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Grenof Water Technologies  
**Project Halogen**

Grenof Preliminary Baseline Soil Assessment  
11 November 2025

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## Glossary

Acronym	Meaning
ACL	Added contaminant limits
Actual acidity	The soluble and exchangeable acidity readily available for reaction, including pore waters containing metal species capable of hydrolysis (e.g. Fe <sup>2+</sup> , Fe <sup>3+</sup> or Al <sup>3+</sup> ions). The laboratory analyte for actual acidity is titratable actual acidity.
AHD	Australian Height Datum
ASS	Acid sulfate soils
bgl	Below ground level
BTEXN	Benzene, toluene, ethylbenzene, xylene and naphthalene
CaCO <sub>3</sub>	Calcium carbonate
CLID	Contaminated land investigation document
CLR	Contaminated Lands Register
COA	Certificate of analysis
COPC	Contaminants of potential concern
COG	CQ Environmental Pty Ltd trading as CQG Consulting
DDT	Dichlorodiphenyltrichloroethane
EIL	Ecological investigation level
EMR	Environmental Management Register
ESL	Ecological screening level
GSDA	Gladstone State Development Area
Ha	Hectare
HIL	Health investigation level
HSL	Health screening level
km	Kilometres
LoR	Limit of reporting
NATA	National Association of Testing Authorities
NEPM	National Environment Protection Measure

Acronym	Meaning
Net acidity	The quantitative measure of the acidity hazard of ASS materials. It is determined from an acid base accounting approach
OCP/OPP	Organochlorine and organophosphorus
PAHs	Polyaromatic hydrocarbons
PASS	Potential acid sulfate soil
PFAS	Per- and polyfluoroalkyl substances
PFHxS	Perfluorohexane sulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
pH KCl	Method to determine soil pH following mixing with potassium chloride solution
pH OX	Method to determine soil pH following oxidisation with 30% hydrogen peroxide
QA	Quality assurance
QASSTM	<i>Queensland Acid Sulfate Soil Technical Manual</i>
QC	Quality control
Qld	Queensland
RDP	Relative percentage difference
Retained acidity	This refers to acidity retained by sparingly soluble and insoluble oxidised sulfur compounds (derived from sulfide oxidation) that slowly produce acid (e.g. jarosite, natrojarosite and schwertmannite)
SPOCAS	Suspension peroxide oxidation combined acidity and sulphur suite
SQP	Suitably qualified person
t	Tonnes
The Project	Project Halogen (Chlor-alkali plant)
The Site	Portion of Lot 1 on SP200899 and Lot 1 on MPH32292
TPH	Total petroleum hydrocarbons
TRH	Total recoverable hydrocarbons

# 1 Introduction

## 1.1 Objective

Grenof engaged COG Consulting (COG) to undertake a preliminary baseline soil assessment for indicators of contaminated land and acid sulfate soils (ASS) for the Project Halogen chlor-alkali plant (the Project), located on a portion of Lot 1 on SP200899 and Lot 1 Plan MPH32292 (the Site), within the Gladstone State Development Area (GSDA).

Details of the Site and Project conceptual plan layout are shown in **Appendix A, Figure A.1**.

## 1.2 Site Information

### 1.2.1 Location

The Site is a greenfield location within the GSDA, approximately 13 kilometres (km) west of Gladstone in Central Queensland.

Nearby land uses include the following activities:

- Landing Road and Ergon electricity easement (Lot A CTN2165) to the west;
- Ergon electricity substation on Lot 2 SP200899 to the west;
- Fishermans Road to the north;
- Intertidal area on Lot 1 SP147871 to the east, with Fisherman's Landing Branch rail line and Rio Tinto Australia Yarwun conveyor further to the east; and
- A tributary of Boat Creek to the south.

### 1.2.2 Site Geology

The Site is located on soils associated with the Quaternary Period, which is made up of recent deposition, consisting of sand, silt, mud, gravel, and residual soil and colluvium (GeoResGlobe, 2025). Australian Soils Classification for the site is described as:

- "Narrows", colluvial fans and alluvial fans below the coastal range along The Narrows Strait, north of Gladstone, with bleached, loamy or silty surface, sodic texture contrast soils and eucalypt woodland with swamp mahogany, tea tree understorey and gum-topped box woodland.

### 1.2.3 Land Registers

The Site is not listed on the Queensland Government Environmental Management Register (EMR) or Contaminated Lands Register (CLR).

A copy of the EMR / CLR search is provided in **Appendix B**.

### 1.2.4 ASS Mapping

ASS soils, sediments and other materials containing iron sulfides are typically found at coastal and near-coastal locations. They are environmentally benign when left undisturbed in an aqueous, anoxic environment, however, when exposed to oxygen the iron sulfides oxidise, releasing sulfuric acid and soluble iron (Queensland Acid Sulfate Soil Technical Manual (QASSTM), Soil Management Guidelines, Version 5.1, 2024). Both substances have considerable ability to degrade the natural and built environment, and the acid may additionally mobilise chemical species (e.g. aluminium and/or heavy metals) which can be toxic or poisonous at low concentrations to plants and animals. Other hazards including the deoxygenation of surface waters, contaminant metal and metalloid release, malodours, nutrient release have been associated directly with ASS (QASSTM, 2024).

Acid sulfate soils occur naturally over extensive areas of low-lying coastal land along the Queensland coastline, predominantly below 5.0 m Australian Height Datum (AHD). These soils may be found close to the natural ground surface but may also be buried at depth in the soil profile (QASSTM, 2024).

Queensland Globe (QLD Globe 2025) contour mapping indicates that the Site is located between 6.5 mAHD at the south-eastern portion to 10.5 mAHD at the north-western portion. As the Site is above 5.0 mAHD the likely presence of PASS / ASS material is considered low.

QLD Globe ASS mapping (refer to **Figure 1.1**) indicates the following:

- The Site is located in the zone labelled as “not assessed” during Queensland Government ASS mapping. This is land located above 5.0 mAHD;
- The nearest ASS zone S1 / S2 indicates the potential presence of PASS material at between 0.5 m to 1.0 m depths below surface level. This is based on a 1:50,000 scale which equates to approximately 1 borehole per 25 hectares (Ha), or 2 to 7 boreholes per square kilometre completed as part of the mapping assessment; and
- The S1 / S2 zone lies within a 2.0 mAHD contour area, approximately 500 m east of the Site.



**Legend**

Project Site

**Acid Sulfate Soils (Qld)**

- A0
- A0S0
- A0S1
- A0S2
- A1S1
- A1S2
- LP
- LP5
- NA
- NAM
- S0
- S0/S1
- S1
- S1/S2
- SDL
- SLA

**Roads and tracks**

- Secondary
- Connector

N

Scale 1:40,000 (A3)

0 600 1,200 1,800

Metres

Coordinate System: GDA2020 MGA Zone 56

**Figure 1.1**  
**Project Halogen**  
**ASS Mapping in vicinity of Project Site Location**

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Project No: 25054  
 Map No: 25054-21  
 Revision: Rev0  
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## 2 Methodology

### 2.1 Scope of works

Two CQG environmental scientists under the direction of a CQG suitably qualified person (SQP), conducted soil sampling at the Site on 15 and 16 September 2025.

Soil bores were advanced onsite by the geotechnical assessment team (D & N Geotechnical 2025) using a truck mounted drill rig with solid stem auger attachments at three predetermined soil boring locations. Soil samples were collected from near surface (0.5 m) and then at 1.0 m intervals to a maximum depth of 5.0 m from each of the boreholes. Boreholes were advanced further by the geotechnical assessment team.

Five hand auger locations were selected by CQG using a judgemental sampling approach, with soil samples collected from the 0.5 m depth soil profile at each sample location.

Soil samples were collected directly from the drill rig auger using gloved hands, as well as from five hand auger locations (0.5 m depth) and were placed in pre-labelled laboratory supplied sample jars and preserved on ice for laboratory transport. Sample locations were recorded in the field using a GPS device within a lateral 3.0 m to 5.0 m level of accuracy.

Sample locations are shown in **Appendix C, Figure C.1**.

All soil samples were dispatched to a National Association of Testing Authority (NATA) certified laboratory for analysis of the following:

- Heavy metals x 15 (arsenic (As), barium (Ba), beryllium (Be), boron (B), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), selenium (Se), vanadium (V) and zinc (Zn));
- Total petroleum hydrocarbons (TPH) and total recoverable hydrocarbons (TRH);
- Benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN);
- Organochlorine and organophosphorus (OCP/OPP) pesticides;
- Polynuclear aromatic hydrocarbons (PAH's);
- Polychlorinated biphenyls (PCBs);
- Phenolic compounds;
- Two soil samples (0.5 m depth profile) from Borehole 3 (BH03) and Hand Auger 4 (HA04) were analysed for per- and polyfluoroalkyl substances (PFAS); and
- All soil samples collected from the boreholes were analysed for suspension peroxide oxidation combined acidity and sulphur suite (SPOCAS) in the laboratory.

No groundwater monitoring wells were installed, and no groundwater sampling or analysis was completed as part of the work completed by CQG.

### 2.2 Standards and guidelines

#### 2.2.1 Contaminated land

Soil sampling was performed in accordance with the following standards and procedures:

- AS/NZS 4882.1:2005 Guide to investigation and sampling of sites with potentially contaminated soil – non-volatile and semi-volatile compounds;
- AS/NZS 4882.2:1999 Guide to investigation and sampling of sites with potentially contaminated soil – Volatile Substances; and
- CQG's Internal procedural documents (Soil Sampling Standard Operating Procedure, 2023).

