEPM 2013 F1-F4 fractions were below laboratory detection limits or below screening criteria in all samples tested.
- Monocyclic Aromatic Hydrocarbons (MAH's) and volatile halogenated and semi-volatile chlorinated hydrocarbons were below laboratory detection limits in all samples tested.

Other Analytes (Table C3)

- The Polycyclic Aromatic Hydrocarbons (PAH) species benzo(a)pyrene and total PAH were below laboratory detection limits or below screening criteria in most samples tested, with one exception.
  - A single elevated benzo(a)pyrene concentration (BaP), in the near-surface sample from test pit TP01, was recorded at 1.1 mg/kg, above the NEPM environmental investigation (ESL) level of 1 mg/kg (NEPM 1999).

    No NEPM health investigation (HIL) level has been specified for BaP alone, however, the BaP TEQ (which is based on the toxicity of 8 carcinogenic PAH species relative to BaP) is below the NEPM 2013 guideline levels for all land uses.
- Phenolic compounds were below laboratory reporting limits in all samples analysed.
- Organochlorine (OC) and Organophosphorus (OP) Pesticides (including Chlorpyrifos) and PCBs were below laboratory reporting limits in all samples analysed.

  It is noted that Bifenthrin is included in the laboratory report under OC Pesticides, not under "Synthetic Pyrethroids".
- Acid Herbicides (incl. 2,4,5-T, 2,4-D and MCPA) and Triazine Herbicides (including Atrazine) were below laboratory reporting limits in all samples analysed (the same applied to Synthetic Pyrethroids which are not included in Table C3).
- Cyanide (total) was below the laboratory reporting limit in all samples analysed.
- Fluoride was detected between <100 mg/kg (non-detect) and 410 mg/kg in the samples. No guideline level for fluoride has been specified in the NEPM.

Asbestos ID (Table C4)

- Asbestos fibres were detected in thirteen of the twenty imported fill samples examined. The fibres consisted of one or more asbestos minerals (chrysotile, amosite, and/or crocidolite) which were found to be bonded in various materials including fibre cement, fibre plaster, and vinyl tile fragments, or they were present as loose fibre bundles. These are asbestos fibres which are visible to the naked eye and under a stereo microscope.

- Nine near-surface samples from TP01, TP03, TP06, TP08, TP09, TP13, TP15, TP17 and TP18, were found to contain asbestos fibres above the NEPM HSL Commercial/Industrial D guideline (allowable concentration of 0.05% w/w).

Trace analysis did not identify further fibres. These would be respirable asbestos fibres which can only be observed under a Polarized Light microscope. No respirable asbestos fibres were detected, hence the laboratory report stated "no trace asbestos detected".

(b) Comparison with EPA 1828.2 (Table 3, 2021) Limits

For soil that is excess to site requirements, and, hence, requires off-site disposal, the EPA waste disposal category threshold limits are applicable (EPA 1828.2, 2021). '

The following bullet points summarize the results for the contaminant groups of concern, namely those analytes identified above EPA Fill limits in one or more samples, and of the soil reaction (pH), with reference to EPA waste disposal guidelines, as well as occurrence of asbestos fibres (refer also to Tables C1b, C2b, C3 and C4 in Appendix C). The test points with analyte concentrations, above Vic EPA 1828,2 (2021) threshold limits, and with detected asbestos, are highlighted in Figure 2b in Appendix B.

- Four of the twelve heavy metals (including hexavalent *Chromium {CrVI}*), for which EPA waste disposal criteria are available, showed concentrations above the EPA Fill Material limits, as detailed below.
  - Lead, Mercury, Nickel and Zinc concentrations exceeded the respective EPA Fill Material limits in between one and twenty shallow and deeper imported fill samples.
- Most fill samples showed total concentrations of benzo(a)pyrene/total PAH below laboratory reporting limits or below the EPA 1828.2 Fill limit.
  - The concentration of benzo(a)pyrene in one of the fill samples analysed (TP1-1/TP1), was above the EPA Fill Material limit.
- Asbestos fibres were detected in thirteen fill samples.
- Soil reaction varied between neutral (7.0) and moderately alkaline (8.0) in the twenty samples analysed, all within the pH limits for Fill Material.

Leachability (ASLP) testing (at a leachate fluid pH of 5.1 and final pH values in the leachate from 5.3 to 6.0) of the samples with the highest total lead, nickel, mercury, zinc and benzo(a)pyrene concentrations showed the following.

- Mercury and benzo(a)pyrene were not detected in the leachates of samples TP19-1/TP19 and TP1-1/TP1 respectively.
- Trace concentrations of the remaining metals were detected in the leachates of samples TP9-1/TP9, TP13-1/TP13 and TP16-1/TP16, however, all concentrations were below the lowest respective ASLP thresholds.

⇒ All concentrations in the leachate of the heavy metals and the PAH compound of concern were within the allowable concentrations for the lowest category of *"Reportable Priority Waste"* (Table 2 in EPA 1828.2, 2021).

Hence, imported fill, as represented by the test pit samples, and if classified based on the highest concentrations, falls into EPA's Waste Disposal Category of *"Category D" or "Category C" waste*, also containing asbestos, according to Table 2 in EPA 1828.2 (2021).

As more than ten datasets were available, statistical calculations were undertaken in order to categorize the waste soil according to 95% UCL average concentrations.

Statistical Data Evaluation

Statistical average and mean values (95% UCL) were calculated for lead, mercury, nickel, zinc and benzo(a)pyrene in imported fill samples (refer to spreadsheet attached at the end of Appendix C).

The findings are summarized below:

All Data (Spreadsheet 1):

- Lead showed a *logarithmic* data distribution with a 95% UCL average of 226.4 mg/kg, below the EPA Fill Material limit of 300 mg/kg.
- Nickel showed a *logarithmic* data distribution with a 95% UCL average of 51.5 mg/kg, below the EPA Fill Material limit of 60 mg/kg.
- Mercury showed a *lognormal* data distribution due to the coefficient of variation (CV) >1.2 (single outlier).

  Lognormal distributions are the result of large variations (one or more orders of magnitude) in analyte concentrations, suggesting the presence of heterogeneous fill material. Where distributions are lognormal, 95% UCL statistical calculations may result in unrealistically high averages.

  Lognormal statistics were not undertaken for the mercury data, due to the large variation (two orders of magnitude) across the test locations, and also given that mercury is not the limiting factor for the waste soil classification (see zinc below).
- Zinc showed a *logarithmic* data distribution with a 95% UCL average of 232.8 mg/kg, *above* the EPA Fill Material limit of 200 mg/kg.
- Benzo(a)pyrene showed a *lognormal* data distribution due to the coefficient of variation (CV) >1.2 (single outlier).

  Lognormal distributions are the result of large variations (one or more orders of magnitude) in analyte concentrations, suggesting the presence of heterogeneous fill material. Where distributions are lognormal, 95% UCL statistical calculations may result in unrealistically high averages.

  Lognormal statistics were not undertaken for the benzo(a)pyrene data, due to the large variation (two orders of magnitude) across the test locations, and also given that benzo(a)pyrene is not the limiting factor for the waste soil classification (see zinc above).

Given the statistical data, the entire fill volume is classified under a single waste category as described in Section 6.2 below.

6. SITE ASSESSMENT SUMMARY

The findings of this environmental site assessment for the proposed BESS works envelope, (northwest and west of) the existing Thomastown Terminal Station, west of High Street and north of Mahoneys Road in Thomastown are summarized below.

6.1 Land-Use-Specific Assessment (NEPM 2013)

Broad contaminant screen analysis of twenty imported fill samples (according to Table 1A{1} in Schedule B1 of the NEPC, 2013) showed the following:

- Most analytes in the twenty samples analysed. except for benzo(a)pyrene, lead, mercury, nickel zinc, were below the *environmental screening* (EIL/ESL) criteria (NEPM 2013).
- All chemical analytes were below the health investigation levels (HIL) for the future commercial/industrial (utility services) land use (NEPM 2013).

  However, asbestos fibre concentrations at almost 50% of the test locations were above the NEPM health screening level (HSL) for commercial/industrial land use.
- Neutral to very moderately alkaline soil reaction (pH 7.0 to 9.0) was recorded across the twenty-one near-surface natural soil samples analysed.

6.2 Off-Site Disposal Assessment (EPA 1828.2)

Imported Fill

The following key findings determine the waste soil classification for the imported fill horizon:

- Peak concentrations of the EPA 1828.2 (Table 3) screen analytes lead, nickel, mercury, zinc and benzo(a)pyrene were *above* the respective EPA Fill Material threshold limits.
- The statistical (95% UCL) average concentration of zinc was *above* the EPA Fill Material threshold limit.
- Analytes of concern, the metals lead, mercury, nickel and zinc and the PAH compound benzo(a)pyrene (BaP), in the samples with the highest total concentrations were either not detected in the leachate or were *below* the respective upper limits for Category C & D Priority Waste soil.
- The peak concentrations of all other EPA screen analytes were *below* the respective EPA Fill Material threshold limits.
- The pH (soil reaction) in all samples was *within* the respective EPA Fill Material threshold range.
- Asbestos fibres were detected in more than 50% of the samples analysed.

Hence, the laboratory test results indicate that the imported fill at the subject test points falls into the ***"Category D" / "Category C"*** contaminated soil range, in accordance with EPA 1828.2, 2021), as highlighted below.

Based on laboratory test results, all imported fill material at the site
is classified as ***'Reportable Priority Waste' (RPW) with Asbestos***,
for the purpose of transport and off-site disposal.

Note: Twenty-five sets of results are sufficient to classify excavated soil volumes of up to 625m^3, if classified based on the highest concentrations (Table 1 in EPA IWRG702, 2009), or up to 6,250 m^3 if classified based on statistical (95% UCL) averages.

7. CONCLUSIONS

The following conclusions are drawn in line with AusNet Services' specification (2021):

- The data show that potential EPA 1828.2 screen analytes and asbestos-containing materials occur in pockets of the heterogeneous imported fill material across the site. The likelihood of excavating contaminated material is, therefore, considered to be high. The widespread distribution of contaminants, in particular bonded asbestos (ACM) materials is illustrated in Figures 2a and 2b (Appendix B).
- The data indicate that both average and peak concentrations of Vic EPA screen analytes meet the EPA guideline levels for disposal of excavated soil as *Reportable Priority Waste* soil according to EPA Publication 1828.2 (2021). Therefore, restrictions apply to the reuse or off-site disposal of excavated soil.
- The risk of harm from exposure to the soil by workers or site occupiers, under the current condition of the site, is considered moderate to high, the latter based on the presence of ACM materials.
- The soil pH of the near-surface soil (imported fill) varies is within the neutral to alkaline range.

8. RECOMMENDATIONS

8.1 Soil Remaining On-Site (Land Use-Specific Assessment)

No further environmental site assessment if required for the proposed commercial/industrial land use. According to the NEPM (2013), a detailed site investigation for asbestos contamination is not considered necessary, due to the exclusive presence of bonded (non-friable) asbestos (ACM) in surficial soil. The presence of buried asbestos is unlikely, as imported fill in all test pits was found to be underlain by natural silty clay.

Therefore, the site may be remediated, by removal of ACM fragments, via clean up of the imported fill, either scraping of all surface fill and/or via hand picking, if necessary, without further investigation. The site will be cleaned up sufficiently, once no further ACM or suspect/potential ACM materials are visible. The status of the site should be confirmed by site inspection and/or via validation testing, if deemed necessary (the latter may be necessary, if less than the entire imported fill is removed from the site).

8.2 Soil Disposed Off-Site (EPA 1828.2)

All imported fill materials to be disposed off-site will be classified as Reportable Priority Waste (Category C) with asbestos. Generic regulations and requirements for Category C soil with asbestos are outlined below.

Regulations and Requirements

Reportable Priority Waste

Restrictions pertaining to re-use on-site, off-site transport and disposal apply to soil classified as *"Reportable Priority Waste"*, and soil containing asbestos, in accordance with the current Vic EPA waste classification guidelines (1828,2, 2021). The waste soil designated for excavation must be disposed off-site to an appropriately licensed landfill, in accordance with EPA regulations and requirements.

All “Reportable Priority Waste” (RPW) must have a transport permission and be tracked using EPA’s digital tool, Waste Tracker (https://www.epa.vic.gov.au/for-business/businessforms-permits-online-tools/waste-tracker).

The Waste Transport Codes (EPA IWRG822.4, 2021) are listed below.

Waste Transport Codes

The Waste Codes for the ***“RPW”*** (Reportable Priority Waste) soil to be entered onto the Waste Transport Certificates are:

Category C / Contains Asbestos:

Waste Code No. (List 1)	**N120**
UN No. (List 1)	**9**
Contaminants (List 1)	**3, 10, 12, 13, 65, contains asbestos**
Waste Origin (List 2)	**3212**
Treatment/Disposal (List 3)**:**	**D1 or D18**

Occupational Health & Safety

The waste soil classifications for the imported fill have occupational health and safety implications for the site workers. Standard health and safety measures shall be implemented during loading and transport, as required by the *Occupational Health and Safety Regulations* (2017) and *Worksafe Victoria* (2018).

Minimum levels of personal protection should include

- long sleeved shirt and trousers, gloves {for protection against dermal (skin) contact}
- eye protection as appropriate
- safety boots, safety vest
- hard hats,
- respirator[1].

[1]Half-face filter respirator fitted with a class P1 or P2 filter cartridge, or a class P1 or P2 disposable respirator appropriate for asbestos.

The contractor shall supply OH & S compliant machines and issue personnel with appropriate safety equipment. If there is a perceived vapour hazard, an OH & S consultant should be contacted for advice on appropriate respiratory protection.

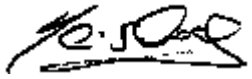
If there is a dust hazard, water sprays should be applied. Should any other unknown foreign materials be observed or unknown chemical odours be noticed, the site supervisor should be informed, the work should be interrupted, and this office be contacted for further evaluation.

Report Prepared By: …...Dr Karin Schwab……(Principal Environmental Scientist)

Date Report Finalized: …..8th March 2022…

Report Authorised By: …Dr Karin Schwab……

Signed on behalf of GeoPollution Management Pty Ltd:



…….
Dr. Karin B. Schwab

9. REFERENCES

AusNet Services (2021) Thomastown Terminal Station – BESS Scope of Work for Geotechnical Assessment and Site Investigation. Revision / Issue No. 0, 19 November

Environment Protection Authority (2009) Industrial Waste Resource Guidelines. Soil Sampling. Publication IWRG 702, June

Environment Protection Authority (2021) Waste Disposal Categories & Thresholds. Publication 1828.2, March

Environment Protection Authority (2021) Waste Codes. Publication IWRG1828.4, June

NEPC (1999) National Environmental Protection (Assessment of Site Contamination) Measure. National Environment Protection Council Service Corporation

NEPM (2013) National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1). 11 April

Standards Australia (2005) Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 1: Non-volatile and Semi-volatile Compounds. Australian Standard AS 4482.1-2005.

Statewide Geotechnical (Aust) Pty Ltd (2022) Geotechnical Site Investigation Report. New Thomastown Terminal Station and Battery Storage System (BESS) Thomastown Terminal Station, Mahoneys Road, Thomastown; Prepared for AusNet Services, File No. 28216-1, 16 February

LIMITATIONS OF THIS INVESTIGATION

This investigation included site reconnaissance and a limited number of soil samples collected from selected (specified) test pit locations and soil horizons for the purposes of a preliminary soil contamination and waste soil classification assessment.

This investigation has been designed to provide an indication of the presence of potential soil contamination.

The data reported in this site assessment report have been derived from visual inspection, on-site testing and laboratory analysis of a limited number of soil samples.

The test pit logs represent subsurface conditions at the specific test locations only. Further, boundaries between zones on excavation logs are often not distinct but transitional and have been interpreted.

The precision with which subsurface conditions are indicated depends largely on the frequency and method of sampling as well as the degree of uniformity of subsurface material. Conclusions drawn have been extrapolated from point data using professional judgement.

While quality assurance procedures were followed during field sampling and standard laboratory QA/QC methods were employed, no separate duplicate or blank samples were collected for quality control checks.

Please note: This site assessment is valid for the current site subsurface condition; i.e. it refers to the soil profile as encountered at the time of this investigation.

GeoPollution Management

APPENDICES

APPENDIX A

SITE IDENTIFICATION:
Property Report &
Aerial Photograph Overlay

PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 12 February 2022 04:52 PM

PROPERTY DETAILS

Lot and Plan Number:	**Lot 2 PS401440**
Address:	**15 HIGH STREET THOMASTOWN 3074**
Standard Parcel Identifier (SPI):	**2\PS401440**
Local Government Area (Council):	**WHITTLESEA** www.whittlesea.vic.gov.au
Council Property Number:	**899559 (Part)**
Directory Reference:	**Melway 8 J11**

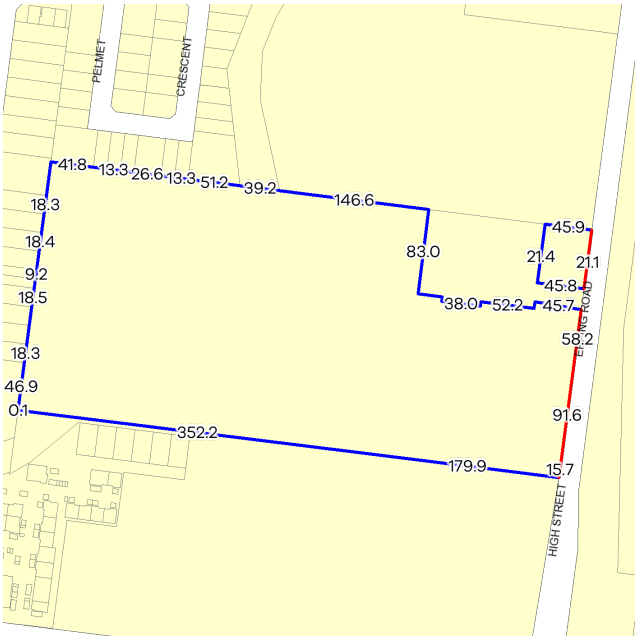
Note: There are 4 properties identified for this site.
These can include units (or car spaces), shops, or part or whole floors of a building.
Dimensions for these individual properties are generally not available.

This parcel is not in a designated bushfire prone area.
No special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au

SITE DIMENSIONS

All dimensions and areas are approximate. They may not agree with those shown on a title or plan.



Area: 119425 sq. m (11.94 ha)
Perimeter: 1779 m
For this property:
— Site boundaries
— Road frontages

Dimensions for individual parcels require a separate search, but dimensions for individual units are generally not available.

