ENVIRONMENTAL ASSESSMENT

5, 20, 25 & 30 Ormond Street,
Bannockburn

Prepared for
TGM GROUP PTY LTD

Environmental
Site Assessments

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1.0 EXECUTIVE SUMMARY

1.1 Background

Ministerial Direction No. 1 – Potentially Contaminated Land ('Direction No. 1') requires planning authorities when preparing planning scheme amendments, to satisfy themselves that the environmental conditions of land proposed to be used for a sensitive use (defined as residential, child-care centre, pre-school centre or primary school), agriculture or public open space are, or will be, suitable for that use.

The planning system is the primary means for regulating land use and approving development and is an important mechanism for triggering the consideration of potentially contaminated land.

Potentially contaminated land is defined in Ministerial Direction No. 1 – Potentially Contaminated Land, as land used or known to have been used for industry, mining or the storage of chemicals, gas, wastes or liquid fuel (if not ancillary to another use of land). This practice note also deals with land that may have been contaminated by other means such as by ancillary activities, contamination from surrounding land, fill using contaminated soil or agricultural uses.

Contamination of land is often a result of current or historical activities that have taken place at a site, or adjacent to it. To identify the potential for contamination, the following steps may assist:

- Consider any available information about the site:
- The current and previous zoning, ownership or activities carried out on the site (for example council, rail, other utility or defence); and
- Any potential contamination from surrounding land uses (for example, an adjacent service station known to be causing off-site contamination).
- Inspect the site. Observations should be made regarding evidence of contamination or historical activities that may give rise to contamination (for example, fuel tanks).

This Environmental Assessment will cover the previously mentioned criteria and also provide a conclusion regarding the likely contamination status of the site.

1.2 Environmental Assessment Conclusions

Conclusions	There is a Low likelihood of chemical contamination of soil in the paddocks due to application of fertilisers and/or herbicides. There is a Low likelihood of contamination of soil at the site due to other chemicals. There is a Low likelihood of contamination of soil at the site due to industrial waste. There is a Low probability of occurrence of Acid Sulfate soils on site. The site is surrounded by low risk properties. There is no apparent soil staining, soil discolouration or odours at the site. There is no apparent asbestos contamination. There is no apparent Prescribed Industrial Waste or Putrescible Waste. There is no apparent imported fill on site.
Risk of Contamination	Based on all available information, this soil at the site has a Low risk of contamination. All soils analysed were BELOW the upper thresholds for NEPM HIL A, HSL A/B, ESLs (Urban Residential) and Management Limits (Residential/Parkland). They are therefore considered suitable for conventional residential purposes.

2.0 INTRODUCTION, OBJECTIVES, SCOPE OF WORKS

2.1 Introduction

Environmental Site Assessments Pty Ltd ('ESA') was engaged by TGM Group Pty Ltd (the 'Client') to undertake an Environmental Assessment including a limited soil sampling program at 5, 20, 25 & 30 Ormond Street Bannockburn (the 'Site'). Currently, the site consists of four houses and associated garage buildings, sheds, one former vineyard and several vacant paddocks.

2.2 Project Objective

The purpose of the environmental assessment is to establish:

- Whether known previous or current land uses may have caused contamination on the site; and
- What the contaminants of concern are likely to be and where they are located.

2.3 Scope of Works

Environmental Site Assessments provided the following services as part of the scope of works:

- A physical site inspection noting areas of potential contamination;
- The collection of targeted and grid-based soil samples;
- Analysis of soil samples for contaminants of potential concern; and
- Preparation of a report which summarises the likely contamination status of the site.

3.0 THE SITE

The site is zoned as Farming Zone ('FZ') and is located in Bannockburn. Currently, the site consists of vacant paddocks, one paddock containing unused grapevines, four houses and garages, and 8 sheds of varying sizes. The soil profile was checked at forty-five points across the site and there was no indication of chemical or other contamination.

3.1 Potential Contaminants of Concern

According to AS4482.1[1], the site has the following potential contaminants of concern due to its previous land uses:

- Fertilisers – Copper, Cadmium;
- Herbicides – Arsenic, Mercury, Organochlorines, Organophosphates; and
- Fuels/Oils – Hydrocarbons, Metals.

There were no instances of Asbestos Containing Material ('ACM') observed on site.

4.0 SITE INSPECTION

4.1 Land Parcel Site Inspection Details	
Date and Time of Inspection	30 April 2018, 09:00
Weather Conditions	Fine and sunny
Current Site Use	Agistment.
Previous Site Uses	Farming, Agistment.
Site Coverage incl. condition and type of ground cover, e.g. bare ground, asphalt, concrete, gravel, etc.	The site is predominantly comprised of paddocks with grass, and some established trees. One paddock contained grapevines. Gravel was present on residential driveways. No soil staining or odours were apparent.
Current Adjacent Land Uses incl. the apparent condition of adjacent properties	Residential/Farming. All properties appear to be in good condition.
Details of Structures on site incl. location and condition of all visible features, including foundations, positions of former buildings, tanks, pits, wells, drains and bores.	Water tanks were present in the vicinity of the residential buildings at 5 and 30 Ormond Street. Each property had at least one shed, ranging in size from a small garden shed to large farming shed. All sheds were located in proximity to the residential buildings on each property.

[1] AS 4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil - Non-volatile and Semi-Volatile compounds

Process Details (in relation to current site use)	There are currently no processes on site.
Details of Chemical use incl. chemical storage and transfer areas, including the presence of waste or chemical containers	Chemical signs were present on a shed at 5 Ormond Road. One paddock on this property contains grapevines. These signs would likely refer to pesticides used on the vineyard.
Presence of above ground storage tanks	Water tanks were present in the vicinity of the residential buildings at 5 and 30 Ormond Street.
Presence of underground storage tanks	Nil apparent.
Presence of septic tanks	Nil apparent.
Details of waste handling	Nil apparent.
Evidence of burning of burying of waste	Nil apparent.
Spill Incidents	Nil apparent.
Spill control systems, e.g. bund (materials of construction should be noted)	Nil apparent.
Locations of dispensing or fill points	Nil apparent.
Evidence of Fill Materials	Nil apparent.
Evidence of Scrap and industrial or chemical waste	Nil apparent.
Evidence of settlement, subsidence and disturbed ground	Nil apparent.
Evidence of on site or adjacent cut and fill activities or quarrying	Nil apparent.
Evidence of Contamination (discoloured soil, polluted water, affected plant growth)	Nil apparent.
Potential Asbestos containing material	Nil apparent.
Animal populations	Horses, ponies, rabbits.
Significant odours	Nil apparent.
Assessment of soil loss or deposition that has occurred in the past and evaluation of the future erosion potential	Nil apparent.
Transformers	Nil apparent.

4.2 Site Inspection Conclusions and Recommendations

Conclusions	There is a Medium likelihood of chemical contamination of surface soils in the paddocks due to application of fertilisers and/or herbicides. There is a Medium likelihood of chemical contamination of surface soils in the vicinity of the small buildings. There is a Low likelihood of contamination of soil at the site due to industrial waste. There is a Low probability of occurrence of Acid Sulfate soils on site. The site is surrounded by low risk properties.

	There is no apparent soil staining, soil discolouration or odours at the site. There is no apparent asbestos contamination. There is no apparent Prescribed Industrial Waste or Putrescible Waste. There is no apparent imported fill on site.
Risk of Contamination	Based on information collected to this point, soils at the site have a Low-Medium risk of contamination.
Recommendations	Surface soil samples from the paddocks are required to discount impacts due to fertiliser/herbicide contamination. Additional samples of soil are required to be collected from around the small buildings. These would be the likely areas where chemical/hydrocarbon impacts would be found due to vehicle traffic and potential capacity for fuel/oil/chemical storage.

5.0 SOIL SAMPLING PROGRAM

This sampling program was undertaken on site on the 30th of April, 2018. Samples were collected by ESA staff from the surface soils (0-0.15m BGL) by hand auger. The auger was cleaned between samples with phosphate free detergent and rinsed with deionised water. The approximate sampling points for the site are shown in **Appendix 1**.

Table 5.0 illustrates the samples that were collected. The samples that were collected consisted of SANDY SILT: Low Plasticity, Brown, Fine Grains, Dry.

A Photoionisation Detector ('PID') was employed to screen samples for Volatile Organic Compounds ('VOC'). The following methodology was employed:

- A sample of soil was carefully collected with minimal disturbance that could cause loss of volatile constituents;
- The sample was immediately extruded into a plastic bag and sealed;
- The sealed bag containing the sample was crushed between the fingers to disperse the sample and release volatile constituents;
- The inlet tube of the PID was then inserted through a small opening in the bag into the headspace over the sample; and
- The PID response (in ppm) was measured within 2-3 seconds and the result recorded on the field form.

The PID calibration form is attached as **Appendix 2.**

Table 5.0

Sample ID	Sampling Point	Depth of Sample (m BGL)	Lab Analysis	PID (PPM)/Odour
SP01/0-0.15	SP01	0-0.15	NEPM Suite*	0.0/Nil
SP02/0-0.15	SP02	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP03/0-0.15	SP03	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP04/0-0.15	SP04	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP05/0-0.15	SP05	0-0.15	NEPM Suite*	0.0/Nil
SP06/0-0.15	SP06	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil

Sample ID	Sampling Point	Depth of Sample (m BGL)	Lab Analysis	PID (PPM)/Odour
SP07/0-0.15	SP07	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP08/0-0.15	SP08	0-0.15	NEPM Suite*	0.0/Nil
SP09/0-0.15	SP09	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP10/0-0.15	SP10	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP11/0-0.15	SP11	0-0.15	NEPM Suite*	0.0/Nil
SP12/0-0.15	SP12	0-0.15	NEPM Suite*	0.0/Nil
SP13/0-0.15	SP13	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP14/0-0.15	SP14	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP15/0-0.15	SP15	0-0.15	NEPM Suite*	0.0/Nil
SP16/0-0.15	SP16	0-0.15	NEPM Suite*	0.0/Nil
SP17/0-0.15	SP17	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
QC06	SP17	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
QC07	SP17	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP18/0-0.15	SP18	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP19/0-0.15	SP19	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP20/0-0.15	SP20	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP21/0-0.15	SP21	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP22/0-0.15	SP22	0-0.15	NEPM Suite*	0.0/Nil

Sample ID	Sampling Point	Depth of Sample (m BGL)	Lab Analysis	PID (PPM)/Odour
SP23/0-0.15	SP23	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP24/0-0.15	SP24	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP25/0-0.15	SP25	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP26/0-0.15	SP26	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP27/0-0.15	SP27	0-0.15	NEPM Suite*	0.0/Nil
SP28/0-0.15	SP28	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP29/0-0.15	SP29	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP30/0-0.15	SP30	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP31/0-0.15	SP31	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP32/0-0.15	SP32	0-0.15	NEPM Suite*	0.0/Nil
SP33/0-0.15	SP33	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP34/0-0.15	SP34	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
SP35/0-0.15	SP35	0-0.15	OC/OP Pesticides including Dieldrin and 15 Metals**	0.0/Nil
TP01/0-0.15	TP01	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP02/0-0.15	TP02	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP03/0-0.15	TP03	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP04/0-0.15	TP04	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP05/0-0.15	TP05	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil

Sample ID	Sampling Point	Depth of Sample (m BGL)	Lab Analysis	PID (PPM)/Odour
TP06/0-0.15	TP06	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP07/0-0.15	TP07	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
QC08	TP07	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
QC09	TP07	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP08/0-0.15	TP08	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP09/0-0.15	TP09	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil
TP10/0-0.15	TP10	0-0.15	TRH C6-C40, 15 Metals**	0.0/Nil

* = 15 Metals including As, Ba, Be, B, Cd, Cr, Co, Cu, Hg, Mn, Ni, Pb, Se V, Zn, TRH (C6-C36 or 40) / BTEXN, PAH/Phenols (16 PAHs & 12 Phenols), OC/OP Pesticides Including Triazine, Pesticides (Atrazine) and Bifenthrin, PCB, Cyanide – WAD, Chromium – Hexavalent (Alkaline Leach)

** = 15 Metals including As, Ba, Be, B, Cd, Cr, Co, Cu, Hg, Mn, Ni, Pb, Se V, Zn

The following sections describe the guidelines, standards and investigation methods adopted for the soil sampling program.

5.1 Relevant Guidelines and Standards

The sampling program was undertaken in accordance with the following guidelines, standards and policies:

- Australia Standard (AS 4482.1) - Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 1: Non-volatile and Semi-volatile compounds (Standards Australia, 2005);
- Australia Standard (AS 4482.2) - Guide to the Sampling and Investigation of Potentially Contaminated Soil, Part 2: Volatile Substances (Standards Australia, 1999);
- National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended); and
- State Environment Protection Policy (Prevention and Management of Contamination of Land) No. S95, EPA Victoria, June 2002.

5.2 Quality Assurance / Quality Control

5.2.1 Environmental Site Assessments Quality Assurance ('QA') Program

Environmental Site Assessments has developed and implemented a Quality Assurance Program in general accordance with the following guidelines:

- Australia Standard (AS 4482.1) - Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 1: Non-volatile and Semi-volatile compounds (Standards Australia, 2005); and
- National Environment Protection Council (NEPC) - National Environment Protection (Assessment of Site Contamination) Measure (NEPM) - Schedule B3 Guideline on Laboratory Analysis of Potentially Contaminated Soils, 1999 (Amended).

As part of the Quality Assurance Program, Environmental Site Assessments ensures that the following methodology is employed:

- The use of appropriately qualified and trained environmental scientists to perform intrusive works;
- The use of standardised field sheets to record the findings of the site investigations;
- The collection and analysis of Quality Control samples as per AS 4482.1;
- The use of Chain of Custody procedures to ensure that sample integrity is maintained through the transport and handling stages; and
- Only using NATA accredited laboratories for the analysis of samples collected during the investigation activities.

As per the Environmental Site Assessments Quality Assurance Program, the following data quality indicators were used for the assessment of the laboratory analytical data:

- All sample analysis to be conducted using NATA registered methods in accordance with NEPM 1999 (Amended) guidelines;
- Laboratory method blank analysis required to be below the Limit of Reporting (LOR); and
- Surrogate compound concentrations required to be spiked at similar concentration to sample result.

5.2.2 Environmental Site Assessments Quality Control ('QC') Program

The overall precision of field quality control samples, laboratory split samples and laboratory duplicates is generally assessed by their Relative Percentage Difference (RPD), given by:

$$\frac{(C1 - C2)\ x\ 100}{\frac{(C1 + C2)}{2}}$$

Where:

C1 is the primary sample concentration.

C2 is the duplicate sample concentration.

The Relative Percentage Difference (RPD) of duplicated analysis were calculated and compared to the following criteria for acceptability. The acceptance criteria are listed in AS4482.1 (2005):

- Less than 30-50% for field duplicates (blind replicate and split samples);
- Less than 30% for laboratory duplicates where the detection is less than 10 times the LOR;
- Less than 20% for laboratory duplicates where the detection is greater than 10 times the LOR;
- RPDs for control spike duplicates will be compared to an acceptable limit of 20%;
- RPDs for matrix spike duplicates will be compared to an acceptable limit of 20%; and
- Percentage recoveries of control spikes and matrix spikes will be compared to an acceptable range of 70% – 130%. Where this range is exceeded, reference to the laboratories internal data quality objective limits will be made. In addition, percentage recoveries of surrogates will also be compared to the USEPA surrogate recovery limits.

5.2.3 Sample Documentation

All samples collected were labelled in a clear and precise way for proper identification in the field and for tracking in the laboratory.

The samples had identifiable and unique numbers. The sample labels contained the following information:

- Company name;
- Name of sampler;
- Sample ID; and
- Date/Time sample was collected.

Chain-of-custody forms were used to document sample collection and transport to laboratories for analysis. All sample transports for analysis were accompanied by a chain-of-custody form.

The chain-of-custody forms identified the contents of each transport and maintained the custodial integrity of the samples. The coolers in which samples were stored were sealed with self-adhesive custody seals. All custody seals were signed.

5.2.4 Packaging and Transport

All sample containers were placed in a plastic cooler. The following outlines the packaging procedures that were followed for samples:

- When ice was used, it was packed in zip-locked, double plastic bags. The drain plug of the cooler was sealed with fiberglass tape to prevent melting ice from leaking out of the cooler;
- The bottom of the cooler was lined with bubble wrap to prevent breakage during transport;
- All glass sample containers were enclosed in bubble wrap to prevent breakage;
- Where required, empty space in the cooler was filled with bubble wrap to prevent movement and breakage during transport;
- Ice used to cool samples was placed on top and around the samples to chill them to the correct temperature; and
- Each cooler was securely taped shut with signed custody seals.

5.2.5 Field Notes

The following information was recorded during the collection of each sample:

- Sample location and description;
- Sampling area sketch showing sample location and measured distances (where required);

- Sampler's name(s);
- Date and time of sample collection;
- Sample ID;
- Type of soil/material encountered (Fill, Natural etc.);
- PID readings;
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odours, colours etc.);
- Soil descriptions as per AS1726-1993; and
- Sample preservation details.

In addition to the sampling information, the following specific information was also recorded in the field logbook:

- Team members and their responsibilities;
- Time of arrival/entry on site and time of site departure;
- Other personnel on site;
- Summary of any meetings or discussions;
- Deviations from sampling plans;
- Changes in personnel and responsibilities with reasons for the changes; and
- Calibration readings for any equipment used and equipment model and serial number.

5.3 Results of Analysis

Investigation levels and **screening levels** are the concentrations of a contaminant above which further appropriate investigation and evaluation will be required.

Investigation and screening levels provide the basis of Tier 1 risk assessment. A Tier 1 assessment is a risk-based analysis comparing site data with generic investigation and screening levels for various land uses to determine the need for further assessment or development of an appropriate management strategy. The application of investigation and screening levels is subject to a range of limitations.

Health investigation levels ('HILs') have been developed for a broad range of metals and organic substances. The HILs are applicable for assessing human health risk via all relevant pathways of exposure. The HILs are generic to all soil types and apply generally to a depth of 3m below the surface for residential use. Site-specific conditions should determine the depth to which HILs apply for other land uses.

Health screening levels ('HSLs') have been developed for selected petroleum compounds and fractions and are applicable to assessing human health risk via the inhalation and direct contact pathways. The HSLs depend on specific soil physicochemical properties, land use scenarios, and the characteristics of building structures. They apply to different soil types, and depths below surface to >4m.

Ecological screening levels ('ESLs') have been developed for selected petroleum hydrocarbon compounds and total petroleum hydrocarbon (TPH) fractions and are applicable for assessing risk to terrestrial ecosystems. ESLs broadly apply to coarse- and fine-grained soils and various land uses. They are generally applicable to the top 2m of soil.

Petroleum hydrocarbon management limits (**'management limits'**) are applicable to petroleum hydrocarbon compounds only. They are applicable as screening levels following evaluation of human health and ecological risks and risks to groundwater resources. They are relevant for operating sites where significant sub-surface leakage of petroleum compounds has occurred and when decommissioning industrial and commercial sites.

The laboratories used for conducting the soil analysis were Australian Laboratory Services Pty Ltd ('ALS') and Eurofins MGT ('MGT'). Both ALS and MGT are NATA certified for the analysis undertaken.

The comparison tables for laboratory results are attached in **Appendix 3**. All chain of custody forms, certificates of analysis and laboratory QA/QC documents are in **Appendix 4.** The laboratory report number is EM1716327.

The laboratory results were compared with NEPM 1999 (Amended) guidelines for HIL A, HSL A/B, ESLs (Urban Residential) and Management Limits (Residential/Parkland).

<u>The comparison results were as follows:</u>

- There were no results in excess of NEPM HIL A, HSL A/B, ESLs (Urban Residential) and Management Limits (Residential/Parkland) upper thresholds.

5.4 Laboratory QA/QC

As part of their NATA accreditation, ALS and MGT perform internal duplicate analysis of samples for comparison of results to demonstrate precision. Laboratory standards including matrix spike samples, laboratory control samples and surrogates are also conducted as a basis to demonstrate accuracy. In addition, internal laboratory blank samples are run to assess the potential for laboratory equipment errors. The laboratory QA/QC results are attached in **Appendix 4.**

5.4.1 ALS Environmental Laboratory

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outlier occurred.
- For all matrices, no Surrogate Recovery outliers occur.