Soil analytical results were compared against the following guidelines:

- National Environment Protection Council (NEPC 2013) National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended on 16 May 2013) (ASC NEPM); and
- National Chemicals Working Group of the Heads of the EPAs Australia and New Zealand (HEPA), PFAS National Environmental Management Plan (NEMP) Plan 3.0, 2025 (criteria for industrial/commercial).

Analytical results were compared against **Commercial / Industrial** assessment criteria within Schedule B (1) Guideline on Investigation Levels for Soil and Groundwater of the ASC NEPM, as follows:

- Table 1A(1) Health Investigation Levels (HILs) for soil contaminants (HIL D);
- Table 1A(3) Soil Health Screening Levels (HSLs) for vapour intrusion ( $C_6 - C_{10}$ ,  $>C_{10} - C_{16}$ , BTEXN), clay soils – 0 to 1m depth (HSL D);
- Table 1B(4) ACL generic Pb, generic EILs for As, DDT and Naphthalene – Commercial / Industrial; and
- Table 1B (5) Ecological Screening levels (ESLs) for TPH fractions F1 – F4, BTEX and benzo(a)pyrene in soil (Commercial/Industrial).

Commercial/industrial standards were adopted as applicable to the intent of the GSDA location and proposed special industry (as defined by Coordinator-General 2022) land use for the Site.

For the HSL vapour intrusion 'clay' and ESL (Commercial / Industrial) 'fine' material was selected as representative of material encountered in the top 1.0 m at both the borehole and hand auger locations.

The assessment criteria for PFAS are presented in **Table 2.1**.

**Table 2.1: NEMP Plan 3.0, 2025 PFAS Assessment Criteria – Commercial / Industrial Land Use**

Exposure Scenario	Land Use	PFOS + PFHxS	PFOA	PFOS
Soil – Human Health Screening Values	Commercial and Industrial (HIL D) (mg/kg)	20	50	NG
Soil – Ecological Direct Exposure	All land uses (mg/kg)	NG	10	1
Soil – Ecological Indirect Exposure	All land uses (mg/kg)	NG	0.003	0.003
<b>Notes:</b> PFOS = perfluorooctanesulfonic acid, PFOA = perfluorooctanoic acid, PFHxS = perfluorohexane sulfonic acid, NG = no guideline values set.				

### 2.2.2 Acid sulfate soil

Soil sampling was performed in accordance with the following ASS guidelines:

- QASSTM, *Soil Management Guidelines, Version 5.1 (2024)*; and
- CQG's Internal procedural documents (Soil Sampling Standard Operating Procedure, 2023).

Laboratory results were compared against QASSTM – Soil Management Guidelines v5.1 (2024) to assess the potential presence and reactivity of ASS. The assessment criteria for ASS are summarised in **Table 2.2**.

Table 2.2: QASSTM assessment criteria

Parameter	Trigger Limit	Assessment Criteria
Peroxide pH	pH ox < 3.0	PASS likely
Net Acidity (mole H+ / t)	0 to 1, 000 t material disturbed: - 18 (Sands to loamy sands) - 36 (Clayey sands to light clays) - 62 (Fine to heavy clays/silts) > 1.000 t material disturbed: - 18 (all soil types)	Soil is acidic and/or potentially acid-forming
Net Acidity (% S)	0 to 1, 000 t material disturbed: - 0.03 (Sands to loamy sands) - 0.06 (Clayey sands to light clays) - 0.10 (Fine to heavy clays/silts) > 1.000 t material disturbed: - 0.03 (all soil types)	Soil is acidic and / or potentially acid-forming
Acid Neutralising Capacity (ANC)	Varies (site-specific)	ANC should ≥ potential acidity

## 3 Results

### 3.1 Field observations

A summary of field observations is listed in **Table 3.1**. A complete set of field observations and photographs is provided in **Appendix D**.

**Table 3.1: Summary of field observations**

Location	Depth bgl	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure
BH01	0.5 m	Firm	Moderate	Clay	Light brown	Low	Blocky
BH01	1.0 m	Hard	Very low	Medium	Greyish brown	Dry	Granular
BH01	2.0 m	Dense	Moderate to high	Clay to silt	Brown	Moderate	Blocky
BH01	3.0 m	Firm	Moderate	Clay	Brown to greyish brown	Moderate	Blocky
BH01	4.0 m	Very firm	High	Fine	Brown to greyish brown	Moderate	Massive
BH01	5.0 m	Firm	Moderate	Fine to medium	Brown	Low	Blocky
BH02	0.5 m	Loose	NA*	NA*	NA*	NA*	NA*
BH02	1.0 m	Loose to friable	Low	Fine to medium	Light brown to greyish tan	Very dry	Weak granular
BH02	2.0 m	Firm to hard	Low	Medium to coarse	Light brown to grey	Dry	Granular
BH02	3.0 m	Loose	Very low	Fine silt to sand	Light brown to pale tan	Very dry	Structureless
BH02	4.0 m	Moderately firm	Low	Mixed – fine and coarse	Brownish grey	Dry	Weak blocky
BH02	5.0 m	Firm to very firm	Moderate to high	Clay sized	Light Brown	Moderately moist	Massive to blocky
BH03	0.5 m	Firm	Low	Fine to medium	Light greyish to brown	Very low	Weak granular
BH03	1.0 m	Loose to slightly firm	Very low	Fine to medium	Light brown to pale tan	Very low	Weak granular

Location	Depth bgl	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure
BH03	2.0 m	Firm to slightly hard	Medium	Coarse sand to fine gravel	Light brown to greyish tan	Low	Weak granular
BH03	3.0 m	Firm	Low	Fine to medium	Light brown	Dry	Weak blocky
BH03	4.0 m	Loose to slightly firm	Very low	Fine to medium	Light brown to pale tan	Dry	Weak granular
BH03	5.0 m	Firm to very firm	Moderate to high	Clay sized	Dark brown	Moderately moist	Massive to blocky
HA01	0.5 m	Loose	Low	Loose, fine	Light greyish to brown	Very dry	Structureless
HA02	0.5 m	Very firm	Medium	Loose, fine	Grey to brown	Low	Weak granular
HA03	0.5 m	Loose to friable	Low	Fine to medium, some larger clumps	Muted brownish grey	Dry	Weak granular
HA04	0.5 m	Firm to moderately hard	Moderate	Fine to medium	Light brown	Dry	Blocky to granular
HA05	0.5 m	Hard to friable	Very low	Mixed – silt and sand gravel	Greyish brown	Very dry	Structureless to granular
*Note: observation details for BH02 0.5 m were not captured in Survey123 due to in field equipment error.							

### 3.2 Soil Analytical Results

A total of 25 soil samples, including two quality control assurance (QA) samples (duplicate samples) were collected and analysed in the laboratory. Refer to **Appendix E** for the laboratory reports.

The suite of analytes selected by CQG for this investigation was dictated by the human health and environmental objectives. To determine whether contaminated soil may pose a hazard to human health and the environment, the levels of contaminants reported in the soil were assessed against recognised standards and guidelines described in **Section 2.2**.

#### 3.2.1 Contaminated land

A summary of the soil results indicates the following:

- All concentrations of metals reported below the nominated environmental guideline values at all sampling locations, with As, B, Cd, and Se reporting levels below the laboratory limit of reporting (LOR) at all sampling locations. The metal results above the LOR are at ambient conditions for coastal Queensland soils (see results presented in **Table F.1, Appendix F**);

- Concentrations of petroleum hydrocarbon fractions (TPH, TRH and PAHs) were reported at below the laboratory LOR for all soil sample locations and depths;
- BETXN concentrations were reported below the laboratory LOR for all soil sample locations and sampling depths;
- Pesticide (OCP / OPPs), phenolic compounds, and PCB concentrations were below the laboratory LOR for all soil sample locations and sample depths analysed; and
- PFAS concentrations in the two soil samples analysed at 0.5 m depths reported levels below the laboratory LOR.

### 3.2.2 ASS

Analytical results indicate the following, when compared to the guidelines presented in **Table 2.2** (see results presented in **Table F.2, Appendix F**).

- Soil pH results when the sample was mixed with a potassium chloride solution (pH KCl) results ranged from 4.7 to 8.8;
- Soil pH results when the sample was mixed with a hydrogen peroxide solution (pH OX) results ranged from 4.9 to 9.2 indicating that pH levels are above the ASS guideline level for the likely presence of PASS;
- Soil samples reported net acidity (sulphur units) below LOR except for BH01 at 0.5 m depth, which reported 0.04 % S. This level lies between the sands to clays and silty clays texture range for 1 – 1000 tonnes (t) material disturbed, however is above the action guideline if > 1,000 t of material is disturbed (0.03 % S); and
- Similarly, soil samples reported net acidity (acidity units) below LOR, except for BH01 at 0.5 m depth, which reported 27 mole H<sup>+</sup> / t. This level is between the sands to sandy clays texture range of 18 to 36 mole H<sup>+</sup> / t for 0 – 1000 T material disturbed, however is above the action guideline if greater than (>) 1,000 t of material is disturbed (18 mole H<sup>+</sup> / t).