20 overlapping dimension labels are not being displayed

Calculating the area from the dimensions shown may give a different value to the area shown above

For more accurate dimensions get copy of plan at Title and Property Certificates

PARCEL DETAILS

This is 1 parcel of 2 parcels comprising this property. The parcel searched for is marked with an * in the table below

	Lot/Plan or Crown Description	SPI
*	Lot 2 PS401440	2\PS401440
	Lot 1 TP865439	1\TP865439

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Melbourne Water Retailer:	**Yarra Valley Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**AUSNET**

STATE ELECTORATES

Legislative Council:	**NORTHERN METROPOLITAN**
Legislative Assembly:	**THOMASTOWN**

PROPERTY REPORT

Environment, Land, Water and Planning

PLANNING INFORMATION

Planning Zone: INDUSTRIAL 1 ZONE (IN1Z)

SCHEDULE TO THE INDUSTRIAL 1 ZONE (IN1Z)

URBAN FLOODWAY ZONE (UFZ)

SCHEDULE TO THE URBAN FLOODWAY ZONE (UFZ)

Planning Overlay: DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY (DCPO)

DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 3 (DCPO3)

LAND SUBJECT TO INUNDATION OVERLAY (LSIO)

LAND SUBJECT TO INUNDATION OVERLAY SCHEDULE (LSIO)

Areas of Aboriginal Cultural Heritage Sensitivity:

All or part of this parcel is an 'area of cultural heritage sensitivity'.

Planning scheme data last updated on 9 February 2022.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting https://www.planning.vic.gov.au

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the ***Planning and Environment Act 1987.*** It does not include information about exhibited planning scheme amendments, or zonings that may abut the land. To obtain a Planning Certificate go to Titles and Property Certificates at Landata - https://www.landata.vic.gov.au

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit https://mapshare.maps.vic.gov.au/vicplan

For other information about planning in Victoria visit https://www.planning.vic.gov.au

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this parcel is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

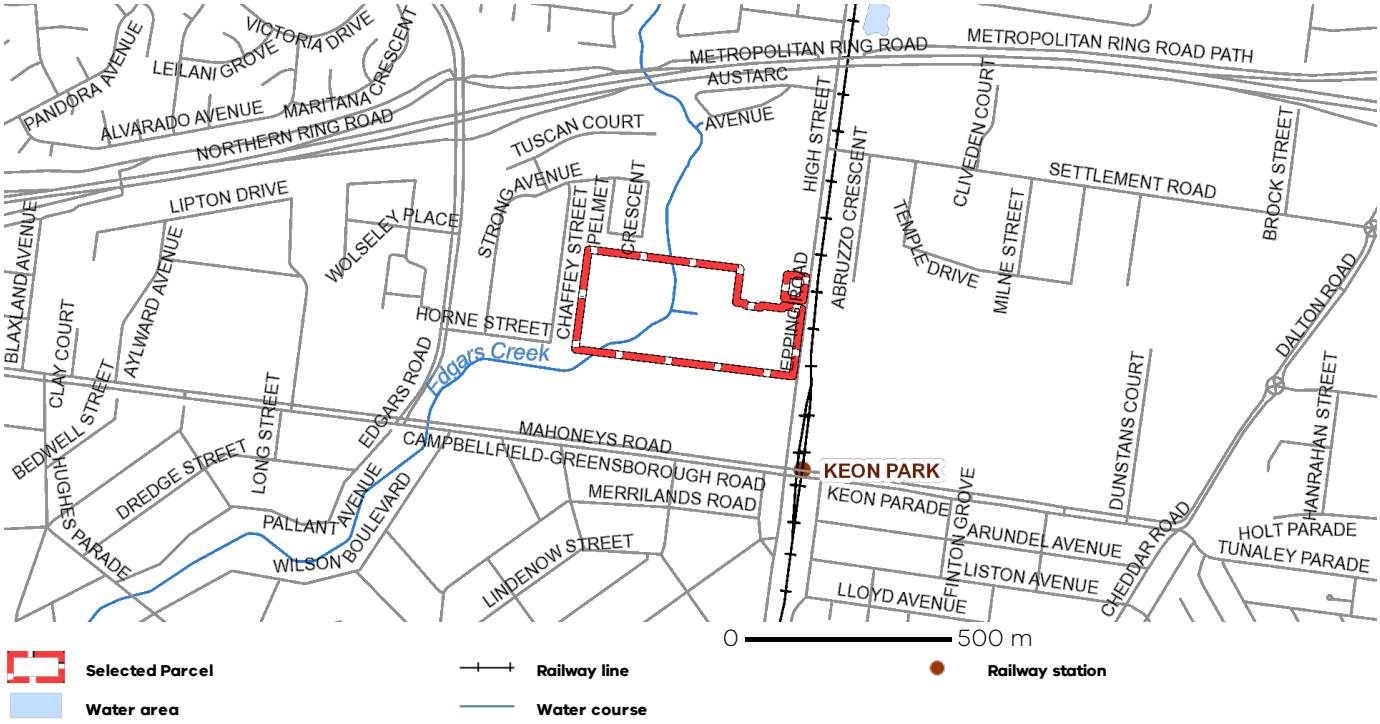
For further information about whether a Cultural Heritage Management Plan is required go to http://www.aav.nrms.net.au/aavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation

PROPERTY REPORT

Environment, Land, Water and Planning

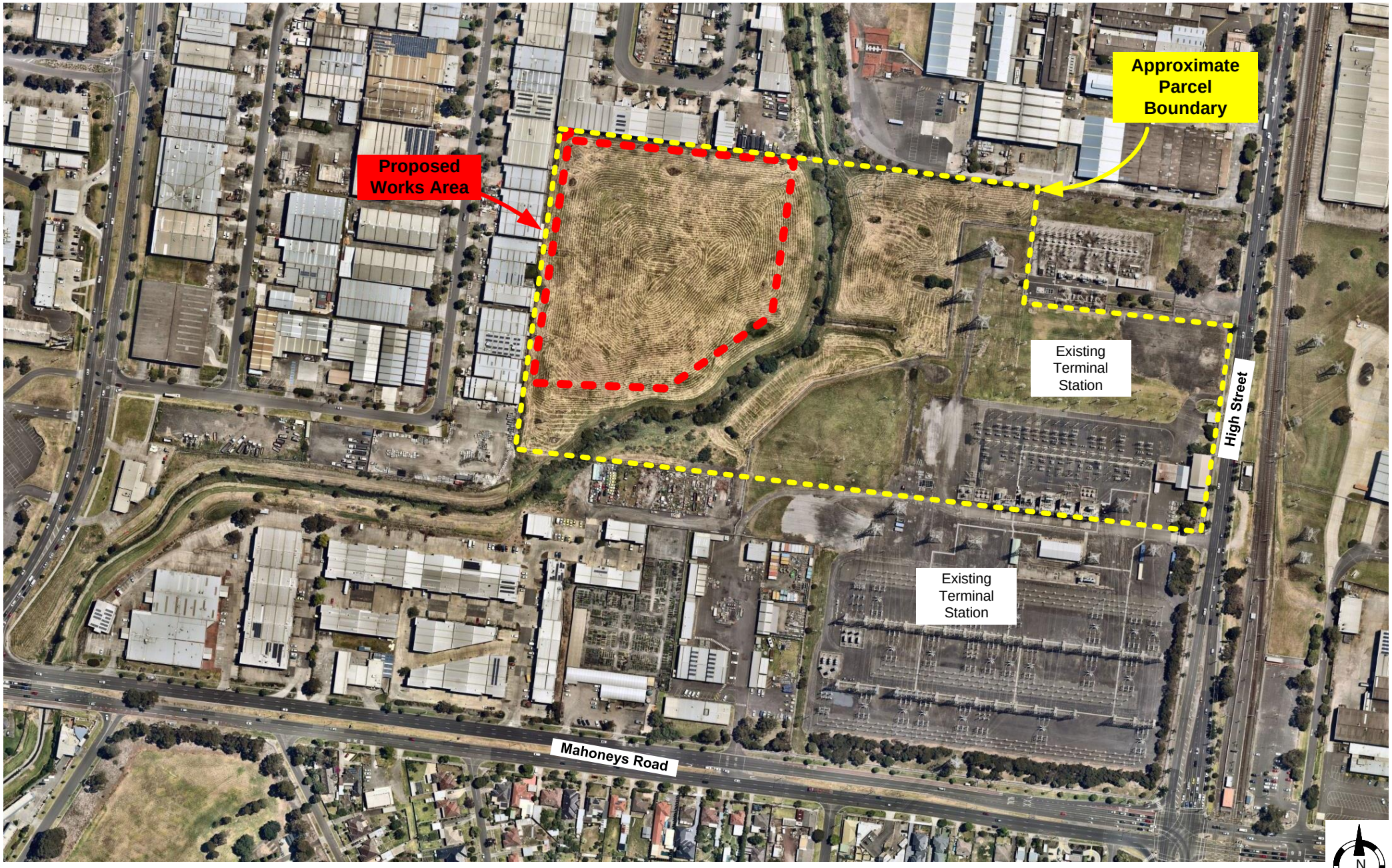
Area Map



GeoPollution Management Pty Ltd

AERIAL VIEW OF SITE LOCATION

FILE: ESA3300-1
Fig.: A



Proposed BESS at Thomastown Terminal Station:
Lot 2 TP966322, 15 High Street, Thomastown, Victoria

Dashed Yellow Outline: Approximate Property Boundary
Dashed Red Outline: Approximate Boundary of Proposed Works Area

Source: Nearmap.com (24 Dec 2021)

APPENDIX B

SAMPLE LOCATION & CONTAMINATION PLANS

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LOCATION PLAN

FILE: ESA3300-1

Fig. No.: 1a

Position of Soil Sampling Points (Test Pits)*

*Over "Geotechnical investigation Layout Plan", Fig 3 in Ausnet Services Specification (2021)

Key:

Approx. Test Pit Location

Project:

Thomastown - BESS:
15 High Street
(Corner Mahoneys Road & High Street),
Thomastown, Victoria

Dashed Yellow Outline: Approximate Boundary of Proposed Works Area (the site)

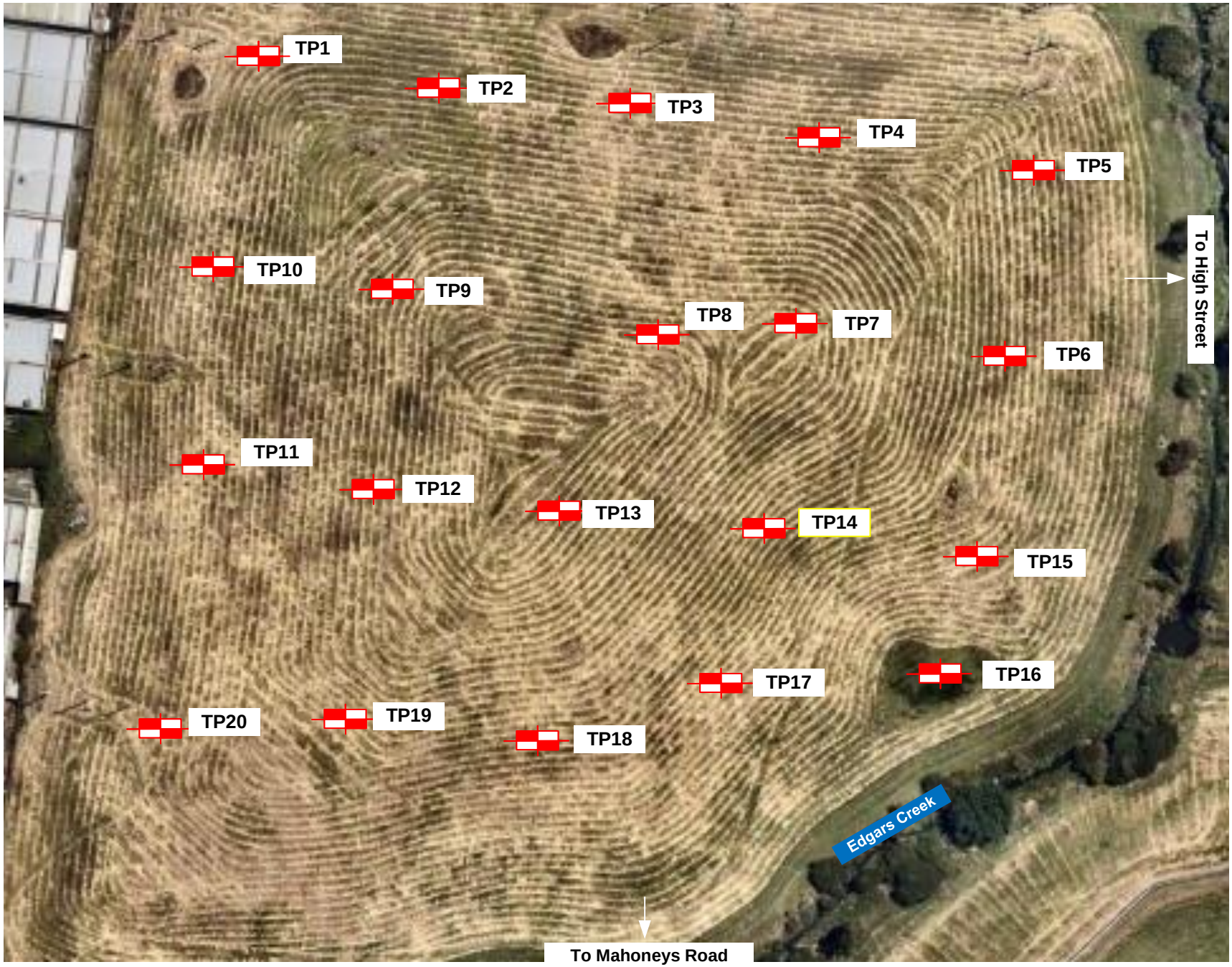
N

GeoPollution Management

LOCATION PLAN

FILE: ESA3300-1

Fig. No.: 1b



Position of Soil Sampling Points (Test Pits)

(Overlay over Aerial Photograph*)

*Over nearmap.com Aerial Photograph, 24 Dec. 2021)

Key:

Approx. Test Pit Location

Project:

Thomastown - BESS:
15 High Street
(Corner Mahoneys Road & High Street),
Thomastown, Victoria

Dashed Yellow Outline: Approximate Boundary of Proposed Works Area (the site)

N

GeoPollution Management

CONTAMINATION PLAN

FILE: ESA3300-1

Fig. No.: 2a

Asbestos Fibre Abundance (% w/w) Compared with NEPM 2013 Guidelines*

*Over "Geotechnical investigation Layout Plan", Fig 3 in Ausnet Services Specification (2021)

Key:

TP1 Approx. Test Pit Location

Highlights test point (irrespective of depth) with asbestos (% w/w) above the NEPM 2013 HIL D level

Project:

Thomastown - BESS:
15 High Street
(Corner Mahoneys Road & High Street),
Thomastown, Victoria

Dashed Yellow Outline: Approximate Boundary of Proposed Works Area (the site)

N

GeoPollution Management

CONTAMINATION PLAN

FILE: ESA3300-1

Fig. No.: 2b

Total Contaminant Concentrations Above EPA 1828.2 Waste Disposal Category Thresholds*

*Over "Geotechnical investigation Layout Plan", Fig 3 in Ausnet Services Specification (2021)

Key:

TP1 Approx. Test Pit Location

Highlights test point with one or more concentrations (irrespective of depth) above the EPA IWRG621 (2009) Cat C threshold limit for total concentration. Highest exceedence overrides others.

Analyte on Light Yellow Background: Concentration exceeds the EPA Fill Limit, i.e. is within the Category C limit.

Asbestos **Asbestos fibres detected (irrespective of percentage)**

Project:

Thomastown - BESS:
15 High Street
(Corner Mahoneys Road & High Street),
Thomastown, Victoria

Dashed Yellow Outline: Approximate Boundary of Proposed Works Area (the site)

N

APPENDIX C

TABULATED ANALYTICAL RESULTS & STATISTICAL EVALUATION (95% $UCL_{average}$)

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TABLE C1a: SOIL ANALYSIS RESULTS - Heavy Metals [mg/kg dry weight of soil] - against NEPM 2013 Guidelines

SAMPLE No.	DEPTH [m]	CONCENTRATION OF CONTAMINANTS																
		TOTAL HEAVY METALS																
		As	B	Be	Cd	Cr	CrVI	Co	Cu	Pb	Mn	Mo	Hg	Ni	Se	Sn	Ag	Zn
Guideline (Screening) Criteria																		
NEPM ESL Levels		20	ns	ns	3	ns	ns	ns	100	600	500	3	1	60	1	50	ns	200
NEPM HIL A Levels		100	4,500	60	20	ns	ns	100	6,000	300	3,800	ns	40	600	200	ns	ns	7,400
NEPM HIL D Levels		3,000	ns	ns	900	ns	3600	4,000	240,000	1,500	60,000	ns	730	6,000	10,000	ns	ns	400,000
TP1-1/TP1	0.0-0.1	4.8	<20	<2	<0.4	51	<1	17	35	110	310	<5	<0.1	38	<2	<10	<2	190
TP1-2	0.2-0.3	2.8	-	-	<0.4	51	<1	-	31	120	-	<5	0.1	43	<2	<10	<2	140
TP2-1/TP2	0.0-0.1	4	<20	<2	<0.4	62	<1	17	28	77	260	<5	<0.1	44	<2	<10	<2	140
TP3-1/TP3	0.0-0.1	4.9	<20	<2	0.4	59	<1	24	32	120	380	<5	0.1	39	<2	<10	<2	210
TP3-2	0.3-0.4	4.7	-	-	<0.4	57	<1	-	34	160	-	<5	0.2	43	<2	<10	<2	240
TP4-1/TP4	0.0-0.1	4.3	<20	<2	0.5	46	<1	17	36	150	290	<5	0.1	42	<2	<10	<2	260
TP5-1/TP5	0.0-0.1	6.2	<20	<2	0.6	48	<1	15	35	140	290	<5	0.1	34	<2	<10	<2	200
TP6-1/TP6	0.0-0.1	3.7	<20	<2	<0.4	66	<1	24	33	130	520	<5	0.1	46	<2	<10	<2	150
TP7-1/TP7	0.0-0.1	5.7	<20	<2	<0.4	48	<1	15	36	140	250	<5	0.1	34	<2	<10	<2	220
TP7-2	0.3-0.4	4.6	-	-	<0.4	54	<1	-	37	180	-	<5	0.1	37	<2	49	<2	220
TP8-1/TP8	0.0-0.1	8.1	16	<2	0.7	60	<1	21	60	330	380	<5	0.2	42	<2	<10	<2	310
TP9-1/TP9	0.0-0.1	<2	<20	<2	<0.4	69	<1	25	30	29	390	<5	<0.1	87	<2	<10	<2	81
TP9-2	0.3-0.4	2.7	-	-	<0.4	71	<1	-	37	89	-	<5	0.1	69	<2	<10	<2	150
TP10-1/TP10	0.0-0.1	<2	<20	<2	<0.4	85	<1	22	27	58	330	<5	<0.1	70	<2	<10	<2	120
TP11-1/TP11	0.0-0.1	4.5	<10	<2	0.4	65	<1	21	34	150	320	<5	0.2	50	<2	<10	<2	240
TP12-1/TP12	0.0-0.1	4.7	10	<2	<0.4	60	<1	20	39	200	340	<5	0.2	45	<2	<10	<2	270
TP13-1/TP13	0.0-0.1	4.4	84	<2	<0.4	62	<1	19	35	910	320	<5	0.1	53	<2	12	<2	270
TP14-1/TP14	0.0-0.1	9	13	<2	<0.4	110	<1	35	34	210	700	<5	0.1	73	<2	<10	<2	190
TP15-1/TP15	0.0-0.1	6.3	<10	<2	<0.4	52	<1	20	57	140	350	<5	0.1	39	<2	13	<2	210
TP16-1/TP16	0.0-0.1	12	<10	<2	<0.4	75	<1	20	34	90	290	<5	<0.1	54	<2	<10	<2	340
TP17-1/TP17	0.0-0.1	7.9	14	<2	<0.4	46	<1	17	35	250	270	<5	0.2	39	<2	<10	<2	260
TP18-1/TP18	0.0-0.1	4.8	12	<2	<0.4	49	<1	16	39	130	250	<5	0.2	38	<2	<10	<2	220
TP18-2	0.4-0.5	5.4	-	-	<0.4	49	<1	-	53	280	-	<5	0.2	34	<2	<10	<2	260
TP19-1/TP19	0.0-0.1	11	<10	<2	<0.4	49	<1	17	34	110	390	<5	1.1	37	<2	<10	<2	170
TP20-1/TP20	0.0-0.1	5.4	11	<2	0.5	57	<1	16	36	160	270	<5	0.2	39	<2	<10	<2	240

Green Background: Concentration exceeds the adopted NEPM EIL level.
Bold Font and Light Orange Background: Concentration exceeds the ESL and HIL Levels.
Light Orange Background: Concentration exceeds the adopted NEPM HIL A level.