5.4.2 Eurofins MGT Laboratory

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outlier occurred.
- For all matrices, no Surrogate Recovery outliers occur.

5.4.3 Sample Holding Times and Sample Receipt Temperature

Sample holding times were within acceptable ranges from collection to extraction. The documented temperature of samples upon receipt at the respective laboratory was within an acceptable range.

5.4.4 Conclusion

A review of the laboratory reports indicates that ALS and MGT have met their internal acceptance criteria for the quality control samples.

5.5 Field Quality Control Samples

5.5.1 Blind Replicate and Split samples

The relative percentage difference was calculated for the blind (QC06 and QC08) and split samples (QC07 and QC09). The comparison table is attached to **Appendix 3.** There were two RPDs (Manganese and Zinc) for the split sample QC09 that were greater than 50%. This was likely due to the difference in interlab testing methodology and will not affect the outcome of this investigation.

5.5.2 Trip, Field and Rinsate Blanks

Trip blanks (QC01, QC02, QC03 & QC04) evaluate if the transport and handling procedures are introducing contaminants into the samples, and if cross contamination in the form of VOC migration has occurred between the collected samples. Field blanks (QC05) evaluate whether contaminants have been introduced into the samples during the sampling due to contamination from sample containers. Equipment rinsate blanks (QC10) evaluate field sampling and decontamination procedures.

Analysis of these Quality Control samples indicate that transport and handling, sample containers and decontamination procedures have not resulted in cross-contamination of the collected soil samples. The table of results is attached in **Appendix 3.**

6.0 CONCLUSION OF ENVIRONMENTAL ASSESSMENT

Conclusions	There is a Low likelihood of chemical contamination of soil in the paddocks due to application of fertilisers and/or herbicides. There is a Low likelihood of contamination of soil at the site due to other chemicals. There is a Low likelihood of contamination of soil at the site due to industrial waste. There is a Low probability of occurrence of Acid Sulfate soils on site. The site is surrounded by low risk properties. There is no apparent soil staining, soil discolouration or odours at the site. There is no apparent asbestos contamination. There is no apparent Prescribed Industrial Waste or Putrescible Waste. There is no apparent imported fill on site.
Risk of Contamination	Based on all available information, this soil at the site has a Low risk of contamination.

	All soils analysed were BELOW the upper thresholds for NEPM HIL A, HSL A/B, ESLs (Urban Residential) and Management Limits (Residential/Parkland). They are therefore considered suitable for conventional residential purposes.

7.0 REFERENCES

- Ministerial Direction No. 1 – Potentially Contaminated Land ('Direction No. 1')
- Environment Protection Authority of Victoria. Priority Sites Register. http://www.epa.vic.gov.au/your-environment/land-and-groundwater/~/media/Files/land/docs/PSRaccessregister.pdf
- Environment Protection Authority of Victoria issued certificates and statements of environmental audits. http://www.epa.vic.gov.au/our-work/environmental-auditing/53v-reports-certificates-statements-of-environmental-audit
- National Environment Protection Council 1999 (As Amended) - National Environment Protection (Assessment of Site Contamination) Measure – Guideline on Investigation Levels for Soil and Groundwater.
- Standards Australia. 2005. AS 4482.1, Guide to the sampling and investigation of potentially contaminated soil, Part 1: Non-volatile compounds. Standards Association of Australia
- Standards Australia. 1999. AS4482.1, Guide to the sampling and investigation of potentially contaminated soil Part 2: Volatile substances. Standards Association of Australia
- Australian Soil Resource Information System (ASRIS), CSIRO Australia 2006, http://www.asris.csiro.au/index_ie.html#
- Department of Sustainability and Environment, Victoria's Planning Scheme, State Government of Victoria, http://www.dpi.vic.gov.au/
- Land Channel. Victorian Government Online Channel, State Government of Victoria,
- GeoVic (http://er-info.dpi.vic.gov.au/sd_weave/registered.htm)

DISCLAIMER

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This report was prepared in accordance with a contracted scope of services. There were a series of cost, time and other constraints which have affected the accuracy and completeness of investigations undertaken.

This report has been prepared solely for use by, and is confidential to; the client who contracted the scope of services and Environmental Site Assessments accepts no responsibility for its use by other persons.

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This report must be read in conjunction with the Statement of Qualifications and Limitations contained within it.

STATEMENT OF QUALIFICATIONS AND LIMITATIONS

It is not possible to identify all contamination or potential contaminants in or under the surface of the site. This is an intrinsic risk when investigating potentially and contaminated sites. As such, Environmental Site Assessments has prepared the following information which details the limitations of this environmental report.

In preparing this report, Environmental Site Assessments has relied on client/ third party information which was not verified by Environmental Site Assessments and Environmental Site Assessments does not accept responsibility for omissions or inaccuracies in the client/ third party information.

This report is based solely on the specific instructions received from its client and/or the scope of work agreed between Environmental Site Assessments and its client. Those instructions and/or scope of work may not be fully described in this report.

This report is based on the site conditions identified at the time of inspection. It is not possible to identify all contamination or potential contaminants in or under the surface of the site.

Investigations undertaken in respect of this report may have been constrained by the particular site conditions, such as the location of buildings, services and vegetation. Further, changes that may have occurred after inspection.

As a result of these matters, not all relevant site history, contaminants or potential for contamination may have been identified in this report.

No warranties express or implied, as to the accuracy or completeness of the matters contained within it are made.

Although normal standards of professional practice have been applied, the absence of any identified potential for air, soil or groundwater impacts on the subject property should not be interpreted as a conclusion that impacts do not exist on the site.

Subsurface conditions can vary across a particular site, which cannot be wholly defined by investigation.

As a result, it is unlikely that the results and estimations presented in this report will reflect the extremes of conditions within the site. Subsurface conditions including impact concentrations can change in a limited period of time. Any information provided may be based on "spot" tests. Conditions may vary between or beyond those locations from the interpreted conditions based on the actual data.

The analyses, evaluations, opinions and conclusions presented in this report are based on the information provided, and they could change if the information is in fact found to be unrepresentative of conditions between sampling and analysis locations.

The assessment and remediation of contamination is a developing science. Clean Up technology is constantly changing as scientific information on data collection, risk assessment, toxicology and remediation technologies are published. Further, opinions can vary as to the criterion for whether particular conditions constitute contamination, and if so how that contamination should be addressed or remediated. Different persons might reasonably or otherwise form opinions different to those of Environmental Site Assessments.

Use of the site for any purpose may require planning and other approvals and, in some cases, EPA and accredited site auditor approvals. Environmental Site Assessments offers no opinion as to the likelihood of obtaining any such approvals, or the conditions and obligations which such approvals may impose, which may include the requirement for significant environment works.

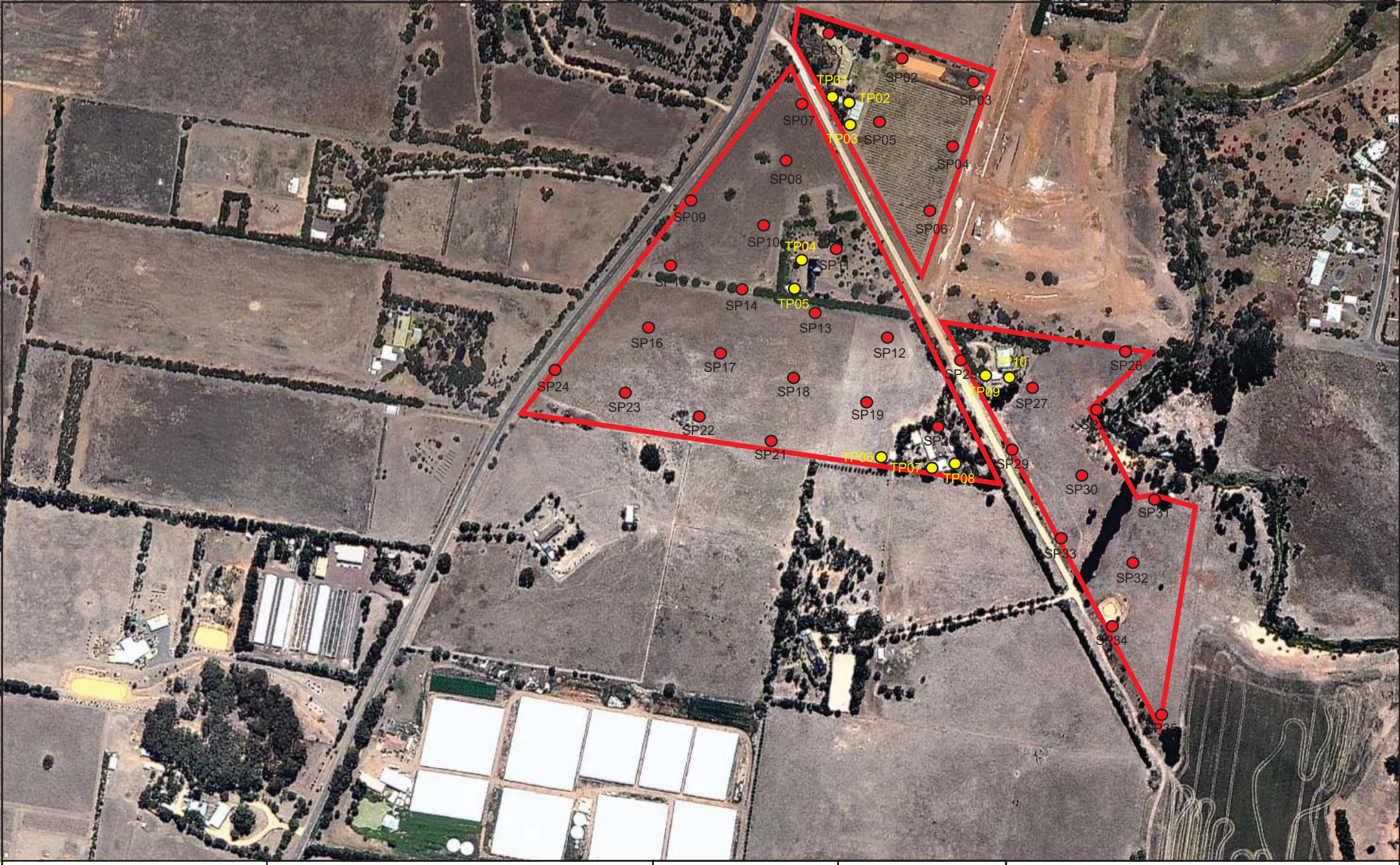
The ongoing use of the site or use of the site for a different purpose may require the owner/ user to manage and/ or remediate site conditions, such as contamination and other conditions, including but not limited to conditions referred to in this report.

This report is not intended to be used for the purposes of tendering, programming of works, refurbishment works or demolition works unless used in conjunction with a specification detailing the extent of the works.

To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.

Environmental Site Assessments makes no determination or recommendation regarding a decision whether to acquire or provide financing with respect to the site.

Appendix 1 – Sample Locations



Environmental Site Assessments

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Legend

- Grid Based Sample Points
- Targeted Sample Points
- Site Boundary

Aerial sourced from Nearmap

Designed:	S.Lillas	Revision:	1
Drawn:	S.Lillas	Date:	26.03.18
File:	Sample Locations.pdf		

N

0 Metres 40

Title:	Sample Locations
Project:	Environmental Assessment
Location:	5, 20, 25 & 30 Ormond Street, Bannockburn
Client:	TGM Group

Appendix 2 – PID Calibration Sheet

AES
ACTIVE ENVIRONMENTAL SOLUTIONS

Calibration Certificate

Sensor	Type	Serial No.	Span Gas	Concentration	Traceability Lot #	CF	Reading	
							Zero	Span
PID	10.6eV	1062R129024	Isobutylene	100 PPM	S110317-1		0	100

Calibrated/Repaired by: DARREN FRANCALANZA Date: 17.04.2018 Next Due: 17.10.2018

Melbourne	**Head Office**	2 Merchant Avenue	THOMASTOWN VIC 3074	T: +(613) 9464 2300	F:+ (613) 9464 3421
Sydney	S14 Lvl 2	6-8 Holden Street	ASHFIELD NSW 2131	T: +(612) 9716 5966	F:+ (612) 9716 5988
Perth	Unit 6	41 Holder Way	MALAGA WA 6090	T: +(618) 9249 5663	F:+ (618) 9249 5362
Brisbane	Unit 17	23 Ashtan Place	BANYO QLD 4014	T: +(617) 3267 1433	F:+ (617) 3267 3559

sales@aesolutions.com.au

ISO Certified 9001:2008

www.aesolutions.com.au

Appendix 3 – Comparison Tables

					BTEX								Cyanides	Halogenated Benzenes	Ha	
					Tokuthion	Benzene	Ethylbenzene	Toluene	Total BTEX	Xylene (m & p)	Xylene (o)	Xylene Total	C6-C10 less BTEX (F1)	Cyanide (WAD)	Hexachlorobenzene	2,4,5-trichlorophenol	2,4,6-trichlorophenol
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.2	0.5	0.5	0.2	0.5	0.5	0.5	10	1	0.05	0.5	0.5
NEPM 2013 Table 1A(1) HILs Res A Soil															10		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																	
0-1m						0.5|0.6|0.7	NL|NL|55	160|390|480				40|95|110	40|45|50				
NEPM 2013 Table 1B(6) ESLs for Urban Res						65|65		105|105									
0-2m						50	70|125|125	85				45|45|105					
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																	
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**													
QC06	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
QC07	SP17	0-0.15	30-Apr-18	SILT	<0.2	-	-	-	-	-	-	-	-	-	<0.05	-	-
QC08	TP07	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	<20	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	1	<0.05	<0.5	<0.5
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-

		BTEX								Cyanides	Halogenated Benzenes	Ha	
	Tokuthion	Benzene	Ethylbenzene	Toluene	Total BTEX	Xylene (m & p)	Xylene (o)	Xylene Total	C6-C10 less BTEX (F1)	Cyanide (WAD)	Hexachlorobenzene	2,4,5-trichlorophenol	2,4,6-trichlorophenol
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.2	0.5	0.5	0.2	0.5	0.5	0.5	10	1	0.05	0.5	0.5
NEPM 2013 Table 1A(1) HILs Res A Soil											10		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion													
0-1m		0.5|0.6|0.7	NL|NL|55	160|390|480				40|95|110	40|45|50				
NEPM 2013 Table 1B(6) ESLs for Urban Res		65|65		105|105									
0-2m		50	70|125|125	85				45|45|105					
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland													

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type												
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	<1	<0.05	<0.5	<0.5
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.05	-	-
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	<0.2	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<10	-	-	-	-

	logenated Phenols				Herbicides	Inorganics		Lead	Metals												
	2,4-dichlorophenol	2,6-dichlorophenol	2-chlorophenol	Pentachlorophenol	Atrazine	Moisture	Moisture Content (dried @ 103°C)	Lead	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (hexavalent)	Chromium (III+VI)	Chromium (Trivalent)	Cobalt	Copper	Manganese	Mercury
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	2	0.05	1		5	2	10	1	10	0.4	0.5	2		2	5	5	0.1
NEPM 2013 Table 1A(1) HILs Res A Soil				100	320			300	100		60	4500	20	100			100	6000	3800	40
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																				
0-1m																				
NEPM 2013 Table 1B(6) ESLs for Urban Res																				
0-2m																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																				

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type																		
QC06	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.7	-	7	40	10	<1	<50	<1	-	20	-	3	<5	32	<0.1
QC07	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	4.6	6.9	29	15	<2	<10	<0.4	<1	20	20	<5	<5	36	<0.1
QC08	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.9	-	<5	21	10	<1	<50	<1	-	12	-	<2	<5	19	<0.1
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	4.4	7.3	22	15	<2	<10	<0.4	<1	15	15	<5	<5	51	<0.1
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	2.9	-	<5	<5	<10	<1	<50	<1	<0.5	7	-	<2	<5	12	<0.1
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.6	-	<5	6	<10	<1	<50	<1	-	9	-	<2	<5	5	<0.1
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.6	-	5	6	10	<1	<50	<1	-	13	-	<2	<5	26	<0.1
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	2.5	-	<5	8	<10	<1	<50	<1	-	12	-	<2	<5	16	<0.1
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	7.2	-	<5	5	<10	<1	<50	<1	<0.5	9	-	<2	<5	18	<0.1
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.1	-	6	12	10	<1	<50	<1	-	18	-	2	<5	20	<0.1
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.7	-	<5	11	<10	<1	<50	<1	-	12	-	<2	<5	6	<0.1
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	2.2	-	6	10	<10	<1	<50	<1	<0.5	14	-	<2	<5	6	<0.1
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.7	-	7	27	20	<1	<50	<1	-	19	-	3	<5	24	<0.1
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.6	-	6	17	<10	<1	<50	<1	-	22	-	<2	<5	7	<0.1
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	4.8	-	6	10	20	<1	<50	<1	<0.5	16	-	2	<5	42	<0.1
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	3.7	-	<5	15	10	<1	<50	<1	<0.5	11	-	<2	<5	16	<0.1
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.3	-	6	15	10	<1	<50	<1	-	14	-	3	<5	24	<0.1
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.6	-	5	15	10	<1	<50	<1	-	14	-	2	<5	21	<0.1
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	5.1	-	6	15	20	<1	<50	<1	<0.5	18	-	4	<5	21	<0.1
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	7.4	-	7	26	30	<1	<50	<1	<0.5	17	-	3	<5	48	<0.1
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.7	-	7	30	10	<1	<50	<1	-	21	-	3	<5	29	<0.1
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.7	-	6	24	10	<1	<50	<1	-	19	-	3	<5	16	<0.1
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.5	-	5	24	20	<1	<50	<1	-	14	-	3	<5	25	<0.1
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.1	-	<5	19	20	<1	<50	<1	-	13	-	3	<5	51	<0.1
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.1	-	6	24	20	<1	<50	<1	-	18	-	4	<5	30	<0.1
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	6.6	-	<5	18	10	<1	<50	<1	<0.5	15	-	2	<5	24	<0.1
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	-	-	-	-	-	5.9	-	6	24	10	<1	<50	<1	-	19	-	4	<5	29	<0.1
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	-	-	-	-	-	6	-	7	42	10	<1	<50	<1	-	27	-	4	<5	30	<0.1
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.4	-	7	21	20	<1	<50	<1	-	16	-	6	<5	28	<0.1
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	-	-	-	-	-	5.7	-	<5	24	10	<1	<50	<1	-	15	-	7	<5	91	<0.1
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	5.3	-	<5	47	30	<1	<50	<1	<0.5	19	-	10	<5	73	<0.1
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	-	-	-	-	-	7.2	-	6	25	20	<1	<50	<1	-	18	-	5	<5	76	<0.1

	logenated Phenols				Herbicides	Inorganics		Lead	Metals												
	2,4-dichlorophenol	2,6-dichlorophenol	2-chlorophenol	Pentachlorophenol	Atrazine	Moisture	Moisture Content (dried @ 103°C)	Lead	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (hexavalent)	Chromium (III+VI)	Chromium (Trivalent)	Cobalt	Copper	Manganese	Mercury
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	2	0.05	1		5	2	10	1	10	0.4	0.5	2		2	5	5	0.1
NEPM 2013 Table 1A(1) HILs Res A Soil				100	320			300	100		60	4500	20	100			100	6000	3800	40
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																				
0-1m																				
NEPM 2013 Table 1B(6) ESLs for Urban Res																				
0-2m																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																				