In summary, ASS laboratory testing of soil samples from the three soil boreholes to a maximum depth of 5.0 m bgl did not report the presence of ASS forming materials. Whilst an outlier soil sample at BH01 at 0.5 m reported results that are indicative of the potential presence of ASS the overall results do not support the presence of ASS in concentrations that require an Acid Sulfate Soil Management Plan (ASSMP). Should at any stage of the project construction works, strong sulfuric “rotten egg” odours or black oozing soils be encountered during disturbance and excavation, then works should immediately cease, soils covered and advice sought from a qualified environmental practitioner with experience in managing PASS / ASS.

## 3.3 Quality Assurance / Quality Control

### 3.3.1 Soil Duplicates

The relative percentage difference (RPD) between primary and duplicate samples is presented in **Table G.1, Appendix G**. In general, RPD values were within acceptable range (between 20% to 30%) for most analytes. RPD values indicate that sampling procedures including decontamination procedures between soil sampling locations was acceptable.

### 3.3.2 Laboratory QA / QC

No method blank value outliers, duplicate outliers, or matrix spike outliers, or surrogate recovery outliers for regular sampling matrices occurred. No analysis holding time or quality control sample frequency outliers occurred (refer to **Appendix E**). Laboratory control outliers were reported for PAHs for analytes phenanthrene, fluoranthene, pyrene, and benzo (b+) fluoranthene with recovery greater than upper control limit. Results greater than upper control limit indicates a higher bias in analytical method for these parameters, which may result in an overestimate for PAH concentrations in samples. It is noted that no soil samples reported PAH analytes in concentrations above LOR.

## 4 Conclusion

Soil sampling was conducted at the proposed Grenof Project Halogen Chlor-alkali plant (the Project) on 15 and 16 September 2025 by CQG environmental scientists.

Samples were analysed in the laboratory for a range of parameter concentrations including heavy metals, hydrocarbons (TRH, BTEXN, PAHs), pesticides, biphenyl's, phenol compounds, PFAS and ASS.

Laboratory results indicate concentrations of chemical parameters were below selected environmental and health-based guidelines for commercial / industrial land use and in many cases below the laboratory LOR.

Selected soil samples analysed from the soil boreholes for ASS in the laboratory did not report pH (KCL and OX) values and net acidity values indicative of the presence of ASS that would require any further testing, however, should at any stage of the development work (earthworks / construction) a strong sulfuric "rotten egg" odour or black oozing soil be encountered during disturbance and / or excavation, then works should immediately cease, soils covered and advice sought from a qualified environmental practitioner.

It is important to note that the report findings and conclusions is based on a limited range and location of test samples and there may be areas onsite that report chemical parameters above and / or below the reported baseline values and guideline values.

## 5 References

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## Limitations

This report has been prepared for the use of the client, Grenof, for the purpose of this commission only.

COG<sup>1</sup> takes no responsibility and disclaims all liability for any loss or damage that any party may suffer because of using or relying on any such information or recommendations contained in this report.

To the maximum extent permitted by law COG expressly disclaims responsibility for or liability arising from:

- Any error in, or omission in connection with assumptions, or
- Reliance on the report by a third party or use of the report other than for the purpose stated.

The report relates only to the project described herein and must be reviewed by a competent expert before being used for any other purpose. COG accepts no responsibility for other use of the data.

This report does not provide a complete assessment of the environmental status of the Site but is limited to the scope defined herein.

It is the reader's responsibility to verify the correct interpretation and intention of the recommendations presented herein. COG assumes no responsibility for misunderstandings or improper interpretations that result in unsatisfactory or unsafe work products. It is the reader's further responsibility to acquire copies of any supplemental reports, addenda or responses to public agency reviews that may supersede recommendations in this report.

This site investigation report is not a Detailed Site Investigation, Hydrogeological report, validation report, remediation action plan, asbestos audit, environmental audit, or geotechnical report. The Site contamination assessment identifies actual subsurface conditions where the samples were taken and when they were taken. The laboratory tests are carried out by an external NATA accredited chemical laboratory and the results together with the field, and other data are interpreted by environmental scientists / engineers. These professionals then render an opinion about the overall subsurface conditions, the nature, mobility, type and extent of the contamination, and its likely impact on a proposed development. The actual conditions may differ from the inferred conditions, as no person (no matter how qualified) or even the most detailed subsurface investigation can predict with confidence what may be hidden by soil or water or may have altered with time.

Often the interface between contamination zones may be more abrupt or gradual than anticipated. The actual conditions in an area may differ from that predicted. Contaminants may be present in areas not surveyed or sampled or may migrate to an area that showed no sign of contamination when previously sampled.

The testing of the analytes is carried out by an independent NATA accredited chemical laboratory and any liability with regards to the testing is solely this laboratory's responsibility.

Site assessments are limited by time. The contamination may be affected by either natural processes such as erosion, mankind altering the ground conditions including the chemical nature of the groundwater or soils or chemical reactions of the contaminants altering the physical characteristics of the soil or water on the Site.

Should further information become available regarding the conditions of the Study Area, COG reserves the right to review the report in the context of the additional information.

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The scope of this study did not include any site surveys or modelling.

This report is based on information issued and supplied to COG by others as well as publicly available information.

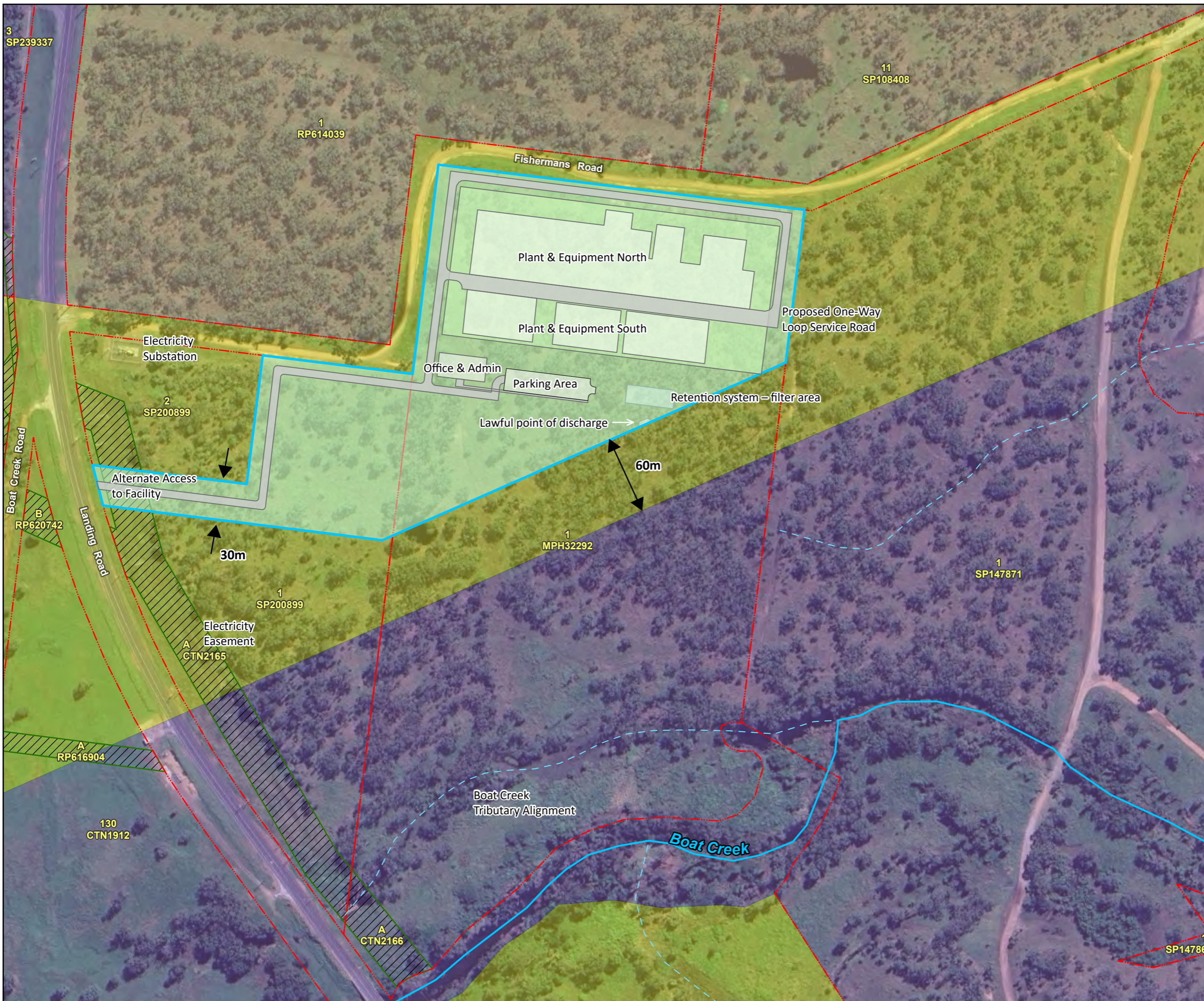
Where laboratory tests have been performed and data recorded, the responsibility for the accuracy of such data remains with the issuing authority, not with COG.