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TABLE C1b: SOIL ANALYSIS RESULTS - Heavy Metals [mg/kg dry weight of soil] - against EPA 1828.2 Waste Disposal Category Thresholds

SAMPLE No.	DEPTH [m]	pH	CONCENTRATION OF CONTAMINANTS											
			TOTAL HEAVY METALS											
			As	Cd	CrVI	Cu	Pb	Mo	Hg	Ni	Se	Sn	Ag	Zn
EPA Waste Categorization Threshold Limits														
EPAV Fill Limits	>4 -<10		20	3	ns	100	300	40	1	60	10	50	10	200
EPAV Category C Limits	<4, >12.5		500	100	ns	5,000	1,500	1,000	75	3,000	50	500	180	35,000
Light Green Background: Concentration within the EPA Fill Material limit.						Light Yellow Background: Concentration within the EPA Category C waste limit.								
TP1-1/TP1	0.0-0.1	7.3	4.8	<0.4	<1	35	110	<5	<0.1	38	<2	<10	<2	190
TP1-2	0.2-0.3	7.7	2.8	<0.4	<1	31	120	<5	0.1	43	<2	<10	<2	140
TP2-1/TP2	0.0-0.1	7.6	4	<0.4	<1	28	77	<5	<0.1	44	<2	<10	<2	140
TP3-1/TP3	0.0-0.1	7.3	4.9	0.4	<1	32	120	<5	0.1	39	<2	<10	<2	210
TP3-2	0.3-0.4	7.6	4.7	<0.4	<1	34	160	<5	0.2	43	<2	<10	<2	240
TP4-1/TP4	0.0-0.1	7.4	4.3	0.5	<1	36	<100	<5	0.1	42	<2	<10	<2	260
TP5-1/TP5	0.0-0.1	7.5	6.2	0.6	<1	35	<100	<5	0.1	34	<2	<10	<2	200
TP6-1/TP6	0.0-0.1	7.4	3.7	<0.4	<1	33	<100	<5	0.1	46	<2	<10	<2	150
TP7-1/TP7	0.0-0.1	7.6	5.7	<0.4	<1	36	140	<5	0.1	34	<2	<10	<2	220
TP7-2	0.3-0.4	7.3	4.6	<0.4	<1	37	180	<5	0.1	37	<2	49	<2	220
TP8-1-TP8	0.0-0.1	7.5	8.1	0.7	<1	60	330	<5	0.2	42	<2	<10	<2	310
TP9-1/TP9	0.0-0.1	7.9	<2	<0.4	<1	30	29	<5	<0.1	87	<2	<10	<2	81
TP9-2	0.3-0.4	7.6	2.7	<0.4	<1	37	89	<5	<0.1	69	<2	<10	<2	150
TP10-1/TP10	0.0-0.1	7.0	<2	<0.4	<1	27	58	<5	0.2	70	<2	<10	<2	120
TP11-1/TP11	0.0-0.1	7.4	4.5	0.4	<1	34	150	<5	0.2	50	<2	<10	<2	240
TP12-1/TP12	0.0-0.1	7.8	4.7	<0.4	<1	39	200	<5	0.1	45	<2	<10	<2	270
TP13-1/TP13	0.0-0.1	7.7	4.4	<0.4	<1	35	910	<5	0.1	53	<2	12	<2	270
TP14-1/TP14	0.0-0.1	7.7	9	<0.4	<1	34	210	<5	0.1	73	<2	<10	<2	190
TP15-1/TP15	0.0-0.1	7.8	6.3	<0.4	<1	57	140	<5	0.1	39	<2	13	<2	210
TP16-1/TP16	0.0-0.1	7.2	12	<0.4	<1	34	90	<5	<0.1	54	<2	<10	<2	340
TP17-1/TP17	0.0-0.1	7.8	7.9	<0.4	<1	35	250	<5	0.2	39	<2	<10	<2	260
TP18-1/TP18	0.0-0.1	8.0	4.8	<0.4	<1	39	130	<5	0.2	38	<2	<10	<2	220
TP18-2	0.4-0.5	7.7	5.4	<0.4	<1	53	280	<5	0.2	34	<2	<10	<2	260
TP19-1/TP19	0.0-0.1	7.6	11	<0.4	<1	34	110	<5	1.1	37	<2	<10	<2	170
TP20-1/TP20	0.0-0.1	7.7	5.4	0.5	<1	36	160	<5	0.2	39	<2	<10	<2	240

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TABLE C2a: SOIL ANALYSIS RESULTS (cont'd) - TRH's (TPH's), MAH's & Halogenated Volatiles (VOC's) [mg/kg dry weight of soil]

Sample No.	Test Pit Loc.	Depth [m]	CONCENTRATIONS OF POTENTIAL CONTAMINANTS											
			VOC's		TOTAL RECOVERABLE HYDROCARBONS				Naphthalene	VOLATILE AROMATIC HYDROCARBONS				
			Indiv.	Total	F1 C_6-C_{10}	F2 >C_{10}-C_{16}	F3 >C_{16}-C_{34}	F4 >C_{34}-C_{40}		Benzene	Toluene	Ethyl Benzene	Xylenes	Total MAH's
ASSESSMENT CRITERIA														
Ecological Screening Levels (ESLs)	Coarse		ns	ns	180	120	300	2,800	ns	50	85	70	105	ns
	Fine		ns	ns	180	120	1,300	5,600	ns	65	105	125	45	ns
Health Investigation Levels (*Vapour Intrusion)* ***- Commercial/Industrial Land***														
Soil Type Sand	0 to <1m	0 to <1m	ns	ns	260	NL	ns	ns	NL	3	NL	NL	230	ns
Soil Type Silt	0 to <1m	250	ns	ns	NL	ns	ns	NL	NL	4	NL	NL	NL	ns
Soil Type Clay	0 to <1m	310	ns	ns	NL	ns	ns	NL	NL	4	NL	NL	NL	ns
												ns: not specified	NL: No Limit	
TP1-1/TP1	TP1	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP1-2		0.2-0.3	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP2-1/TP2	TP2	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP3-1/TP3	TP3	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP3-2		0.3-0.4	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP4-1/TP4	TP4	0.0-0.1	<0.5	<0.5	<20	<50	120	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP5-1/TP5	TP5	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP6-1/TP6	TP6	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP7-1/TP7	TP7	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP7-2		0.3-0.4	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP8-1-TP8	TP8	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP9-1/TP9	TP9	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP9-2		0.3-0.4	<0.5	<0.5	64	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP10-1/TP10	TP10	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP11-1/TP11	TP11	0.0-0.1	<0.5	<0.5	<20	<50	150	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP12-1/TP12	TP12	0.0-0.1	<0.5	<0.5	<20	<50	100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP13-1/TP13	TP13	0.0-0.1	<0.5	<0.5	<20	<50	140	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP14-1/TP14	TP14	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP15-1/TP15	TP15	0.0-0.1	<0.5	<0.5	<20	<50	120	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP16-1/TP16	TP16	0.0-0.1	<0.5	<0.5	<20	<50	130	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP17-1/TP17	TP17	0.0-0.1	<0.5	<0.5	<20	<50	130	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP18-1/TP18	TP18	0.0-0.1	<0.5	<0.5	<20	<50	140	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP18-2		0.4-0.5	<0.5	<0.5	<20	<50	170	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP19-1/TP19	TP19	0.0-0.1	<0.5	<0.5	<20	<50	<100	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5
TP20-1/TP20	TP20	0.0-0.1	<0.5	<0.5	<20	<50	140	<100	<0.5	<0.1	<0.1	<0.1	<0.3	<0.5

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TABLE C2b: TABULATED ANALYSIS RESULTS - TPH's & MAH's (BTEX) [mg/kg dry weight of soil] - against EPA 1828.2 (2021) Limits

SAMPLE No.	TOTAL PETROLEUM HYDROCARBONS					MONOCYCLIC AROMATIC HYDROCARBONS				
	C_6-C_9	C_{10}-C_{14}	C_{15}-C_{28}	C_{29}-C_{36}	Total >C_9	Benzene	Toluene	Ethyl Benzene	Xylenes	Total BTEX^
EPA Waste Classification Limits (Table 3 in 1828.2, 2021)										
EPA Fill Limits	100	ns	ns	ns	1,000	1	ns	ns	ns	7
EPA Category C Limits	650	ns	ns	ns	10,000	4	ns	ns	ns	70
EPA Category B Limits	2,600	ns	ns	ns	40,000	16	ns	ns	ns	240
Light Green Background: Concentration within EPA Fill Range. Yellow Background: Concentration within Category C waste range. Orange Background: Concentration within Category B waste range. ns: not specified										
TP1-1/TP1	<25	<50	<50	71	71	<0.2	<0.5	<1	<1	<1
TP1-2	<25	<50	<50	65	65	<0.2	<0.5	<1	<1	<1
TP2-1/TP2	<25	<50	<50	66	66	<0.2	<0.5	<1	<1	<1
TP3-1/TP3	<25	<50	<50	<50	<50	<0.2	<0.5	<1	<1	<1
TP3-2	<25	<50	<50	<50	<50	<0.2	<0.5	<1	<1	<1
TP4-1/TP4	<25	<50	58	90	148	<0.2	<0.5	<1	<1	<1
TP5-1/TP5	<25	<50	<50	68	68	<0.2	<0.5	<1	<1	<1
TP6-1/TP6	<25	<50	<50	<50	<50	<0.2	<0.5	<1	<1	<1
TP7-1/TP7	<25	<50	53	96	149	<0.2	<0.5	<1	<1	<1
TP7-2	<25	<50	51	87	138	<0.2	<0.5	<1	<1	<1
TP8-1-TP8	<25	<50	66	120	186	<0.2	<0.5	<1	<1	<1
TP9-1/TP9	<25	<50	56	<50	<50	<0.2	<0.5	<1	<1	<1
TP9-2	38	<50	<50	<50	<50	<0.2	<0.5	<1	<1	<1
TP10-1/TP10	<25	<50	<50	80	80	<0.2	<0.5	<1	<1	<1
TP11-1/TP11	<25	<50	67	130	197	<0.2	<0.5	<1	<1	<1
TP12-1/TP12	<25	<50	<50	84	84	<0.2	<0.5	<1	<1	<1
TP13-1/TP13	<25	26	81	97	204	<0.2	<0.5	<1	<1	<1
TP14-1/TP14	<25	<50	<50	<100	<50	<0.2	<0.5	<1	<1	<1
TP15-1/TP15	<25	<50	62	100	162	<0.2	<0.5	<1	<1	<1
TP16-1/TP16	<25	<50	63	110	173	<0.2	<0.5	<1	<1	<1
TP17-1/TP17	<25	<50	62	110	172	<0.2	<0.5	<1	<1	<1
TP18-1/TP18	<25	<50	72	110	182	<0.2	<0.5	<1	<1	<1
TP18-2	<25	<50	93	120	213	<0.2	<0.5	<1	<1	<1
TP19-1/TP19	<25	<50	<50	72	72	<0.2	<0.5	<1	<1	<1
TP20-1/TP20	<25	<50	68	100	168	<0.2	<0.5	<1	<1	<1

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TABLE C3: SOIL ANALYSIS RESULTS (cont'd) - Phenols, PAH's, OC & OP Pesticides, Acid & Triazine Herbices, PCB's, Cyanide & Fluoride [mg/kg dry weight of soil]

SAMPLE No.	Depth Interval Range [m]	Phenolics (Total Non-Hal.)	PAH's			OC Pesticides			OPP's		Acid Herbicides		Triazine Herbicides		PCB's		Cyanide *(total)*	Fluoride *(total)*
			B(a)P	B(a)P TEQ [3]	Total	4,4'-DDD	4,4'-DDE	Bifenthrin	Chlor-pyrifos	Other	2,4,5-T	Other	Atrazine	Other	Indiv.	Total		
NEPM Investigation Levels	**EIL**	1	1	ns	ns	ns	ns	ns	ns	ns	ns	ns			ns	ns	ns	ns
	HIL A	3000	ns	3	ns	240[5]		600	320	ns	600	ns	160	ns	ns	1	250[2]	ns
EPA Waste Classification Limits (EPA 1828.2, 2021)																		
EPAV Fill Material Limits		60	1	ns	20	ns	ns	12	ns	ns	ns	ns	ns	ns	ns	ns	50	450
EPAV Cat C Limits		560	5	ns	100	2		10[2]	ns	ns	ns	ns	ns	ns	ns	ns	2500	10,000
TP1-1/TP1	0.0-0.1	<0.5-<20	1.1	1.7	11.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP1-2	0.2-0.3	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	-	-	<0.2-<2	-	<0.5	-	<0.2	<0.1	<0.1	<5	130
TP2-1/TP2	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	180
TP3-1/TP3	0.0-0.1	<0.5-<20	<0.5	<0.5	0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP3-2	0.3-0.4	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	-	-	<0.2-<2	-	<0.5	-	<0.2	<0.1	<0.1	<5	160
TP4-1/TP4	0.0-0.1	<0.5-<20	<0.5	<0.5	1.4	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP5-1/TP5	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	120
TP6-1/TP6	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP7-1/TP7	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP7-2	0.3-0.4	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	-	<0.2-<2	-	<0.5	-	<0.2	<0.1	<0.1	<5	<100
T8-1/TP8	0.0-0.1	<0.5-<20	<0.5	<0.5	1.4	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	140
TP9-1/TP9	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	220
TP9-2	0.3-0.4	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	-	<0.2-<2	-	<0.5	-	<0.2	<0.1	<0.1	<5	<100
TP10-1/TP10	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	160
TP11-1/TP11	0.0-0.1	<0.5-<20	<0.5	<0.5	1.6	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	410
TP12-1/TP12	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	170
TP13-1/TP13	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	120
TP14-1/TP14	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP15-1/TP15	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP16-1/TP16	0.0-0.1	<0.5-<20	<0.5	<0.5	3.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP17-1/TP17	0.0-0.1	<0.5-<20	<0.5	<0.5	0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP18-1/TP18	0.0-0.1	<0.5-<20	<0.5	<0.5	0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP18-2	0.3-0.4	<0.5-<20	0.6	<0.5	3.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	-	<0.5	-	<0.2	<0.1	<0.1	<5	<100
TP19-1/TP19	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100
TP20-1/TP20	0.0-0.1	<0.5-<20	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2-<2	<0.5	<0.5	<0.2	<0.2	<0.1	<0.1	<5	<100

Unshaded: Concentrations below NEPM 2013 and Vic EPA Guideline Limits.

Light blue shading: Concentrations above the NEPM 1999 EIL level.

[1] Guideline levels specified for Total OC Pesticides.

[2] Guideline level specified for Free Cyanide.

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TABLE C4: SUMMARY OF ANALYSIS RESULTS - Asbestos ID

SAMPLE No.	DEPTH [m]	FIBRES IDENTIFIED	Type & Concentration of Fibres *(if detected)*		
			MINERAL TYPE	MATERIAL	Estimated Concentration (%w/w)
Guideline (Health Screening) Levels for Bonded ACM					
NEPM HSL Levels (w/w) - Residential A					0.01
NEPM HSL Levels (w/w) - Commercial/Industrial D					0.05
TP1-1/TP1	0.0-0.1	Asbestos, Organic Fibres	Chrysotile & Amosite	Fibre Cement Fragment	0.18
TP2-1/TP2	0.0-0.1	None	-	-	-
TP3-1/TP3	0.0-0.1	Asbestos, Organic Fibres	Chrysotile & Crocidolite	Fibre Cement Fragment	0.44
TP4-1/TP4	0.0-0.1	Asbestos, SMF & Organic Fibres	Chrysotile	Fibre Plaster Fragment	0.00026
TP5-1/TP5	0.0-0.1	None	-	-	-
TP6-1/TP6	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Fibre Cement Fragment & Loose Fibre Bundles	0.056
TP7-1/TP7	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Vinyl Tile fragment	0.0037
TP8-1-TP8	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Fibre Cement Fragment	0.25
TP9-1/TP9	0.0-0.1	Asbestos, Organic Fibres	Chrysotile & Amosite	Fibre Cement Fragment & Loose Fibre Bundles	1.1
TP10-1/TP10	0.0-0.1	None	-	-	-
TP11-1/TP11	0.0-0.1	None	-	-	-
TP12-1/TP12	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Loose Fibre Bundles	0.00022
TP13-1/TP13	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Fibre Cement Fragment	0.054
TP14-1/TP14	0.0-0.1	None	-	-	-
TP15-1/TP15	0.0-0.1	Asbestos, Organic Fibres	Chrysotile & Crocidolite	Vinyl Tile & Fibre Cement Fragments	0.28
TP16-1/TP16	0.0-0.1	None	-	-	-
TP17-1/TP17	0.0-0.1	Asbestos, Organic Fibres	Chrysotile & Crocidolite	Fibre Cement Fragment	0.39
TP18-1/TP18	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Fibre Cement Fragment	0.081
TP19-1/TP19	0.0-0.1	None	-	-	-
TP20-1/TP20	0.0-0.1	Asbestos, Organic Fibres	Chrysotile	Fibre Cement Fragment	0.012

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STATISTICAL ANALYSIS FOR WASTE SOIL

Spreadsheet 1: IMPORTED FILL HORIZON (All Results)

Sample No.	Depth [m]	Lead	Mercury	Nickel	Zinc	BaP
TP1-1/TP1	0.0-0.1	110	0.05	38	190	1.1
TP1-2	0.2-0.3	120	0.1	43	140	0.025
TP2-1/TP2	0.0-0.1	77	0.05	44	140	0.025
TP3-1/TP3	0.0-0.1	120	0.1	39	210	0.025
TP3-2	0.3-0.4	160	0.2	43	240	0.025
TP4-1/TP4	0.0-0.1	150	0.1	42	260	0.025
TP5-1/TP5	0.0-0.1	140	0.1	34	200	0.025
TP6-1/TP6	0.0-0.1	130	0.1	46	150	0.025
TP7-1/TP7	0.0-0.1	140	0.1	34	220	0.025
TP7-2	0.3-0.4	180	0.1	37	220	0.025
TP8-1/TP8	0.0-0.1	330	0.2	42	310	0.025
TP9-1/TP9	0.0-0.1	29	0.05	87	81	0.025
TP9-2	0.3-0.4	89	0.1	69	150	0.025
TP10-1/TP10	0.0-0.1	58	0.05	70	120	0.025
TP11-1/TP11	0.0-0.1	150	0.2	50	240	0.025
TP12-1/TP12	0.0-0.1	200	0.2	45	270	0.025
TP13-1/TP13	0.0-0.1	910	0.1	53	270	0.025
TP14-1/TP14	0.0-0.1	210	0.1	73	190	0.025
TP15-1/TP15	0.0-0.1	140	0.1	39	210	0.025
TP16-1/TP16	0.0-0.1	90	0.05	54	340	0.025
TP17-1/TP17	0.0-0.1	250	0.2	39	260	0.025
TP18-1/TP18	0.0-0.1	130	0.2	38	220	0.6
TP18-2	0.4-0.5	280	0.2	34	260	0.6
TP19-1/TP19	0.0-0.1	110	1.1	37	170	0.025
TP20-1/TP20	0.0-0.1	160	0.2	39	240	0.025
		Lead	**Mercury**	**Nickel**	**Zinc**	**BaP**
MEAN		178.52	0.16	46.76	212.04	0.11
STD DEV		193.03	0.24	15.60	65.99	0.19
Variation Coeff CV		1.1	1.5	0.3	0.3	1.6

CV must be less than 1.2 for Procedure D. If CV >1.2, 95% UCL's needs to be calculated using Procedure G*.*

95% UCL CALC	**244.5**	0.2	**52.1**	**234.6**	0.2
PEAK	910.00	1.10	87.00	340.00	0.60

Grey Shading: Below LOR (half the LOR used for calculations).