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type																		
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	-	-	-	-	-	5.6	-	5	24	30	<1	<50	<1	-	18	-	4	<5	41	<0.1
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	-	-	-	-	-	13.9	-	8	43	60	1	<50	<1	-	37	-	10	<5	122	<0.1
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	-	-	-	-	-	10.9	-	7	26	60	<1	<50	<1	-	22	-	10	<5	184	<0.1
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<2	<0.05	4.2	-	<5	28	20	<1	<50	<1	<0.5	17	-	4	<5	84	<0.1
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.3	-	<5	32	30	<1	<50	<1	-	16	-	4	<5	37	<0.1
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	-	-	-	-	-	7.2	-	7	43	60	1	<50	<1	-	25	-	14	<5	88	<0.1
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	-	-	-	-	-	7.2	-	<5	26	20	<1	<50	<1	-	14	-	2	<5	24	<0.1
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.9	-	<5	7	10	<1	<50	<1	-	9	-	<2	<5	11	<0.1
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.3	-	<5	5	10	<1	<50	<1	-	9	-	<2	<5	14	<0.1
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	2.8	-	7	<5	<10	<1	<50	<1	-	11	-	<2	7	15	<0.1
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.7	-	<5	7	<10	<1	<50	<1	-	9	-	<2	<5	11	<0.1
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	-	-	-	-	4.1	-	8	14	10	<1	<50	<1	-	15	-	<2	<5	21	<0.1
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	5.6	-	7	50	10	<1	<50	<1	-	23	-	4	<5	31	<0.1
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	3.8	-	<5	21	<10	<1	<50	<1	-	12	-	2	<5	16	<0.1
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	-	-	-	-	11.8	-	12	40	20	1	<50	<1	-	29	-	13	6	85	<0.1
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	5.6	-	10	50	40	<1	<50	<1	-	21	-	10	<5	45	<0.1
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	7	-	11	56	20	<1	<50	<1	-	26	-	8	<5	35	<0.1

																		Organochlorine Pesticides				
					Nickel	Selenium	Vanadium	Zinc	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					2	5	5	5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Res A Soil					400	200		7400				6		50						240		270		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																								
0-1m																								
NEPM 2013 Table 1B(6) ESLs for Urban Res																								
0-2m																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																								
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																				
QC06	SP17	0-0.15	30-Apr-18	SILT	5	<5	46	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
QC07	SP17	0-0.15	30-Apr-18	SILT	5.3	-	44	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05
QC08	TP07	0-0.15	30-Apr-18	SILT	3	<5	34	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	<5	-	39	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<2	<5	18	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	2	<5	23	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	4	<5	28	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	2	<5	33	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	2	<5	23	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	5	<5	48	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	3	<5	33	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<2	<5	49	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	5	<5	56	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	4	<5	52	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	4	<5	37	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	3	<5	32	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	5	<5	38	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	4	<5	41	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	5	<5	61	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	4	<5	52	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	5	<5	49	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	5	<5	44	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	4	<5	38	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	4	<5	40	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	4	<5	49	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	5	<5	42	<5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	6	<5	54	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	7	<5	71	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	7	<5	40	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	6	<5	46	6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	9	<5	53	6	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	6	<5	56	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05

																		Organochlorine Pesticides					
					Nickel	Selenium	Vanadium	Zinc	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					2	5	5	5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Res A Soil					400	200		7400				6		50						240		270		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																								
0-1m																								
NEPM 2013 Table 1B(6) ESLs for Urban Res																								
0-2m																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																								
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																				
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	5	<5	51	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	17	<5	99	16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	8	<5	61	6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	5	<5	49	5	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	4	<5	46	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	12	<5	73	6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	3	<5	39	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	3	<5	24	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	2	<5	21	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	4	<5	20	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	2	<5	26	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	3	<5	40	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	6	<5	69	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	3	<5	32	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	33	<5	63	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	10	<5	57	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	8	<5	83	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

					Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.05		0.05	0.05	0.05	0.05	0.05				0.05
NEPM 2013 Table 1A(1) HILs Res A Soil						10				6		300	20						160					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																								
0-1m																								
NEPM 2013 Table 1B(6) ESLs for Urban Res																								
0-2m																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																								
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																				
QC06	SP17	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
QC07	SP17	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2
QC08	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	0.06	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05

					Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.05		0.05	0.05	0.05	0.05	0.05				0.05
NEPM 2013 Table 1A(1) HILs Res A Soil						10				6		300	20						160					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																								
0-1m																								
NEPM 2013 Table 1B(6) ESLs for Urban Res																								
0-2m																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																								
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																				
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Organophosphorous Pesticides																			
	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Prothiofos	Pyrazophos	Ronnel	Terbufos
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05		0.05				0.05	0.05		0.2		0.2				0.05			
NEPM 2013 Table 1A(1) HILs Res A Soil																				
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																				
0-1m																				
NEPM 2013 Table 1B(6) ESLs for Urban Res																				
0-2m																				
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																				

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type																		
QC06	SP17	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
QC07	SP17	0-0.15	30-Apr-18	SILT	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	-	<0.2	<0.2	<0.2
QC08	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-

					Organophosphorous Pesticides																		
					Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Prothiofos	Pyrazophos	Ronnel	Terbufos
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.05	0.05		0.05				0.05	0.05		0.2		0.2				0.05			
NEPM 2013 Table 1A(1) HILs Res A Soil																							
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																							
0-1m																							
NEPM 2013 Table 1B(6) ESLs for Urban Res																							
0-2m																							
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																							
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																			
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	<0.2	-	<0.2	-	-	-	<0.05	-	-	-
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

					PAH	PAH/Phenols																	
					Benzo[b+j]fluoranthene	2,4-dimethylphenol	2-methylphenol	2-nitrophenol	3-&4-methylphenol	4-chloro-3-methylphenol	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Carcinogenic PAHs (as B(a)P TPE)	Fluoranthene	Fluorene
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Res A Soil																				3		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																						
0-1m																						
NEPM 2013 Table 1B(6) ESLs for Urban Res																						
0-2m															0.7|0.7|0.7							
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																						
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																		
QC06	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC07	SP17	0-0.15	30-Apr-18	SILT	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC08	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	-	-	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

					PAH	PAH/Phenols																	
					Benzo[b+j]fluoranthene	2,4-dimethylphenol	2-methylphenol	2-nitrophenol	3-&4-methylphenol	4-chloro-3-methylphenol	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Carcinogenic PAHs (as B(a)P TPE)	Fluoranthene	Fluorene
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Res A Soil																				3		
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																						
0-1m																						
NEPM 2013 Table 1B(6) ESLs for Urban Res																						
0-2m															0.7|0.7|0.7							
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																						
Field_ID	**LocCode**	**Sample_Depth_Range**	**Sampled_Date-Time**	**Env_Stds_Conditional_Matrix_Type**																		
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

											Pesticides							Polychlorinated Biphenyls	SVOCs
					Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Phenol	Pyrene	Bifenthrin	Demeton-S-methyl	Fenamiphos	Mirex	Parathion	Pirimiphos-methyl	Pirimiphos-ethyl	PCBs (Sum of total)	EPN
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.05	0.05	0.2	0.2		0.05	0.1	
NEPM 2013 Table 1A(1) HILs Res A Soil							300		3000		600			10				1	
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																			
0-1m						3|4|5													
NEPM 2013 Table 1B(6) ESLs for Urban Res																			
0-2m																			
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																			
Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type															
QC06	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
QC07	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-	-	<0.2
QC08	TP07	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
QC09	TP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type							Pesticides							Polychlorinated Biphenyls	SVOCs
					Indeno(1,2,3-c,d)pyrene	Naphthalene	PAHs (Sum of total)	Phenanthrene	Phenol	Pyrene	Bifenthrin	Demeton-S-methyl	Fenamiphos	Mirex	Parathion	Pirimiphos-methyl	Pirimphos-ethyl	PCBs (Sum of total)	EPN
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.05	0.05	0.2	0.2		0.05	0.1	
NEPM 2013 Table 1A(1) HILs Res A Soil							300		3000		600			10				1	
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion																			
0-1m						3|4|5													
NEPM 2013 Table 1B(6) ESLs for Urban Res																			
0-2m																			
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland																			
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.2	<0.2	-	<0.05	<0.1	-
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	-	<0.05	-	-
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-

	TPH										
	C10-C16	C16-C34	C34-C40	F2-NAPHTHALENE	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	100	100	50	10	20	50	50	50	50	10
NEPM 2013 Table 1A(1) HILs Res A Soil											
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion											
0-1m				110|230|280							
NEPM 2013 Table 1B(6) ESLs for Urban Res	120|120	1300|1300	5600|5600								180|180
0-2m	120	300	2800								180
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland	1000|1000|1000	2500|2500|3500	10000|10000|10000								700|700|800

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type											
QC06	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
QC07	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
QC08	TP07	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
QC09	TP07	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<20	30	62	<50	92	-	<20
SP01/0-0.15	SP01	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP02/0-0.15	SP02	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP03/0-0.15	SP03	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP04/0-0.15	SP04	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP05/0-0.15	SP05	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP06/0-0.15	SP06	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP07/0-0.15	SP07	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP08/0-0.15	SP08	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP09/0-0.15	SP09	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP10/0-0.15	SP10	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP11/0-0.15	SP11	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP12/0-0.15	SP12	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP13/0-0.15	SP13	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP14/0-0.15	SP14	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP15/0-0.15	SP15	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP16/0-0.15	SP16	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP17/0-0.15	SP17	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP18/0-0.15	SP18	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP19/0-0.15	SP19	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP20/0-0.15	SP20	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP21/0-0.15	SP21	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP22/0-0.15	SP22	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP23/0-0.15	SP23	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP24/0-0.15	SP24	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP25/0-0.15	SP25	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP26/0-0.15	SP26	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP27/0-0.15	SP27	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP28/0-0.15	SP28	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-

	TPH										
	C10-C16	C16-C34	C34-C40	F2-NAPHTHALENE	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	100	100	50	10	20	50	50	50	50	10
NEPM 2013 Table 1A(1) HILs Res A Soil											
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion											
0-1m				110|230|280							
NEPM 2013 Table 1B(6) ESLs for Urban Res	120|120	1300|1300	5600|5600								180|180
0-2m	120	300	2800								180
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland	1000|1000|1000	2500|2500|3500	10000|10000|10000								700|700|800

Field_ID	LocCode	Sample_Depth_Range	Sampled_Date-Time	Env_Stds_Conditional_Matrix_Type											
SP29/0-0.15	SP29	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP30/0-0.15	SP30	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP31/0-0.15	SP31	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP32/0-0.15	SP32	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
SP33/0-0.15	SP33	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP34/0-0.15	SP34	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
SP35/0-0.15	SP35	0-0.15	30-Apr-18	SILT	-	-	-	-	-	-	-	-	-	-	-
TP01/0-0.15	TP01	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP02/0-0.15	TP02	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP03/0-0.15	TP03	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP04/0-0.15	TP04	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP05/0-0.15	TP05	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP06/0-0.15	TP06	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP07/0-0.15	TP07	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP08/0-0.15	TP08	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP09/0-0.15	TP09	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10
TP10/0-0.15	TP10	0-0.15	30-Apr-18	SILT	<50	<100	<100	<50	<10	<50	<100	<100	<50	<50	<10

Field Duplicates (SOIL)
Filter: SDG in('ALSE-M

	SDG	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18		ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18		ALSE-Melbourne 01-May-18	Interlab_D		ALSE-Melbourne 01-May-18	Interlab_D	
	Field_ID	SP17/0-0.15	QC06	RPD	TP07/0-0.15	QC08	RPD	SP17/0-0.15	QC07	RPD	TP07/0-0.15	QC09	RPD
	Sampled_Date-Time	30-04-18 11:43	30-04-18 11:43		30-04-18 11:05	30-04-18 11:05		30-04-18 11:43	30-04-18 11:43		30-04-18 11:05	30-04-18 11:05	
Chem_Gro	ChemNam	Units	EQL										
BTEX	Benzene	mg/kg	0.2			<0.2	<0.2	0				<0.2		
	Ethylbenze	mg/kg	0.5			<0.5	<0.5	0				<0.5		
	Toluene	mg/kg	0.5			<0.5	<0.5	0				<0.5		
	Total BTEX	mg/kg	0.2			<0.2	<0.2	0				<0.2		
	Xylene (m	mg/kg	0.5			<0.5	<0.5	0				<0.5		
	Xylene (o)	mg/kg	0.5			<0.5	<0.5	0				<0.5		
	Xylene Tot	mg/kg	0.5			<0.5	<0.5	0				<0.5		
	C6-C10 les	mg/kg	10 (Primary): 20 (Interlab)			<10.0	<10.0	0				<10.0	<20.0	0
Halogenate	Hexachlorc	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
ed Benzenes															
Inorganics	Moisture	%	1	4.7	4.7	0	3.8	3.9	3	4.7			3.8		
Lead	Lead	mg/kg	5	7.0	7.0	0	<5.0	<5.0	0	7.0	6.9	1	<5.0	7.3	37
Metals	Arsenic	mg/kg	5 (Primary): 2 (Interlab)	30.0	40.0	29	21.0	21.0	0	30.0	29.0	3	21.0	22.0	5
	Barium	mg/kg	10	10.0	10.0	0	<10.0	10.0	0	10.0	15.0	40	<10.0	15.0	40
	Beryllium	mg/kg	1 (Primary): 2 (Interlab)	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<2.0	0	<1.0	<2.0	0
	Boron	mg/kg	50 (Primary): 10 (Interla	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<10.0	0	<50.0	<10.0	0
	Cadmium	mg/kg	1 (Primary): 0.4 (Interlab	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<0.4	0	<1.0	<0.4	0
	Chromium	mg/kg	2 (Primary): 5 (Interlab)	21.0	20.0	5	12.0	12.0	0	21.0	20.0	5	12.0	15.0	22
	Cobalt	mg/kg	2 (Primary): 5 (Interlab)	3.0	3.0	0	2.0	<2.0	0	3.0	<5.0	0	2.0	<5.0	0
	Copper	mg/kg	5	<5.0	<5.0	0	<5.0	<5.0	0	<5.0	<5.0	0	<5.0	<5.0	0
	Manganes	mg/kg	5	29.0	32.0	10	16.0	19.0	17	29.0	36.0	22	**16.0**	**51.0**	**104**
	Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Nickel	mg/kg	2 (Primary): 5 (Interlab)	5.0	5.0	0	3.0	3.0	0	5.0	5.3	6	3.0	<5.0	0
	Selenium	mg/kg	5	<5.0	<5.0	0	<5.0	<5.0	0	<5.0			<5.0		
	Vanadium	mg/kg	5 (Primary): 10 (Interlab	49.0	46.0	6	32.0	34.0	6	49.0	44.0	11	32.0	39.0	20
	Zinc	mg/kg	5	<5.0	<5.0	0	<5.0	8.0	46	<5.0	<5.0	0	**<5.0**	**24.0**	**131**
Organochl	4,4-DDE	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	a-BHC	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Aldrin	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Aldrin + Di	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	b-BHC	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	chlordane	mg/kg	0.05 (Primary): 0.1 (Inte	<0.05	<0.05	0				<0.05	<0.1	0			
	Chlordane	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Chlordane	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	d-BHC	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	DDD	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	DDT	mg/kg	0.2 (Primary): 0.05 (Inte	<0.2	<0.2	0				<0.2	<0.05	0			
	DDT+DDE	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Dieldrin	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endosulfar	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Endosulfar	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endosulfar	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endosulfar	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endrin	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endrin alde	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Endrin ketc	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	g-BHC (Lin	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Heptachlor	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Heptachlor	mg/kg	0.05	<0.05	<0.05	0				<0.05	<0.05	0			
	Methoxych	mg/kg	0.2 (Primary): 0.05 (Inte	<0.2	<0.2	0				<0.2	<0.05	0			
rine Pesticides															
Organopho	Azinophos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Bromopho	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Carbopher	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Chlorfenvir	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Chlorpyrifo	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Chlorpyrifo	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Diazinon	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Dichlorvos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Dimethoat	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Ethion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Fenthion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Malathion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0				<0.05	<0.2	0			
	Methyl par	mg/kg	0.2	<0.2	<0.2	0				<0.2	<0.2	0			
	Monocroto	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<0.2	0				<0.2	<2.0	0			
	Prothiofos	mg/kg	0.05	<0.05	<0.05	0				<0.05					
sphorous Pesticides															
PAH/Phen	Naphthaler	mg/kg	1				<1.0	<1.0	0				<1.0		
ols															
Pesticides	Demeton-S	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Fenamiphc	mg/kg	0.05	<0.05	<0.05	0				<0.05					
	Parathion	mg/kg	0.2	<0.2	<0.2	0				<0.2	<0.2	0			
	Pirimphos-	mg/kg	0.05	<0.05	<0.05	0				<0.05					
TPH	C10-C16	mg/kg	50				<50.0	<50.0	0				<50.0	<50.0	0
	C16-C34	mg/kg	100				<100.0	<100.0	0				<100.0	<100.0	0
	C34-C40	mg/kg	100				<100.0	<100.0	0				<100.0	<100.0	0
	F2-NAPHT	mg/kg	50				<50.0	<50.0	0				<50.0	<50.0	0
	C6 - C9	mg/kg	10 (Primary): 20 (Interlab)				<10.0	<10.0	0				<10.0	<20.0	0
	C10 - C14	mg/kg	50 (Primary): 20 (Interlab)				<50.0	<50.0	0				<50.0	30.0	0
	C15 - C28	mg/kg	100 (Primary): 50 (Interlab)				<100.0	<100.0	0				<100.0	62.0	0
	C29-C36	mg/kg	100 (Primary): 50 (Interlab)				<100.0	<100.0	0				<100.0	<50.0	0
	+C10 - C36	mg/kg	50				<50.0	<50.0	0				<50.0	92.0	59
	C10 - C40	mg/kg	50				<50.0	<50.0	0				<50.0		
	C6-C10	mg/kg	10 (Primary): 20 (Interlab)				<10.0	<10.0	0				<10.0	<20.0	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 80 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

Field Blanks (WATER)
Filter: SDG in('ALSE-Melbourne 01-May-18')

SDG	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18	ALSE-Melbourne 01-May-18
Field_ID	QC05	QC10	QC01	QC02	QC03	QC04
Sampled_Date-Time	30-04-18 9:10	30-04-18 13:00	30-04-18 8:30	30-04-18 8:30	30-04-18 8:30	30-04-18
Sample_Type	Field_B	Rinsate	Trip_B	Trip_B	Trip_B	Trip_B
Chem_Group	ChemName	Units	EQL						
BTEX	Benzene	µg/L	1			<1	<1	<1	<1
	Ethylbenzene	µg/l	1			<2	<2	<2	<1
	Toluene	µg/L	1			<2	<2	<2	<1
	Total BTEX	mg/l	0.001			<0.001	<0.001	<0.001	
	Xylene (m & p)	µg/L	2			<2	<2	<2	<2
	Xylene (o)	µg/L	1			<2	<2	<2	<1
	Xylene Total	µg/L	2			<2	<2	<2	<3
	C6-C10 less BTEX (F1)	mg/l	0.02			<0.02	<0.02	<0.02	<0.02
Halogenated Benzenes	Hexachlorobenzene	µg/L	0.5	<0.5	<0.5				
Lead	Lead	mg/l	0.001	<0.001	<0.001				
Metals	Arsenic	mg/l	0.001	<0.001	<0.001				
	Barium	mg/l	0.001	<0.001	<0.001				
	Beryllium	mg/l	0.001	<0.001	<0.001				
	Boron	mg/l	0.05	<0.05	<0.05				
	Cadmium	mg/l	0.0001	<0.0001	<0.0001				
	Chromium (III+VI)	mg/l	0.001	<0.001	<0.001				
	Cobalt	mg/l	0.001	<0.001	<0.001				
	Copper	mg/l	0.001	<0.001	<0.001				
	Manganese	mg/l	0.001	<0.001	<0.001				
	Mercury	mg/l	0.0001	<0.0001	<0.0001				
	Nickel	mg/l	0.001	<0.001	<0.001				
	Selenium	mg/l	0.01	<0.01	<0.01				
	Vanadium	mg/l	0.01	<0.01	<0.01				
	Zinc	mg/l	0.005	<0.005	<0.005				
Organochlorine Pesticides	4,4-DDE	µg/L	0.5	<0.5	<0.5				
	a-BHC	µg/L	0.5	<0.5	<0.5				
	Aldrin	µg/L	0.5	<0.5	<0.5				
	Aldrin + Dieldrin	µg/L	0.5	<0.5	<0.5				
	b-BHC	µg/L	0.5	<0.5	<0.5				
	chlordane	µg/L	0.5	<0.5	<0.5				
	Chlordane (cis)	µg/L	0.5	<0.5	<0.5				
	Chlordane (trans)	µg/L	0.5	<0.5	<0.5				
	d-BHC	µg/L	0.5	<0.5	<0.5				
	DDD	µg/L	0.5	<0.5	<0.5				
	DDT	µg/L	2	<2	<2				
	DDT+DDE+DDD	µg/L	0.5	<0.5	<0.5				
	Dieldrin	µg/L	0.5	<0.5	<0.5				
	Endosulfan I	µg/L	0.5	<0.5	<0.5				
	Endosulfan II	µg/L	0.5	<0.5	<0.5				
	Endosulfan sulphate	µg/L	0.5	<0.5	<0.5				
	Endrin	µg/L	0.5	<0.5	<0.5				
	Endrin aldehyde	µg/L	0.5	<0.5	<0.5				
	Endrin ketone	µg/L	0.5	<0.5	<0.5				
	g-BHC (Lindane)	µg/L	0.5	<0.5	<0.5				
	Heptachlor	µg/L	0.5	<0.5	<0.5				
	Heptachlor epoxide	µg/L	0.5	<0.5	<0.5				
	Methoxychlor	µg/L	2	<2	<2				
Organophosphorous Pesticides	Azinophos methyl	µg/L	0.5	<0.5	<0.5				
	Bromophos-ethyl	µg/L	0.5	<0.5	<0.5				
	Carbophenothion	µg/L	0.5	<0.5	<0.5				
	Chlorfenvinphos	µg/L	0.5	<0.5	<0.5				
	Chlorpyrifos	µg/L	0.5	<0.5	<0.5				
	Chlorpyrifos-methyl	mg/l	0.0005	<0.0005	<0.0005				
	Diazinon	µg/L	0.5	<0.5	<0.5				
	Dichlorvos	µg/L	0.5	<0.5	<0.5				
	Dimethoate	µg/L	0.5	<0.5	<0.5				
	Ethion	µg/L	0.5	<0.5	<0.5				
	Fenthion	µg/L	0.5	<0.5	<0.5				
	Malathion	µg/L	0.5	<0.5	<0.5				
	Methyl parathion	µg/L	2	<2	<2				
	Monocrotophos	µg/L	2	<2	<2				
	Prothiofos	µg/L	0.5	<0.5	<0.5				
PAH/Phenols	Naphthalene	µg/L	5			<5	<5	<5	
Pesticides	Demeton-S-methyl	µg/L	0.5	<0.5	<0.5				
	Fenamiphos	µg/L	0.5	<0.5	<0.5				
	Parathion	µg/L	2	<2	<2				
	Pirimphos-ethyl	µg/L	0.5	<0.5	<0.5				
TPH	C6 - C9	µg/l	20			<20	<20	<20	<20
	C6-C10	mg/l	0.02			<0.02	<0.02	<0.02	<0.02