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<sup>1</sup> *CQ Environmental Pty Ltd (ABN 61 107 574 514) trading as CQG Consulting (CQG)*

**Appendix A:**

*Halogen Project Map – Project Halogen Site Layout*



**Legend**

- Easement
- Lot Type Parcel
- Named Waterways
- Unnamed waterways

**Gladstone SDA Precinct**

- Port Related Industry Precinct
- Industry Investigation Precinct
- Materials Transportation and Services Corridor Precinct (MTSC)

Disclaimer:  
 CQG has relied upon data obtained from QSpatial and other public sources, as well as the client (Grenof).  
 All internal access, maneuvering areas, and infrastructure are subject to engineering design

N

Scale 1:2,750 (A3)

0      41      83      124

Metres

Coordinate System: GDA2020 MGA Zone 56

**Figure A.1**

**Project Halogen**

**Conceptual Operations Site Layout  
(MCU Submission)**

**GRENOF**

Project No: 25054  
 Map No: 25054-02  
 Revision: RevA  
 10 November 2025

**Appendix B:**

*Contaminated Land EMR Search Results*



Department of the Environment, Tourism, Science and Innovation (DETSI)  
ABN 46 640 294 485  
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA  
www.detsi.qld.gov.au

**SEARCH RESPONSE**  
**ENVIRONMENTAL MANAGEMENT REGISTER (EMR)**  
**CONTAMINATED LAND REGISTER (CLR)**

Scott lucke  
PO Box 8384  
Allentown QLD 4700

Transaction ID: 51027937      EMR Site Id: 28 July 2025  
Cheque Number:  
Client Reference:

This response relates to a search request received for the site:

Lot: 1      Plan: MPH32292  
56 FISHERMANS RD  
YARWUN

**EMR RESULT**

The above site is NOT included on the Environmental Management Register.

**CLR RESULT**

The above site is NOT included on the Contaminated Land Register.

**ADDITIONAL ADVICE**

All search responses include particulars of land listed in the EMR/CLR when the search was generated.  
The EMR/CLR does NOT include:-

1. land which is contaminated land (or a complete list of contamination) if DETSI has not been notified
2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if DETSI has not been notified

If you have any queries in relation to this search please email [emr.clr.registry@detsi.qld.gov.au](mailto:emr.clr.registry@detsi.qld.gov.au)

**Administering Authority**

**Appendix C:**

*Soil Sampling Locations Figure C.1*



**Legend**

- Project Area
- Proposed Plant and Equipment Location
- Road/ Proposed Road
- Other

**Sample Locations**

- Bore Locations
- Test Pit Locations

**Cadastral Boundaries**

- Easement
- Lot Type Parcel

**Roads and tracks**

- Local

N

Scale 1:2,000 (A3)

0 30 60 90

Metres

Coordinate System: GDA2020 MGA Zone 56

**Figure C.1**

**Grenof Water Technologies Pty Ltd**

**Project Halogen**

**Sample Locations**




**CQG Consulting**

180 Quay Street, Rockhampton Q 4700  
 PO Box 8384, Allenstown 4700  
 Ph: +61 7 4922 9252 Fax: +61 7 4922 0195



**Project No: 25054**  
**Map No: 25054-22**  
**Revision: RevB**  
**10 November 2025**



**Appendix D:**


*Field Observations and Photographs*

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH01	0.5 m	16/09/2025 16:20	-23.813478 151.153326	Firm	Moderate	Clay	Light brown	Low	Blocky		
BH01	1.0 m	16/09/2025 16:40	-23.813478 151.153326	Hard	Very low	Medium	Greyish brown	Dry	Granular		
BH01	2.0 m	17/09/2025 07:30	-23.813478 151.153326	Dense	Moderate to high	Clay to silt	Brown	Moderate	Blocky		



Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH01	3.0 m	17/09/2025 07:40	-23.813478 151.153326	Firm	Moderate	Clay	Brown to greyish brown	Moderate	Blocky		
BH01	4.0 m	17/09/2025 07:50	-23.813478 151.153326	Very firm	High	Fine	Brown to greyish brown	Moderate	Massive		
BH01	5.0 m	17/09/2025 08:10	-23.813478 151.153326	Firm	Moderate	Fine to medium	Brown	Low	Blocky	Brown soil sample coated in fine grey dust from surface soils	
BH02	0.5 m	16/09/2025 12:30	-23.814264 151.152594	Loose	NA*	NA*	NA*	NA*	NA*		NA*



Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH02	1.0 m	16/09/2025 12:35	-23.814264 151.152594	Loose to friable	Low	Fine to medium	Light brown to greyish tan	Very dry	Weak granular		
BH02	2.0 m	16/09/2025 13:10	-23.814264 151.152594	Firm to hard	Low	Medium to coarse	Light brown to grey	Dry	Granular		




Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH02	3.0 m	16/09/2025 13:25	-23.814264 151.152594	Loose	Very low	Fine silt to sand	Light brown to pale tan	Very dry	Structureless		
BH02	4.0 m	16/09/2025 13:40	-23.814264 151.152594	Moderately firm	Low	Mixed – fine and coarse	Brownish grey	Dry	Weak blocky		



Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH02	5.0 m	16/09/2025 14:00	-23.814264 151.152594	Firm to very firm	Moderate to high	Clay sized	Light Brown	Moderately moist	Massive to blocky		
BH03	0.5 m	15/09/2025 15:00	-23.814917 151.151956	Firm	Low	Fine to medium	Light greyish to brown	Very low	Weak granular		

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH03	1.0 m	15/09/2025 15:10	-23.814917 151.151956	Loose to slightly firm	Very low	Fine to medium	Light brown to pale tan	Very low	Weak granular	Minor inclusions of dry grass and surface debris. coarse-textured and rocky. It has a high content of gravel and larger rock fragments mixed with fine particles like sand and silt.	

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH03	2.0 m	15/09/2025 16:00	-23.814917 151.151956	Firm to slightly hard	Medium	Coarse sand to fine gravel	Light brown to greyish tan	Low	Weak granular	Small stones, rock fragments	
BH03	3.0 m	15/09/2025 07:45	-23.814917 151.151956	Firm	Low	Fine to medium	Light brown	Dry	Weak blocky		

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
BH03	4.0 m	15/09/2025 08:00	-23.814917 151.151956	Loose to slightly firm	Very low	Fine to medium	Light brown to pale tan	Dry	Weak granular		
BH03	5.0 m	15/09/2025 08:30	-23.814917 151.151956	Firm to very firm	Moderate to high	Clay sized	Dark brown	Moderately moist	Massive to blocky		

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
HA01	0.5 m	16/09/2025 08:40	-23.814827 151.151888	Loose	Low	Fine	Light greyish to brown	Very dry	Structureless		
HA02	0.5 m	16/09/2025 09:10	-23.814785 151.152637	Very firm clay	Medium	Fine	Grey to brown	Low	Weak granular		
HA03	0.5 m	16/09/2025 10:00	-23.814408 151.153634	Loose to friable	Low	Fine to medium, some larger clumps	Muted brownish grey	Dry	Weak granular		

Location	Depth	Time and Date	Lat/Long	Consistency	Plasticity	Soil Type	Colour	Moisture Content	Soil Structure	Comments	Photo
HA04	0.5 m	16/09/2025 11:00	-23.81367 151.152317	Firm to moderately hard	Moderate	Fine to medium	Light brown	Dry	Blocky to granular		
HA05	0.5 m	16/09/2025 13:00	-23.813495 151.15416	Hard to friable	Very low	Mixed – silt and sand gravel	Greyish brown	Very dry	Structureless to granular		

**Appendix E:**  
*Laboratory Reports*



## CERTIFICATE OF ANALYSIS

<b>Work Order</b>	<b>: EB2532723</b>	Page	: 1 of 39
<b>Amendment</b>	<b>: 1</b>		
<b>Client</b>	<b>: CQ ENVIRONMENTAL</b>	<b>Laboratory</b>	: Environmental Division Brisbane
<b>Contact</b>	<b>: OSCAR DALLA PRIA</b>	<b>Contact</b>	: Kelly Schafer
<b>Address</b>	<b>: 15 LORD STREET</b>	<b>Address</b>	: 2 Byth Street Stafford QLD Australia 4053
	<b>GLADSTONE QLD 4680</b>		
<b>Telephone</b>	: ----	<b>Telephone</b>	: +61 7 4978 7944
<b>Project</b>	: 25054	<b>Date Samples Received</b>	: 19-Sep-2025 11:40
<b>Order number</b>	: 25054	<b>Date Analysis Commenced</b>	: 22-Sep-2025
<b>C-O-C number</b>	: ----	<b>Issue Date</b>	: 07-Oct-2025 16:44
<b>Sampler</b>	: MICHAEL WHITEHEAD		
<b>Site</b>	: ----		
<b>Quote number</b>	: EN/222		
<b>No. of samples received</b>	: 25		
<b>No. of samples analysed</b>	: 25		



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. 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
Beatriz Llarinas	Senior Chemist	Brisbane Inorganics, Stafford, QLD
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD
Kim McCabe	Senior Inorganic Chemist	Brisbane Soil Preparation, Stafford, QLD
Satishkumar Trivedi	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Satishkumar Trivedi	Senior Acid Sulfate Soil Chemist	Brisbane Soil Preparation, Stafford, QLD
Tatijana Markoska	Senior Chemist - Organics	Brisbane Organics, Stafford, QLD
Timothy Creagh	Senior Chemist - Organics	Brisbane Organics, Stafford, QLD



## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the 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 Contract 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) per the NEPM (2013) 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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- **Amendment (07/10/2025): This report has been amended and re-released to allow the reporting of additional analytical data, specifically method EG005 for sample EB2532723-001, 007, 013, 019, 020, 021, 022, 023, 024, 025.**
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- EP075(SIM) - PAH/Phenols: High LCS recovery deemed acceptable as all associated analyte results are less than LOR
- ASS: EA029 (SPOCAS): Laboratory determinations of ANC needs to be corroborated by effectiveness of the measured ANC in relation to incubation ANC. Unless corroborated, the results of ANC testing should be discounted when determining Net Acidity for comparison with action criteria, or for the determination of the acidity hazard and required liming amounts.
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO<sub>3</sub>) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m<sup>3</sup> in-situ soil, multiply reported results x wet bulk density of soil in t/m<sup>3</sup>.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per USEPA 1633 limits where listed. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time				16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50	
Compound	CAS Number	LOR	Unit	EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005	
				Result	Result	Result	Result	Result	
<b>EA029-A: pH Measurements</b>									
pH KCl (23A)	----	0.1	pH Unit	4.7	5.6	8.4	8.6	8.6	
pH OX (23B)	----	0.1	pH Unit	4.9	7.0	8.7	9.2	9.2	
<b>EA029-B: Acidity Trail</b>									
Titrateable Actual Acidity (23F)	----	2	mole H+ / t	27	4	<2	<2	<2	
Titrateable Peroxide Acidity (23G)	----	2	mole H+ / t	4	<2	<2	<2	<2	
Titrateable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	<2	<2	<2	
sulfidic - Titrateable Actual Acidity (s-23F)	----	0.020	% pyrite S	0.043	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
<b>EA029-C: Sulfur Trail</b>									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Sulfur (23De)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	<10	<10	<10	
<b>EA029-D: Calcium Values</b>									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	0.063	<0.020	0.226	0.272	0.218	
Peroxide Calcium (23Wh)	----	0.020	% Ca	0.062	0.022	0.278	0.690	0.318	
Acid Reacted Calcium (23X)	----	0.020	% Ca	<0.020	<0.020	0.052	0.417	0.099	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	<10	<10	26	208	50	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	<0.020	<0.020	0.042	0.334	0.080	
<b>EA029-E: Magnesium Values</b>									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	0.106	0.056	0.165	0.200	0.188	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	0.103	0.059	0.221	0.285	0.223	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	<0.020	<0.020	0.056	0.085	0.035	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	<10	<10	46	70	29	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	<0.020	<0.020	0.074	0.112	0.046	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time					16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50
Compound	CAS Number	LOR	Unit		EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005
					Result	Result	Result	Result	Result
<b>EA029-F: Excess Acid Neutralising Capacity</b>									
Excess Acid Neutralising Capacity (23Q)	----	0.020	% CaCO3	----	0.273	1.27	2.04	0.926	
acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t	----	54	254	407	185	
sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.020	% S	----	0.087	0.407	0.652	0.296	
<b>EA029-H: Acid Base Accounting</b>									
ANC Fineness Factor	----	0.5	-	1.5	1.5	1.5	1.5	1.5	
Net Acidity (sulfur units)	----	0.02	% S	0.04	<0.02	<0.02	<0.02	<0.02	
Net Acidity (acidity units)	----	10	mole H+ / t	27	<10	<10	<10	<10	
Liming Rate	----	1	kg CaCO3/t	2	<1	<1	<1	<1	
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	0.04	<0.02	<0.02	<0.02	<0.02	
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	27	<10	<10	<10	<10	
Liming Rate excluding ANC	----	1	kg CaCO3/t	2	<1	<1	<1	<1	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%	13.6	----	----	----	----	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Barium	7440-39-3	10	mg/kg	320	----	----	----	----	
Beryllium	7440-41-7	1	mg/kg	<1	----	----	----	----	
Boron	7440-42-8	50	mg/kg	<50	----	----	----	----	
Cobalt	7440-48-4	2	mg/kg	19	----	----	----	----	
Manganese	7439-96-5	5	mg/kg	4160	----	----	----	----	
Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----	
Vanadium	7440-62-2	5	mg/kg	107	----	----	----	----	
Arsenic	7440-38-2	5	mg/kg	<5	----	----	----	----	
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----	
Chromium	7440-47-3	2	mg/kg	16	----	----	----	----	
Copper	7440-50-8	5	mg/kg	22	----	----	----	----	
Lead	7439-92-1	5	mg/kg	5	----	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time					16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50
Compound	CAS Number	LOR	Unit	EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005	
				Result	Result	Result	Result	Result	
<b>EG005(ED093)T: Total Metals by ICP-AES - Continued</b>									
Nickel	7440-02-0	2	mg/kg	7	----	----	----	----	----
Zinc	7440-66-6	5	mg/kg	16	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----	----
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----	----
<b>EP068A: Organochlorine Pesticides (OC)</b>									
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 - (Lindane)	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	----	----	----	----	----
<sup>^</sup> 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	----	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----	----
<sup>^</sup> 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	----	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time				16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50	
Compound	CAS Number	LOR	Unit	EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005	
				Result	Result	Result	Result	Result	
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>									
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	----	----	----	----	
<sup>^</sup> Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----	
<sup>^</sup> Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	----	----	----	----	
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
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	----	----	----	----	
<b>EP075(SIM)A: Phenolic Compounds</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time					16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50
Compound	CAS Number	LOR	Unit		EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005
					Result	Result	Result	Result	Result
<b>EP075(SIM)A: Phenolic Compounds - Continued</b>									
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	----	----	----	----
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									
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	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time				16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50	
Compound	CAS Number	LOR	Unit	EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>									
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	----	----	----	----	
<sup>^</sup> Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	<b>0.6</b>	----	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	----	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
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	----	----	----	----	
<sup>^</sup> C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----	
<sup>^</sup> 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	----	----	----	----	
<sup>^</sup> >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	
<sup>^</sup> >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----	
<b>EP080: BTEXN</b>									
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	----	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m
Sampling date / time				16-Sep-2025 16:20	16-Sep-2025 16:45	17-Sep-2025 07:30	17-Sep-2025 07:40	17-Sep-2025 07:50	
Compound	CAS Number	LOR	Unit	EB2532723-001	EB2532723-002	EB2532723-003	EB2532723-004	EB2532723-005	
				Result	Result	Result	Result	Result	
<b>EP080: BTEXN - Continued</b>									
^ 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	----	----	----	----	----
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	97.3	----	----	----	----	----
<b>EP068S: Organochlorine Pesticide Surrogate</b>									
Dibromo-DDE	21655-73-2	0.05	%	122	----	----	----	----	----
<b>EP068T: Organophosphorus Pesticide Surrogate</b>									
DEF	78-48-8	0.05	%	93.2	----	----	----	----	----
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>									
Phenol-d6	13127-88-3	0.5	%	107	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	104	----	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%	82.0	----	----	----	----	----
<b>EP075(SIM)T: PAH Surrogates</b>									
2-Fluorobiphenyl	321-60-8	0.5	%	103	----	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	106	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	110	----	----	----	----	----
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	74.2	----	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	84.2	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	89.4	----	----	----	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EA029-A: pH Measurements</b>									
pH KCl (23A)	----	0.1	pH Unit	8.2	5.2	5.4	8.5	7.3	
pH OX (23B)	----	0.1	pH Unit	8.6	6.5	6.6	8.8	8.6	
<b>EA029-B: Acidity Trail</b>									
Titrateable Actual Acidity (23F)	----	2	mole H+ / t	<2	7	10	<2	<2	
Titrateable Peroxide Acidity (23G)	----	2	mole H+ / t	<2	<2	<2	<2	<2	
Titrateable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	<2	<2	<2	
sulfidic - Titrateable Actual Acidity (s-23F)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
<b>EA029-C: Sulfur Trail</b>									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Sulfur (23De)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	<10	<10	<10	
<b>EA029-D: Calcium Values</b>									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	0.194	0.031	0.095	0.293	0.163	
Peroxide Calcium (23Wh)	----	0.020	% Ca	0.221	0.039	0.120	0.496	0.172	
Acid Reacted Calcium (23X)	----	0.020	% Ca	0.028	<0.020	0.025	0.203	<0.020	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	14	<10	12	101	<10	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	0.022	<0.020	<0.020	0.162	<0.020	
<b>EA029-E: Magnesium Values</b>									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	0.210	0.032	0.106	0.150	0.153	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	0.236	0.035	0.138	0.198	0.164	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	0.027	<0.020	0.032	0.048	<0.020	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	22	<10	27	40	<10	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	0.035	<0.020	0.043	0.064	<0.020	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EA029-F: Excess Acid Neutralising Capacity</b>									
Excess Acid Neutralising Capacity (23Q)	----	0.020	% CaCO3	<b>0.735</b>	<b>0.211</b>	<b>0.432</b>	<b>1.38</b>	<b>0.444</b>	
acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t	<b>147</b>	<b>42</b>	<b>86</b>	<b>275</b>	<b>89</b>	
sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.020	% S	<b>0.235</b>	<b>0.068</b>	<b>0.138</b>	<b>0.441</b>	<b>0.142</b>	
<b>EA029-H: Acid Base Accounting</b>									
ANC Fineness Factor	----	0.5	-	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	
Net Acidity (sulfur units)	----	0.02	% S	<0.02	<0.02	<0.02	<0.02	<0.02	
Net Acidity (acidity units)	----	10	mole H+ / t	<10	<10	<10	<10	<10	
Liming Rate	----	1	kg CaCO3/t	<1	<1	<1	<1	<1	
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	<0.02	<0.02	<0.02	<0.02	<0.02	
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	<10	<10	<10	<10	<10	
Liming Rate excluding ANC	----	1	kg CaCO3/t	<1	<1	<1	<1	<1	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%	----	<b>5.1</b>	----	----	----	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Barium	7440-39-3	10	mg/kg	----	<b>30</b>	----	----	----	
Beryllium	7440-41-7	1	mg/kg	----	<1	----	----	----	
Boron	7440-42-8	50	mg/kg	----	<50	----	----	----	
Cobalt	7440-48-4	2	mg/kg	----	<b>6</b>	----	----	----	
Manganese	7439-96-5	5	mg/kg	----	<b>513</b>	----	----	----	
Selenium	7782-49-2	5	mg/kg	----	<5	----	----	----	
Vanadium	7440-62-2	5	mg/kg	----	<b>76</b>	----	----	----	
Arsenic	7440-38-2	5	mg/kg	----	<5	----	----	----	
Cadmium	7440-43-9	1	mg/kg	----	<1	----	----	----	
Chromium	7440-47-3	2	mg/kg	----	<b>13</b>	----	----	----	
Copper	7440-50-8	5	mg/kg	----	<b>9</b>	----	----	----	
Lead	7439-92-1	5	mg/kg	----	<b>5</b>	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EG005(ED093)T: Total Metals by ICP-AES - Continued</b>									
Nickel	7440-02-0	2	mg/kg	----	<2	----	----	----	
Zinc	7440-66-6	5	mg/kg	----	<5	----	----	----	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg	----	<0.1	----	----	----	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	----	----	
<b>EP068A: Organochlorine Pesticides (OC)</b>									
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 - (Lindane)	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	----	----	----	
<sup>^</sup> 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	----	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	----	
<sup>^</sup> 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	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>									
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	----	----	----	
<sup>^</sup> Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	----	----	
<sup>^</sup> Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	----	<0.05	----	----	----	
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
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	----	----	----	
<b>EP075(SIM)A: Phenolic Compounds</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)A: Phenolic Compounds - Continued</b>									
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	----	----	----	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									
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	----	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time					17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>									
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	----	----	----	
<sup>^</sup> Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	<b>0.6</b>	----	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	<b>1.2</b>	----	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
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	----	----	----	
<sup>^</sup> C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	<10	----	----	----	
<sup>^</sup> 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	----	----	----	
<sup>^</sup> >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----	
<sup>^</sup> >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	<50	----	----	----	
<b>EP080: BTEXN</b>									
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	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m
Sampling date / time				17-Sep-2025 08:10	16-Sep-2025 12:30	16-Sep-2025 12:35	16-Sep-2025 13:10	16-Sep-2025 13:25	
Compound	CAS Number	LOR	Unit	EB2532723-006	EB2532723-007	EB2532723-008	EB2532723-009	EB2532723-010	
				Result	Result	Result	Result	Result	
<b>EP080: BTEXN - Continued</b>									
^ 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	----	----	----	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	----	91.9	----	----	----	
<b>EP068S: Organochlorine Pesticide Surrogate</b>									
Dibromo-DDE	21655-73-2	0.05	%	----	111	----	----	----	
<b>EP068T: Organophosphorus Pesticide Surrogate</b>									
DEF	78-48-8	0.05	%	----	89.3	----	----	----	
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>									
Phenol-d6	13127-88-3	0.5	%	----	101	----	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	97.9	----	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	76.0	----	----	----	
<b>EP075(SIM)T: PAH Surrogates</b>									
2-Fluorobiphenyl	321-60-8	0.5	%	----	95.6	----	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	102	----	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	103	----	----	----	
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	62.0	----	----	----	
Toluene-D8	2037-26-5	0.2	%	----	69.5	----	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	73.2	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EA029-A: pH Measurements</b>									
pH KCl (23A)	----	0.1	pH Unit	7.7	7.7	5.4	5.9	8.6	
pH OX (23B)	----	0.1	pH Unit	8.6	8.9	6.2	6.7	8.8	
<b>EA029-B: Acidity Trail</b>									
Titrateable Actual Acidity (23F)	----	2	mole H+ / t	<2	<2	5	<2	<2	
Titrateable Peroxide Acidity (23G)	----	2	mole H+ / t	<2	<2	<2	<2	<2	
Titrateable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	<2	<2	<2	
sulfidic - Titrateable Actual Acidity (s-23F)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
sulfidic - Titrateable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	<0.020	<0.020	
<b>EA029-C: Sulfur Trail</b>									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Sulfur (23De)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	<0.020	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	<10	<10	<10	
<b>EA029-D: Calcium Values</b>									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	0.223	0.181	0.030	0.063	0.298	
Peroxide Calcium (23Wh)	----	0.020	% Ca	0.232	0.202	0.032	0.074	0.627	
Acid Reacted Calcium (23X)	----	0.020	% Ca	<0.020	0.020	<0.020	<0.020	0.329	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	<10	10	<10	<10	164	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	<0.020	<0.020	<0.020	<0.020	0.263	
<b>EA029-E: Magnesium Values</b>									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	0.194	0.212	0.029	0.089	0.187	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	0.202	0.234	0.031	0.097	0.260	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	<0.020	0.022	<0.020	<0.020	0.073	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	<10	18	<10	<10	60	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	<0.020	0.029	<0.020	<0.020	0.096	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time					16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00
Compound	CAS Number	LOR	Unit		EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015
				Result	Result	Result	Result	Result	Result
<b>EA029-F: Excess Acid Neutralising Capacity</b>									
Excess Acid Neutralising Capacity (23Q)	----	0.020	% CaCO3		<b>0.572</b>	<b>0.532</b>	----	<b>0.279</b>	<b>2.14</b>
acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t		<b>114</b>	<b>106</b>	----	<b>56</b>	<b>427</b>
sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.020	% S		<b>0.183</b>	<b>0.170</b>	----	<b>0.089</b>	<b>0.684</b>
<b>EA029-H: Acid Base Accounting</b>									
ANC Fineness Factor	----	0.5	-		<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>
Net Acidity (sulfur units)	----	0.02	% S		<0.02	<0.02	<0.02	<0.02	<0.02
Net Acidity (acidity units)	----	10	mole H+ / t		<10	<10	<10	<10	<10
Liming Rate	----	1	kg CaCO3/t		<1	<1	<1	<1	<1
Net Acidity excluding ANC (sulfur units)	----	0.02	% S		<0.02	<0.02	<0.02	<0.02	<0.02
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t		<10	<10	<10	<10	<10
Liming Rate excluding ANC	----	1	kg CaCO3/t		<1	<1	<1	<1	<1
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%		----	----	<b>5.3</b>	----	----
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Barium	7440-39-3	10	mg/kg		----	----	<b>80</b>	----	----
Beryllium	7440-41-7	1	mg/kg		----	----	<1	----	----
Boron	7440-42-8	50	mg/kg		----	----	<50	----	----
Cobalt	7440-48-4	2	mg/kg		----	----	<b>9</b>	----	----
Manganese	7439-96-5	5	mg/kg		----	----	<b>829</b>	----	----
Selenium	7782-49-2	5	mg/kg		----	----	<5	----	----
Vanadium	7440-62-2	5	mg/kg		----	----	<b>80</b>	----	----
Arsenic	7440-38-2	5	mg/kg		----	----	<5	----	----
Cadmium	7440-43-9	1	mg/kg		----	----	<1	----	----
Chromium	7440-47-3	2	mg/kg		----	----	<b>11</b>	----	----
Copper	7440-50-8	5	mg/kg		----	----	<b>11</b>	----	----
Lead	7439-92-1	5	mg/kg		----	----	<5	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time					16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00
Compound	CAS Number	LOR	Unit		EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015
					Result	Result	Result	Result	Result
<b>EG005(ED093)T: Total Metals by ICP-AES - Continued</b>									
Nickel	7440-02-0	2	mg/kg		----	----	4	----	----
Zinc	7440-66-6	5	mg/kg		----	----	8	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg		----	----	<0.1	----	----
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg		----	----	<0.1	----	----
<b>EP068A: Organochlorine Pesticides (OC)</b>									
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 - (Lindane)	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	----	----
<sup>^</sup> 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	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	----	<0.05	----	----
<sup>^</sup> 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	----	----