Blue Shading: Concentration exceeds the EPA Fill Limit.

Orange Shading: Concentration exceeds the EPA Category C Limit.

Red Shading: Concentration exceeds the EPA Category B Limit.

Lognormal Distribution!

250 Red Digits & Yellow Shading: 95% UCL average / Lognormal Distribution.

*: NEPC (2013) National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1)

APPENDIX D

CHAIN OF CUSTODY DOCUMENTATION

Time/Time: 2/2/22 12:20pm
Chilled: Yes / No
Temp: 3.7 - 0.4
Correction:
Final Temp: 2.9oc

courier
Emily D

GeoPollution Management

CHAIN OF CUSTODY AND ANALYSIS REQUEST

Job No.:	**ESA3300**	**Project:**	Thomastown	**Laboratory:**	**Eurofins**
Request No.:	**1013**	**Date:**	2/02/2022	**Prepared by:**	Dr K. Schwab
Turnaround:	**STANDARD**	**Sample Collection Dates:**	27/01 & 28/01/, 31/01 & 01/02/2021		
Dispatch Date:	2/02/2022	**Method:**	Courier	**Quote No.:**	**220131GPMV**
Requested by:	Karin Schwab	**Date:**	2/02/2022	**Signature:**	
Received by:		**Date:**		**Signature:**	

Please return signed form to this office (email: k.schwab@geopollution.com.au)

SAMPLE No.	Bore Location	DEPTH (m)	SAMPLE TYPE/ Containers	PARAMETERS REQUESTED
Sampled 27/01/2022				
TP1-1 / TP1	TP1	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP1-2		0.2-0.3	SOIL: 250 mL Glass Jar	**Suite R1: VIC EPA1828.2 (Table 3) Screen**
TP1-3		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP2-1 / TP2	TP2	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP2-2		0.1-0.2	SOIL: 250 mL Glass Jar	please hold
TP3-1 / TP3	TP3	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP3-2		0.3-0.4	SOIL: 250 mL Glass Jar	**Suite R1: VIC EPA1828.2 (Table 3) Screen**
TP3-3		0.4-0.5	SOIL: 250 mL Glass Jar	please hold
TP4-1 / TP4	TP4	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP4-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP5-1 / TP5	TP5	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP5-2		0.2-0.3	SOIL: 250 mL Glass Jar	please hold
Sampled 28/01/2022				

859644

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CHAIN OF CUSTODY AND ANALYSIS REQUEST

Job No.:	**ESA3300**	**Project:**	Thomastown	**Laboratory:**	**Eurofins**
Request No.:	**1013**	**Date:**	2/02/2022	**Prepared by:**	Dr K. Schwab
Turnaround:	**STANDARD**	**Sample Collection Dates:**	27/01 & 28/01/, 31/01 & 01/02/2021		
Dispatch Date:	2/02/2022	**Method:**	Courier	**Quote No.:**	**220131GPMV**
Requested by:	Karin Schwab	**Date:**	2/02/2022	**Signature:**	
Received by:		**Date:**		**Signature:**	

Please return signed form to this office (email: k.schwab@geopollution.com.au)

SAMPLE No.	Bore Location	DEPTH (m)	SAMPLE TYPE/ Containers	PARAMETERS REQUESTED
TP6-1 / TP6	TP6	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP6-2		0.2-0.3	SOIL: 250 mL Glass Jar	please hold
TP7-1 / TP7	TP7	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP7-2		0.3-0.4	SOIL: 250 mL Glass Jar	**Suite R1: VIC EPA1828.2 (Table 3) Screen**
TP7-3		0.5-0.6	SOIL: 250 mL Glass Jar	please hold
TP8-1 / TP8	TP8	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP8-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP9-1 / TP9	TP9	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP9-2		0.3-0.4	SOIL: 250 mL Glass Jar	**Suite R1: VIC EPA1828.2 (Table 3) Screen**
TP9-3		0.6-0.7	SOIL: 250 mL Glass Jar	please hold
TP10-1 / TP10	TP10	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP10-2		0.5-0.6	SOIL: 250 mL Glass Jar	please hold

Sampled 31/01/2022

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CHAIN OF CUSTODY AND ANALYSIS REQUEST

Job No.:	**ESA3300**	**Project:**	Thomastown	**Laboratory:**	**Eurofins**
Request No.:	**1013**	**Date:**	2/02/2022	**Prepared by:**	Dr K. Schwab
Turnaround:	**STANDARD**	**Sample Collection Dates:**	27/01 & 28/01/, 31/01 & 01/02/2021		
Dispatch Date:	2/02/2022	**Method:**	Courier	**Quote No.:**	**220131GPMV**
Requested by:	Karin Schwab	**Date:**	2/02/2022	**Signature:**	
Received by:		**Date:**		**Signature:**	

Please return signed form to this office (email: k.schwab@geopollution.com.au)

SAMPLE No.	Bore Location	DEPTH (m)	SAMPLE TYPE/ Containers	PARAMETERS REQUESTED
TP11-1 / TP11	TP11	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP11-2		0.4-0.5	SOIL: 250 mL Glass Jar	please hold
TP12-1 / TP12	TP12	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP12-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
Sampled 1/02/2022				
TP13-1 / TP13	TP13	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP13-2		0.4-0.5	SOIL: 250 mL Glass Jar	please hold
TP14-1 / TP14	TP14	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP14-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP15-1 / TP15	TP15	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP15-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP16-1 / TP16	TP16	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP16-2		0.2-0.3	SOIL: 250 mL Glass Jar	please hold

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CHAIN OF CUSTODY AND ANALYSIS REQUEST

Job No.:	**ESA3300**	**Project:**	Thomastown	**Laboratory:**	**Eurofins**
Request No.:	**1013**	**Date:**	2/02/2022	**Prepared by:**	Dr K. Schwab
Turnaround:	**STANDARD**	**Sample Collection Dates:**	27/01 & 28/01/, 31/01 & 01/02/2021		
Dispatch Date:	2/02/2022	**Method:**	Courier	**Quote No.:**	**220131GPMV**
Requested by:	Karin Schwab	**Date:**	2/02/2022	**Signature:**	
Received by:		**Date:**		**Signature:**	

Please return signed form to this office (email: k.schwab@geopollution.com.au)

SAMPLE No.	Bore Location	DEPTH (m)	SAMPLE TYPE/ Containers	PARAMETERS REQUESTED
TP17-1 / TP17	TP17	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP17-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP18-1 / TP18	TP18	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP18-2		0.4-0.5	SOIL: 250 mL Glass Jar	**Suite R1: VIC EPA1828.2 (Table 3) Screen**
TP18-3		0.6-0.7	SOIL: 250 mL Glass Jar	please hold
TP19-1 / TP19	TP19	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP19-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold
TP20-1 / TP20	TP20	0.0-0.1	SOIL: 250 mL Glass Jar / Plastic Bag	**Suite R1: VIC EPA1828.2 (Table 3) Screen; Extra Metals: Sb, Be, B, Co, Mn; Acid Herbicides, Triazines; OP Pesticides & Synth. Pyrethroids (Bifenthrin); Asbestos ID**
TP20-2		0.3-0.4	SOIL: 250 mL Glass Jar	please hold

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FURTHER ANALYSIS REQUEST

Job No.:	**ESA3300**	**Project:**	Thomastown	**Laboratory:**	**Eurofins**
Request No.:	**1013-2**	**Date:**	21/02/2022	**Prepared by:**	Dr Karin Schwab
Turnaround:	**STANDARD**	**Sample Collection Dates:**		27/01,28/01,31/01 & 01/02/2022	
Dispatch Date:	2/02/2022	**Method:**	Already at Lab*		
Requested by:	Karin Schwab	**Date:**	21/02/2022	**Signature:**	
Received by:		**Date:**		**Signature:**	

Please return signed form to this office (email: k.schwab@geopollution.com.au)

SAMPLE No.	BORE No.	DEPTH (m)	Lab Sample No.	PARAMETERS REQUESTED
TP1-1/TP1	TP1	0.0-0.1	M22-Fe00667	**ASLP (pH 5.0): PAH**
TP9-1/TP9	TP9	0.0-0.1	M22-Fe00678	**ASLP (pH 5.0): Ni**
TP13-1/TP13	TP13	0.0-0.1	M22-Fe00683	**ASLP (pH 5.0): Pb**
TP16-1/TP16	TP16	0.0-0.1	M22-Fe00686	**ASLP (pH 5.0): Zn**
TP19-1/TP19	TP19	0.0-0.1	M22-Fe00690	**ASLP (pH 5.0): Hg**

Fe00667 - GT0004 FF303
Fe00678 -
Fe00683 - GT0560 FF403
Fe00686 -
Fe00690 -

865210

*Samples Held at your Lab. Refer to Your Report No. 859644-S.

#AU_CAU001_EnviroSampleVic

From: Dr. Karin Schwab <k.schwab@geopollution.com.au>
Sent: Monday, 21 February 2022 12:07 PM
To: #AU_CAU001_EnviroSampleVic
Cc: Michael Morrison
Subject: Further Analysis Request - Thomastown Samples
Attachments: 1013-2 - ESA3300 Thomastown Further Analysis.pdf

Hi Jake / Michael,

Please find attached a further analysis request for samples already held at your lab.

Thanks & Regards

Karin Schwab

865210

Dr Karin Schwab
Principal Environmental Scientist
GeoPollution Management Pty Ltd
17-20 Summer Lane, Ringwood Vic 3134

Email: k.schwab@geopollution.com.au
Phone: 613 9879 6618 **Fax:** 613 9879 6226 **Mobile:** 0418 582 690

APPENDIX E

NATA ENDORSED ANALYTICAL REPORTS

Geo Pollution Management
17-20 Summer Lane
Ringwood
VIC 3134

Attention: **Karin Schwab**

Report **859644-S**
Project name THOMASTOWN
Project ID ESA3300
Received Date Feb 02, 2022

Client Sample ID			**TP1-1/TP1**	**TP1-2**	**TP2-1/TP2**	**TP3-1/TP3**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Fe00667**	**M22-Fe00668**	**M22-Fe00669**	**M22-Fe00670**
Date Sampled			**Jan 27, 2022**	**Jan 27, 2022**	**Jan 27, 2022**	**Jan 27, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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	71	65	66	< 50
TRH C10-C36 (Total)	50	mg/kg	71	65	66	< 50
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	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	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
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP1-1/TP1	TP1-2	TP2-1/TP2	TP3-1/TP3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00667	M22-Fe00668	M22-Fe00669	M22-Fe00670
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 27, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	76	90	93	96
Toluene-d8 (surr.)	1	%	63	57	72	72
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	1.4	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.7	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	2.0	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	1.1	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	1.1	< 0.5	< 0.5	< 0.5

Client Sample ID			TP1-1/TP1	TP1-2	TP2-1/TP2	TP3-1/TP3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00667	M22-Fe00668	M22-Fe00669	M22-Fe00670
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 27, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	1.0	< 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	0.9	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	1.2	< 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	2.3	< 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	1.8	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	2.1	< 0.5	< 0.5	0.5
Total PAH*	0.5	mg/kg	11.5	< 0.5	< 0.5	0.5
2-Fluorobiphenyl (surr.)	1	%	114	74	73	72
p-Terphenyl-d14 (surr.)	1	%	66	65	61	61
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	89	105	112	104
Tetrachloro-m-xylene (surr.)	1	%	91	124	118	109
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			TP1-1/TP1	TP1-2	TP2-1/TP2	TP3-1/TP3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00667	M22-Fe00668	M22-Fe00669	M22-Fe00670
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 27, 2022
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	85	-	86	80
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	89	105	112	104
Tetrachloro-m-xylene (surr.)	1	%	91	124	118	109
Triazines						
Ametryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Atraton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Atrazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Prometon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Prometryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Propazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Simazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			TP1-1/TP1	TP1-2	TP2-1/TP2	TP3-1/TP3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00667	M22-Fe00668	M22-Fe00669	M22-Fe00670
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 27, 2022
Test/Reference	LOR	Unit				
Triazines						
Simetryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbuthylazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbutryne	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	< 2	-	< 2	< 2
Cyfluthrin*	2	mg/kg	< 2	-	< 2	< 2
Cypermethrin (total)*	2	mg/kg	< 2	-	< 2	< 2
Fenvalerate*	2	mg/kg	< 2	-	< 2	< 2
Permethrin	2	mg/kg	< 2	-	< 2	< 2
Phenothrin*	2	mg/kg	< 2	-	< 2	< 2
Resmethrin*	2	mg/kg	< 2	-	< 2	< 2
Tetramethrin*	2	mg/kg	< 2	-	< 2	< 2
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4-DB	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4.5-TP	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dicamba	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPA	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPB	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Warfarin (surr.)	1	%	107	-	114	98
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	79	59	62	59
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			TP1-1/TP1	TP1-2	TP2-1/TP2	TP3-1/TP3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00667	M22-Fe00668	M22-Fe00669	M22-Fe00670
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 27, 2022
Test/Reference	LOR	Unit				
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	130	180	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.3	7.7	7.6	7.3
% Moisture	1	%	17	13	16	15
Heavy Metals						
Antimony	10	mg/kg	< 10	-	< 10	< 10
Arsenic	2	mg/kg	4.8	2.8	4.0	4.9
Beryllium	2	mg/kg	< 2	-	< 2	< 2
Boron	10	mg/kg	< 20	-	< 20	< 20
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	0.4
Chromium	5	mg/kg	51	51	62	59
Cobalt	5	mg/kg	17	-	17	24
Copper	5	mg/kg	35	31	28	32
Lead	5	mg/kg	110	120	77	120
Manganese	5	mg/kg	310	-	260	380
Mercury	0.1	mg/kg	< 0.1	0.1	< 0.1	0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	38	43	44	39
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	190	140	140	210

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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	58	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	90	68	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	148	68	< 50
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	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	120	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	120	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	85	88	97	75
Toluene-d8 (surr.)	1	%	74	53	72	64
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	0.7	< 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	0.7	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	72	76	121	126
p-Terphenyl-d14 (surr.)	1	%	64	64	73	76
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	133	113	96	96
Tetrachloro-m-xylene (surr.)	1	%	149	120	97	106
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Naled	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	-	< 2	< 2	< 2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	86	81	89

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	133	113	96	96
Tetrachloro-m-xylene (surr.)	1	%	149	120	97	106
Triazines						
Ametryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Atraton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Atrazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Prometon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Prometryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Propazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Simazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Simetryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbuthylazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbutryne	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	-	< 2	< 2	< 2
Cyfluthrin*	2	mg/kg	-	< 2	< 2	< 2
Cypermethrin (total)*	2	mg/kg	-	< 2	< 2	< 2
Fenvalerate*	2	mg/kg	-	< 2	< 2	< 2
Permethrin	2	mg/kg	-	< 2	< 2	< 2
Phenothrin*	2	mg/kg	-	< 2	< 2	< 2
Resmethrin*	2	mg/kg	-	< 2	< 2	< 2
Tetramethrin*	2	mg/kg	-	< 2	< 2	< 2
Acid Herbicides						
2.4-D	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-DB	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-TP	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dicamba	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
MCPA	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
MCPB	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Warfarin (surr.)	1	%	-	103	100	101
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			TP3-2	TP4-1/TP4	TP5-1/TP5	TP6-1/TP6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00671	M22-Fe00672	M22-Fe00673	M22-Fe00674
Date Sampled			Jan 27, 2022	Jan 27, 2022	Jan 27, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	52	57	79	78
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	160	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.6	7.4	7.5	7.4
% Moisture	1	%	15	13	13	20
Heavy Metals						
Antimony	10	mg/kg	-	< 10	< 10	< 10
Arsenic	2	mg/kg	4.7	4.3	6.2	3.7
Beryllium	2	mg/kg	-	< 2	< 2	< 2
Boron	10	mg/kg	-	< 20	< 20	< 20
Cadmium	0.4	mg/kg	< 0.4	0.5	0.6	< 0.4
Chromium	5	mg/kg	57	46	48	66
Cobalt	5	mg/kg	-	17	15	24
Copper	5	mg/kg	34	36	35	33
Lead	5	mg/kg	160	150	140	130
Manganese	5	mg/kg	-	290	290	520
Mercury	0.1	mg/kg	0.2	0.1	0.1	0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	43	42	34	46
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	240	260	200	150

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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	53	51	66	< 50
TRH C29-C36	50	mg/kg	96	87	120	< 50
TRH C10-C36 (Total)	50	mg/kg	149	138	186	< 50
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	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	110	100	140	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	110	100	140	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	92	56	55	91
Toluene-d8 (surr.)	1	%	87	51	67	74
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	0.7	< 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	0.7	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
2-Fluorobiphenyl (surr.)	1	%	71	75	76	76
p-Terphenyl-d14 (surr.)	1	%	63	63	61	66