Appendix 4 – Laboratory Chain of Custody Documents, Certificates of Analysis and QA/QC

Environmental Site Assessments

CHAIN OF CUSTODY

LAB: ALS	TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date): 8/5/18	FOR LABORATORY USE ONLY (Circle)	
CLIENT: ENVIRONMENTAL SITE ASSESSMENTS	☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes No N/A
OFFICE: PO BOX 3106, WAURN PONDS VIC 3216	QUOTE NO.: MEBQ-159-15V2	Notes / Discrepancies Noted:	Yes No N/A
PROJECT: TGM Bannockburn	COC SEQUENCE NUMBER (Circle) COC: (1) 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Seton Lilas CONTACT PH: 0433 747 187	OF: 1 2 3 (4) 5 6 7	Other Comments:	
SAMPLER: A. Koster SAMPLER MOBILE: 0417 966 868			
Email Reports to: office@esagroup.com.au; andrew@esagroup.com.au			
Email Invoice to: accounts@esagroup.com.au			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
A. Koster	[redacted]		Bhanath (ALS)
DATE/TIME: 30/4 1415	DATE/TIME:	DATE/TIME:	DATE/TIME: 01/5/18 9:05

Method of Delivery: Courier ☑ Hand Delivered ☐ Postal ☐

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE	TOTAL CONTAINERS	TRH C6-C10 & BTEXN	OC/OPs	15 Metals (NEPM Metals)	NEPM Suite (B21/1a)	TRHs			
1	QC01	30/4 0830	W		1	X							
2	QC02	0830	W		1	X							
3	QC03	0830	W		1	X							
	[redacted]	[redacted]			[redacted]								
4	QC05	0910	W		4		X	X					
5	SP01/0-0.15	0913	S		1				X				
6	SP02/0-0.15	0915	S		1		X	X					
7	SP03/0-0.15	0920	S		1		X	X					
8	SP04/0-0.15	0925	S		1		X	X					
9	SP05/0-0.15	0935	S		1				X				
10	SP06/0-0.15	0930	S		1		X	X					
11	SP07/0-0.15	1020	S		1		X	X					
12	SP08/0-0.15	1045	S		1				X				
13	SP09/0-0.15	1025	S		1		X	X					
14	SP10/0-0.15	1040	S		1		X	X					
				TOTAL	17	3	8	8	3				

Environmental Division
Melbourne
Work Order Reference
EM1807085

Telephone : +61-3-8549 9600

Environmental Site Assessments

CHAIN OF CUSTODY

LAB: ALS

CLIENT: ENVIRONMENTAL SITE ASSESSMENTS

OFFICE: PO BOX 3106, WAURN PONDS VIC 3216

PROJECT: TGM Bannockburn

PROJECT MANAGER: Seton Lilas — CONTACT PH: 0433 747 187

SAMPLER: A. Koster — SAMPLER MOBILE: 0417 966 868

Email Reports to: office@esagroup.com.au; andrew@esagroup.com.au

Email Invoice to: accounts@esagroup.com.au

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date): 8/5/18 ☐ Non Standard or urgent TAT (List due date):

QUOTE NO.: MEBQ-159-15V2

COC SEQUENCE NUMBER (Circle): COC: 1 (2) 3 4 5 6 7 — OF: 1 2 3 (4) 5 6 7

FOR LABORATORY USE ONLY (Circle): Custody Seal Intact: Yes / No / N/A; Ice / Frozen Ice Bricks present: Yes / No / N/A; Random Sample Temperature on Receipt: °C; Other Comments:

RELINQUISHED BY: A. Koster — DATE/TIME: 30/4 1415

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY: Bharathi (CMCS) — DATE/TIME: 01/5/18 9.05

Method of Delivery: Courier ☑ Hand Delivered ☐ Postal ☐

	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION	ANALYSIS REQUIRED									Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE	TOTAL CONTAINERS	TRH C6-C10 & BTEXN	OC/OPs	15 Metals (NEPM Metals)	NEPM Suite (B2)(1a)	TRHs				
15	SB11/0-0.15	30/4 1005	S		1				X					
16	SB12/0-0.15	1152	S		1				X					
17	SB13/0-0.15	1147	S		1		X	X						
18	SB14/0-0.15	1035	S		1		X	X						
19	SB15/0-0.15	1030	S		1				X					
20	SB16/0-0.15	1115	S		1				X					
21	SB17/0-0.15	1143	S		1		X	X						
22	QC06	1143	S		#1		X	X						
	[redacted]		[redacted]		[redacted]		[redacted]							
23	SB18/0-0.15	1139	S		1		X	X						
24	SB19/0-0.15	1134	S		1		X	X						
25	SB20/0-0.15	1050	S		1		X	X						
26	SB21/0-0.15	1132	S		1		X	X						
27	SB22/0-0.15	1128	S		1				X					
28	SB23/0-0.15	1125	S		1		X	X						
				TOTAL	31	3	18	18	8					

Environmental Site Assessments

CHAIN OF CUSTODY

LAB: ALS

CLIENT: ENVIRONMENTAL SITE ASSESSMENTS

OFFICE: PO BOX 3106, WAURN PONDS VIC 3216

PROJECT: TGM Bannockburn

PROJECT MANAGER: Seton Lilas — CONTACT PH: 0433 747 187

SAMPLER: A. Koster — SAMPLER MOBILE: 0417 966 868

Email Reports to: office@esagroup.com.au; andrew@esagroup.com.au

Email Invoice to: accounts@esagroup.com.au

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date): 8/5/18

☐ Non Standard or urgent TAT (List due date):

QUOTE NO.: MEBQ-159-15V2

COC SEQUENCE NUMBER (Circle)

COC: 1 2 (3) 4 5 6 7

OF: 1 2 3 (7) 5 6 7

FOR LABORATORY USE ONLY (Circle)

Custody Seal intact? Yes No N/A

Cooling Agent present? Yes No N/A

Random Sample Temperature on Receipt: C

Other comments:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
A. Koster			Bharathi (ALS)
DATE/TIME: 30/4 1415	DATE/TIME:	DATE/TIME:	DATE/TIME: 01/5/18 9.05

Method of Delivery: Courier ☑ Hand Delivered ☐ Postal ☐

	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED									Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE	TOTAL CONTAINERS	TRH C6-C10 & BTEXN	OC/OPs	15 Metals (NEPM Metals)	NEPM Suite (B2A/1a)	TRHs					
29	SB24/0-0.15	30/4 1121	S		1		X	X							
30	SB25/0-0.15	1205	S		1		X	X							
31	SB26/0-0.15	1210	S		1		X	X							
32	SB27/0-0.15	1213	S		1				X						
33	SB28/0-0.15	1218	S		1		X	X							
34	SB29/0-0.15	1223	S		1		X	X							
35	SB30/0-0.15	1226	S		1		X	X							
36	SB31/0-0.15	1241	S		1		X	X							
37	SB32/0-0.15	1237	S		1				X						
38	SB33/0-0.15	1229	S		1		X	X							
39	SB34/0-0.15	1232	S		1		X	X							
40	SB35/0-0.15	1245	S		1		X	X							
41	TP01/0-0.15	0940	S		1			X		X					
42	TP02/0-0.15	0942	S		1			X		X					
43	TP03/0-0.15	0945	S		1			X		X					
				TOTAL	46	3	29	31	10	3					

Environmental Site Assessments

CHAIN OF CUSTODY

LAB: ALS

CLIENT: ENVIRONMENTAL SITE ASSESSMENTS

OFFICE: PO BOX 3106, WAURN PONDS VIC 3216

PROJECT: TGM Bannockburn

PROJECT MANAGER: Seton Lilas CONTACT PH: 0433 747 187

SAMPLER: A. Koster SAMPLER MOBILE: 0417 966 868

Email Reports to: office@esagroup.com.au; andrew@esagroup.com.au

Email Invoice to: accounts@esagroup.com.au

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date): 3/5/18

☐ Non Standard or urgent TAT (List due date):

QUOTE NO.: MEBQ-159-15V2

COC SEQUENCE NUMBER (Circle)

COC: 1 2 3 (4) 5 6 7

OF: 1 2 3 (4) 5 6 7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact? Yes / No / N/A

Cooling Ice/gel packs present? Yes / No / N/A

Random Sample Temperature on Receipt: C°

Other comments:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
A. Koster			
DATE/TIME: 30/4 1415	DATE/TIME:	DATE/TIME:	DATE/TIME:

Method of Delivery: Courier ☑ Hand Delivered ☐ Postal ☐

	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION	ANALYSIS REQUIRED									Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE	TOTAL CONTAINERS	TRH C6-C10 & BTEXN	OC/OPs	15 Metals (NEPM Metals)	NEPM Suite (B2A/1a)	TRHs				
44	TP04/0-0.15	30/4 1010	S		1			X		X				
45	TP05/0-0.15	1012	S		1			X		X				
46	TP06/0-0.15	1137	S		1			X		X				
47	TP07/0-0.15	1105	S		1			X		X				
48	TP08/0-0.15	1100	S		1			X		X				
49	QC08	1105	S		1			X		X				
50	TP09/0-0.15	1159	S		1			X		X				
51	TP10/0-0.15	1202	S		1			X		X				
52	QC10	1300	W		4		X	X						
				TOTAL	58	3	29	40	10	11				

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM1807085**	Page	: 1 of 48
Client	: **ENVIRONMENTAL SITE ASSESSMENTS PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: MR SETON LILLAS	Contact	: Larissa Burns
Address	: P.O. BOX 3106 WAURN PONDS VIC 3216	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: TGM Bannockburn	Date Samples Received	: 01-May-2018 09:05
Order number	:	Date Analysis Commenced	: 01-May-2018
C-O-C number	: ----	Issue Date	: 08-May-2018 16:44
Sampler	: AK		
Site	: ----		
Quote number	: MEBQ/159/15 V2		
No. of samples received	: 52		
No. of samples analysed	: 52		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP01/0-0.15	SP02/0-0.15	SP03/0-0.15	SP04/0-0.15	SP05/0-0.15
			Client sampling date / time	30-Apr-2018 09:13	30-Apr-2018 09:15	30-Apr-2018 09:20	30-Apr-2018 09:25	30-Apr-2018 09:35
Compound	CAS Number	LOR	Unit	EM1807085-005	EM1807085-006	EM1807085-007	EM1807085-008	EM1807085-009
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	2.9	3.6	3.6	2.5	7.2
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	6	8	5
Barium	7440-39-3	10	mg/kg	<10	<10	10	<10	<10
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	9	13	12	9
Cobalt	7440-48-4	2	mg/kg	<2	<2	<2	<2	<2
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	<5	<5	5	<5	<5
Manganese	7439-96-5	5	mg/kg	12	5	26	16	18
Nickel	7440-02-0	2	mg/kg	<2	2	4	2	2
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	18	23	28	33	23
Zinc	7440-66-6	5	mg/kg	<5	<5	5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	----	----	----	<0.5
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	----	----	----	<1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP01/0-0.15	SP02/0-0.15	SP03/0-0.15	SP04/0-0.15	SP05/0-0.15
			Client sampling date / time	30-Apr-2018 09:13	30-Apr-2018 09:15	30-Apr-2018 09:20	30-Apr-2018 09:25	30-Apr-2018 09:35
Compound	CAS Number	LOR	Unit	EM1807085-005	EM1807085-006	EM1807085-007	EM1807085-008	EM1807085-009
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg	<0.20	----	----	----	<0.20
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP01/0-0.15	SP02/0-0.15	SP03/0-0.15	SP04/0-0.15	SP05/0-0.15
				Client sampling date / time	30-Apr-2018 09:13	30-Apr-2018 09:15	30-Apr-2018 09:20	30-Apr-2018 09:25	30-Apr-2018 09:35
Compound	CAS Number	LOR	Unit		EM1807085-005	EM1807085-006	EM1807085-007	EM1807085-008	EM1807085-009
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		<0.05	----	----	----	<0.05
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		<0.05	----	----	----	<0.05
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP01/0-0.15	SP02/0-0.15	SP03/0-0.15	SP04/0-0.15	SP05/0-0.15
				Client sampling date / time	30-Apr-2018 09:13	30-Apr-2018 09:15	30-Apr-2018 09:20	30-Apr-2018 09:25	30-Apr-2018 09:35
Compound	CAS Number	LOR	Unit		EM1807085-005	EM1807085-006	EM1807085-007	EM1807085-008	EM1807085-009
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	----	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	----	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	----	----	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	----	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	----	----	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	----	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	----	----	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	----	----	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	----	----	----	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**94.6**	----	----	----	**90.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP01/0-0.15	SP02/0-0.15	SP03/0-0.15	SP04/0-0.15	SP05/0-0.15
				Client sampling date / time	30-Apr-2018 09:13	30-Apr-2018 09:15	30-Apr-2018 09:20	30-Apr-2018 09:25	30-Apr-2018 09:35
Compound	CAS Number	LOR	Unit		EM1807085-005	EM1807085-006	EM1807085-007	EM1807085-008	EM1807085-009
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		104	101	103	105	99.5
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		97.7	97.7	104	110	92.1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		86.6	----	----	----	87.2
2-Chlorophenol-D4	93951-73-6	0.5	%		87.0	----	----	----	86.1
2.4.6-Tribromophenol	118-79-6	0.5	%		75.7	----	----	----	77.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		86.1	----	----	----	86.3
Anthracene-d10	1719-06-8	0.5	%		92.2	----	----	----	92.6
4-Terphenyl-d14	1718-51-0	0.5	%		93.7	----	----	----	93.7
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		63.7	----	----	----	85.4
Toluene-D8	2037-26-5	0.2	%		55.3	----	----	----	79.6
4-Bromofluorobenzene	460-00-4	0.2	%		74.0	----	----	----	104

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP06/0-0.15	SP07/0-0.15	SP08/0-0.15	SP09/0-0.15	SP10/0-0.15
			Client sampling date / time	30-Apr-2018 09:30	30-Apr-2018 10:20	30-Apr-2018 10:45	30-Apr-2018 10:25	30-Apr-2018 10:40
Compound	CAS Number	LOR	Unit	EM1807085-010	EM1807085-011	EM1807085-012	EM1807085-013	EM1807085-014
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.1	3.7	2.2	3.7	4.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	12	11	10	27	17
Barium	7440-39-3	10	mg/kg	10	<10	<10	20	<10
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	18	12	14	19	22
Cobalt	7440-48-4	2	mg/kg	2	<2	<2	3	<2
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	6	<5	6	7	6
Manganese	7439-96-5	5	mg/kg	20	6	6	24	7
Nickel	7440-02-0	2	mg/kg	5	3	<2	5	4
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	48	33	49	56	52
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	----	----	<0.5	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	----	----	<1	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP06/0-0.15	SP07/0-0.15	SP08/0-0.15	SP09/0-0.15	SP10/0-0.15
				Client sampling date / time	30-Apr-2018 09:30	30-Apr-2018 10:20	30-Apr-2018 10:45	30-Apr-2018 10:25	30-Apr-2018 10:40
Compound	CAS Number	LOR	Unit		EM1807085-010	EM1807085-011	EM1807085-012	EM1807085-013	EM1807085-014
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		----	----	<0.20	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP06/0-0.15	SP07/0-0.15	SP08/0-0.15	SP09/0-0.15	SP10/0-0.15
				Client sampling date / time	30-Apr-2018 09:30	30-Apr-2018 10:20	30-Apr-2018 10:45	30-Apr-2018 10:25	30-Apr-2018 10:40
Compound	CAS Number	LOR	Unit		EM1807085-010	EM1807085-011	EM1807085-012	EM1807085-013	EM1807085-014
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		----	----	<0.05	----	----
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		----	----	<0.05	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		----	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		----	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		----	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		----	----	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		----	----	<0.5	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		----	----	<0.5	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		----	----	<0.5	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		----	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		----	----	<0.5	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		----	----	<0.5	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		----	----	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg		----	----	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg		----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		----	----	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP06/0-0.15	SP07/0-0.15	SP08/0-0.15	SP09/0-0.15	SP10/0-0.15
				Client sampling date / time	30-Apr-2018 09:30	30-Apr-2018 10:20	30-Apr-2018 10:45	30-Apr-2018 10:25	30-Apr-2018 10:40
Compound	CAS Number	LOR	Unit		EM1807085-010	EM1807085-011	EM1807085-012	EM1807085-013	EM1807085-014
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	----	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	----	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	----	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg		----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		----	----	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		----	----	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	----	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	----	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		----	----	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	----	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	----	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		----	----	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		----	----	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		----	----	<1	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		----	----	**92.3**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP06/0-0.15	SP07/0-0.15	SP08/0-0.15	SP09/0-0.15	SP10/0-0.15
				Client sampling date / time	30-Apr-2018 09:30	30-Apr-2018 10:20	30-Apr-2018 10:45	30-Apr-2018 10:25	30-Apr-2018 10:40
Compound	CAS Number	LOR	Unit		EM1807085-010	EM1807085-011	EM1807085-012	EM1807085-013	EM1807085-014
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		101	104	101	99.4	103
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		99.7	102	95.6	94.8	96.3
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	----	86.7	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	85.9	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	78.2	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	84.6	----	----
Anthracene-d10	1719-06-8	0.5	%		----	----	90.7	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	92.4	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	----	61.9	----	----
Toluene-D8	2037-26-5	0.2	%		----	----	76.6	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	----	101	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP11/0-0.15	SP12/0-0.15	SP13/0-0.15	SP14/0-0.15	SP15/0-0.15
			Client sampling date / time	30-Apr-2018 10:05	30-Apr-2018 11:52	30-Apr-2018 11:47	30-Apr-2018 10:35	30-Apr-2018 10:30
Compound	CAS Number	LOR	Unit	EM1807085-015	EM1807085-016	EM1807085-017	EM1807085-018	EM1807085-019
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.8	3.7	4.3	3.6	5.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	15	15	15	15
Barium	7440-39-3	10	mg/kg	20	10	10	10	20
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	16	11	14	14	18
Cobalt	7440-48-4	2	mg/kg	2	<2	3	2	4
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	6	<5	6	5	6
Manganese	7439-96-5	5	mg/kg	42	16	24	21	21
Nickel	7440-02-0	2	mg/kg	4	3	5	4	5
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	37	32	38	41	61
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	<1	----	----	<1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP11/0-0.15	SP12/0-0.15	SP13/0-0.15	SP14/0-0.15	SP15/0-0.15
				Client sampling date / time	30-Apr-2018 10:05	30-Apr-2018 11:52	30-Apr-2018 11:47	30-Apr-2018 10:35	30-Apr-2018 10:30
Compound	CAS Number	LOR	Unit		EM1807085-015	EM1807085-016	EM1807085-017	EM1807085-018	EM1807085-019
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		<0.20	<0.20	----	----	<0.20
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP11/0-0.15	SP12/0-0.15	SP13/0-0.15	SP14/0-0.15	SP15/0-0.15
			Client sampling date / time	30-Apr-2018 10:05	30-Apr-2018 11:52	30-Apr-2018 11:47	30-Apr-2018 10:35	30-Apr-2018 10:30
Compound	CAS Number	LOR	Unit	EM1807085-015	EM1807085-016	EM1807085-017	EM1807085-018	EM1807085-019
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines								
Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
EP068D: Pyrethroids								
Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	----	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	----	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP11/0-0.15	SP12/0-0.15	SP13/0-0.15	SP14/0-0.15	SP15/0-0.15
				Client sampling date / time	30-Apr-2018 10:05	30-Apr-2018 11:52	30-Apr-2018 11:47	30-Apr-2018 10:35	30-Apr-2018 10:30
Compound	CAS Number	LOR	Unit		EM1807085-015	EM1807085-016	EM1807085-017	EM1807085-018	EM1807085-019
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**95.5**	**91.6**	----	----	**95.1**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP11/0-0.15	SP12/0-0.15	SP13/0-0.15	SP14/0-0.15	SP15/0-0.15
				Client sampling date / time	30-Apr-2018 10:05	30-Apr-2018 11:52	30-Apr-2018 11:47	30-Apr-2018 10:35	30-Apr-2018 10:30
Compound	CAS Number	LOR	Unit		EM1807085-015	EM1807085-016	EM1807085-017	EM1807085-018	EM1807085-019
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		105	100	108	99.5	103
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		105	100	107	105	104
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		94.3	94.5	----	----	88.5
2-Chlorophenol-D4	93951-73-6	0.5	%		93.9	94.0	----	----	88.2
2.4.6-Tribromophenol	118-79-6	0.5	%		87.2	88.7	----	----	82.9
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		93.6	93.4	----	----	88.1
Anthracene-d10	1719-06-8	0.5	%		100	100	----	----	93.5
4-Terphenyl-d14	1718-51-0	0.5	%		101	102	----	----	95.5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		70.6	60.5	----	----	93.1
Toluene-D8	2037-26-5	0.2	%		74.5	75.0	----	----	87.8
4-Bromofluorobenzene	460-00-4	0.2	%		97.3	94.9	----	----	106

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP16/0-0.15	SP17/0-0.15	QC06	SP18/0-0.15	SP19/0-0.15
			Client sampling date / time	30-Apr-2018 11:15	30-Apr-2018 11:43	30-Apr-2018 11:43	30-Apr-2018 11:39	30-Apr-2018 11:34
Compound	CAS Number	LOR	Unit	EM1807085-020	EM1807085-021	EM1807085-022	EM1807085-023	EM1807085-024
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.4	4.7	4.7	4.7	3.5
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	26	30	40	24	24
Barium	7440-39-3	10	mg/kg	30	10	10	10	20
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	17	21	20	19	14
Cobalt	7440-48-4	2	mg/kg	3	3	3	3	3
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	7	7	7	6	5
Manganese	7439-96-5	5	mg/kg	48	29	32	16	25
Nickel	7440-02-0	2	mg/kg	4	5	5	5	4
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	52	49	46	44	38
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	----	----	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	1	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP16/0-0.15	SP17/0-0.15	QC06	SP18/0-0.15	SP19/0-0.15
				Client sampling date / time	30-Apr-2018 11:15	30-Apr-2018 11:43	30-Apr-2018 11:43	30-Apr-2018 11:39	30-Apr-2018 11:34
Compound	CAS Number	LOR	Unit		EM1807085-020	EM1807085-021	EM1807085-022	EM1807085-023	EM1807085-024
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		<0.20	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP16/0-0.15	SP17/0-0.15	QC06	SP18/0-0.15	SP19/0-0.15
				Client sampling date / time	30-Apr-2018 11:15	30-Apr-2018 11:43	30-Apr-2018 11:43	30-Apr-2018 11:39	30-Apr-2018 11:34
Compound	CAS Number	LOR	Unit		EM1807085-020	EM1807085-021	EM1807085-022	EM1807085-023	EM1807085-024
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		<0.05	----	----	----	----
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP16/0-0.15	SP17/0-0.15	QC06	SP18/0-0.15	SP19/0-0.15
				Client sampling date / time	30-Apr-2018 11:15	30-Apr-2018 11:43	30-Apr-2018 11:43	30-Apr-2018 11:39	30-Apr-2018 11:34
Compound	CAS Number	LOR	Unit		EM1807085-020	EM1807085-021	EM1807085-022	EM1807085-023	EM1807085-024
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**94.2**	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP16/0-0.15	SP17/0-0.15	QC06	SP18/0-0.15	SP19/0-0.15
				Client sampling date / time	30-Apr-2018 11:15	30-Apr-2018 11:43	30-Apr-2018 11:43	30-Apr-2018 11:39	30-Apr-2018 11:34
Compound	CAS Number	LOR	Unit		EM1807085-020	EM1807085-021	EM1807085-022	EM1807085-023	EM1807085-024
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		104	109	111	110	93.2
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		106	101	107	108	80.0
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		94.9	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		94.3	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		89.2	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		93.6	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		101	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		102	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		84.8	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		99.6	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		103	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP20/0-0.15	SP21/0-0.15	SP22/0-0.15	SP23/0-0.15	SP24/0-0.15
			Client sampling date / time	30-Apr-2018 10:50	30-Apr-2018 11:32	30-Apr-2018 11:28	30-Apr-2018 11:25	30-Apr-2018 11:21
Compound	CAS Number	LOR	Unit	EM1807085-025	EM1807085-026	EM1807085-027	EM1807085-028	EM1807085-029
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.1	4.1	6.6	5.9	6.0
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	19	24	18	24	42
Barium	7440-39-3	10	mg/kg	20	20	10	10	10
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	13	18	15	19	27
Cobalt	7440-48-4	2	mg/kg	3	4	2	4	4
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	<5	6	<5	6	7
Manganese	7439-96-5	5	mg/kg	51	30	24	29	30
Nickel	7440-02-0	2	mg/kg	4	4	5	6	7
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	40	49	42	54	71
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	----	----	<0.5	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	----	----	<1	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP20/0-0.15	SP21/0-0.15	SP22/0-0.15	SP23/0-0.15	SP24/0-0.15
				Client sampling date / time	30-Apr-2018 10:50	30-Apr-2018 11:32	30-Apr-2018 11:28	30-Apr-2018 11:25	30-Apr-2018 11:21
Compound	CAS Number	LOR	Unit		EM1807085-025	EM1807085-026	EM1807085-027	EM1807085-028	EM1807085-029
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		----	----	<0.20	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP20/0-0.15	SP21/0-0.15	SP22/0-0.15	SP23/0-0.15	SP24/0-0.15
			Client sampling date / time	30-Apr-2018 10:50	30-Apr-2018 11:32	30-Apr-2018 11:28	30-Apr-2018 11:25	30-Apr-2018 11:21
Compound	CAS Number	LOR	Unit	EM1807085-025	EM1807085-026	EM1807085-027	EM1807085-028	EM1807085-029
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines								
Atrazine	1912-24-9	0.05	mg/kg	----	----	<0.05	----	----
EP068D: Pyrethroids								
Bifenthrin	82657-04-3	0.05	mg/kg	----	----	<0.05	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	----	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	----	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	----	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	----	----	<0.5	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	----	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	----	<0.5	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	----	----	<0.5	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	----	----	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg	----	----	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP20/0-0.15	SP21/0-0.15	SP22/0-0.15	SP23/0-0.15	SP24/0-0.15
				Client sampling date / time	30-Apr-2018 10:50	30-Apr-2018 11:32	30-Apr-2018 11:28	30-Apr-2018 11:25	30-Apr-2018 11:21
Compound	CAS Number	LOR	Unit		EM1807085-025	EM1807085-026	EM1807085-027	EM1807085-028	EM1807085-029
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	----	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	----	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	----	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg		----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		----	----	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		----	----	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	----	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	----	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		----	----	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	----	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	----	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		----	----	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		----	----	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		----	----	<1	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		----	----	**104**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP20/0-0.15	SP21/0-0.15	SP22/0-0.15	SP23/0-0.15	SP24/0-0.15
				Client sampling date / time	30-Apr-2018 10:50	30-Apr-2018 11:32	30-Apr-2018 11:28	30-Apr-2018 11:25	30-Apr-2018 11:21
Compound	CAS Number	LOR	Unit		EM1807085-025	EM1807085-026	EM1807085-027	EM1807085-028	EM1807085-029
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		81.2	81.4	90.0	83.9	77.0
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		72.8	63.8	73.1	71.2	103
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	----	86.8	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	86.1	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	76.1	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	86.0	----	----
Anthracene-d10	1719-06-8	0.5	%		----	----	90.9	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	90.9	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	----	81.0	----	----
Toluene-D8	2037-26-5	0.2	%		----	----	85.9	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	----	99.8	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP25/0-0.15	SP26/0-0.15	SP27/0-0.15	SP28/0-0.15	SP29/0-0.15
			Client sampling date / time	30-Apr-2018 12:05	30-Apr-2018 12:10	30-Apr-2018 12:13	30-Apr-2018 12:18	30-Apr-2018 12:23
Compound	CAS Number	LOR	Unit	EM1807085-030	EM1807085-031	EM1807085-032	EM1807085-033	EM1807085-034
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.4	5.7	5.3	7.2	5.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	21	24	47	25	24
Barium	7440-39-3	10	mg/kg	20	10	30	20	30
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	16	15	19	18	18
Cobalt	7440-48-4	2	mg/kg	6	7	10	5	4
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	7	<5	<5	6	5
Manganese	7439-96-5	5	mg/kg	28	91	73	76	41
Nickel	7440-02-0	2	mg/kg	7	6	9	6	5
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	40	46	53	56	51
Zinc	7440-66-6	5	mg/kg	<5	6	6	5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	----	----	<0.5	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	----	----	<1	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP25/0-0.15	SP26/0-0.15	SP27/0-0.15	SP28/0-0.15	SP29/0-0.15
				Client sampling date / time	30-Apr-2018 12:05	30-Apr-2018 12:10	30-Apr-2018 12:13	30-Apr-2018 12:18	30-Apr-2018 12:23
Compound	CAS Number	LOR	Unit		EM1807085-030	EM1807085-031	EM1807085-032	EM1807085-033	EM1807085-034
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		----	----	<0.20	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP25/0-0.15	SP26/0-0.15	SP27/0-0.15	SP28/0-0.15	SP29/0-0.15
			Client sampling date / time	30-Apr-2018 12:05	30-Apr-2018 12:10	30-Apr-2018 12:13	30-Apr-2018 12:18	30-Apr-2018 12:23
Compound	CAS Number	LOR	Unit	EM1807085-030	EM1807085-031	EM1807085-032	EM1807085-033	EM1807085-034
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	**0.06**	<0.05	<0.05
EP068C: Triazines								
Atrazine	1912-24-9	0.05	mg/kg	----	----	<0.05	----	----
EP068D: Pyrethroids								
Bifenthrin	82657-04-3	0.05	mg/kg	----	----	<0.05	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	----	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	----	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	----	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	----	----	<0.5	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	----	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	----	<0.5	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	----	----	<0.5	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	----	----	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg	----	----	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP25/0-0.15	SP26/0-0.15	SP27/0-0.15	SP28/0-0.15	SP29/0-0.15
				Client sampling date / time	30-Apr-2018 12:05	30-Apr-2018 12:10	30-Apr-2018 12:13	30-Apr-2018 12:18	30-Apr-2018 12:23
Compound	CAS Number	LOR	Unit		EM1807085-030	EM1807085-031	EM1807085-032	EM1807085-033	EM1807085-034
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	----	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	----	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	----	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg		----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		----	----	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		----	----	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	----	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	----	<50	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	----	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		----	----	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	----	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	----	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	----	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		----	----	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		----	----	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		----	----	<1	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		----	----	**101**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP25/0-0.15	SP26/0-0.15	SP27/0-0.15	SP28/0-0.15	SP29/0-0.15
				Client sampling date / time	30-Apr-2018 12:05	30-Apr-2018 12:10	30-Apr-2018 12:13	30-Apr-2018 12:18	30-Apr-2018 12:23
Compound	CAS Number	LOR	Unit		EM1807085-030	EM1807085-031	EM1807085-032	EM1807085-033	EM1807085-034
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		90.2	75.6	84.0	76.1	89.2
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		118	108	118	108	113
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	----	89.0	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	87.3	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	74.8	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	87.5	----	----
Anthracene-d10	1719-06-8	0.5	%		----	----	100	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	93.1	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	----	82.0	----	----
Toluene-D8	2037-26-5	0.2	%		----	----	87.9	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	----	97.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP30/0-0.15	SP31/0-0.15	SP32/0-0.15	SP33/0-0.15	SP34/0-0.15
			Client sampling date / time	30-Apr-2018 12:26	30-Apr-2018 12:41	30-Apr-2018 12:37	30-Apr-2018 12:29	30-Apr-2018 12:32
Compound	CAS Number	LOR	Unit	EM1807085-035	EM1807085-036	EM1807085-037	EM1807085-038	EM1807085-039
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	13.9	10.9	4.2	4.3	7.2
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	43	26	28	32	43
Barium	7440-39-3	10	mg/kg	60	60	20	30	60
Beryllium	7440-41-7	1	mg/kg	1	<1	<1	<1	1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	37	22	17	16	25
Cobalt	7440-48-4	2	mg/kg	10	10	4	4	14
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	8	7	<5	<5	7
Manganese	7439-96-5	5	mg/kg	122	184	84	37	88
Nickel	7440-02-0	2	mg/kg	17	8	5	4	12
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	99	61	49	46	73
Zinc	7440-66-6	5	mg/kg	16	6	5	<5	6
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	----	----	<0.5	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	----	----	<1	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP30/0-0.15	SP31/0-0.15	SP32/0-0.15	SP33/0-0.15	SP34/0-0.15
				Client sampling date / time	30-Apr-2018 12:26	30-Apr-2018 12:41	30-Apr-2018 12:37	30-Apr-2018 12:29	30-Apr-2018 12:32
Compound	CAS Number	LOR	Unit		EM1807085-035	EM1807085-036	EM1807085-037	EM1807085-038	EM1807085-039
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Mirex	2385-85-5	0.20	mg/kg		----	----	<0.20	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP30/0-0.15	SP31/0-0.15	SP32/0-0.15	SP33/0-0.15	SP34/0-0.15
			Client sampling date / time	30-Apr-2018 12:26	30-Apr-2018 12:41	30-Apr-2018 12:37	30-Apr-2018 12:29	30-Apr-2018 12:32
Compound	CAS Number	LOR	Unit	EM1807085-035	EM1807085-036	EM1807085-037	EM1807085-038	EM1807085-039
				Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued								
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068C: Triazines								
Atrazine	1912-24-9	0.05	mg/kg	----	----	<0.05	----	----
EP068D: Pyrethroids								
Bifenthrin	82657-04-3	0.05	mg/kg	----	----	<0.05	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	----	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	----	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	----	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	----	<0.5	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	----	----	<0.5	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	----	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	----	<0.5	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	----	----	<0.5	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	----	----	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg	----	----	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP30/0-0.15	SP31/0-0.15	SP32/0-0.15	SP33/0-0.15	SP34/0-0.15
			Client sampling date / time	30-Apr-2018 12:26	30-Apr-2018 12:41	30-Apr-2018 12:37	30-Apr-2018 12:29	30-Apr-2018 12:32
Compound	CAS Number	LOR	Unit	EM1807085-035	EM1807085-036	EM1807085-037	EM1807085-038	EM1807085-039
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	----	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	----	----	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	----	----	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	----	<50	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg	----	----	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg	----	----	<1	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	**91.2**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP30/0-0.15	SP31/0-0.15	SP32/0-0.15	SP33/0-0.15	SP34/0-0.15
				Client sampling date / time	30-Apr-2018 12:26	30-Apr-2018 12:41	30-Apr-2018 12:37	30-Apr-2018 12:29	30-Apr-2018 12:32
Compound	CAS Number	LOR	Unit		EM1807085-035	EM1807085-036	EM1807085-037	EM1807085-038	EM1807085-039
					Result	Result	Result	Result	Result
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		70.3	70.0	70.9	80.4	71.2
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		88.4	82.0	81.8	83.0	79.8
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	----	87.1	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	86.6	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	71.9	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	85.3	----	----
Anthracene-d10	1719-06-8	0.5	%		----	----	99.3	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	89.3	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	----	83.2	----	----
Toluene-D8	2037-26-5	0.2	%		----	----	81.1	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	----	96.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP35/0-0.15	TP01/0-0.15	TP02/0-0.15	TP03/0-0.15	TP04/0-0.15
			Client sampling date / time	30-Apr-2018 12:45	30-Apr-2018 09:40	30-Apr-2018 09:42	30-Apr-2018 09:45	30-Apr-2018 10:10
Compound	CAS Number	LOR	Unit	EM1807085-040	EM1807085-041	EM1807085-042	EM1807085-043	EM1807085-044
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.2	3.9	3.3	2.8	3.7
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	26	7	5	<5	7
Barium	7440-39-3	10	mg/kg	20	10	10	<10	<10
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	<1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	14	9	9	11	9
Cobalt	7440-48-4	2	mg/kg	2	<2	<2	<2	<2
Copper	7440-50-8	5	mg/kg	<5	<5	<5	7	<5
Lead	7439-92-1	5	mg/kg	<5	<5	<5	7	<5
Manganese	7439-96-5	5	mg/kg	24	11	14	15	11
Nickel	7440-02-0	2	mg/kg	3	3	2	4	2
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	39	24	21	20	26
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SP35/0-0.15	TP01/0-0.15	TP02/0-0.15	TP03/0-0.15	TP04/0-0.15
			Client sampling date / time	30-Apr-2018 12:45	30-Apr-2018 09:40	30-Apr-2018 09:42	30-Apr-2018 09:45	30-Apr-2018 10:10
Compound	CAS Number	LOR	Unit	EM1807085-040	EM1807085-041	EM1807085-042	EM1807085-043	EM1807085-044
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	----	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	----	<100	<100	<100	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SP35/0-0.15	TP01/0-0.15	TP02/0-0.15	TP03/0-0.15	TP04/0-0.15
				Client sampling date / time	30-Apr-2018 12:45	30-Apr-2018 09:40	30-Apr-2018 09:42	30-Apr-2018 09:45	30-Apr-2018 10:10
Compound	CAS Number	LOR	Unit		EM1807085-040	EM1807085-041	EM1807085-042	EM1807085-043	EM1807085-044
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C29 - C36 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		----	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		----	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		----	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		----	<1	<1	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		70.4	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		79.8	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	87.2	83.4	82.6	87.1
Toluene-D8	2037-26-5	0.2	%		----	90.0	83.6	82.4	83.9
4-Bromofluorobenzene	460-00-4	0.2	%		----	104	96.6	96.9	96.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP05/0-0.15	TP06/0-0.15	TP07/0-0.15	TP08/0-0.15	QC08
			Client sampling date / time	30-Apr-2018 10:12	30-Apr-2018 11:37	30-Apr-2018 11:05	30-Apr-2018 11:00	30-Apr-2018 11:05
Compound	CAS Number	LOR	Unit	EM1807085-045	EM1807085-046	EM1807085-047	EM1807085-048	EM1807085-049
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	4.1	5.6	3.8	11.8	3.9
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	14	50	21	40	21
Barium	7440-39-3	10	mg/kg	10	10	<10	20	10
Beryllium	7440-41-7	1	mg/kg	<1	<1	<1	1	<1
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	15	23	12	29	12
Cobalt	7440-48-4	2	mg/kg	<2	4	2	13	<2
Copper	7440-50-8	5	mg/kg	<5	<5	<5	6	<5
Lead	7439-92-1	5	mg/kg	8	7	<5	12	<5
Manganese	7439-96-5	5	mg/kg	21	31	16	85	19
Nickel	7440-02-0	2	mg/kg	3	6	3	33	3
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Vanadium	7440-62-2	5	mg/kg	40	69	32	63	34
Zinc	7440-66-6	5	mg/kg	<5	<5	<5	24	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP05/0-0.15	TP06/0-0.15	TP07/0-0.15	TP08/0-0.15	QC08
			Client sampling date / time	30-Apr-2018 10:12	30-Apr-2018 11:37	30-Apr-2018 11:05	30-Apr-2018 11:00	30-Apr-2018 11:05
Compound	CAS Number	LOR	Unit	EM1807085-045	EM1807085-046	EM1807085-047	EM1807085-048	EM1807085-049
				Result	Result	Result	Result	Result
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**79.4**	**84.6**	**83.6**	**82.9**	**86.3**
Toluene-D8	2037-26-5	0.2	%	**76.8**	**87.3**	**80.9**	**80.8**	**84.3**
4-Bromofluorobenzene	460-00-4	0.2	%	**93.8**	**101**	**99.2**	**98.9**	**101**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP09/0-0.15	TP10/0-0.15	----	----	----
			Client sampling date / time	30-Apr-2018 11:59	30-Apr-2018 12:02	----	----	----
Compound	CAS Number	LOR	Unit	EM1807085-050	EM1807085-051	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**5.6**	**7.0**	----	----	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**50**	**56**	----	----	----
Barium	7440-39-3	10	mg/kg	**40**	**20**	----	----	----
Beryllium	7440-41-7	1	mg/kg	<1	<1	----	----	----
Boron	7440-42-8	50	mg/kg	<50	<50	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**21**	**26**	----	----	----
Cobalt	7440-48-4	2	mg/kg	**10**	**8**	----	----	----
Copper	7440-50-8	5	mg/kg	<5	<5	----	----	----
Lead	7439-92-1	5	mg/kg	**10**	**11**	----	----	----
Manganese	7439-96-5	5	mg/kg	**45**	**35**	----	----	----
Nickel	7440-02-0	2	mg/kg	**10**	**8**	----	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	----	----	----
Vanadium	7440-62-2	5	mg/kg	**57**	**83**	----	----	----
Zinc	7440-66-6	5	mg/kg	**13**	**11**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg	<50	<50	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP09/0-0.15	TP10/0-0.15	----	----	----
			Client sampling date / time	30-Apr-2018 11:59	30-Apr-2018 12:02	----	----	----
Compound	CAS Number	LOR	Unit	EM1807085-050	EM1807085-051	--------	--------	--------
				Result	Result	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**80.9**	**76.5**	----	----	----
Toluene-D8	2037-26-5	0.2	%	**80.5**	**66.4**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**95.2**	**85.7**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC01	QC02	QC03	QC05	QC10
				Client sampling date / time	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 09:10	30-Apr-2018 13:00
Compound	CAS Number	LOR	Unit		EM1807085-001	EM1807085-002	EM1807085-003	EM1807085-004	EM1807085-052
					Result	Result	Result	Result	Result
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		----	----	----	<0.001	<0.001
Boron	7440-42-8	0.05	mg/L		----	----	----	<0.05	<0.05
Barium	7440-39-3	0.001	mg/L		----	----	----	<0.001	<0.001
Beryllium	7440-41-7	0.001	mg/L		----	----	----	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		----	----	----	<0.0001	<0.0001
Cobalt	7440-48-4	0.001	mg/L		----	----	----	<0.001	<0.001
Chromium	7440-47-3	0.001	mg/L		----	----	----	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		----	----	----	<0.001	<0.001
Manganese	7439-96-5	0.001	mg/L		----	----	----	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		----	----	----	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		----	----	----	<0.001	<0.001
Selenium	7782-49-2	0.01	mg/L		----	----	----	<0.01	<0.01
Vanadium	7440-62-2	0.01	mg/L		----	----	----	<0.01	<0.01
Zinc	7440-66-6	0.005	mg/L		----	----	----	<0.005	<0.005
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		----	----	----	<0.0001	<0.0001
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		----	----	----	<0.5	<0.5
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		----	----	----	<0.5	<0.5
beta-BHC	319-85-7	0.5	µg/L		----	----	----	<0.5	<0.5
gamma-BHC	58-89-9	0.5	µg/L		----	----	----	<0.5	<0.5
delta-BHC	319-86-8	0.5	µg/L		----	----	----	<0.5	<0.5
Heptachlor	76-44-8	0.5	µg/L		----	----	----	<0.5	<0.5
Aldrin	309-00-2	0.5	µg/L		----	----	----	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	µg/L		----	----	----	<0.5	<0.5
trans-Chlordane	5103-74-2	0.5	µg/L		----	----	----	<0.5	<0.5
alpha-Endosulfan	959-98-8	0.5	µg/L		----	----	----	<0.5	<0.5
cis-Chlordane	5103-71-9	0.5	µg/L		----	----	----	<0.5	<0.5
Dieldrin	60-57-1	0.5	µg/L		----	----	----	<0.5	<0.5
4.4`-DDE	72-55-9	0.5	µg/L		----	----	----	<0.5	<0.5
Endrin	72-20-8	0.5	µg/L		----	----	----	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	µg/L		----	----	----	<0.5	<0.5
4.4`-DDD	72-54-8	0.5	µg/L		----	----	----	<0.5	<0.5
Endrin aldehyde	7421-93-4	0.5	µg/L		----	----	----	<0.5	<0.5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC01	QC02	QC03	QC05	QC10
				Client sampling date / time	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 09:10	30-Apr-2018 13:00
Compound	CAS Number	LOR	Unit		EM1807085-001	EM1807085-002	EM1807085-003	EM1807085-004	EM1807085-052
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endosulfan sulfate	1031-07-8	0.5	µg/L		----	----	----	<0.5	<0.5
4.4`-DDT	50-29-3	2.0	µg/L		----	----	----	<2.0	<2.0
Endrin ketone	53494-70-5	0.5	µg/L		----	----	----	<0.5	<0.5
Methoxychlor	72-43-5	2.0	µg/L		----	----	----	<2.0	<2.0
^ **Total Chlordane (sum)**	----	0.5	µg/L		----	----	----	<0.5	<0.5
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.5	µg/L		----	----	----	<0.5	<0.5
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.5	µg/L		----	----	----	<0.5	<0.5
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		----	----	----	<0.5	<0.5
Demeton-S-methyl	919-86-8	0.5	µg/L		----	----	----	<0.5	<0.5
Monocrotophos	6923-22-4	2.0	µg/L		----	----	----	<2.0	<2.0
Dimethoate	60-51-5	0.5	µg/L		----	----	----	<0.5	<0.5
Diazinon	333-41-5	0.5	µg/L		----	----	----	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		----	----	----	<0.5	<0.5
Parathion-methyl	298-00-0	2.0	µg/L		----	----	----	<2.0	<2.0
Malathion	121-75-5	0.5	µg/L		----	----	----	<0.5	<0.5
Fenthion	55-38-9	0.5	µg/L		----	----	----	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	µg/L		----	----	----	<0.5	<0.5
Parathion	56-38-2	2.0	µg/L		----	----	----	<2.0	<2.0
Pirimphos-ethyl	23505-41-1	0.5	µg/L		----	----	----	<0.5	<0.5
Chlorfenvinphos	470-90-6	0.5	µg/L		----	----	----	<0.5	<0.5
Bromophos-ethyl	4824-78-6	0.5	µg/L		----	----	----	<0.5	<0.5
Fenamiphos	22224-92-6	0.5	µg/L		----	----	----	<0.5	<0.5
Prothiofos	34643-46-4	0.5	µg/L		----	----	----	<0.5	<0.5
Ethion	563-12-2	0.5	µg/L		----	----	----	<0.5	<0.5
Carbophenothion	786-19-6	0.5	µg/L		----	----	----	<0.5	<0.5
Azinphos Methyl	86-50-0	0.5	µg/L		----	----	----	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	<20	<20	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC01	QC02	QC03	QC05	QC10
				Client sampling date / time	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 08:30	30-Apr-2018 09:10	30-Apr-2018 13:00
Compound	CAS Number	LOR	Unit		EM1807085-001	EM1807085-002	EM1807085-003	EM1807085-004	EM1807085-052
					Result	Result	Result	Result	Result
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	----	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	----	----
^ **Total Xylenes**	----	2	µg/L		<2	<2	<2	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	<1	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		----	----	----	**71.6**	**86.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		----	----	----	**63.0**	**94.2**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**93.5**	**98.6**	**97.6**	----	----
Toluene-D8	2037-26-5	2	%		**87.1**	**96.2**	**92.7**	----	----
4-Bromofluorobenzene	460-00-4	2	%		**93.3**	**98.1**	**96.4**	----	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	36	140
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	38	128
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	33	139
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	54	125
2-Chlorophenol-D4	93951-73-6	65	123
2.4.6-Tribromophenol	118-79-6	34	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	61	125
Anthracene-d10	1719-06-8	62	130
4-Terphenyl-d14	1718-51-0	67	133
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	56	124