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	116	111	108	114
Tetrachloro-m-xylene (surr.)	1	%	124	117	115	122
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	90	-	90	76
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	116	111	108	114
Tetrachloro-m-xylene (surr.)	1	%	124	117	115	122
Triazines						
Ametryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Atraton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Atrazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Prometon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Prometryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Propazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Simazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Simetryn	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbuthylazine	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbutryne	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	< 2	-	< 2	< 2
Cyfluthrin*	2	mg/kg	< 2	-	< 2	< 2
Cypermethrin (total)*	2	mg/kg	< 2	-	< 2	< 2
Fenvalerate*	2	mg/kg	< 2	-	< 2	< 2
Permethrin	2	mg/kg	< 2	-	< 2	< 2
Phenothrin*	2	mg/kg	< 2	-	< 2	< 2
Resmethrin*	2	mg/kg	< 2	-	< 2	< 2
Tetramethrin*	2	mg/kg	< 2	-	< 2	< 2

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4-DB	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2.4.5-TP	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dicamba	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPA	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
MCPB	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Warfarin (surr.)	1	%	105	-	104	104
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	57	58	59	60
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	140	220
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.6	7.3	7.5	7.9
% Moisture	1	%	15	13	13	14
Heavy Metals						
Antimony	10	mg/kg	< 10	-	< 10	< 10
Arsenic	2	mg/kg	5.7	4.6	8.1	< 2
Beryllium	2	mg/kg	< 2	-	< 2	< 2
Boron	10	mg/kg	< 20	-	16	< 20
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.7	< 0.4

Client Sample ID			TP7-1/TP7	TP7-2	TP8-1/TP8	TP9-1/TP9
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00675	M22-Fe00676	M22-Fe00677	M22-Fe00678
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 28, 2022	Jan 28, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Chromium	5	mg/kg	48	54	60	69
Cobalt	5	mg/kg	15	-	21	25
Copper	5	mg/kg	36	37	60	30
Lead	5	mg/kg	140	180	330	29
Manganese	5	mg/kg	250	-	380	390
Mercury	0.1	mg/kg	0.1	0.1	0.2	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	34	37	42	87
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	49	< 10	< 10
Zinc	5	mg/kg	220	220	310	81

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	38	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	67	< 50
TRH C29-C36	50	mg/kg	< 50	80	130	84
TRH C10-C36 (Total)	50	mg/kg	< 50	80	197	84
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	64	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	64	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	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
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	150	100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	62	75	83	80
Toluene-d8 (surr.)	1	%	73	63	73	57

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
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	0.6	< 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	1.6	< 0.5
2-Fluorobiphenyl (surr.)	1	%	78	80	82	85
p-Terphenyl-d14 (surr.)	1	%	68	78	88	78
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	111	110	96	91
Tetrachloro-m-xylene (surr.)	1	%	125	134	116	96
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Naled	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	-	< 2	< 2	< 2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	81	81	80
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	111	110	96	91
Tetrachloro-m-xylene (surr.)	1	%	125	134	116	96

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
Triazines						
Ametryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Atraton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Atrazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Prometon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Prometryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Propazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Simazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Simetryn	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbuthylazine	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbutryne	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	-	< 2	< 2	< 2
Cyfluthrin*	2	mg/kg	-	< 2	< 2	< 2
Cypermethrin (total)*	2	mg/kg	-	< 2	< 2	< 2
Fenvalerate*	2	mg/kg	-	< 2	< 2	< 2
Permethrin	2	mg/kg	-	< 2	< 2	< 2
Phenothrin*	2	mg/kg	-	< 2	< 2	< 2
Resmethrin*	2	mg/kg	-	< 2	< 2	< 2
Tetramethrin*	2	mg/kg	-	< 2	< 2	< 2
Acid Herbicides						
2.4-D	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-DB	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-TP	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dicamba	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
MCPA	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
MCPB	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Warfarin (surr.)	1	%	-	105	88	104
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5

Client Sample ID			TP9-2	TP10-1/TP10	TP11-1/TP11	TP12-1/TP12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00679	M22-Fe00680	M22-Fe00681	M22-Fe00682
Date Sampled			Jan 28, 2022	Jan 28, 2022	Jan 31, 2022	Jan 31, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	56	61	65	78
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	160	410	170
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.6	7.0	7.4	7.8
% Moisture	1	%	13	18	17	17
Heavy Metals						
Antimony	10	mg/kg	-	< 10	< 10	< 10
Arsenic	2	mg/kg	2.7	< 2	4.5	4.7
Beryllium	2	mg/kg	-	< 2	< 2	< 2
Boron	10	mg/kg	-	< 20	< 10	10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.4	< 0.4
Chromium	5	mg/kg	71	85	65	60
Cobalt	5	mg/kg	-	22	21	20
Copper	5	mg/kg	37	27	34	39
Lead	5	mg/kg	89	58	150	200
Manganese	5	mg/kg	-	330	320	340
Mercury	0.1	mg/kg	0.1	< 0.1	0.2	0.2
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	69	70	50	45
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	150	120	240	270

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	26	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	81	< 50	62	63
TRH C29-C36	50	mg/kg	97	< 50	100	110
TRH C10-C36 (Total)	50	mg/kg	204	< 50	162	173
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	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	140	< 100	120	130
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	140	< 100	120	130
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	87	68	57	62
Toluene-d8 (surr.)	1	%	77	50	73	73
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	1.3
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	1.0
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.2
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	3.5
2-Fluorobiphenyl (surr.)	1	%	86	83	79	74
p-Terphenyl-d14 (surr.)	1	%	72	73	77	82
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	90	83	78	67
Tetrachloro-m-xylene (surr.)	1	%	103	85	109	105
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	82	81	78	73
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	90	83	78	67
Tetrachloro-m-xylene (surr.)	1	%	103	85	109	105
Triazines						
Ametryn	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Atraton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Atrazine	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Prometon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Prometryn	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Propazine	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Simazine	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Simetryn	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbuthylazine	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbutryne	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	< 2	< 2	< 2	< 2
Cyfluthrin*	2	mg/kg	< 2	< 2	< 2	< 2
Cypermethrin (total)*	2	mg/kg	< 2	< 2	< 2	< 2
Fenvalerate*	2	mg/kg	< 2	< 2	< 2	< 2
Permethrin	2	mg/kg	< 2	< 2	< 2	< 2
Phenothrin*	2	mg/kg	< 2	< 2	< 2	< 2
Resmethrin*	2	mg/kg	< 2	< 2	< 2	< 2
Tetramethrin*	2	mg/kg	< 2	< 2	< 2	< 2
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-DB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-TP	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dicamba	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
MCPA	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Acid Herbicides						
MCPB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Warfarin (surr.)	1	%	80	82	84	84
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	79	73	55	47
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	120	< 100	100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.7	7.7	7.8	7.2
% Moisture	1	%	19	25	15	19
Heavy Metals						
Antimony	10	mg/kg	< 10	< 10	< 10	< 10
Arsenic	2	mg/kg	4.4	9.0	6.3	12
Beryllium	2	mg/kg	< 2	< 2	< 2	< 2
Boron	10	mg/kg	84	13	< 10	< 10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	62	110	52	75
Cobalt	5	mg/kg	19	35	20	20
Copper	5	mg/kg	35	34	57	34
Lead	5	mg/kg	910	210	140	90
Manganese	5	mg/kg	320	700	350	290
Mercury	0.1	mg/kg	0.1	0.1	0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	53	73	39	54
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2

Client Sample ID			TP13-1/TP13	TP14-1/TP14	TP15-1/TP15	TP16-1/TP16
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00683	M22-Fe00684	M22-Fe00685	M22-Fe00686
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Tin	10	mg/kg	12	< 10	13	< 10
Zinc	5	mg/kg	270	190	210	340

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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	62	72	93	< 50
TRH C29-C36	50	mg/kg	110	110	120	72
TRH C10-C36 (Total)	50	mg/kg	172	182	213	72
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	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	130	140	170	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	130	140	170	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	100	126	130	83
Toluene-d8 (surr.)	1	%	72	73	94	88
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	1.0	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.3	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	0.6	< 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

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	0.9	< 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	1.0	< 0.5
Total PAH*	0.5	mg/kg	0.5	0.5	3.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	76	83	78	81
p-Terphenyl-d14 (surr.)	1	%	77	86	77	85
Organochlorine Pesticides						
Bifenthrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	73	76	76	59
Tetrachloro-m-xylene (surr.)	1	%	91	96	90	88
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Omethoate	2	mg/kg	< 2	< 2	-	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	77	81	-	65
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	73	76	76	59
Tetrachloro-m-xylene (surr.)	1	%	91	96	90	88
Triazines						
Ametryn	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Atraton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Atrazine	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Prometon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Prometryn	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Propazine	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Simazine	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Simetryn	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbuthylazine	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbutryne	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Synthetic Pyrethroids*						
Allethrin*	2	mg/kg	< 2	< 2	-	< 2
Cyfluthrin*	2	mg/kg	< 2	< 2	-	< 2
Cypermethrin (total)*	2	mg/kg	< 2	< 2	-	< 2
Fenvalerate*	2	mg/kg	< 2	< 2	-	< 2
Permethrin	2	mg/kg	< 2	< 2	-	< 2
Phenothrin*	2	mg/kg	< 2	< 2	-	< 2
Resmethrin*	2	mg/kg	< 2	< 2	-	< 2
Tetramethrin*	2	mg/kg	< 2	< 2	-	< 2
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4-DB	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4.5-TP	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dicamba	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
MCPA	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
MCPB	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Warfarin (surr.)	1	%	83	116	-	113
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	52	55	55	56
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			TP17-1/TP17	TP18-1/TP18	TP18-2	TP19-1/TP19
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Fe00687	M22-Fe00688	M22-Fe00689	M22-Fe00690
Date Sampled			Feb 01, 2022	Feb 01, 2022	Feb 01, 2022	Feb 01, 2022
Test/Reference	LOR	Unit				
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.8	8.0	7.7	7.6
% Moisture	1	%	18	16	11	15
Heavy Metals						
Antimony	10	mg/kg	< 10	< 10	-	< 10
Arsenic	2	mg/kg	7.9	4.8	5.4	11
Beryllium	2	mg/kg	< 2	< 2	-	< 2
Boron	10	mg/kg	14	12	-	< 10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	46	49	49	49
Cobalt	5	mg/kg	17	16	-	17
Copper	5	mg/kg	35	39	53	34
Lead	5	mg/kg	250	130	280	110
Manganese	5	mg/kg	270	250	-	390
Mercury	0.1	mg/kg	0.2	0.2	0.2	1.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	39	38	34	37
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	13	< 10
Zinc	5	mg/kg	260	220	260	170

Client Sample ID			TP20-1/TP20
Sample Matrix			Soil
Eurofins Sample No.			M22-Fe00691
Date Sampled			Feb 01, 2022
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	68
TRH C29-C36	50	mg/kg	100
TRH C10-C36 (Total)	50	mg/kg	168
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	140
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	140
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5

Client Sample ID			TP20-1/TP20
Sample Matrix			Soil
Eurofins Sample No.			M22-Fe00691
Date Sampled			Feb 01, 2022
Test/Reference	LOR	Unit	
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5

Client Sample ID			TP20-1/TP20
Sample Matrix			Soil
Eurofins Sample No.			M22-Fe00691
Date Sampled			Feb 01, 2022
Test/Reference	LOR	Unit	
Volatile Organics			
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	53
Toluene-d8 (surr.)	1	%	69
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	0.6
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	0.7
Total PAH*	0.5	mg/kg	1.3
2-Fluorobiphenyl (surr.)	1	%	78
p-Terphenyl-d14 (surr.)	1	%	65
Organochlorine Pesticides			
Bifenthrin	0.05	mg/kg	< 0.05
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-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	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

Client Sample ID			TP20-1/TP20
Sample Matrix			Soil
Eurofins Sample No.			M22-Fe00691
Date Sampled			Feb 01, 2022
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (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	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	102
Tetrachloro-m-xylene (surr.)	1	%	107
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	90

Client Sample ID			TP20-1/TP20
Sample Matrix			Soil
Eurofins Sample No.			M22-Fe00691
Date Sampled			Feb 01, 2022
Test/Reference	LOR	Unit	
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	%	102
Tetrachloro-m-xylene (surr.)	1	%	107
Triazines			
Ametryn	0.2	mg/kg	< 0.2
Atraton	0.2	mg/kg	< 0.2
Atrazine	0.2	mg/kg	< 0.2
Prometon	0.2	mg/kg	< 0.2
Prometryn	0.2	mg/kg	< 0.2
Propazine	0.2	mg/kg	< 0.2
Simazine	0.2	mg/kg	< 0.2
Simetryn	0.2	mg/kg	< 0.2
Terbuthylazine	0.2	mg/kg	< 0.2
Terbutryne	0.2	mg/kg	< 0.2
Synthetic Pyrethroids*			
Allethrin*	2	mg/kg	< 2
Cyfluthrin*	2	mg/kg	< 2
Cypermethrin (total)*	2	mg/kg	< 2
Fenvalerate*	2	mg/kg	< 2
Permethrin	2	mg/kg	< 2
Phenothrin*	2	mg/kg	< 2
Resmethrin*	2	mg/kg	< 2
Tetramethrin*	2	mg/kg	< 2
Acid Herbicides			
2.4-D	0.5	mg/kg	< 0.5
2.4-DB	0.5	mg/kg	< 0.5
2.4.5-T	0.5	mg/kg	< 0.5
2.4.5-TP	0.5	mg/kg	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5
Dicamba	0.5	mg/kg	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5
Dinoseb	0.5	mg/kg	< 0.5
MCPA	0.5	mg/kg	< 0.5
MCPB	0.5	mg/kg	< 0.5
Mecoprop	0.5	mg/kg	< 0.5
Warfarin (surr.)	1	%	115
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1

Client Sample ID			TP20-1/TP20
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Fe00691**
Date Sampled			**Feb 01, 2022**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
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-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	73
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.7
% Moisture	1	%	17
Heavy Metals			
Antimony	10	mg/kg	< 10
Arsenic	2	mg/kg	5.4
Beryllium	2	mg/kg	< 2
Boron	10	mg/kg	11
Cadmium	0.4	mg/kg	0.5
Chromium	5	mg/kg	57
Cobalt	5	mg/kg	16
Copper	5	mg/kg	36
Lead	5	mg/kg	160
Manganese	5	mg/kg	270
Mercury	0.1	mg/kg	0.2
Molybdenum	5	mg/kg	< 5
Nickel	5	mg/kg	39
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	240

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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 1828.2 Table 3 (Solids)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Feb 03, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Feb 03, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Feb 03, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Feb 03, 2022	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Feb 04, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Feb 03, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Feb 03, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Organophosphorus Pesticides	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)			
Triazines	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2210 Triazine Herbicides in Soil and Water by GC-MS/MS			
Synthetic Pyrethroids*	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2170 Synthetic Pyrethroids by HPLC-UV			
Acid Herbicides	Melbourne	Feb 03, 2022	14 Days
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			
Heavy Metals	Melbourne	Feb 03, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Feb 02, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: Geo Pollution Management
Address: 17-20 Summer Lane
Ringwood
VIC 3134

Project Name: THOMASTOWN
Project ID: ESA3300

Order No.:
Report #: 859644
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**														
1	TP1-1/TP1	Jan 27, 2022		Soil	M22-Fe00667	X	X	X	X	X	X		X	X	X	X	X	X	X
2	TP1-2	Jan 27, 2022		Soil	M22-Fe00668													X	X
3	TP2-1/TP2	Jan 27, 2022		Soil	M22-Fe00669	X	X	X	X	X	X		X	X	X	X	X	X	X
4	TP3-1/TP3	Jan 27, 2022		Soil	M22-Fe00670	X	X	X	X	X	X		X	X	X	X	X	X	X
5	TP3-2	Jan 27, 2022		Soil	M22-Fe00671													X	X
6	TP4-1/TP4	Jan 27, 2022		Soil	M22-Fe00672	X	X	X	X	X	X		X	X	X	X	X	X	X
7	TP5-1/TP5	Jan 27, 2022		Soil	M22-Fe00673	X	X	X	X	X	X		X	X	X	X	X	X	X
8	TP6-1/TP6	Jan 28, 2022		Soil	M22-Fe00674	X	X	X	X	X	X		X	X	X	X	X	X	X
9	TP7-1/TP7	Jan 28, 2022		Soil	M22-Fe00675	X	X	X	X	X	X		X	X	X	X	X	X	X

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Company Name: Geo Pollution Management
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Project Name: THOMASTOWN
Project ID: ESA3300

Order No.:
Report #: 859644
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
10	TP7-2	Jan 28, 2022		Soil	M22-Fe00676													X	X
11	TP8-1/TP8	Jan 28, 2022		Soil	M22-Fe00677	X	X	X	X	X	X		X	X	X	X	X	X	X
12	TP9-1/TP9	Jan 28, 2022		Soil	M22-Fe00678	X	X	X	X	X	X		X	X	X	X	X	X	X
13	TP9-2	Jan 28, 2022		Soil	M22-Fe00679													X	X
14	TP10-1/TP10	Jan 28, 2022		Soil	M22-Fe00680	X	X	X	X	X	X		X	X	X	X	X	X	X
15	TP11-1/TP11	Jan 31, 2022		Soil	M22-Fe00681	X	X	X	X	X	X		X	X	X	X	X	X	X
16	TP12-1/TP12	Jan 31, 2022		Soil	M22-Fe00682	X	X	X	X	X	X		X	X	X	X	X	X	X
17	TP13-1/TP13	Feb 01, 2022		Soil	M22-Fe00683	X	X	X	X	X	X		X	X	X	X	X	X	X
18	TP14-1/TP14	Feb 01, 2022		Soil	M22-Fe00684	X	X	X	X	X	X		X	X	X	X	X	X	X
19	TP15-1/TP15	Feb 01, 2022		Soil	M22-Fe00685	X	X	X	X	X	X		X	X	X	X	X	X	X
20	TP16-1/TP16	Feb 01, 2022		Soil	M22-Fe00686	X	X	X	X	X	X		X	X	X	X	X	X	X

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Company Name: Geo Pollution Management
Address: 17-20 Summer Lane
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VIC 3134

Project Name: THOMASTOWN
Project ID: ESA3300

Order No.:
Report #: 859644
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
21	TP17-1/TP17	Feb 01, 2022		Soil	M22-Fe00687	X	X	X	X	X	X		X	X	X	X	X	X	X
22	TP18-1/TP18	Feb 01, 2022		Soil	M22-Fe00688	X	X	X	X	X	X		X	X	X	X	X	X	X
23	TP18-2	Feb 01, 2022		Soil	M22-Fe00689													X	X
24	TP19-1/TP19	Feb 01, 2022		Soil	M22-Fe00690	X	X	X	X	X	X		X	X	X	X	X	X	X
25	TP20-1/TP20	Feb 01, 2022		Soil	M22-Fe00691	X	X	X	X	X	X		X	X	X	X	X	X	X
26	TP1-3	Jan 27, 2022		Soil	M22-Fe00692							X							
27	TP2-2	Jan 27, 2022		Soil	M22-Fe00693							X							
28	TP3-3	Jan 27, 2022		Soil	M22-Fe00694							X							
29	TP4-2	Jan 27, 2022		Soil	M22-Fe00695							X							
30	TP5-2	Jan 27, 2022		Soil	M22-Fe00696							X							
31	TP6-2	Jan 28, 2022		Soil	M22-Fe00697							X							

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Company Name: Geo Pollution Management
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Project Name: THOMASTOWN
Project ID: ESA3300

Order No.:
Report #: 859644
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
32	TP7-3	Jan 28, 2022		Soil	M22-Fe00698							X							
33	TP8-2	Jan 28, 2022		Soil	M22-Fe00699							X							
34	TP9-3	Jan 28, 2022		Soil	M22-Fe00700							X							
35	TP10-2	Jan 28, 2022		Soil	M22-Fe00701							X							
36	TP11-2	Jan 31, 2022		Soil	M22-Fe00702							X							
37	TP12-2	Jan 31, 2022		Soil	M22-Fe00703							X							
38	TP13-2	Feb 01, 2022		Soil	M22-Fe00704							X							
39	TP14-2	Feb 01, 2022		Soil	M22-Fe00705							X							
40	TP15-2	Feb 01, 2022		Soil	M22-Fe00706							X							
41	TP16-2	Feb 01, 2022		Soil	M22-Fe00707							X							
42	TP17-2	Feb 01, 2022		Soil	M22-Fe00708							X							

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Order No.:
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Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
43	TP18-3	Feb 01, 2022		Soil	M22-Fe00709							X							
44	TP19-2	Feb 01, 2022		Soil	M22-Fe00710							X							
45	TP20-2	Feb 01, 2022		Soil	M22-Fe00711							X							
Test Counts						20	20	20	20	20	20	20	20	20	20	20	20	25	25

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. 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 SRA.