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	117
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	51	127
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EM1807085**	Page	: 1 of 28
Client	: **ENVIRONMENTAL SITE ASSESSMENTS PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: MR SETON LILLAS	Contact	: Larissa Burns
Address	: P.O. BOX 3106 WAURN PONDS VIC 3216	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: TGM Bannockburn	Date Samples Received	: 01-May-2018
Order number	:	Date Analysis Commenced	: 01-May-2018
C-O-C number	: ----	Issue Date	: 08-May-2018
Sampler	: AK		
Site	: ----		
Quote number	: MEBQ/159/15 V2		
No. of samples received	: 52		
No. of samples analysed	: 52		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 1609539)									
EM1807083-001	Anonymous	EA055: Moisture Content	----	0.1	%	8.8	7.4	17.0	No Limit
EM1807083-022	Anonymous	EA055: Moisture Content	----	0.1	%	12.2	12.5	2.44	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 1609540)									
EM1807085-014	SP10/0-0.15	EA055: Moisture Content	----	0.1	%	4.6	5.2	11.3	No Limit
EM1807085-024	SP19/0-0.15	EA055: Moisture Content	----	0.1	%	3.5	3.0	14.6	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 1609541)									
EM1807085-034	SP29/0-0.15	EA055: Moisture Content	----	0.1	%	5.6	6.0	7.98	No Limit
EM1807085-044	TP04/0-0.15	EA055: Moisture Content	----	0.1	%	3.7	3.2	13.4	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 1610015)									
EM1807085-005	SP01/0-0.15	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	<10	<10	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	7	7	0.00	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	12	11	0.00	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	18	18	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.00	No Limit
EM1807085-014	SP10/0-0.15	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005T: Total Metals by ICP-AES (QC Lot: 1610015) - continued									
EM1807085-014	SP10/0-0.15	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	<10	<10	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	22	22	0.00	0% - 50%
		EG005T: Cobalt	7440-48-4	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	17	17	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	6	6	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	7	8	0.00	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	52	52	0.00	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.00	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 1610020)									
EM1807085-025	SP20/0-0.15	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	20	20	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	13	0.00	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	3	3	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	19	19	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	51	52	0.00	0% - 50%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	40	41	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.00	No Limit
EM1807085-034	SP29/0-0.15	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	30	30	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	18	18	0.00	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	4	4	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	5	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	24	24	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	<5	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	41	41	0.00	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	51	52	0.00	0% - 50%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005T: Total Metals by ICP-AES (QC Lot: 1610020) - continued									
EM1807085-034	SP29/0-0.15	EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.00	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 1610884)									
EM1806793-021	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	1	1	0.00	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	60	60	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	16	16	0.00	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	8	8	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	9	9	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	6	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	6	6	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	135	137	1.16	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	53	54	0.00	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	13	13	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	90	90	0.00	No Limit
EM1807085-047	TP07/0-0.15	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	<10	<10	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	12	11	0.00	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	2	2	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	3	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	21	21	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	16	16	0.00	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	32	32	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1610018)									
EM1807085-005	SP01/0-0.15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EM1807085-014	SP10/0-0.15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1610019)									
EM1807085-025	SP20/0-0.15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EM1807085-034	SP29/0-0.15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1610885)									
EM1806793-021	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1610885) - continued									
EM1807085-047	TP07/0-0.15	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 1609691)									
EM1806967-020	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EM1807083-005	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 1609692)									
EM1807085-037	SP32/0-0.15	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QC Lot: 1610412)									
EM1806782-007	Anonymous	EK028SF: Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	<1	0.00	No Limit
EM1807085-032	SP27/0-0.15	EK028SF: Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	<1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 1609440)									
EM1807085-005	SP01/0-0.15	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 1609450)									
EM1807085-027	SP22/0-0.15	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1609441)									
EM1807085-015	SP11/0-0.15	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Mirex	2385-85-5	0.05	mg/kg	<0.20	<0.20	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EM1807085-005	SP01/0-0.15	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1609441) - continued									
EM1807085-005	SP01/0-0.15	EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Mirex	2385-85-5	0.05	mg/kg	<0.20	<0.20	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1609449)									
EM1807085-034	SP29/0-0.15	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Mirex	2385-85-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1609449) - continued									
EM1807085-034	SP29/0-0.15	EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EM1807085-027	SP22/0-0.15	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Mirex	2385-85-5	0.05	mg/kg	<0.20	<0.20	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1609441)									
EM1807085-015	SP11/0-0.15	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1609441) - continued									
EM1807085-015	SP11/0-0.15	EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EM1807085-005	SP01/0-0.15	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1609449)									
EM1807085-034	SP29/0-0.15	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1609449) - continued									
EM1807085-034	SP29/0-0.15	EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EM1807085-027	SP22/0-0.15	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068C: Triazines (QC Lot: 1609441)									
EM1807085-015	SP11/0-0.15	EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EM1807085-005	SP01/0-0.15	EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068C: Triazines (QC Lot: 1609449)									
EM1807085-034	SP29/0-0.15	EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EM1807085-027	SP22/0-0.15	EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068D: Pyrethroids (QC Lot: 1609441)									
EM1807085-015	SP11/0-0.15	EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EM1807085-005	SP01/0-0.15	EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068D: Pyrethroids (QC Lot: 1609449)									
EM1807085-034	SP29/0-0.15	EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EM1807085-027	SP22/0-0.15	EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 1609442)									
EM1807085-005	SP01/0-0.15	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)A: Phenolic Compounds (QC Lot: 1609442) - continued									
EM1807085-005	SP01/0-0.15	EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.00	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.00	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 1609453)									
EM1807085-027	SP22/0-0.15	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.00	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 1609442)									
EM1807085-005	SP01/0-0.15	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 1609453)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 1609453) - continued									
EM1807085-027	SP22/0-0.15	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1608141)									
EM1807085-005	SP01/0-0.15	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EM1807085-041	TP01/0-0.15	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1608142)									
EM1807080-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EM1807083-009	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1609443)									
EM1807085-005	SP01/0-0.15	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1609452)									
EM1807085-027	SP22/0-0.15	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1609462)									
EM1806793-002	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EM1807108-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1609462) - continued									
EM1807108-001	Anonymous	EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1608141)									
EM1807085-005	SP01/0-0.15	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EM1807085-041	TP01/0-0.15	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1608142)									
EM1807080-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EM1807083-009	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1609443)									
EM1807085-005	SP01/0-0.15	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1609452)									
EM1807085-027	SP22/0-0.15	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1609462)									
EM1806793-002	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EM1807108-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.00	No Limit
EP080: BTEXN (QC Lot: 1608141)									
EM1807085-005	SP01/0-0.15	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EM1807085-041	TP01/0-0.15	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 1608141) - continued									
EM1807085-041	TP01/0-0.15	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 1608142)									
EM1807080-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EM1807083-009	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QC Lot: 1609210)									
EM1807085-004	QC05	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Vanadium	7440-62-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	<0.05	0.00	No Limit
EM1807095-038	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 1609210) - continued									
EM1807095-038	Anonymous	EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	0.001	0.00	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Vanadium	7440-62-2	0.01	mg/L	<0.01	<0.01	0.00	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	<0.05	0.00	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1620600)									
EM1806827-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EM1807151-003	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1608999)									
EM1807114-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EM1807114-005	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 1608999)									
EM1807114-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EM1807114-005	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 1608999)									
EM1807114-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit
EM1807114-005	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 1610015)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	91.4	79	113
EG005T: Barium	7440-39-3	10	mg/kg	<10	143 mg/kg	93.7	79	110
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	5.63 mg/kg	103	85	120
EG005T: Boron	7440-42-8	50	mg/kg	<50	33.2 mg/kg	106	82	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	91.1	85	109
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	101	83	109
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	16 mg/kg	95.2	78	112
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	94.9	78	108
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	94.2	78	106
EG005T: Manganese	7439-96-5	5	mg/kg	<5	130 mg/kg	95.6	82	107
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	99.0	82	111
EG005T: Selenium	7782-49-2	5	mg/kg	<5	5.37 mg/kg	100	93	109
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	29.6 mg/kg	96.3	80	109
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	95.5	82	111
EG005T: Total Metals by ICP-AES (QCLot: 1610020)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	89.3	79	113
EG005T: Barium	7440-39-3	10	mg/kg	<10	143 mg/kg	92.6	79	110
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	5.63 mg/kg	100	85	120
EG005T: Boron	7440-42-8	50	mg/kg	<50	33.2 mg/kg	102	82	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	88.9	85	109
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	97.0	83	109
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	16 mg/kg	93.0	78	112
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	91.7	78	108
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	91.0	78	106
EG005T: Manganese	7439-96-5	5	mg/kg	<5	130 mg/kg	93.9	82	107
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	96.3	82	111
EG005T: Selenium	7782-49-2	5	mg/kg	<5	5.37 mg/kg	98.8	93	109
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	29.6 mg/kg	94.1	80	109
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	94.8	82	111
EG005T: Total Metals by ICP-AES (QCLot: 1610884)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	86.0	79	113
EG005T: Barium	7440-39-3	10	mg/kg	<10	143 mg/kg	93.2	79	110
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	5.63 mg/kg	99.5	85	120
EG005T: Boron	7440-42-8	50	mg/kg	<50	33.2 mg/kg	100	82	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 1610884) - continued								
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	89.2	85	109
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	92.5	83	109
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	16 mg/kg	92.1	78	112
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	89.0	78	108
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	87.8	78	106
EG005T: Manganese	7439-96-5	5	mg/kg	<5	130 mg/kg	93.9	82	107
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	94.7	82	111
EG005T: Selenium	7782-49-2	5	mg/kg	<5	5.37 mg/kg	99.5	93	109
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	29.6 mg/kg	92.3	80	109
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	96.9	82	111
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610018)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	79.4	77	104
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610019)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	88.6	77	104
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610885)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	80.5	77	104
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 1609691)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	40 mg/kg	82.8	75	112
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 1609692)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	40 mg/kg	88.7	75	112
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QCLot: 1610412)								
EK028SF: Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	20 mg/kg	96.5	80	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 1609440)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	92.5	63	115
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 1609450)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	77.9	63	115
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609441)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	65	120
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	68	121
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.5	70	121
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	64	119
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	56	121
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	63	114
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	64	121
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	68	120
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	72	124
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	69	125

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609441) - continued								
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	71	123
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	59	123
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	70	123
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.9	64	119
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	69	124
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	66	128
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	62	121
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.5	57	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	94.4	60	124
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	73	120
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	93.1	61	121
EP068: Mirex	2385-85-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	69	123
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609449)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	103	65	120
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	107	68	121
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	104	70	121
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	64	119
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	56	121
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.9	63	114
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	64	121
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	103	68	120
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	72	124
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	69	125
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	71	123
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	99.9	59	123
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.8	70	123
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	118	64	119
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	102	69	124
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	108	66	128
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	62	121
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	57	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	85.4	60	124
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.3	73	120
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	84.4	61	121
EP068: Mirex	2385-85-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	69	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1609441)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	105	63	127
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.9	53	137
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	75.7	10	136

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1609441) - continued								
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	56	127
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	70	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	70	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	93.9	50	132
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.4	63	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	70	122
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.0	58	123
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	90.4	56	119
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	68	119
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	45	122
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.6	67	116
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	50	127
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	68	121
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.4	60	123
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	68	122
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	24	113
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1609449)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	107	63	127
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	53	137
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	100	10	136
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	109	56	127
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	108	70	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	105	70	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	104	50	132
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	108	63	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	107	70	122
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	104	58	123
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	100	56	119
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	107	68	119
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	45	122
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	105	67	116
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	98.1	50	127
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	106	68	121
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	104	60	123
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	68	122
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	101	24	113
EP068C: Triazines (QCLot: 1609441)								
EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	73	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068C: Triazines (QCLot: 1609449)								
EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	73	122
EP068D: Pyrethroids (QCLot: 1609441)								
EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	0.5 mg/kg	94.2	65	123
EP068D: Pyrethroids (QCLot: 1609449)								
EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	65	123
EP075(SIM)A: Phenolic Compounds (QCLot: 1609442)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	3 mg/kg	86.1	70	125
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	3 mg/kg	85.3	74	128
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	3 mg/kg	84.6	76	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	6 mg/kg	84.6	70	128
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	3 mg/kg	59.9	56	114
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	3 mg/kg	79.8	70	122
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	3 mg/kg	85.7	70	121
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	3 mg/kg	87.6	70	126
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	3 mg/kg	85.4	67	120
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	3 mg/kg	85.8	63	121
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	3 mg/kg	86.6	71	133
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	6 mg/kg	57.7	20	110
EP075(SIM)A: Phenolic Compounds (QCLot: 1609453)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	3 mg/kg	90.0	70	125
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	3 mg/kg	87.8	74	128
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	3 mg/kg	85.6	76	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	6 mg/kg	87.2	70	128
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	3 mg/kg	77.2	56	114
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	3 mg/kg	80.5	70	122
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	3 mg/kg	84.7	70	121
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	3 mg/kg	86.8	70	126
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	3 mg/kg	85.8	67	120
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	3 mg/kg	81.1	63	121
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	3 mg/kg	83.6	71	133
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	6 mg/kg	56.5	20	110
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1609442)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	85.3	75	131
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	85.8	70	132
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	85.7	80	128
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	85.5	70	128
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	88.2	80	128
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	1.6 mg/kg	85.5	72	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1609442) - continued								
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	85.9	70	128
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	93.8	80	125
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	81.5	70	130
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	89.3	80	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	77.4	71	124
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	85.6	75	125
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	74.6	70	125
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	76.0	71	128
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	75.8	72	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	77.1	68	127
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1609453)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	88.5	75	131
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	87.1	70	132
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	87.0	80	128
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	87.5	70	128
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	90.0	80	128
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	1.6 mg/kg	83.6	72	126
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	86.3	70	128
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	92.2	80	125
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	81.6	70	130
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	88.4	80	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	82.6	71	124
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	86.3	75	125
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	76.1	70	125
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	79.8	71	128
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	81.4	72	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	81.7	68	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608141)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	106	70	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608142)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	88.2	70	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609443)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	806 mg/kg	107	80	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	3006 mg/kg	113	84	115
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1584 mg/kg	104	80	112
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609452)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	806 mg/kg	100	80	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	3006 mg/kg	109	84	115
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1584 mg/kg	102	80	112
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609462)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	806 mg/kg	94.0	80	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	3006 mg/kg	104	84	115
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1584 mg/kg	98.6	80	112
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608141)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	102	68	125
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608142)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	85.9	68	125
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609443)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1160 mg/kg	104	83	117
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3978 mg/kg	109	82	114
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	313 mg/kg	103	73	115
EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609452)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1160 mg/kg	101	83	117
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3978 mg/kg	109	82	114
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	313 mg/kg	98.7	73	115
EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609462)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1160 mg/kg	94.3	83	117
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3978 mg/kg	103	82	114
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	313 mg/kg	85.7	73	115
EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080: BTEXN (QCLot: 1608141)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	111	74	124
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	110	77	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	110	73	125
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	109	77	128
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	111	81	128
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	111	66	130
EP080: BTEXN (QCLot: 1608142)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	86.4	74	124

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 1608142) - continued								
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	94.4	77	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	90.3	73	125
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	93.0	77	128
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	100	81	128
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	93.5	66	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 1609210)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	98.0	90	110
EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	0.1 mg/L	93.9	88	113
EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	0.1 mg/L	97.4	88	112
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	93.1	86	111
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	90.0	87	109
EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	0.1 mg/L	97.9	88	113
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	97.3	87	108
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	91.3	88	109
EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	0.1 mg/L	92.6	88	111
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.3	87	111
EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	0.1 mg/L	94.6	85	113
EG020A-T: Vanadium	7440-62-2	0.01	mg/L	<0.01	0.1 mg/L	93.3	88	112
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	98.7	87	113
EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	0.5 mg/L	92.0	88	118
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1620600)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	98.9	81	114
EP068A: Organochlorine Pesticides (OC) (QCLot: 1608080)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	97.9	51	122
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	88.8	51	118
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	99.7	57	119
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	78.6	51	121
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	100.0	58	114
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	104	47	113
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	95.8	53	118
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	98.8	53	117
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	98.7	50	126
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	96.6	55	121
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	97.8	54	120

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 1608080) - continued								
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	97.1	50	121
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	95.4	54	120
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	122	45	122
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	99.4	55	120
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	101	53	126
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	108	52	123
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	100	48	121
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	108	46	120
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	93.7	56	118
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	116	42	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1608080)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	113	45	123
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	117	42	129
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	21.7	10	43
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	109	38	115
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	101	54	121
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	97.2	56	118
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	105	43	115
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	90.0	50	120
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	99.1	55	119
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	98.7	50	122
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	107	44	114
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	101	52	117
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	113	42	126
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	100	50	117
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	102	45	127
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	99.9	52	120
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	111	49	118
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	105	52	119
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	110	21	120
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608999)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	87.5	68	125
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608999)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	85.2	66	123
EP080: BTEXN (QCLot: 1608999)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	87.6	74	123
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	95.0	77	128
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	92.8	73	126

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 1608999) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	93.0	72	131
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	95.1	74	131
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	94.6	74	124

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005T: Total Metals by ICP-AES (QCLot: 1610015)							
EM1807085-006	SP02/0-0.15	EG005T: Arsenic	7440-38-2	50 mg/kg	106	78	124
		EG005T: Barium	7440-39-3	50 mg/kg	106	71	135
		EG005T: Beryllium	7440-41-7	50 mg/kg	116	85	125
		EG005T: Cadmium	7440-43-9	50 mg/kg	106	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	106	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	104	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	110	76	124
		EG005T: Manganese	7439-96-5	50 mg/kg	105	68	136
		EG005T: Nickel	7440-02-0	50 mg/kg	106	78	120
		EG005T: Selenium	7782-49-2	50 mg/kg	99.0	71	125
		EG005T: Vanadium	7440-62-2	50 mg/kg	104	76	124
		EG005T: Zinc	7440-66-6	50 mg/kg	107	74	128
EG005T: Total Metals by ICP-AES (QCLot: 1610020)							
EM1807085-026	SP21/0-0.15	EG005T: Arsenic	7440-38-2	50 mg/kg	96.4	78	124
		EG005T: Barium	7440-39-3	50 mg/kg	102	71	135
		EG005T: Beryllium	7440-41-7	50 mg/kg	108	85	125
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	100	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	101	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	101	76	124
		EG005T: Manganese	7439-96-5	50 mg/kg	101	68	136
		EG005T: Nickel	7440-02-0	50 mg/kg	102	78	120
		EG005T: Selenium	7782-49-2	50 mg/kg	91.1	71	125
		EG005T: Vanadium	7440-62-2	50 mg/kg	91.2	76	124
		EG005T: Zinc	7440-66-6	50 mg/kg	99.4	74	128

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 1610884)							
EM1806793-029	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	97.7	78	124
		EG005T: Barium	7440-39-3	50 mg/kg	95.4	71	135
		EG005T: Beryllium	7440-41-7	50 mg/kg	109	85	125
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	104	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	104	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	102	76	124
		EG005T: Manganese	7439-96-5	50 mg/kg	106	68	136
		EG005T: Nickel	7440-02-0	50 mg/kg	102	78	120
		EG005T: Selenium	7782-49-2	50 mg/kg	91.5	71	125
		EG005T: Vanadium	7440-62-2	50 mg/kg	101	76	124
		EG005T: Zinc	7440-66-6	50 mg/kg	101	74	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610018)							
EM1807085-006	SP02/0-0.15	EG035T: Mercury	7439-97-6	5 mg/kg	96.5	76	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610019)							
EM1807085-026	SP21/0-0.15	EG035T: Mercury	7439-97-6	5 mg/kg	95.6	76	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1610885)							
EM1806793-029	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	96.2	76	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 1609691)							
EM1806967-021	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	40 mg/kg	99.0	58	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 1609692)							
EM1807098-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	40 mg/kg	58.2	58	114
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QCLot: 1610412)							
EM1807085-005	SP01/0-0.15	EK028SF: Weak Acid Dissociable Cyanide	----	20 mg/kg	104	70	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 1609440)							
EM1807085-009	SP05/0-0.15	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	96.5	44	144
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 1609450)							
EM1807085-032	SP27/0-0.15	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	91.9	44	144
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609441)							
EM1807085-006	SP02/0-0.15	EP068: gamma-BHC	58-89-9	0.5 mg/kg	70.9	22	139
		EP068: Heptachlor	76-44-8	0.5 mg/kg	85.9	18	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	91.2	23	136
		EP068: Dieldrin	60-57-1	0.5 mg/kg	90.8	42	136
		EP068: Endrin	72-20-8	0.5 mg/kg	95.2	23	146
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	73.3	20	133
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609449)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 1609449) - continued							
EM1807085-025	SP20/0-0.15	EP068: gamma-BHC	58-89-9	0.5 mg/kg	73.6	22	139
		EP068: Heptachlor	76-44-8	0.5 mg/kg	70.5	18	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	95.0	23	136
		EP068: Dieldrin	60-57-1	0.5 mg/kg	84.2	42	136
		EP068: Endrin	72-20-8	0.5 mg/kg	107	23	146
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	88.8	20	133
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1609441)							
EM1807085-006	SP02/0-0.15	EP068: Diazinon	333-41-5	0.5 mg/kg	75.6	49	135
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	92.3	41	127
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	77.2	47	133
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	73.3	45	133
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	78.0	40	128
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1609449)							
EM1807085-025	SP20/0-0.15	EP068: Diazinon	333-41-5	0.5 mg/kg	87.6	49	135
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	78.6	41	127
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	82.1	47	133
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	77.5	45	133
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	72.8	40	128
EP075(SIM)A: Phenolic Compounds (QCLot: 1609442)							
EM1807085-012	SP08/0-0.15	EP075(SIM): Phenol	108-95-2	3 mg/kg	85.8	63	117
		EP075(SIM): 2-Chlorophenol	95-57-8	3 mg/kg	84.3	65	123
		EP075(SIM): 2-Nitrophenol	88-75-5	3 mg/kg	54.9	40	134
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	83.1	56	122
		EP075(SIM): Pentachlorophenol	87-86-5	3 mg/kg	61.7	15	139
EP075(SIM)A: Phenolic Compounds (QCLot: 1609453)							
EM1807085-037	SP32/0-0.15	EP075(SIM): Phenol	108-95-2	3 mg/kg	89.6	63	117
		EP075(SIM): 2-Chlorophenol	95-57-8	3 mg/kg	89.5	65	123
		EP075(SIM): 2-Nitrophenol	88-75-5	3 mg/kg	81.7	40	134
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	85.8	56	122
		EP075(SIM): Pentachlorophenol	87-86-5	3 mg/kg	67.2	15	139
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1609442)							
EM1807085-012	SP08/0-0.15	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	83.3	67	117
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	87.3	52	148
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1609453)							
EM1807085-037	SP32/0-0.15	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	86.2	67	117
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	87.4	52	148
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608141)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608141) - continued							
EM1807085-009	SP05/0-0.15	EP080: C6 - C9 Fraction	----	28 mg/kg	79.4	42	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608142)							
EM1807080-002	Anonymous	EP080: C6 - C9 Fraction	----	28 mg/kg	70.9	42	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609443)							
EM1807085-009	SP05/0-0.15	EP071: C10 - C14 Fraction	----	806 mg/kg	101	53	123
		EP071: C15 - C28 Fraction	----	3006 mg/kg	106	70	124
		EP071: C29 - C36 Fraction	----	1584 mg/kg	97.9	64	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609452)							
EM1807085-032	SP27/0-0.15	EP071: C10 - C14 Fraction	----	806 mg/kg	88.3	53	123
		EP071: C15 - C28 Fraction	----	3006 mg/kg	98.0	70	124
		EP071: C29 - C36 Fraction	----	1584 mg/kg	92.2	64	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1609462)							
EM1806793-008	Anonymous	EP071: C10 - C14 Fraction	----	806 mg/kg	87.3	53	123
		EP071: C15 - C28 Fraction	----	3006 mg/kg	97.2	70	124
		EP071: C29 - C36 Fraction	----	1584 mg/kg	92.8	64	118
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608141)							
EM1807085-009	SP05/0-0.15	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	75.7	39	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608142)							
EM1807080-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	69.6	39	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609443)							
EM1807085-009	SP05/0-0.15	EP071: >C10 - C16 Fraction	----	1160 mg/kg	97.8	65	123
		EP071: >C16 - C34 Fraction	----	3978 mg/kg	103	67	121
		EP071: >C34 - C40 Fraction	----	313 mg/kg	97.7	44	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609452)							
EM1807085-032	SP27/0-0.15	EP071: >C10 - C16 Fraction	----	1160 mg/kg	89.5	65	123
		EP071: >C16 - C34 Fraction	----	3978 mg/kg	97.6	67	121
		EP071: >C34 - C40 Fraction	----	313 mg/kg	88.1	44	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1609462)							
EM1806793-008	Anonymous	EP071: >C10 - C16 Fraction	----	1160 mg/kg	87.1	65	123
		EP071: >C16 - C34 Fraction	----	3978 mg/kg	96.4	67	121
		EP071: >C34 - C40 Fraction	----	313 mg/kg	90.4	44	126
EP080: BTEXN (QCLot: 1608141)							
EM1807085-009	SP05/0-0.15	EP080: Benzene	71-43-2	2 mg/kg	69.3	50	136
		EP080: Toluene	108-88-3	2 mg/kg	87.7	56	139
EP080: BTEXN (QCLot: 1608142)							

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Recovery Limits (%) Low	Matrix Spike (MS) Report: Recovery Limits (%) High
EP080: BTEXN (QCLot: 1608142) - continued							
EM1807080-002	Anonymous	EP080: Benzene	71-43-2	2 mg/kg	77.6	50	136
		EP080: Toluene	108-88-3	2 mg/kg	82.0	56	139

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Recovery Limits (%) Low	Matrix Spike (MS) Report: Recovery Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 1609210)							
EM1807085-004	QC05	EG020A-T: Arsenic	7440-38-2	1 mg/L	93.1	82	118
		EG020A-T: Beryllium	7440-41-7	1 mg/L	99.7	79	121
		EG020A-T: Barium	7440-39-3	1 mg/L	97.9	80	114
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	91.7	75	129
		EG020A-T: Chromium	7440-47-3	1 mg/L	89.3	80	118
		EG020A-T: Cobalt	7440-48-4	1 mg/L	90.3	82	120
		EG020A-T: Copper	7440-50-8	1 mg/L	89.8	81	115
		EG020A-T: Lead	7439-92-1	1 mg/L	85.8	83	121
		EG020A-T: Manganese	7439-96-5	1 mg/L	91.2	73	123
		EG020A-T: Nickel	7440-02-0	1 mg/L	94.8	80	118
		EG020A-T: Vanadium	7440-62-2	1 mg/L	89.7	81	119
		EG020A-T: Zinc	7440-66-6	1 mg/L	93.9	74	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 1620600)							
EM1806960-001	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	92.7	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1608999)							
EM1807114-004	Anonymous	EP080: C6 - C9 Fraction	----	280 µg/L	68.6	43	125
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1608999)							
EM1807114-004	Anonymous	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	66.9	44	122
EP080: BTEXN (QCLot: 1608999)							
EM1807114-004	Anonymous	EP080: Benzene	71-43-2	20 µg/L	89.5	68	130
		EP080: Toluene	108-88-3	20 µg/L	94.9	72	132

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM1807085**	Page	: 1 of 14
Client	: **ENVIRONMENTAL SITE ASSESSMENTS PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: MR SETON LILLAS	Telephone	: +61-3-8549 9600
Project	: TGM Bannockburn	Date Samples Received	: 01-May-2018
Site	: ----	Issue Date	: 08-May-2018
Sampler	: AK	No. of samples received	: 52
Order number	:	No. of samples analysed	: 52