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.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
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.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

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%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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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 that 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. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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							
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	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
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							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	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							
Bifenthrin	mg/kg	< 0.05			0.05	Pass	
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-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	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	
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
g-HCH (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	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	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							
Triazines							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ametryn	mg/kg	< 0.2			0.2	Pass	
Atraton	mg/kg	< 0.2			0.2	Pass	
Atrazine	mg/kg	< 0.2			0.2	Pass	
Prometon	mg/kg	< 0.2			0.2	Pass	
Prometryn	mg/kg	< 0.2			0.2	Pass	
Propazine	mg/kg	< 0.2			0.2	Pass	
Simazine	mg/kg	< 0.2			0.2	Pass	
Simetryn	mg/kg	< 0.2			0.2	Pass	
Terbuthylazine	mg/kg	< 0.2			0.2	Pass	
Terbutryne	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Synthetic Pyrethroids*							
Allethrin*	mg/kg	< 2			2	Pass	
Cyfluthrin*	mg/kg	< 2			2	Pass	
Cypermethrin (total)*	mg/kg	< 2			2	Pass	
Fenvalerate*	mg/kg	< 2			2	Pass	
Permethrin	mg/kg	< 2			2	Pass	
Phenothrin*	mg/kg	< 2			2	Pass	
Resmethrin*	mg/kg	< 2			2	Pass	
Tetramethrin*	mg/kg	< 2			2	Pass	
Method Blank							
Acid Herbicides							
2.4-D	mg/kg	< 0.5			0.5	Pass	
2.4-DB	mg/kg	< 0.5			0.5	Pass	
2.4.5-T	mg/kg	< 0.5			0.5	Pass	
2.4.5-TP	mg/kg	< 0.5			0.5	Pass	
Actril (loxynil)	mg/kg	< 0.5			0.5	Pass	
Dicamba	mg/kg	< 0.5			0.5	Pass	
Dichlorprop	mg/kg	< 0.5			0.5	Pass	
Dinitro-o-cresol	mg/kg	< 0.5			0.5	Pass	
Dinoseb	mg/kg	< 0.5			0.5	Pass	
MCPA	mg/kg	< 0.5			0.5	Pass	
MCPB	mg/kg	< 0.5			0.5	Pass	
Mecoprop	mg/kg	< 0.5			0.5	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	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	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-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	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Antimony	mg/kg	< 10			10	Pass	
Arsenic	mg/kg	< 2			2	Pass	
Beryllium	mg/kg	< 2			2	Pass	
Boron	mg/kg	< 10			10	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	98			70-130	Pass	
TRH C10-C14	%	105			70-130	Pass	
Naphthalene	%	95			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	101			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	74			70-130	Pass	
1.1.1-Trichloroethane	%	82			70-130	Pass	
1.2-Dichlorobenzene	%	92			70-130	Pass	
1.2-Dichloroethane	%	89			70-130	Pass	
Benzene	%	89			70-130	Pass	
Ethylbenzene	%	95			70-130	Pass	
m&p-Xylenes	%	102			70-130	Pass	
Toluene	%	104			70-130	Pass	
Xylenes - Total*	%	101			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	78			70-130	Pass	
Acenaphthylene	%	80			70-130	Pass	
Anthracene	%	72			70-130	Pass	
Benz(a)anthracene	%	83			70-130	Pass	
Benzo(a)pyrene	%	83			70-130	Pass	
Benzo(b&j)fluoranthene	%	94			70-130	Pass	
Benzo(g.h.i)perylene	%	113			70-130	Pass	
Benzo(k)fluoranthene	%	87			70-130	Pass	
Chrysene	%	82			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a.h)anthracene	%	76			70-130	Pass	
Fluoranthene	%	72			70-130	Pass	
Fluorene	%	72			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	77			70-130	Pass	
Naphthalene	%	72			70-130	Pass	
Phenanthrene	%	106			70-130	Pass	
Pyrene	%	74			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Bifenthrin	%	123			70-130	Pass	
Chlordanes - Total	%	102			70-130	Pass	
4.4'-DDD	%	101			70-130	Pass	
4.4'-DDE	%	98			70-130	Pass	
4.4'-DDT	%	91			70-130	Pass	
a-HCH	%	84			70-130	Pass	
Aldrin	%	73			70-130	Pass	
b-HCH	%	87			70-130	Pass	
d-HCH	%	84			70-130	Pass	
Dieldrin	%	112			70-130	Pass	
Endosulfan I	%	77			70-130	Pass	
Endosulfan II	%	79			70-130	Pass	
Endosulfan sulphate	%	85			70-130	Pass	
Endrin	%	84			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
Endrin ketone	%	77			70-130	Pass	
g-HCH (Lindane)	%	123			70-130	Pass	
Heptachlor	%	83			70-130	Pass	
Heptachlor epoxide	%	97			70-130	Pass	
Hexachlorobenzene	%	123			70-130	Pass	
Methoxychlor	%	123			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	82			70-130	Pass	
Dimethoate	%	93			70-130	Pass	
Ethion	%	103			70-130	Pass	
Fenitrothion	%	72			70-130	Pass	
Methyl parathion	%	75			70-130	Pass	
Mevinphos	%	89			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	74			70-130	Pass	
LCS - % Recovery							
Triazines							
Atrazine	%	110			75-125	Pass	
Prometryn	%	86			70-130	Pass	
Simazine	%	86			75-125	Pass	
LCS - % Recovery							
Synthetic Pyrethroids*							
Allethrin*	%	124			70-130	Pass	
Cyfluthrin*	%	121			70-130	Pass	
Cypermethrin (total)*	%	115			70-130	Pass	
Fenvalerate*	%	99			70-130	Pass	
Permethrin	%	103			70-130	Pass	
Phenothrin*	%	83			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Resmethrin*	%	103			70-130	Pass	
Tetramethrin*	%	109			70-130	Pass	
LCS - % Recovery							
Acid Herbicides							
2.4-D	%	93			70-130	Pass	
2.4-DB	%	87			70-130	Pass	
2.4.5-T	%	92			70-130	Pass	
2.4.5-TP	%	96			70-130	Pass	
Actril (loxynil)	%	101			70-130	Pass	
Dicamba	%	103			70-130	Pass	
Dichlorprop	%	92			70-130	Pass	
Dinitro-o-cresol	%	97			70-130	Pass	
Dinoseb	%	105			70-130	Pass	
MCPA	%	90			70-130	Pass	
MCPB	%	87			70-130	Pass	
Mecoprop	%	94			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	74			25-140	Pass	
2.4-Dichlorophenol	%	82			25-140	Pass	
2.4.5-Trichlorophenol	%	80			25-140	Pass	
2.4.6-Trichlorophenol	%	129			25-140	Pass	
2.6-Dichlorophenol	%	70			25-140	Pass	
4-Chloro-3-methylphenol	%	88			25-140	Pass	
Pentachlorophenol	%	86			25-140	Pass	
Tetrachlorophenols - Total	%	71			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	67			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	66			25-140	Pass	
2-Nitrophenol	%	81			25-140	Pass	
2.4-Dimethylphenol	%	70			25-140	Pass	
2.4-Dinitrophenol	%	42			25-140	Pass	
2-Methylphenol (o-Cresol)	%	68			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	80			25-140	Pass	
4-Nitrophenol	%	78			25-140	Pass	
Dinoseb	%	80			25-140	Pass	
Phenol	%	84			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	98			70-130	Pass	
Cyanide (total)	%	113			70-130	Pass	
Fluoride (Total)	%	113			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Antimony	%	97			80-120	Pass	
Arsenic	%	102			80-120	Pass	
Beryllium	%	100			80-120	Pass	
Boron	%	106			80-120	Pass	
Cadmium	%	104			80-120	Pass	
Chromium	%	101			80-120	Pass	
Cobalt	%	106			80-120	Pass	
Copper	%	101			80-120	Pass	
Lead	%	106			80-120	Pass	
Manganese	%	102			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury			%	106			80-120	Pass	
Molybdenum			%	103			80-120	Pass	
Nickel			%	98			80-120	Pass	
Selenium			%	99			80-120	Pass	
Silver			%	114			80-120	Pass	
Tin			%	99			80-120	Pass	
Zinc			%	101			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Fe00667	CP	%	87			70-130	Pass	
Acenaphthylene	M22-Fe00667	CP	%	98			70-130	Pass	
Anthracene	M22-Fe00667	CP	%	92			70-130	Pass	
Benz(a)anthracene	M22-Fe00667	CP	%	102			70-130	Pass	
Benzo(a)pyrene	M22-Fe00667	CP	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Fe00667	CP	%	103			70-130	Pass	
Benzo(g.h.i)perylene	M22-Fe00667	CP	%	77			70-130	Pass	
Benzo(k)fluoranthene	M22-Fe00667	CP	%	101			70-130	Pass	
Chrysene	M22-Fe00667	CP	%	106			70-130	Pass	
Dibenz(a.h)anthracene	M22-Fe00667	CP	%	92			70-130	Pass	
Fluoranthene	M22-Fe00667	CP	%	93			70-130	Pass	
Fluorene	M22-Fe00667	CP	%	125			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe00667	CP	%	75			70-130	Pass	
Naphthalene	M22-Fe00667	CP	%	104			70-130	Pass	
Phenanthrene	M22-Fe00667	CP	%	98			70-130	Pass	
Pyrene	M22-Fe00667	CP	%	95			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Bifenthrin	M22-Fe04270	NCP	%	102			70-130	Pass	
Chlordanes - Total	M22-Fe04270	NCP	%	122			70-130	Pass	
4.4'-DDD	M22-Fe04270	NCP	%	96			70-130	Pass	
4.4'-DDE	M22-Fe04270	NCP	%	88			70-130	Pass	
4.4'-DDT	M22-Fe04270	NCP	%	83			70-130	Pass	
a-HCH	M22-Fe04270	NCP	%	125			70-130	Pass	
Aldrin	M22-Fe04270	NCP	%	125			70-130	Pass	
b-HCH	M22-Fe04270	NCP	%	87			70-130	Pass	
d-HCH	M22-Fe04270	NCP	%	127			70-130	Pass	
Dieldrin	M22-Fe04270	NCP	%	87			70-130	Pass	
Endosulfan I	M22-Fe04270	NCP	%	129			70-130	Pass	
Endosulfan II	M22-Fe04270	NCP	%	125			70-130	Pass	
Endosulfan sulphate	M22-Fe04270	NCP	%	102			70-130	Pass	
Endrin	M22-Fe04270	NCP	%	102			70-130	Pass	
Endrin aldehyde	M22-Fe04270	NCP	%	115			70-130	Pass	
Endrin ketone	M22-Fe04270	NCP	%	121			70-130	Pass	
g-HCH (Lindane)	M22-Fe04270	NCP	%	117			70-130	Pass	
Heptachlor	M22-Fe04270	NCP	%	87			70-130	Pass	
Heptachlor epoxide	M22-Fe04270	NCP	%	122			70-130	Pass	
Hexachlorobenzene	M22-Fe04270	NCP	%	87			70-130	Pass	
Methoxychlor	M22-Fe04270	NCP	%	101			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Fe00667	CP	%	95			30-130	Pass	
2.4-Dichlorophenol	M22-Fe00667	CP	%	108			30-130	Pass	
2.4.5-Trichlorophenol	M22-Fe00667	CP	%	104			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	M22-Fe00667	CP	%	88			30-130	Pass	
2.6-Dichlorophenol	M22-Fe00667	CP	%	111			30-130	Pass	
4-Chloro-3-methylphenol	M22-Fe00667	CP	%	101			30-130	Pass	
Pentachlorophenol	M22-Fe00667	CP	%	76			30-130	Pass	
Tetrachlorophenols - Total	M22-Fe00667	CP	%	67			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Fe00667	CP	%	64			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Fe00667	CP	%	60			30-130	Pass	
2-Nitrophenol	M22-Fe00667	CP	%	100			30-130	Pass	
2.4-Dimethylphenol	M22-Fe00667	CP	%	111			30-130	Pass	
2.4-Dinitrophenol	M22-Fe00667	CP	%	42			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Fe00667	CP	%	94			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Fe00667	CP	%	91			30-130	Pass	
4-Nitrophenol	M22-Fe00667	CP	%	85			30-130	Pass	
Dinoseb	M22-Fe00667	CP	%	76			30-130	Pass	
Phenol	M22-Fe00667	CP	%	101			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Fe02050	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Antimony	M22-Fe00668	CP	%	101			75-125	Pass	
Arsenic	M22-Fe00668	CP	%	92			75-125	Pass	
Beryllium	M22-Fe00668	CP	%	104			75-125	Pass	
Cadmium	M22-Fe00668	CP	%	109			75-125	Pass	
Chromium	M22-Fe00668	CP	%	101			75-125	Pass	
Cobalt	M22-Fe00668	CP	%	106			75-125	Pass	
Copper	M22-Fe00668	CP	%	92			75-125	Pass	
Mercury	M22-Fe00668	CP	%	108			75-125	Pass	
Molybdenum	M22-Fe00668	CP	%	107			75-125	Pass	
Nickel	M22-Fe00668	CP	%	89			75-125	Pass	
Selenium	M22-Fe00668	CP	%	89			75-125	Pass	
Silver	M22-Fe00668	CP	%	118			75-125	Pass	
Tin	M22-Fe00668	CP	%	108			75-125	Pass	
Zinc	M22-Fe00668	CP	%	112			75-125	Pass	
Spike - % Recovery									
Synthetic Pyrethroids*				Result 1					
Allethrin*	M22-Fe00669	CP	%	115			70-130	Pass	
Fenvalerate*	M22-Fe00669	CP	%	113			70-130	Pass	
Phenothrin*	M22-Fe00669	CP	%	92			70-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Fe00669	CP	%	111			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Fe00673	CP	%	98			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Fe00676	CP	%	74			70-130	Pass	
Aroclor-1260	M22-Fe00676	CP	%	87			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Fe00678	CP	%	99			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Naphthalene	M22-Fe00678	CP	%	81			70-130	Pass	
TRH C6-C10	M22-Fe00678	CP	%	96			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Fe00678	CP	%	84			70-130	Pass	
1.1.1-Trichloroethane	M22-Fe00678	CP	%	104			70-130	Pass	
1.2-Dichlorobenzene	M22-Fe00678	CP	%	103			70-130	Pass	
1.2-Dichloroethane	M22-Fe00678	CP	%	104			70-130	Pass	
Benzene	M22-Fe00678	CP	%	83			70-130	Pass	
Ethylbenzene	M22-Fe00678	CP	%	105			70-130	Pass	
m&p-Xylenes	M22-Fe00678	CP	%	115			70-130	Pass	
o-Xylene	M22-Fe00678	CP	%	108			70-130	Pass	
Toluene	M22-Fe00678	CP	%	96			70-130	Pass	
Xylenes - Total*	M22-Fe00678	CP	%	113			70-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Fe00678	CP	%	66			70-130	Fail	Q08
Spike - % Recovery									
Heavy Metals				Result 1					
Antimony	M22-Fe00678	CP	%	95			75-125	Pass	
Arsenic	M22-Fe00678	CP	%	93			75-125	Pass	
Beryllium	M22-Fe00678	CP	%	105			75-125	Pass	
Boron	M22-Fe00678	CP	%	100			75-125	Pass	
Cadmium	M22-Fe00678	CP	%	86			75-125	Pass	
Cobalt	M22-Fe00678	CP	%	95			75-125	Pass	
Copper	M22-Fe00678	CP	%	103			75-125	Pass	
Lead	M22-Fe00678	CP	%	117			75-125	Pass	
Mercury	M22-Fe00678	CP	%	108			75-125	Pass	
Molybdenum	M22-Fe00678	CP	%	107			75-125	Pass	
Nickel	M22-Fe00678	CP	%	90			75-125	Pass	
Selenium	M22-Fe00678	CP	%	88			75-125	Pass	
Silver	M22-Fe00678	CP	%	93			75-125	Pass	
Tin	M22-Fe00678	CP	%	108			75-125	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	M22-Ja27800	NCP	%	94			70-130	Pass	
Dimethoate	M22-Ja27800	NCP	%	89			70-130	Pass	
Ethion	M22-Ja27800	NCP	%	88			70-130	Pass	
Fenitrothion	M22-Ja27800	NCP	%	88			70-130	Pass	
Methyl parathion	M22-Ja27800	NCP	%	87			70-130	Pass	
Mevinphos	M22-Ja27800	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Synthetic Pyrethroids*				Result 1					
Allethrin*	M22-Fe00682	CP	%	106			70-130	Pass	
Fenvalerate*	M22-Fe00682	CP	%	122			70-130	Pass	
Phenothrin*	M22-Fe00682	CP	%	98			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Fe00683	CP	%	85			70-130	Pass	
Acenaphthylene	M22-Fe00683	CP	%	100			70-130	Pass	
Anthracene	M22-Fe00683	CP	%	77			70-130	Pass	
Benz(a)anthracene	M22-Fe00683	CP	%	81			70-130	Pass	
Benzo(a)pyrene	M22-Fe00683	CP	%	88			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Fe00683	CP	%	84			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(g.h.i)perylene	M22-Fe00683	CP	%	84			70-130	Pass	
Benzo(k)fluoranthene	M22-Fe00683	CP	%	78			70-130	Pass	
Chrysene	M22-Fe00683	CP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	M22-Fe00683	CP	%	86			70-130	Pass	
Fluoranthene	M22-Fe00683	CP	%	86			70-130	Pass	
Fluorene	M22-Fe00683	CP	%	89			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe00683	CP	%	91			70-130	Pass	
Naphthalene	M22-Fe00683	CP	%	86			70-130	Pass	
Phenanthrene	M22-Fe00683	CP	%	92			70-130	Pass	
Pyrene	M22-Fe00683	CP	%	93			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Fe00683	CP	%	79			30-130	Pass	
2.4-Dichlorophenol	M22-Fe00683	CP	%	79			30-130	Pass	
2.4.5-Trichlorophenol	M22-Fe00683	CP	%	70			30-130	Pass	
2.4.6-Trichlorophenol	M22-Fe00683	CP	%	78			30-130	Pass	
2.6-Dichlorophenol	M22-Fe00683	CP	%	77			30-130	Pass	
4-Chloro-3-methylphenol	M22-Fe00683	CP	%	78			30-130	Pass	
Pentachlorophenol	M22-Fe00683	CP	%	73			30-130	Pass	
Tetrachlorophenols - Total	M22-Fe00683	CP	%	93			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Fe00683	CP	%	34			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Fe00683	CP	%	59			30-130	Pass	
2-Nitrophenol	M22-Fe00683	CP	%	80			30-130	Pass	
2.4-Dimethylphenol	M22-Fe00683	CP	%	87			30-130	Pass	
2.4-Dinitrophenol	M22-Fe00683	CP	%	51			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Fe00683	CP	%	73			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Fe00683	CP	%	75			30-130	Pass	
4-Nitrophenol	M22-Fe00683	CP	%	70			30-130	Pass	
Dinoseb	M22-Fe00683	CP	%	71			30-130	Pass	
Phenol	M22-Fe00683	CP	%	69			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Fe00684	CP	%	101			70-130	Pass	
Naphthalene	M22-Fe00684	CP	%	99			70-130	Pass	
TRH C6-C10	M22-Fe00684	CP	%	88			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Fe00684	CP	%	70			70-130	Pass	
1.1.1-Trichloroethane	M22-Fe00684	CP	%	80			70-130	Pass	
1.2-Dichlorobenzene	M22-Fe00684	CP	%	112			70-130	Pass	
1.2-Dichloroethane	M22-Fe00684	CP	%	97			70-130	Pass	
Benzene	M22-Fe00684	CP	%	91			70-130	Pass	
Ethylbenzene	M22-Fe00684	CP	%	92			70-130	Pass	
m&p-Xylenes	M22-Fe00684	CP	%	90			70-130	Pass	
o-Xylene	M22-Fe00684	CP	%	95			70-130	Pass	
Toluene	M22-Fe00684	CP	%	88			70-130	Pass	
Trichloroethene	M22-Fe00684	CP	%	86			70-130	Pass	
Xylenes - Total*	M22-Fe00684	CP	%	92			70-130	Pass	
Spike - % Recovery									
Acid Herbicides				Result 1					
2.4-D	M22-Fe00685	CP	%	86			70-130	Pass	
Actril (loxynil)	M22-Fe00685	CP	%	114			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorprop	M22-Fe00685	CP	%	92			70-130	Pass	
MCPA	M22-Fe00685	CP	%	90			70-130	Pass	
MCPB	M22-Fe00685	CP	%	81			70-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Fe00686	CP	%	85			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Fe00688	CP	%	98			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Antimony	M22-Fe00688	CP	%	100			75-125	Pass	
Arsenic	M22-Fe00688	CP	%	101			75-125	Pass	
Beryllium	M22-Fe00688	CP	%	84			75-125	Pass	
Boron	M22-Fe00688	CP	%	97			75-125	Pass	
Cadmium	M22-Fe00688	CP	%	103			75-125	Pass	
Chromium	M22-Fe00688	CP	%	113			75-125	Pass	
Cobalt	M22-Fe00688	CP	%	110			75-125	Pass	
Copper	M22-Fe00688	CP	%	106			75-125	Pass	
Manganese	M22-Fe00688	CP	%	76			75-125	Pass	
Mercury	M22-Fe00688	CP	%	105			75-125	Pass	
Molybdenum	M22-Fe00688	CP	%	109			75-125	Pass	
Nickel	M22-Fe00688	CP	%	105			75-125	Pass	
Selenium	M22-Fe00688	CP	%	95			75-125	Pass	
Silver	M22-Fe00688	CP	%	112			75-125	Pass	
Tin	M22-Fe00688	CP	%	111			75-125	Pass	
Zinc	M22-Fe00688	CP	%	80			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M22-Fe00690	CP	%	111			70-130	Pass	
TRH >C10-C16	M22-Fe00690	CP	%	112			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Fe00667	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Fe00667	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Fe00667	CP	mg/kg	< 50	100	82	30%	Fail	Q15
TRH C29-C36	M22-Fe00667	CP	mg/kg	71	130	61	30%	Fail	Q15
Naphthalene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Fe00667	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Fe00667	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Fe00667	CP	mg/kg	< 100	190	71	30%	Fail	Q15
TRH >C34-C40	M22-Fe00667	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1.2.2-Tetrachloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Fe00667	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Fe00667	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Fe00667	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Fe00667	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Fe00667	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Fe00667	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Fe00667	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Synthetic Pyrethroids*				Result 1	Result 2	RPD			
Allethrin*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cyfluthrin*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cypermethrin (total)*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenvalerate*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	

Duplicate									
Synthetic Pyrethroids*				Result 1	Result 2	RPD			
Permethrin	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phenothrin*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Resmethrin*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tetramethrin*	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Antimony	M22-Fe00667	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Arsenic	M22-Fe00667	CP	mg/kg	4.8	4.4	8.0	30%	Pass	
Beryllium	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M22-Fe00667	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Cadmium	M22-Fe00667	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe00667	CP	mg/kg	51	49	5.0	30%	Pass	
Cobalt	M22-Fe00667	CP	mg/kg	17	17	1.0	30%	Pass	
Copper	M22-Fe00667	CP	mg/kg	35	35	3.0	30%	Pass	
Lead	M22-Fe00667	CP	mg/kg	110	100	6.0	30%	Pass	
Manganese	M22-Fe00667	CP	mg/kg	310	310	<1	30%	Pass	
Mercury	M22-Fe00667	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Fe00667	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Fe00667	CP	mg/kg	38	38	<1	30%	Pass	
Selenium	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe00667	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe00667	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe00667	CP	mg/kg	190	230	19	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Antimony	M22-Fe00668	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Arsenic	M22-Fe00668	CP	mg/kg	2.8	2.7	2.0	30%	Pass	
Beryllium	M22-Fe00668	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	M22-Fe00668	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe00668	CP	mg/kg	51	52	1.0	30%	Pass	
Cobalt	M22-Fe00668	CP	mg/kg	19	19	3.0	30%	Pass	
Copper	M22-Fe00668	CP	mg/kg	31	32	2.0	30%	Pass	
Lead	M22-Fe00668	CP	mg/kg	120	120	1.0	30%	Pass	
Manganese	M22-Fe00668	CP	mg/kg	300	310	2.0	30%	Pass	
Mercury	M22-Fe00668	CP	mg/kg	0.1	0.1	1.0	30%	Pass	
Molybdenum	M22-Fe00668	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Fe00668	CP	mg/kg	43	44	2.0	30%	Pass	
Selenium	M22-Fe00668	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe00668	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe00668	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe00668	CP	mg/kg	140	140	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Fe00670	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Fe00672	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M22-Fe00676	CP	%	13	13	3.0	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Fe00677	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Fe00677	CP	mg/kg	66	73	10	30%	Pass	
TRH C29-C36	M22-Fe00677	CP	mg/kg	120	120	2.0	30%	Pass	
TRH >C10-C16	M22-Fe00677	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Fe00677	CP	mg/kg	140	140	3.0	30%	Pass	
TRH >C34-C40	M22-Fe00677	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Fe00677	CP	mg/kg	0.7	0.6	15	30%	Pass	
Fluorene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Fe00677	CP	mg/kg	0.7	0.7	11	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Bifenthrin	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordanes - Total	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Fe00677	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Chlorpyrifos-methyl	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M22-Fe00677	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M22-Fe00677	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M22-Fe00677	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Fe00677	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Triazines				Result 1	Result 2	RPD			
Ametryn	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Atraton	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Atrazine	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Prometon	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Prometryn	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Propazine	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Simazine	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Simetryn	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbuthylazine	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbutryne	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Fe00677	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Fe00677	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Fe00677	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Fe00677	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Fe00677	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Fe00677	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Fe00677	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Fe00677	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Fe00677	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Fe00677	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Fe00677	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Fe00677	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Fe00677	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Fe00677	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Antimony	M22-Fe00678	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Arsenic	M22-Fe00678	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Beryllium	M22-Fe00678	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M22-Fe00678	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Cadmium	M22-Fe00678	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe00678	CP	mg/kg	69	69	<1	30%	Pass	
Cobalt	M22-Fe00678	CP	mg/kg	25	27	8.0	30%	Pass	
Copper	M22-Fe00678	CP	mg/kg	30	31	5.0	30%	Pass	
Lead	M22-Fe00678	CP	mg/kg	29	30	3.0	30%	Pass	
Manganese	M22-Fe00678	CP	mg/kg	390	430	9.0	30%	Pass	
Mercury	M22-Fe00678	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Fe00678	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Fe00678	CP	mg/kg	87	92	6.0	30%	Pass	
Selenium	M22-Fe00678	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe00678	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe00678	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe00678	CP	mg/kg	81	84	5.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Fe00681	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Fe00681	CP	mg/kg	67	120	55	30%	Fail	Q15
TRH C29-C36	M22-Fe00681	CP	mg/kg	130	150	14	30%	Pass	
TRH >C10-C16	M22-Fe00681	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Fe00681	CP	mg/kg	150	210	36	30%	Fail	Q15
TRH >C34-C40	M22-Fe00681	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Synthetic Pyrethroids*				Result 1	Result 2	RPD			
Allethrin*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cyfluthrin*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cypermethrin (total)*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenvalerate*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Permethrin	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	

Duplicate									
Synthetic Pyrethroids*				Result 1	Result 2	RPD			
Phenothrin*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Resmethrin*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tetramethrin*	M22-Fe00681	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Fe00682	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Fe00683	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Fe00683	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Fe00683	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dichlorodifluoromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Fe00683	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Fe00683	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Fe00683	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Fe00683	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Fe00683	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Fe00683	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Acid Herbicides				Result 1	Result 2	RPD			
2.4-D	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-DB	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-T	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-TP	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Actril (loxynil)	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dicamba	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorprop	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dinitro-o-cresol	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dinoseb	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
MCPA	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
MCPB	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Mecoprop	M22-Fe00684	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Fe00684	CP	mg/kg	< 100	130	79	30%	Fail	Q15
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M22-Fe00686	CP	%	19	19	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Fe00687	CP	pH Units	7.8	7.8	pass	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Antimony	M22-Fe00687	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Arsenic	M22-Fe00687	CP	mg/kg	7.9	7.3	8.0	30%	Pass	
Beryllium	M22-Fe00687	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M22-Fe00687	CP	mg/kg	14	11	26	30%	Pass	
Cadmium	M22-Fe00687	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe00687	CP	mg/kg	46	61	28	30%	Pass	
Cobalt	M22-Fe00687	CP	mg/kg	17	19	14	30%	Pass	
Copper	M22-Fe00687	CP	mg/kg	35	38	9.0	30%	Pass	
Lead	M22-Fe00687	CP	mg/kg	250	190	28	30%	Pass	
Manganese	M22-Fe00687	CP	mg/kg	270	280	4.0	30%	Pass	
Mercury	M22-Fe00687	CP	mg/kg	0.2	0.2	14	30%	Pass	
Molybdenum	M22-Fe00687	CP	mg/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	M22-Fe00687	CP	mg/kg	39	43	9.0	30%	Pass	
Selenium	M22-Fe00687	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe00687	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe00687	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe00687	CP	mg/kg	260	300	12	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Fe00688	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Antimony	M22-Fe00688	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Arsenic	M22-Fe00688	CP	mg/kg	4.8	4.8	<1	30%	Pass	
Beryllium	M22-Fe00688	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M22-Fe00688	CP	mg/kg	12	11	7.0	30%	Pass	
Cadmium	M22-Fe00688	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Fe00688	CP	mg/kg	49	50	2.0	30%	Pass	
Cobalt	M22-Fe00688	CP	mg/kg	16	16	<1	30%	Pass	
Copper	M22-Fe00688	CP	mg/kg	39	40	1.0	30%	Pass	
Lead	M22-Fe00688	CP	mg/kg	130	140	3.0	30%	Pass	
Manganese	M22-Fe00688	CP	mg/kg	250	250	1.0	30%	Pass	
Mercury	M22-Fe00688	CP	mg/kg	0.2	0.1	2.0	30%	Pass	
Molybdenum	M22-Fe00688	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Fe00688	CP	mg/kg	38	38	<1	30%	Pass	
Selenium	M22-Fe00688	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Fe00688	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Fe00688	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Fe00688	CP	mg/kg	220	230	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Fe00689	CP	mg/kg	< 5	< 5	<1	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
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Michael Morrison	Analytical Services Manager
Vivian Wang	Senior Analyst-Volatile (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Geo Pollution Management
17-20 Summer Lane
Ringwood
VIC 3134

Attention:	Karin Schwab
Report	859644-AID
Project Name	THOMASTOWN
Project ID	ESA3300
Received Date	Feb 02, 2022
Date Reported	Feb 09, 2022

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name THOMASTOWN
Project ID ESA3300
Date Sampled Jan 27, 2022 to Feb 01, 2022
Report 859644-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP1-1/TP1	22-Fe00667	Jan 27, 2022	Approximate Sample 569g Sample consisted of: Brown fine-grained clayey soil, cement, brick, organic debris and rocks	Chrysotile and amosite asbestos detected in fibre cement fragment. Approximate raw weight of asbestos containing material = 6.7g* Total estimated asbestos content in the sample = 1.0g* Total estimated asbestos concentration = 0.18% w/w* Organic fibre detected. No trace asbestos detected.
TP2-1/TP2	22-Fe00669	Jan 27, 2022	Approximate Sample 380g Sample consisted of: Brown fine-grained clayey soil, ceramic tile, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP3-1/TP3	22-Fe00670	Jan 27, 2022	Approximate Sample 333g Sample consisted of: Brown fine-grained clayey soil, brick, cement, organic debris and rocks	Chrysotile and crocidolite asbestos detected in fibre cement fragment. Approximate raw weight of asbestos containing material = 9.8g* Total estimated asbestos content in the sample = 1.5g* Total estimated asbestos concentration = 0.44% w/w* Organic fibre detected. No trace asbestos detected.
TP4-1/TP4	22-Fe00672	Jan 27, 2022	Approximate Sample 465g Sample consisted of: Brown fine-grained clayey soil, plaster, cement, ceramic tile and rocks	Chrysotile asbestos detected in fibre plaster material fragment. Approximate raw weight of asbestos containing material = 0.0082g* Total estimated asbestos content in the sample = 0.0012g* Total estimated asbestos concentration = 0.00026% w/w* No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP5-1/TP5	22-Fe00673	Jan 27, 2022	Approximate Sample 408g Sample consisted of: Brown fine-grained clayey soil, cement, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP6-1/TP6	22-Fe00674	Jan 28, 2022	Approximate Sample 488g Sample consisted of: Brown fine-grained clayey soil, fibre plaster cement material fragment, cement, organic debris and rocks	Chrysotile asbestos detected in fibre cement fragment. Chrysotile asbestos detected in loose fibre bundles. Approximate raw weight of asbestos containing material = 2.8g* Total estimated asbestos content in the sample = 0.28g* Total estimated asbestos concentration = 0.056% w/w* Organic fibre detected. No trace asbestos detected.
TP7-1/TP7	22-Fe00675	Jan 28, 2022	Approximate Sample 425g Sample consisted of: Brown fine-grained clayey soil, plaster, brick, cement, organic debris and rocks	Chrysotile asbestos detected in vinyl tile fragment. Approximate raw weight of asbestos containing material = 0.78g* Total estimated asbestos content in the sample = 0.016g* Total estimated asbestos concentration = 0.0037% w/w* No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP8-1/TP8	22-Fe00677	Jan 28, 2022	Approximate Sample 441g Sample consisted of: Brown fine-grained clayey soil, glass, ceramic tile, plaster,cement and rocks	Chrysotile asbestos detected in fibre cement fragment. Approximate raw weight of asbestos containing material = 2.5g* Total estimated asbestos content in the sample = 0.25g* Total estimated asbestos concentration = 0.058% w/w* Organic fibre detected. No trace asbestos detected.
TP9-1/TP9	22-Fe00678	Jan 28, 2022	Approximate Sample 520g Sample consisted of: Brown fine-grained clayey soil, fragments of plaster, brick, cement, organic debris and rocks	Chrysotile and amosite asbestos detected in fibre cement fragments. Chrysotile and amosite asbestos detected in the form of loose fibre bundles. Approximate raw weight of asbestos containing material = 37g* Total estimated asbestos content in the sample = 5.6g* Total estimated asbestos concentration = 1.1% w/w* Organic fibre detected. No trace asbestos detected.
TP10-1/TP10	22-Fe00680	Jan 28, 2022	Approximate Sample 394g Sample consisted of: Brown fine-grained clayey soil, brick, cement, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP11-1/TP11	22-Fe00681	Jan 31, 2022	Approximate Sample 503g Sample consisted of: Brown fine-grained clayey soil, brick, cement, wood chips, glass, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP12-1/TP12	22-Fe00682	Jan 31, 2022	Approximate Sample 713g Sample consisted of: Brown fine-grained clayey soil, ceramic tile, plaster, brick, cement, organic debris and rocks	Chrysotile asbestos detected in the form of loose fibre bundles. Approximate raw weight of asbestos containing material = 0.0016g* Total estimated asbestos content in the sample = 0.0016g* Total estimated asbestos concentration = 0.00022% w/w* No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP13-1/TP13	22-Fe00683	Feb 01, 2022	Approximate Sample 485g Sample consisted of: Brown fine-grained clayey soil, plaster, brick, cement, ceramic tile, organic debris and rocks	Chrysotile asbestos detected in fibre cement fragment. Approximate raw weight of asbestos containing material = 2.6g* Total estimated asbestos content in the sample = 0.26g* Total estimated asbestos concentration = 0.054% w/w* Organic fibre detected. No trace asbestos detected.
TP14-1/TP14	22-Fe00684	Feb 01, 2022	Approximate Sample 626g Sample consisted of: Brown fine-grained clayey soil, plaster, cement, brick, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP15-1/TP15	22-Fe00685	Feb 01, 2022	Approximate Sample 602g Sample consisted of: Brown fine-grained clayey soil, fragments of plaster, plastic, corroded metals, cement, brick and organic debris and rocks	Chrysotile asbestos detected in vinyl tile fragment. Chrysotile and crocidolite asbestos detected in fibre cement fragment. Approximate raw weight of asbestos containing material = 8.5g* Total estimated asbestos content in the sample = 1.7g* Total estimated asbestos concentration = 0.28% w/w* Organic fibre detected. No trace asbestos detected.
TP16-1/TP16	22-Fe00686	Feb 01, 2022	Approximate Sample 654g Sample consisted of: Brown fine-grained clayey soil, glass, brick, cew, ceramic tile, bitumen, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP17-1/TP17	22-Fe00687	Feb 01, 2022	Approximate Sample 483g Sample consisted of: Brown fine-grained clayey soil, brick, cement, metal, ceramic tile, organic debris and rocks	Chrysotile and crocidolite asbestos detected in fibre cement fragments. Approximate raw weight of asbestos containing material = 13g* Total estimated asbestos content in the sample = 1.9g* Total estimated asbestos concentration = 0.39% w/w* Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP18-1/TP18	22-Fe00688	Feb 01, 2022	Approximate Sample 538g Sample consisted of: Brown fine-grained clayey soil, fragments of plaster, brick, cement, ceramic tile, organic debris, organic debris, plastic and rocks	Chrysotile asbestos detected in fibre cement fragments. Approximate raw weight of asbestos containing material = 4.3g* Total estimated asbestos content in the sample = 0.43g* Total estimated asbestos concentration = 0.081% w/w* Organic fibre detected. No trace asbestos detected.
TP19-1/TP19	22-Fe00690	Feb 01, 2022	Approximate Sample 685g Sample consisted of: Brown fine-grained clayey soil, fragments of plaster, brick, cement, ceramic tile and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP20-1/TP20	22-Fe00691	Feb 01, 2022	Approximate Sample 600g Sample consisted of: Brown fine-grained clayey soil, plaster, brick, cement, glass and rocks	Chrysotile asbestos detected in fibre cement fragments. Approximate raw weight of asbestos containing material = 0.72g* Total estimated asbestos content in the sample = 0.072g* Total estimated asbestos concentration = 0.012% w/w* Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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
Asbestos - LTM-ASB-8020	Sydney	Feb 02, 2022	Indefinite