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Pesticides by GCMS	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Pesticides by GCMS	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method	***Sample Date***	*Extraction / Preparation*			*Analysis*		
Container / *Client Sample ID(s)*		***Date extracted***	*Due for extraction*	*Evaluation*	***Date analysed***	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C) - Continued							
SP01/0-0.15, SP02/0-0.15, SP03/0-0.15, SP04/0-0.15, SP05/0-0.15, SP06/0-0.15, SP07/0-0.15, SP08/0-0.15, SP09/0-0.15, SP10/0-0.15, SP11/0-0.15, SP12/0-0.15, SP13/0-0.15, SP14/0-0.15, SP15/0-0.15, SP16/0-0.15, SP17/0-0.15, QC06, SP18/0-0.15, SP19/0-0.15, SP20/0-0.15, SP21/0-0.15, SP22/0-0.15, SP23/0-0.15, SP24/0-0.15, SP25/0-0.15, SP26/0-0.15, SP27/0-0.15, SP28/0-0.15, SP29/0-0.15, SP30/0-0.15, SP31/0-0.15, SP32/0-0.15, SP33/0-0.15, SP34/0-0.15, SP35/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, QC08, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**----**	----	----	**02-May-2018**	14-May-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SP01/0-0.15, SP02/0-0.15, SP03/0-0.15, SP04/0-0.15, SP05/0-0.15, SP06/0-0.15, SP07/0-0.15, SP08/0-0.15, SP09/0-0.15, SP10/0-0.15, SP11/0-0.15, SP12/0-0.15, SP13/0-0.15, SP14/0-0.15, SP15/0-0.15, SP16/0-0.15, SP17/0-0.15, QC06, SP18/0-0.15, SP19/0-0.15, SP20/0-0.15, SP21/0-0.15, SP22/0-0.15, SP23/0-0.15, SP24/0-0.15, SP25/0-0.15, SP26/0-0.15, SP27/0-0.15, SP28/0-0.15, SP29/0-0.15, SP30/0-0.15, SP31/0-0.15, SP32/0-0.15, SP33/0-0.15, SP34/0-0.15, SP35/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, QC08, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**02-May-2018**	27-Oct-2018	✓	**02-May-2018**	27-Oct-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SP01/0-0.15, SP02/0-0.15, SP03/0-0.15, SP04/0-0.15, SP05/0-0.15, SP06/0-0.15, SP07/0-0.15, SP08/0-0.15, SP09/0-0.15, SP10/0-0.15, SP11/0-0.15, SP12/0-0.15, SP13/0-0.15, SP14/0-0.15, SP15/0-0.15, SP16/0-0.15, SP17/0-0.15, QC06, SP18/0-0.15, SP19/0-0.15, SP20/0-0.15, SP21/0-0.15, SP22/0-0.15, SP23/0-0.15, SP24/0-0.15, SP25/0-0.15, SP26/0-0.15, SP27/0-0.15, SP28/0-0.15, SP29/0-0.15, SP30/0-0.15, SP31/0-0.15, SP32/0-0.15, SP33/0-0.15, SP34/0-0.15, SP35/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, QC08, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**02-May-2018**	28-May-2018	✓	**03-May-2018**	28-May-2018	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	28-May-2018	✓	**02-May-2018**	09-May-2018	✓
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK028SF)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**03-May-2018**	16-May-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
SP01/0-0.15, SP02/0-0.15, SP03/0-0.15, SP04/0-0.15, SP05/0-0.15, SP06/0-0.15, SP07/0-0.15, SP08/0-0.15, SP09/0-0.15, SP10/0-0.15, SP11/0-0.15, SP12/0-0.15, SP13/0-0.15, SP14/0-0.15, SP15/0-0.15, SP16/0-0.15, SP17/0-0.15, QC06, SP18/0-0.15, SP19/0-0.15, SP20/0-0.15, SP21/0-0.15, SP22/0-0.15, SP23/0-0.15, SP24/0-0.15, SP25/0-0.15, SP26/0-0.15, SP27/0-0.15, SP28/0-0.15, SP29/0-0.15, SP30/0-0.15, SP31/0-0.15, SP32/0-0.15, SP33/0-0.15, SP34/0-0.15, SP35/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
SP01/0-0.15, SP02/0-0.15, SP03/0-0.15, SP04/0-0.15, SP05/0-0.15, SP06/0-0.15, SP07/0-0.15, SP08/0-0.15, SP09/0-0.15, SP10/0-0.15, SP11/0-0.15, SP12/0-0.15, SP13/0-0.15, SP14/0-0.15, SP15/0-0.15, SP16/0-0.15, SP17/0-0.15, QC06, SP18/0-0.15, SP19/0-0.15, SP20/0-0.15, SP21/0-0.15, SP22/0-0.15, SP23/0-0.15, SP24/0-0.15, SP25/0-0.15, SP26/0-0.15, SP27/0-0.15, SP28/0-0.15, SP29/0-0.15, SP30/0-0.15, SP31/0-0.15, SP32/0-0.15, SP33/0-0.15, SP34/0-0.15, SP35/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
EP068C: Triazines							
Soil Glass Jar - Unpreserved (EP068)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
EP068D: Pyrethroids							
Soil Glass Jar - Unpreserved (EP068)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM))							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, QC08, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**01-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓
Soil Glass Jar - Unpreserved (EP071)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15, TP01/0-0.15, TP02/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
Soil Glass Jar - Unpreserved (EP071)							
TP03/0-0.15, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, QC08, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**03-May-2018**	11-Jun-2018	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, QC08, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**01-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓
Soil Glass Jar - Unpreserved (EP071)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15, TP01/0-0.15, TP02/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	11-Jun-2018	✓
Soil Glass Jar - Unpreserved (EP071)							
TP03/0-0.15, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, QC08, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**03-May-2018**	11-Jun-2018	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
SP01/0-0.15, SP05/0-0.15, SP08/0-0.15, SP11/0-0.15, SP12/0-0.15, SP15/0-0.15, SP16/0-0.15, SP22/0-0.15, SP27/0-0.15, SP32/0-0.15, TP01/0-0.15, TP02/0-0.15, TP03/0-0.15, TP04/0-0.15, TP05/0-0.15, TP06/0-0.15, TP07/0-0.15, TP08/0-0.15, QC08, TP09/0-0.15, TP10/0-0.15	**30-Apr-2018**	**01-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
QC05, QC10	**30-Apr-2018**	**02-May-2018**	27-Oct-2018	✓	**02-May-2018**	27-Oct-2018	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
QC05, QC10	**30-Apr-2018**	**----**	----	----	**07-May-2018**	28-May-2018	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068)							
QC05, QC10	**30-Apr-2018**	**02-May-2018**	07-May-2018	✓	**03-May-2018**	11-Jun-2018	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068)							
QC05, QC10	**30-Apr-2018**	**02-May-2018**	07-May-2018	✓	**03-May-2018**	11-Jun-2018	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP080)							
QC01, QC02, QC03	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber VOC Vial - Sulfuric Acid (EP080)							
QC01, QC02, QC03	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
QC01, QC02, QC03	**30-Apr-2018**	**02-May-2018**	14-May-2018	✓	**02-May-2018**	14-May-2018	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	10	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	10	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	6	60	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	4	27	**14.81**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	23	**17.39**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	27	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	27	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS) - Continued							
Total Metals by ICP-AES	EG005T	3	60	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	27	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Pesticides by GCMS	EP068	0	2	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Pesticides by GCMS	EP068	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Pesticides by GCMS	EP068	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Pesticides by GCMS	EP068	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060A. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
WAD Cyanide by Segmented Flow Analyser	EK028SF	SOIL	In house: Referenced to APHA 4500-CN-O. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Hydrogen cyanide is liberated from a slightly acidified (pH 4.5) and is dialysed. Tight cyanide complexes that would not be amenable to oxidation by chlorine are not converted. Iron cyanide complexes are precipitated with zinc acetate. Liberated HCN diffuses through a membrane into a stream of sodium hydroxide where it is carried as CN- The cyanide in caustic solution is buffered to pH 5.2 and further converted to cyanogen chloride by reaction with chloramine-T. Cyanogen chloride subsequently reacts with 4 ¿pyridine carboxylic and 1,3 - dimethylbarbituric acids to give a red colour complex. This colour is measured at 600 nm. This method is compliant with NEPM (2013) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270D. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)

Analytical Methods	Method	Matrix	Method Descriptions
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260B. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (2013) Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

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ABN 50 [ ]

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Company	Environmental Site Assessments	Purchase Order	
Address		Eurofins | mgt Quote No	170227ESA
Contact Name	Andrew Koster	Project Manager	
Contact Phone No	0417 966 868	Project No	
Special Direction		Project Name	TGM Bannockburn
Relinquished by (Signature)	A. Koster	Electronic Results Format	
(Time / Date)	14:15 30/4/18	Email for Results	andrew@esagroup.com.au

Turn Around Requirements: [ ] 1 DAY* [ ] 2 DAY* [ ] 3 DAY* * Surcharges apply; [✓] 5 DAY (Std.) [ ] Other ( )

Containers: 1L Plastic | 250mL Plastic | 125mL Plastic | 200mL Amber Glass | 40mL Vial | 125mL Amber Glass | Jar

Method of Shipment: [✓] Courier (Josies) [ ] Hand Delivered [ ] Postal

Analytics (Note: Where metals are requested, please specify "Total" or "Filtered".)

- Suite R1- Vic EPA IWRG 621 : TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH
- Suite M12 – IWRG 621 – As,Cd,Cr,Cu,Ni,Pb,Zn,Hg,Mo,Se,Ag,Sn
- PAH
- ASLP- PAH
- ASLP - M12 - As,Cd,Cr,Cu,Ni,Pb,Zn,Hg,Mo,Se,Ag,Sn
- **Suite R20** - NEPM Screen Table 1(A) HIL's for Soil Contaminants - Basic Suite - Excluding
- add suite B1 - BTEX/TRH
- TRH C6-C9 & BTEX/N
- TRH
- 15 Metals (NEPM Metals)
- OC/OPs

№	Client Sample ID	Date	Matrix	Sample Comments / DG Hazard Warning
1	QC04	30/4	W	
2	QC07	↓	S	
3	QC09	↓	S	
4				
5				
6				
7				
8				
9				
10				
11				
12				

Laboratory Use Only								
Received By		SYD | BNE | MEL | PER | ADL | NEW | DAR	Date	/ /	Time	:	Signature	Temperature
Received By	SB	SYD | BNE | MEL | PER | ADL | NEW | DAR	Date	1/5/18	Time	9:56	Signature	Report № 596385

eurofins | mgt

30 years Testing For Life 1987–2017
Celebrating 30 years Testing and Protecting Human Health

Certificate of Analysis

Environmental Site Assessments P/L
2 Homestead Crt
Highton
VIC 3216

NATA Accredited
Accreditation Number 1261
Site Number 1254

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

Attention: **Andrew Koster**

Report **596385-S**
Project name TGM BANNOCKBURN
Received Date May 01, 2018

Client Sample ID			**QC07**	**QC09**
Sample Matrix			**Soil**	**Soil**
Eurofins | mgt Sample No.			**M18-My01490**	**M18-My01491**
Date Sampled			**Apr 30, 2018**	**Apr 30, 2018**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	-	< 20
TRH C10-C14	20	mg/kg	-	30
TRH C15-C28	50	mg/kg	-	62
TRH C29-C36	50	mg/kg	-	< 50
TRH C10-36 (Total)	50	mg/kg	-	92
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
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	-	< 100
TRH >C34-C40	100	mg/kg	-	< 100
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-
Toxaphene	1	mg/kg	< 1	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-

Client Sample ID			QC07	QC09
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			M18-My01490	M18-My01491
Date Sampled			Apr 30, 2018	Apr 30, 2018
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
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	%	100	-
Tetrachloro-m-xylene (surr.)	1	%	92	-
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	%	87	-
Chromium (hexavalent)	1	mg/kg	< 1	< 1
Chromium (trivalent)	5	mg/kg	20	15
% Moisture	1	%	4.6	4.4

Client Sample ID			QC07	QC09
Sample Matrix			**Soil**	**Soil**
Eurofins | mgt Sample No.			**M18-My01490**	**M18-My01491**
Date Sampled			**Apr 30, 2018**	**Apr 30, 2018**
Test/Reference	LOR	Unit		
Heavy Metals				
Arsenic	2	mg/kg	29	22
Barium	10	mg/kg	15	15
Beryllium	2	mg/kg	< 2	< 2
Boron	10	mg/kg	< 10	< 10
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	20	15
Cobalt	5	mg/kg	< 5	< 5
Copper	5	mg/kg	< 5	< 5
Lead	5	mg/kg	6.9	7.3
Manganese	5	mg/kg	36	51
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	5.3	< 5
Vanadium	10	mg/kg	44	39
Zinc	5	mg/kg	< 5	24

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	May 03, 2018	14 Day
- Method: LTM-ORG-2010 TRH C6-C36			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	May 03, 2018	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	May 03, 2018	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Organochlorine Pesticides	Melbourne	May 03, 2018	14 Day
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Melbourne	May 03, 2018	14 Day
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Chromium (hexavalent)	Melbourne	May 03, 2018	28 Day
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Heavy Metals	Melbourne	May 03, 2018	180 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
% Moisture	Melbourne	May 02, 2018	14 Day
- Method: LTM-GEN-7080 Moisture			

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NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Company Name: Environmental Site Assessments P/L
Address: 2 Homestead Crt
Highton
VIC 3216

Project Name: TGM BANNOCKBURN

Order No.:
Report #: 596385
Phone:
Fax:

Received: May 1, 2018 8:56 AM
Due: May 8, 2018
Priority: 5 Day
Contact Name: Andrew Koster

Eurofins | mgt Analytical Services Manager : Cindi Guo

Sample Detail						Organochlorine Pesticides	Organophosphorus Pesticides	NEPM 1999 Metals : Metals M15	Moisture Set	Total Recoverable Hydrocarbons	BTEXN and Volatile TRH
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217											
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	QC04	Apr 30, 2018		Water	M18-My01489						X
2	QC07	Apr 30, 2018		Soil	M18-My01490	X	X	X	X		
3	QC09	Apr 30, 2018		Soil	M18-My01491			X	X	X	
Test Counts						1	1	2	2	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. 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. 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.

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
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							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Barium	mg/kg	< 10			10	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	
Nickel	mg/kg	< 5			5	Pass	
Vanadium	mg/kg	< 10			10	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	94			70-130	Pass	
TRH C10-C14	%	82			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	105			70-130	Pass	
TRH C6-C10	%	88			70-130	Pass	
TRH >C10-C16	%	86			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
4.4'-DDD	%	113			70-130	Pass	
4.4'-DDE	%	113			70-130	Pass	
4.4'-DDT	%	85			70-130	Pass	
a-BHC	%	112			70-130	Pass	
Aldrin	%	118			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
b-BHC	%	106			70-130	Pass	
d-BHC	%	106			70-130	Pass	
Dieldrin	%	116			70-130	Pass	
Endosulfan I	%	118			70-130	Pass	
Endosulfan II	%	109			70-130	Pass	
Endosulfan sulphate	%	111			70-130	Pass	
Endrin	%	115			70-130	Pass	
Endrin aldehyde	%	107			70-130	Pass	
Endrin ketone	%	108			70-130	Pass	
g-BHC (Lindane)	%	111			70-130	Pass	
Heptachlor	%	108			70-130	Pass	
Heptachlor epoxide	%	118			70-130	Pass	
Hexachlorobenzene	%	110			70-130	Pass	
Methoxychlor	%	90			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	90			70-130	Pass	
Dimethoate	%	79			70-130	Pass	
Ethion	%	74			70-130	Pass	
Fenitrothion	%	116			70-130	Pass	
Methyl parathion	%	113			70-130	Pass	
Mevinphos	%	87			70-130	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	98			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	92			80-120	Pass	
Barium	%	107			80-120	Pass	
Beryllium	%	90			80-120	Pass	
Boron	%	90			80-120	Pass	
Cadmium	%	87			80-120	Pass	
Chromium	%	98			80-120	Pass	
Cobalt	%	97			80-120	Pass	
Copper	%	89			80-120	Pass	
Lead	%	96			80-120	Pass	
Manganese	%	95			80-120	Pass	
Mercury	%	89			75-125	Pass	
Nickel	%	89			80-120	Pass	
Vanadium	%	93			80-120	Pass	
Zinc	%	89			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	M18-My01635	NCP	%	113			70-130	Pass	
4.4'-DDE	M18-My01635	NCP	%	108			70-130	Pass	
4.4'-DDT	M18-My01635	NCP	%	83			70-130	Pass	
a-BHC	M18-My01635	NCP	%	100			70-130	Pass	
Aldrin	M18-My01635	NCP	%	108			70-130	Pass	
b-BHC	M18-My01635	NCP	%	94			70-130	Pass	
d-BHC	M18-My01635	NCP	%	97			70-130	Pass	
Dieldrin	M18-My01635	NCP	%	106			70-130	Pass	
Endosulfan I	M18-My01635	NCP	%	108			70-130	Pass	
Endosulfan II	M18-My01635	NCP	%	103			70-130	Pass	
Endosulfan sulphate	M18-My01635	NCP	%	110			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin	M18-My01635	NCP	%	107			70-130	Pass	
Endrin aldehyde	M18-My01635	NCP	%	102			70-130	Pass	
Endrin ketone	M18-My01635	NCP	%	102			70-130	Pass	
g-BHC (Lindane)	M18-My01635	NCP	%	96			70-130	Pass	
Heptachlor	M18-My01635	NCP	%	102			70-130	Pass	
Heptachlor epoxide	M18-My01635	NCP	%	107			70-130	Pass	
Hexachlorobenzene	M18-My01635	NCP	%	94			70-130	Pass	
Methoxychlor	M18-My01635	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	M18-Ap34068	NCP	%	117			70-130	Pass	
Dimethoate	M18-My05071	NCP	%	76			70-130	Pass	
Ethion	M18-Ap34068	NCP	%	102			70-130	Pass	
Fenitrothion	M18-My05071	NCP	%	80			70-130	Pass	
Methyl parathion	M18-My05071	NCP	%	77			70-130	Pass	
Mevinphos	M18-Ap34068	NCP	%	75			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M18-My03933	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M18-My03935	NCP	%	106			75-125	Pass	
Barium	M18-My03935	NCP	%	108			75-125	Pass	
Beryllium	M18-My03935	NCP	%	103			75-125	Pass	
Boron	M18-My03935	NCP	%	101			75-125	Pass	
Cadmium	M18-My03935	NCP	%	100			75-125	Pass	
Chromium	M18-My03935	NCP	%	110			75-125	Pass	
Cobalt	M18-My03935	NCP	%	111			75-125	Pass	
Copper	M18-My03935	NCP	%	108			75-125	Pass	
Lead	M18-My03935	NCP	%	107			75-125	Pass	
Manganese	M18-My03935	NCP	%	109			75-125	Pass	
Mercury	M18-My03935	NCP	%	84			70-130	Pass	
Nickel	M18-My03935	NCP	%	101			75-125	Pass	
Vanadium	M18-My03935	NCP	%	106			75-125	Pass	
Zinc	M18-My03935	NCP	%	105			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M18-My01345	NCP	%	93			70-130	Pass	
TRH C10-C14	M18-My00767	NCP	%	83			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M18-My01345	NCP	%	80			70-130	Pass	
TRH C6-C10	M18-My01345	NCP	%	87			70-130	Pass	
TRH >C10-C16	M18-My00767	NCP	%	87			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M18-My01634	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
d-BHC	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M18-My01634	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M18-My01634	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M18-My04547	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M18-My04547	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M18-My04547	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M18-My04547	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M18-Ap33872	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
% Moisture	M18-My01418	NCP	%	20	18	10	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M18-My03935	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Barium	M18-My03935	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Beryllium	M18-My03935	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Boron	M18-My03935	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Cadmium	M18-My03935	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Cobalt	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Manganese	M18-My03935	NCP	mg/kg	11	11	3.0	30%	Pass	
Mercury	M18-My03935	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Vanadium	M18-My03935	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M18-My03935	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M18-My01344	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M18-My00766	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M18-My00766	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M18-My00766	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M18-My01344	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M18-My01344	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M18-My00766	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M18-My00766	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M18-My00766	NCP	mg/kg	< 100	< 100	<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.

Authorised By

Cindi Guo	Analytical Services Manager
Alex Petridis	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Michael Brancati	Senior Analyst-Inorganic (VIC)

Glenn Jackson
National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

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

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Environmental Site Assessments P/L
2 Homestead Crt
Highton
VIC 3216

NATA Accredited
Accreditation Number 1261
Site Number 1254

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

Attention: **Andrew Koster**

Report **596385-W**
Project name TGM BANNOCKBURN
Received Date May 01, 2018

Client Sample ID			**QC04**
Sample Matrix			**Water**
Eurofins | mgt Sample No.			**M18-My01489**
Date Sampled			**Apr 30, 2018**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	0.02	mg/L	< 0.02
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	96

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons	Melbourne	May 02, 2018	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	May 02, 2018	7 Day
- Method: LTM-ORG-2010 TRH C6-C36			
BTEX	Melbourne	May 02, 2018	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			

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NATA # 1261
Site # 23736

Company Name: Environmental Site Assessments P/L
Address: 2 Homestead Crt
Highton
VIC 3216

Project Name: TGM BANNOCKBURN

Order No.:
Report #: 596385
Phone:
Fax:

Received: May 1, 2018 8:56 AM
Due: May 8, 2018
Priority: 5 Day
Contact Name: Andrew Koster

Eurofins | mgt Analytical Services Manager : Cindi Guo

Sample Detail						Organochlorine Pesticides	Organophosphorus Pesticides	NEPM 1999 Metals : Metals M15	Moisture Set	Total Recoverable Hydrocarbons	BTEXN and Volatile TRH
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217											
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	QC04	Apr 30, 2018		Water	M18-My01489						X
2	QC07	Apr 30, 2018		Soil	M18-My01490	X	X	X	X		
3	QC09	Apr 30, 2018		Soil	M18-My01491			X	X	X	
Test Counts						1	1	2	2	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. 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. 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.

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	Quality Systems Manual ver 5.1 US Department of Defense
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

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

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

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

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. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

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Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	121			70-130	Pass	
TRH C6-C10	%	118			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	118			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	120			70-130	Pass	
Toluene	%	116			70-130	Pass	
Ethylbenzene	%	120			70-130	Pass	
m&p-Xylenes	%	122			70-130	Pass	
Xylenes - Total	%	123			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M18-My01524	NCP	%	102			70-130	Pass	
TRH C6-C10	M18-My01524	NCP	%	99			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M18-My01524	NCP	%	101			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M18-My01524	NCP	%	101			70-130	Pass	
Toluene	M18-My01524	NCP	%	109			70-130	Pass	
Ethylbenzene	M18-My01524	NCP	%	103			70-130	Pass	
m&p-Xylenes	M18-My01524	NCP	%	106			70-130	Pass	
o-Xylene	M18-My01524	NCP	%	103			70-130	Pass	
Xylenes - Total	M18-My01524	NCP	%	105			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M18-My01523	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	M18-My01523	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M18-My01523	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M18-My01523	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M18-My01523	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M18-My01523	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M18-My01523	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M18-My01523	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	M18-My01523	NCP	mg/L	< 0.003	< 0.003	<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
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.

Authorised By

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Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

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