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Company Name: Geo Pollution Management
Address: 17-20 Summer Lane
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VIC 3134

Project Name: THOMASTOWN
Project ID: ESA3300

Order No.:
Report #: 859644
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 2, 2022 12:20 PM
Due: Feb 9, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Antimony	Asbestos - AS4964	Beryllium	Bifenthrin	Boron	Cobalt	HOLD	Manganese	Organophosphorus Pesticides	Triazines	Synthetic Pyrethroids*	Acid Herbicides	Moisture Set	Vic EPA 1828.2 Table 3 (Solids)
Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**														
1	TP1-1/TP1	Jan 27, 2022		Soil	M22-Fe00667	X	X	X	X	X	X		X	X	X	X	X	X	X
2	TP1-2	Jan 27, 2022		Soil	M22-Fe00668													X	X
3	TP2-1/TP2	Jan 27, 2022		Soil	M22-Fe00669	X	X	X	X	X	X		X	X	X	X	X	X	X
4	TP3-1/TP3	Jan 27, 2022		Soil	M22-Fe00670	X	X	X	X	X	X		X	X	X	X	X	X	X
5	TP3-2	Jan 27, 2022		Soil	M22-Fe00671													X	X
6	TP4-1/TP4	Jan 27, 2022		Soil	M22-Fe00672	X	X	X	X	X	X		X	X	X	X	X	X	X
7	TP5-1/TP5	Jan 27, 2022		Soil	M22-Fe00673	X	X	X	X	X	X		X	X	X	X	X	X	X
8	TP6-1/TP6	Jan 28, 2022		Soil	M22-Fe00674	X	X	X	X	X	X		X	X	X	X	X	X	X
9	TP7-1/TP7	Jan 28, 2022		Soil	M22-Fe00675	X	X	X	X	X	X		X	X	X	X	X	X	X

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Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
Mayfield Laboratory - NATA # 1261 Site # 25079																			
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External Laboratory																			
10	TP7-2	Jan 28, 2022		Soil	M22-Fe00676													X	X
11	TP8-1/TP8	Jan 28, 2022		Soil	M22-Fe00677	X	X	X	X	X	X		X	X	X	X	X	X	X
12	TP9-1/TP9	Jan 28, 2022		Soil	M22-Fe00678	X	X	X	X	X	X		X	X	X	X	X	X	X
13	TP9-2	Jan 28, 2022		Soil	M22-Fe00679													X	X
14	TP10-1/TP10	Jan 28, 2022		Soil	M22-Fe00680	X	X	X	X	X	X		X	X	X	X	X	X	X
15	TP11-1/TP11	Jan 31, 2022		Soil	M22-Fe00681	X	X	X	X	X	X		X	X	X	X	X	X	X
16	TP12-1/TP12	Jan 31, 2022		Soil	M22-Fe00682	X	X	X	X	X	X		X	X	X	X	X	X	X
17	TP13-1/TP13	Feb 01, 2022		Soil	M22-Fe00683	X	X	X	X	X	X		X	X	X	X	X	X	X
18	TP14-1/TP14	Feb 01, 2022		Soil	M22-Fe00684	X	X	X	X	X	X		X	X	X	X	X	X	X
19	TP15-1/TP15	Feb 01, 2022		Soil	M22-Fe00685	X	X	X	X	X	X		X	X	X	X	X	X	X
20	TP16-1/TP16	Feb 01, 2022		Soil	M22-Fe00686	X	X	X	X	X	X		X	X	X	X	X	X	X

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Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
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Perth Laboratory - NATA # 2377 Site # 2370																			
External Laboratory																			
21	TP17-1/TP17	Feb 01, 2022		Soil	M22-Fe00687	X	X	X	X	X	X		X	X	X	X	X	X	X
22	TP18-1/TP18	Feb 01, 2022		Soil	M22-Fe00688	X	X	X	X	X	X		X	X	X	X	X	X	X
23	TP18-2	Feb 01, 2022		Soil	M22-Fe00689													X	X
24	TP19-1/TP19	Feb 01, 2022		Soil	M22-Fe00690	X	X	X	X	X	X		X	X	X	X	X	X	X
25	TP20-1/TP20	Feb 01, 2022		Soil	M22-Fe00691	X	X	X	X	X	X		X	X	X	X	X	X	X
26	TP1-3	Jan 27, 2022		Soil	M22-Fe00692							X							
27	TP2-2	Jan 27, 2022		Soil	M22-Fe00693							X							
28	TP3-3	Jan 27, 2022		Soil	M22-Fe00694							X							
29	TP4-2	Jan 27, 2022		Soil	M22-Fe00695							X							
30	TP5-2	Jan 27, 2022		Soil	M22-Fe00696							X							
31	TP6-2	Jan 28, 2022		Soil	M22-Fe00697							X							

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Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
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External Laboratory																			
32	TP7-3	Jan 28, 2022		Soil	M22-Fe00698							X							
33	TP8-2	Jan 28, 2022		Soil	M22-Fe00699							X							
34	TP9-3	Jan 28, 2022		Soil	M22-Fe00700							X							
35	TP10-2	Jan 28, 2022		Soil	M22-Fe00701							X							
36	TP11-2	Jan 31, 2022		Soil	M22-Fe00702							X							
37	TP12-2	Jan 31, 2022		Soil	M22-Fe00703							X							
38	TP13-2	Feb 01, 2022		Soil	M22-Fe00704							X							
39	TP14-2	Feb 01, 2022		Soil	M22-Fe00705							X							
40	TP15-2	Feb 01, 2022		Soil	M22-Fe00706							X							
41	TP16-2	Feb 01, 2022		Soil	M22-Fe00707							X							
42	TP17-2	Feb 01, 2022		Soil	M22-Fe00708							X							

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Melbourne Laboratory - NATA # 1261 Site # 1254						X		X	X	X	X	X	X	X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217							X												
Brisbane Laboratory - NATA # 1261 Site # 20794																			
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External Laboratory																			
43	TP18-3	Feb 01, 2022		Soil	M22-Fe00709							X							
44	TP19-2	Feb 01, 2022		Soil	M22-Fe00710							X							
45	TP20-2	Feb 01, 2022		Soil	M22-Fe00711							X							
Test Counts						20	20	20	20	20	20	20	20	20	20	20	20	25	25

Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).
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.

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (**% w/w**)
F/fld	Airborne fibre filter loading as Fibres (**N**) per Fields counted (**n**)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (**C**)
g, kg	Mass, e.g. of whole sample (**M**) or asbestos-containing find within the sample (**m**)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (**V** = **r** x **t**)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (**r**)
min	Time (**t**), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right)$

Asbestos Content (as asbestos): $\%\, w/w = \frac{(m \times P_A)}{M}$

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A)_x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 *Appendix 2*, else assumed to be 15% in accordance with WA DOH *Appendix 2* (**P_A**).
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (**% w/w**).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
HSG248	UK HSE HSG248, *Asbestos: The Analysts Guide*, 2nd Edition (2021).
HSG264	UK HSE HSG264, *Asbestos: The Survey Guide* (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (**K**) as derived from the effective filter area of the given AFM membrane used for collecting the sample (**A**) and the projected eyepiece graticule area of the specific microscope used for the analysis (**a**).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC:3003(2005)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (updated 2021), including Appendix Four: *Laboratory analysis*
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (**$\%_{WA}$**).

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

Asbestos Counter/Identifier:

Chamath JHM Annakkage	Senior Analyst-Asbestos (NSW)

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Geo Pollution Management
17-20 Summer Lane
Ringwood
VIC 3134

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Karin Schwab**

Report **865210-L**
Project name THOMASTOWN
Project ID ESA3300
Received Date Feb 21, 2022

Client Sample ID			**TP1-1/TP1**	**TP9-1/TP9**	**TP13-1/TP13**	**TP16-1/TP16**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Fe42274**	**M22-Fe42275**	**M22-Fe42276**	**M22-Fe42277**
Date Sampled			**Feb 01, 2022**	**Feb 01, 2022**	**Feb 01, 2022**	**Feb 01, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	-	-	-
Acenaphthylene	0.001	mg/L	< 0.001	-	-	-
Anthracene	0.001	mg/L	< 0.001	-	-	-
Benz(a)anthracene	0.001	mg/L	< 0.001	-	-	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	-	-	-
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	-	-	-
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	-	-	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	-	-	-
Chrysene	0.001	mg/L	< 0.001	-	-	-
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	-	-	-
Fluoranthene	0.001	mg/L	< 0.001	-	-	-
Fluorene	0.001	mg/L	< 0.001	-	-	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	-	-	-
Naphthalene	0.001	mg/L	< 0.001	-	-	-
Phenanthrene	0.001	mg/L	< 0.001	-	-	-
Pyrene	0.001	mg/L	< 0.001	-	-	-
Total PAH*	0.001	mg/L	< 0.001	-	-	-
2-Fluorobiphenyl (surr.)	1	%	109	-	-	-
p-Terphenyl-d14 (surr.)	1	%	119	-	-	-
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.5	5.8	6.0	5.3
Heavy Metals						
Lead	0.01	mg/L	-	-	0.01	-
Nickel	0.01	mg/L	-	0.01	-	-
Zinc	0.01	mg/L	-	-	-	0.25

Client Sample ID			TP19-1/TP19
Sample Matrix			**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Fe42278**
Date Sampled			**Feb 01, 2022**
Test/Reference	LOR	Unit	
AUS Leaching Procedure			
Leachate Fluid[C01]		comment	1.0
pH (initial)	0.1	pH Units	N/A
pH (Leachate fluid)	0.1	pH Units	5.1
pH (off)	0.1	pH Units	5.4
Heavy Metals			
Mercury	0.001	mg/L	< 0.001

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

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
Polycyclic Aromatic Hydrocarbons	Melbourne	Feb 22, 2022	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
AUS Leaching Procedure			
pH (initial)	Melbourne	Feb 22, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Feb 22, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Feb 22, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Heavy Metals	Melbourne	Feb 22, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

eurofins | Environment Testing

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Company Name: Geo Pollution Management
Address: 17-20 Summer Lane
Ringwood
VIC 3134

Project Name: THOMASTOWN
Project ID: ESA3300

Order No.: 1013-2
Report #: 865210
Phone: 9879 6618
Fax: 9879 6226

Received: Feb 21, 2022 12:07 PM
Due: Feb 28, 2022
Priority: 5 Day
Contact Name: Karin Schwab

Eurofins Analytical Services Manager : Michael Morrison

Sample Detail						Lead	Mercury	Nickel	Zinc	Polycyclic Aromatic Hydrocarbons	AUS Leaching Procedure
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217											
Brisbane Laboratory - NATA # 1261 Site # 20794											
Mayfield Laboratory - NATA # 1261 Site # 25079											
Perth Laboratory - NATA # 2377 Site # 2370											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	TP1-1/TP1	Feb 01, 2022		AUS Leachate - pH 5.0	M22-Fe42274					X	X
2	TP9-1/TP9	Feb 01, 2022		AUS Leachate - pH 5.0	M22-Fe42275			X			X
3	TP13-1/TP13	Feb 01, 2022		AUS Leachate - pH 5.0	M22-Fe42276	X					X
4	TP16-1/TP16	Feb 01, 2022		AUS Leachate - pH 5.0	M22-Fe42277				X		X
5	TP19-1/TP19	Feb 01, 2022		AUS Leachate - pH 5.0	M22-Fe42278		X				X
Test Counts						1	1	1	1	1	5

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
9. 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 SRA.

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.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
µg/L: micrograms per litre
ppm: parts per million
ppb: parts per billion
%: Percentage
org/100 mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
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.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

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%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

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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 that 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. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. 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									
Heavy Metals									
Lead			mg/L	< 0.01			0.01	Pass	
Mercury			mg/L	< 0.001			0.001	Pass	
Nickel			mg/L	< 0.01			0.01	Pass	
Zinc			mg/L	< 0.01			0.01	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Heavy Metals				Result 1					
Nickel	M22-Fe44511	NCP	%	129			75-125	Fail	Q08
Spike - % Recovery									
Heavy Metals				Result 1					
Lead	M22-Fe44511	NCP	%	105			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Zinc	M22-Fe44511	NCP	%	107			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Mercury	M22-Fe44511	NCP	%	94			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	M22-Fe21571	NCP	mg/L	0.002	0.002	2.0	30%	Pass	
Fluorene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	M22-Fe21571	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	M22-Fe21571	NCP	mg/L	0.003	0.002	20	30%	Pass	
Pyrene	M22-Fe21571	NCP	mg/L	0.001	0.002	12	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	M22-Fe44511	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Lead	M22-Fe44511	NCP	mg/L	0.06	0.06	5.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Zinc	M22-Fe44511	NCP	mg/L	0.62	0.67	9.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury	M22-Fe44511	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Comments

Eurofins | Environment Testing accreditation number 1261, site 18217 is currently in progress of a controlled transition to a new custom built location at 179 Magowar Road, Girraween, NSW 2145. All results on this report denoted as being performed by Eurofins | Environment Testing Unit F3, Building F, 16 Mars road, Lane Cove West, NSW 2066, corporate site 18217, will have been performed on either Lane Cove or new Girraween site

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
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
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Michael Morrison	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

APPENDIX F

FIELD METHODS AND QUALITY ASSURANCE / QUALITY CONTROL

FIELD METHODS AND QUALITY ASSURANCE / QUALITY CONTROL

1. Drilling of Boreholes and Soil Sampling

Test pits were dug with an 18 tonne excavator. Shallow samples from test pits (max. sampling depth of 700mm in natural soil) were collected using a hand auger or pick hammer, following the removal of outermost (disturbed) surfaces.

No pavements were penetrated at any of the twenty test pits. Upon termination of testing and sampling, each test pit was backfilled with spoil to surrounding surface levels.

All samples for NEPM and EPA analyte screen testing were collected as 'zero-headspace samples', i.e. the jars were filled to capacity leaving no or minimal air gaps (subject to soil consistency). They were sealed with a teflon-lined plastic screw cap in order to minimise oxidation, loss through evaporation and potential interference from plastic additives.

In addition, grab samples were also collected in plastic bags for identification of presence/absence of asbestos fibres.

Soil samples were labelled as shown below.

Sample Identification

Sample Number	Identification
Test Pits	
TP1-1 & TP20-1	Test Pit No. TP1 & to No. TP20 – Sampled on 27th January to 1st February, 2022 - First Sample Collected

2. Sample Dispatch and NATA Laboratory

Samples were cooled on ice following collection and during transport to our Ringwood office where they were refrigerated at 4 °C until dispatch on the next possible working day after completion of the sampling program. Sample dispatch followed chain of custody procedures. A copy of the combined chain of custody and analysis request form is attached as Appendix D. Samples not chosen for individual analysis were placed in storage by the laboratory for possible future analysis.

Chemical analysis was carried out on a standard turnaround by the NATA accredited analytical laboratory of Eurofins Environment Testing, Dandenong South (refer to Appendix E). Laboratory-internal quality control data (duplicates, blanks and spike, recovery, analyses) are included in the Eurofins report. Further details on laboratory QA/QC are provided below.

3. Internal Laboratory Quality Control

Internal laboratory quality control testing was performed as follows:

Duplicates	- 10% of all samples
Blanks -	- 1 per batch of samples analysed
Spikes	- Duplicates with known spikes. Metals: Spike added to acid digest. Organic compounds: Spike added to soil prior to extraction.
Standards	- Instrument calibration standards as required by NATA.

Collection of field duplicate samples for external quality control checks was not required for the purpose of this initial investigation.

QA/QC procedures were adopted out to ensure that the data, as far as possible, were accurate, precise (repeatable and reproducible) and representative. The methods employed were in compliance with the National Environment Protection *(Assessment of Site Contamination)* Measure 2013 Schedule B (3) *Guideline on Laboratory Analysis of Potentially Contaminated Soils* (NEPC 2013). Surrogate recoveries are not considered in the following evaluation.

Eurofins Report No. 859644-S and 859644-AID

Most matrix spike recoveries performed by the laboratory were within the laboratory's acceptance limits appropriate for the respective analytes (varying between 70 to 130%, 75-125% and 30-130%).

- A single spike recovery for fluoride failed the internal acceptance criteria. The laboratory commented that the non-compliance was due to matrix interference (last page of report). An acceptable recovery was obtained for the laboratory control sample (LCS).

Most duplicate RPD's tests conducted showed variations above 30%. Several duplicate variations (RPD%) were outside of the standard acceptance criteria, including:

- RPD variations between duplicate tests of five TRH fractions varied by between 36 and 82%, and the RPD variation of fluoride varied by 79% in another duplicate pair. The laboratory commented that the internal QC acceptance criteria were still met for these RPD variations.

None of the blank samples showed any detections.

Eurofins Report No. 865210-L

Most matrix spike recoveries performed by the laboratory were within the laboratory's acceptance limits appropriate for the respective analytes (varying between 70 to 130%, 75-125% and 30-130%).

- A single spike recovery for nickel failed the internal acceptance criteria. The laboratory commented that the non-compliance was due to matrix interference (last page of report). An acceptable recovery was obtained for the laboratory control sample (LCS).

All duplicate RPD's tests conducted showed variations above 30%.

None of the blank samples showed any detections.

4. Conclusions

Most spike recoveries, most duplicate variations and all blank analyses were in compliance with the QA/QC guidelines.

- Whilst several spike recoveries (for the anion fluoride, certain TRH fractions and nickel) failed the laboratory's acceptance criteria, this was deemed to be caused by matrix interference. Acceptable recoveries were obtained for the laboratory control samples (LCS).
- The elevated duplicate variation for fluoride was deemed to be within the laboratory's acceptance criteria.

Subsequently, the soil data quality results are considered to adequately validate the routine results as being representative of true sample concentrations. The data quality is deemed acceptable.