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>									
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	----	----	
<sup>^</sup> Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
<sup>^</sup> Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	----	----	<0.05	----	----	
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
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	----	----	
<b>EP075(SIM)A: Phenolic Compounds</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)A: Phenolic Compounds - Continued</b>									
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	----	----	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									
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	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>									
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	----	----	
<sup>^</sup> Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	----	<0.5	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	----	<b>0.6</b>	----	----	
<sup>^</sup> Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	<b>1.2</b>	----	----	
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
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	----	----	
<sup>^</sup> C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	----	<10	----	----	
<sup>^</sup> 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	----	----	
<sup>^</sup> >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----	
<sup>^</sup> >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	----	<50	----	----	
<b>EP080: BTEXN</b>									
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	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EP080: BTEXN - Continued</b>									
^ 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	----	----	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	----	<0.0002	----	----	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	----	<0.001	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	----	<0.0002	----	----	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	----	<0.0005	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	----	<0.0005	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	----	<0.0005	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	<0.0005	----	----	
<b>EP231P: PFAS Sums</b>									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	<0.0002	----	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	<0.0002	----	----	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	92.7	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m
Sampling date / time				16-Sep-2025 13:40	16-Sep-2025 14:00	15-Sep-2025 15:00	15-Sep-2025 15:10	15-Sep-2025 16:00	
Compound	CAS Number	LOR	Unit	EB2532723-011	EB2532723-012	EB2532723-013	EB2532723-014	EB2532723-015	
				Result	Result	Result	Result	Result	
<b>EP068S: Organochlorine Pesticide Surrogate</b>									
Dibromo-DDE	21655-73-2	0.05	%	----	----	116	----	----	
<b>EP068T: Organophosphorus Pesticide Surrogate</b>									
DEF	78-48-8	0.05	%	----	----	95.8	----	----	
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>									
Phenol-d6	13127-88-3	0.5	%	----	----	103	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	99.4	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	----	79.0	----	----	
<b>EP075(SIM)T: PAH Surrogates</b>									
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	97.8	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	----	103	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	104	----	----	
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	----	79.4	----	----	
Toluene-D8	2037-26-5	0.2	%	----	----	93.2	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	----	100	----	----	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.0002	%	----	----	104	----	----	
13C8-PFOA	----	0.0002	%	----	----	97.5	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EA029-A: pH Measurements</b>									
pH KCl (23A)	----	0.1	pH Unit	8.7	8.8	8.7	----	----	
pH OX (23B)	----	0.1	pH Unit	8.7	8.5	8.9	----	----	
<b>EA029-B: Acidity Trail</b>									
Titrateable Actual Acidity (23F)	----	2	mole H+ / t	<2	<2	<2	----	----	
Titrateable Peroxide Acidity (23G)	----	2	mole H+ / t	<2	<2	<2	----	----	
Titrateable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	<2	----	----	
sulfidic - Titrateable Actual Acidity (s-23F)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	----	----	
sulfidic - Titrateable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	----	----	
sulfidic - Titrateable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	<0.020	<0.020	<0.020	----	----	
<b>EA029-C: Sulfur Trail</b>									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	<0.020	<0.020	<0.020	----	----	
Peroxide Sulfur (23De)	----	0.020	% S	<0.020	<0.020	<0.020	----	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	<0.020	<0.020	<0.020	----	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	<10	----	----	
<b>EA029-D: Calcium Values</b>									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	0.293	0.234	0.226	----	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	0.902	0.342	0.353	----	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	0.609	0.108	0.127	----	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	304	54	63	----	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	0.487	0.086	0.101	----	----	
<b>EA029-E: Magnesium Values</b>									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	0.171	0.140	0.154	----	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	0.246	0.184	0.209	----	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	0.075	0.044	0.054	----	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	62	36	45	----	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	0.099	0.058	0.072	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EA029-F: Excess Acid Neutralising Capacity</b>									
Excess Acid Neutralising Capacity (23Q)	----	0.020	% CaCO3	<b>2.71</b>	<b>1.14</b>	<b>1.44</b>	----	----	
acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t	<b>542</b>	<b>228</b>	<b>288</b>	----	----	
sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.020	% S	<b>0.869</b>	<b>0.365</b>	<b>0.462</b>	----	----	
<b>EA029-H: Acid Base Accounting</b>									
ANC Fineness Factor	----	0.5	-	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	----	----	
Net Acidity (sulfur units)	----	0.02	% S	<0.02	<0.02	<0.02	----	----	
Net Acidity (acidity units)	----	10	mole H+ / t	<10	<10	<10	----	----	
Liming Rate	----	1	kg CaCO3/t	<1	<1	<1	----	----	
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	<0.02	<0.02	<0.02	----	----	
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	<10	<10	<10	----	----	
Liming Rate excluding ANC	----	1	kg CaCO3/t	<1	<1	<1	----	----	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%	----	----	----	<b>8.8</b>	<b>14.5</b>	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Barium	7440-39-3	10	mg/kg	----	----	----	<b>120</b>	<b>90</b>	
Beryllium	7440-41-7	1	mg/kg	----	----	----	<1	<1	
Boron	7440-42-8	50	mg/kg	----	----	----	<50	<50	
Cobalt	7440-48-4	2	mg/kg	----	----	----	<b>20</b>	<b>10</b>	
Manganese	7439-96-5	5	mg/kg	----	----	----	<b>1450</b>	<b>473</b>	
Selenium	7782-49-2	5	mg/kg	----	----	----	<5	<5	
Vanadium	7440-62-2	5	mg/kg	----	----	----	<b>66</b>	<b>84</b>	
Arsenic	7440-38-2	5	mg/kg	----	----	----	<5	<5	
Cadmium	7440-43-9	1	mg/kg	----	----	----	<1	<1	
Chromium	7440-47-3	2	mg/kg	----	----	----	<b>16</b>	<b>10</b>	
Copper	7440-50-8	5	mg/kg	----	----	----	<b>17</b>	<b>26</b>	
Lead	7439-92-1	5	mg/kg	----	----	----	<5	<b>5</b>	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EG005(ED093)T: Total Metals by ICP-AES - Continued</b>									
Nickel	7440-02-0	2	mg/kg	----	----	----	10	4	
Zinc	7440-66-6	5	mg/kg	----	----	----	14	12	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg	----	----	----	<0.1	<0.1	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	----	<0.1	<0.1	
<b>EP068A: Organochlorine Pesticides (OC)</b>									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	----	<0.05	<0.05	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	----	<0.05	<0.05	
beta-BHC	319-85-7	0.05	mg/kg	----	----	----	<0.05	<0.05	
gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	----	----	----	<0.05	<0.05	
delta-BHC	319-86-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
Heptachlor	76-44-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
Aldrin	309-00-2	0.05	mg/kg	----	----	----	<0.05	<0.05	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	----	<0.05	<0.05	
<sup>^</sup> Total Chlordane (sum)	----	0.05	mg/kg	----	----	----	<0.05	<0.05	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	----	<0.05	<0.05	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	----	<0.05	<0.05	
Dieldrin	60-57-1	0.05	mg/kg	----	----	----	<0.05	<0.05	
4,4'-DDE	72-55-9	0.05	mg/kg	----	----	----	<0.05	<0.05	
Endrin	72-20-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	----	<0.05	<0.05	
<sup>^</sup> Endosulfan (sum)	115-29-7	0.05	mg/kg	----	----	----	<0.05	<0.05	
4,4'-DDD	72-54-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	----	<0.05	<0.05	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	----	<0.05	<0.05	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>									
4,4'-DDT	50-29-3	0.2	mg/kg	----	----	----	<0.2	<0.2	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	----	<0.05	<0.05	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	----	<0.2	<0.2	
<sup>^</sup> Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	----	<0.05	<0.05	
<sup>^</sup> Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	----	----	----	<0.05	<0.05	
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
Dichlorvos	62-73-7	0.05	mg/kg	----	----	----	<0.05	<0.05	
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	----	<0.05	<0.05	
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	----	<0.2	<0.2	
Dimethoate	60-51-5	0.05	mg/kg	----	----	----	<0.05	<0.05	
Diazinon	333-41-5	0.05	mg/kg	----	----	----	<0.05	<0.05	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	----	<0.05	<0.05	
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	----	<0.2	<0.2	
Malathion	121-75-5	0.05	mg/kg	----	----	----	<0.05	<0.05	
Fenthion	55-38-9	0.05	mg/kg	----	----	----	<0.05	<0.05	
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	----	<0.05	<0.05	
Parathion	56-38-2	0.2	mg/kg	----	----	----	<0.2	<0.2	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	----	<0.05	<0.05	
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	----	----	<0.05	<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	----	<0.05	<0.05	
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	----	<0.05	<0.05	
Prothiofos	34643-46-4	0.05	mg/kg	----	----	----	<0.05	<0.05	
Ethion	563-12-2	0.05	mg/kg	----	----	----	<0.05	<0.05	
Carbophenothion	786-19-6	0.05	mg/kg	----	----	----	<0.05	<0.05	
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	----	<0.05	<0.05	
<b>EP075(SIM)A: Phenolic Compounds</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)A: Phenolic Compounds - Continued</b>									
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	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									
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	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	----	<0.5	<0.5	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>									
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	----	----	----	<b>0.6</b>	<b>0.6</b>	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	----	<b>1.2</b>	<b>1.2</b>	
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
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	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
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	
<b>EP080: BTEXN</b>									
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	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m	HA01 - 0.5m	HA02 - 0.5m
Sampling date / time				16-Sep-2025 07:45	16-Sep-2025 08:00	16-Sep-2025 08:30	16-Sep-2025 08:40	16-Sep-2025 09:10	
Compound	CAS Number	LOR	Unit	EB2532723-016	EB2532723-017	EB2532723-018	EB2532723-019	EB2532723-020	
				Result	Result	Result	Result	Result	
<b>EP080: BTEXN - Continued</b>									
^ 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	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	----	88.9	99.4	
<b>EP068S: Organochlorine Pesticide Surrogate</b>									
Dibromo-DDE	21655-73-2	0.05	%	----	----	----	114	119	
<b>EP068T: Organophosphorus Pesticide Surrogate</b>									
DEF	78-48-8	0.05	%	----	----	----	97.3	93.8	
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>									
Phenol-d6	13127-88-3	0.5	%	----	----	----	94.2	106	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	----	91.3	102	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	----	----	77.7	76.0	
<b>EP075(SIM)T: PAH Surrogates</b>									
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	----	89.7	101	
Anthracene-d10	1719-06-8	0.5	%	----	----	----	99.8	107	
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	----	102	109	
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	----	----	74.9	82.4	
Toluene-D8	2037-26-5	0.2	%	----	----	----	89.1	99.0	
4-Bromofluorobenzene	460-00-4	0.2	%	----	----	----	96.4	101	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time				16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00	
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content	----	1.0	%	8.1	15.7	12.0	4.4	7.8	
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Barium	7440-39-3	10	mg/kg	730	40	60	30	460	
Beryllium	7440-41-7	1	mg/kg	1	<1	<1	<1	1	
Boron	7440-42-8	50	mg/kg	<50	<50	<50	<50	<50	
Cobalt	7440-48-4	2	mg/kg	70	9	20	6	57	
Manganese	7439-96-5	5	mg/kg	6100	466	201	685	3500	
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5	
Vanadium	7440-62-2	5	mg/kg	119	78	88	54	99	
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	15	13	10	11	15	
Copper	7440-50-8	5	mg/kg	20	28	25	8	18	
Lead	7439-92-1	5	mg/kg	10	<5	6	<5	8	
Nickel	7440-02-0	2	mg/kg	9	8	5	<2	7	
Zinc	7440-66-6	5	mg/kg	12	14	10	<5	10	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
<b>EP068A: Organochlorine Pesticides (OC)</b>									
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 - (Lindane)	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	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time				16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00	
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EP068A: Organochlorine Pesticides (OC) - Continued</b>									
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	
<sup>^</sup> Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
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	
<sup>^</sup> 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	
<sup>^</sup> Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
<sup>^</sup> Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
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	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time					16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00
Compound	CAS Number	LOR	Unit		EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025
				Result	Result	Result	Result	Result	Result
<b>EP068B: Organophosphorus Pesticides (OP) - Continued</b>									
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<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	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<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	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<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	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<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	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<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	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<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	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
<b>EP075(SIM)A: Phenolic Compounds</b>									
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	<2	<2	<2
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time					16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued</b>									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time				16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00	
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued</b>									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10	
<sup>^</sup> 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	
<sup>^</sup> >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	
<sup>^</sup> >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50	
<b>EP080: BTEXN</b>									
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	
<sup>^</sup> Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
<sup>^</sup> 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	
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	<0.0002	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	<0.0002	----	----	----	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	<0.001	----	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	<0.0002	----	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	<0.0002	----	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	<0.0002	----	----	----	



## Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time				16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00	
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EP231B: Perfluoroalkyl Carboxylic Acids - Continued</b>									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	----	----	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	----	----	
<b>EP231P: PFAS Sums</b>									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	----	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	----	----	
<b>EP066S: PCB Surrogate</b>									
Decachlorobiphenyl	2051-24-3	0.1	%	97.2	101	91.0	97.5	93.6	
<b>EP068S: Organochlorine Pesticide Surrogate</b>									
Dibromo-DDE	21655-73-2	0.05	%	121	124	115	130	114	
<b>EP068T: Organophosphorus Pesticide Surrogate</b>									
DEF	78-48-8	0.05	%	96.6	99.5	89.4	114	91.3	
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>									
Phenol-d6	13127-88-3	0.5	%	107	111	101	112	102	
2-Chlorophenol-D4	93951-73-6	0.5	%	103	108	98.0	108	98.1	
2,4,6-Tribromophenol	118-79-6	0.5	%	80.9	80.0	77.6	86.0	80.4	
<b>EP075(SIM)T: PAH Surrogates</b>									
2-Fluorobiphenyl	321-60-8	0.5	%	101	107	96.0	107	96.7	
Anthracene-d10	1719-06-8	0.5	%	104	110	100	110	101	
4-Terphenyl-d14	1718-51-0	0.5	%	108	114	103	115	104	
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	67.0	76.8	96.7	89.5	88.3	



### Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QCBH02	HA03 DUP
Sampling date / time				16-Sep-2025 10:00	16-Sep-2025 11:15	16-Sep-2025 13:00	16-Sep-2025 12:30	16-Sep-2025 00:00	
Compound	CAS Number	LOR	Unit	EB2532723-021	EB2532723-022	EB2532723-023	EB2532723-024	EB2532723-025	
				Result	Result	Result	Result	Result	
<b>EP080S: TPH(V)/BTEX Surrogates - Continued</b>									
Toluene-D8	2037-26-5	0.2	%	75.4	90.7	89.1	83.5	80.4	
4-Bromofluorobenzene	460-00-4	0.2	%	78.6	99.2	117	115	110	
<b>EP231S: PFAS Surrogate</b>									
13C4-PFOS	----	0.0002	%	----	98.5	----	----	----	
13C8-PFOA	----	0.0002	%	----	97.0	----	----	----	



## Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP066S: PCB Surrogate</b>			
Decachlorobiphenyl	2051-24-3	16	134
<b>EP068S: Organochlorine Pesticide Surrogate</b>			
Dibromo-DDE	21655-73-2	10	138
<b>EP068T: Organophosphorus Pesticide Surrogate</b>			
DEF	78-48-8	23	134
<b>EP075(SIM)S: Phenolic Compound Surrogates</b>			
Phenol-d6	13127-88-3	35	154
2-Chlorophenol-D4	93951-73-6	42	153
2,4,6-Tribromophenol	118-79-6	26	157
<b>EP075(SIM)T: PAH Surrogates</b>			
2-Fluorobiphenyl	321-60-8	34	156
Anthracene-d10	1719-06-8	37	153
4-Terphenyl-d14	1718-51-0	42	172
<b>EP080S: TPH(V)/BTEX Surrogates</b>			
1,2-Dichloroethane-D4	17060-07-0	53	134
Toluene-D8	2037-26-5	60	131
4-Bromofluorobenzene	460-00-4	59	127
<b>EP231S: PFAS Surrogate</b>			
13C4-PFOS	----	76	136
13C8-PFOA	----	78	131



## QUALITY CONTROL REPORT

Work Order : **EB2532723**

Page : 1 of 18

Amendment : **1**

Client : **CQ ENVIRONMENTAL**

Laboratory : Environmental Division Brisbane

Contact : OSCAR DALLA PRIA

Contact : Kelly Schafer

Address : 15 LORD STREET  
GLADSTONE QLD 4680

Address : 2 Byth Street Stafford QLD Australia 4053

Telephone : ----

Telephone : +61 7 4978 7944

Project : 25054

Date Samples Received : 19-Sep-2025

Order number : 25054

Date Analysis Commenced : 22-Sep-2025

C-O-C number : ----

Issue Date : 07-Oct-2025

Sampler : MICHAEL WHITEHEAD

Site : ----

Quote number : EN/222

No. of samples received : 25

No. of samples analysed : 25



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, unless the sampling was conducted by ALS. 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
Beatriz Llarinas	Senior Chemist	Brisbane Inorganics, Stafford, QLD
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD
Kim McCabe	Senior Inorganic Chemist	Brisbane Soil Preparation, Stafford, QLD
Satishkumar Trivedi	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Satishkumar Trivedi	Senior Acid Sulfate Soil Chemist	Brisbane Soil Preparation, Stafford, QLD
Tatijana Markoska	Senior Chemist - Organics	Brisbane Organics, Stafford, QLD
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## General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the 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.

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  
 \* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

## 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	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6878183)</b>									
EB2532723-001	BH01 - 0.5m	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	320	260	17.9	0% - 20%
		EG005T: Chromium	7440-47-3	2	mg/kg	16	16	0.0	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	19	17	10.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	7	3	62.9	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	22	21	8.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	<5	0.0	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	4160	3680	12.3	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	107	88	19.3	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	16	9	55.7	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.0	No Limit
EB2532847-001	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	<10	<10	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	7	8	0.0	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	<2	2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	3	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	5	5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 6878183) - continued</b>									
EB2532847-001	Anonymous	EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	138	147	5.9	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	8	9	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	8	8	0.0	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.0	No Limit
<b>EA029-A: pH Measurements (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: pH KCl (23A)	----	0.1	pH Unit	4.7	4.7	0.0	0% - 20%
		EA029: pH OX (23B)	----	0.1	pH Unit	4.9	4.9	0.0	0% - 20%
EB2532723-011	BH02 - 4.0m	EA029: pH KCl (23A)	----	0.1	pH Unit	7.7	7.7	0.0	0% - 20%
		EA029: pH OX (23B)	----	0.1	pH Unit	8.6	8.5	0.0	0% - 20%
<b>EA029-B: Acidity Trail (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: sulfidic - Titratable Actual Acidity (s-23F)	----	0.02	% pyrite S	0.043	0.043	0.0	No Limit
		EA029: sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.02	% pyrite S	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.02	% pyrite S	<0.020	<0.020	0.0	No Limit
		EA029: Titratable Actual Acidity (23F)	----	2	mole H+ / t	27	27	0.0	0% - 50%
		EA029: Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	4	3	0.0	No Limit
		EA029: Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	0.0	No Limit
EB2532723-011	BH02 - 4.0m	EA029: sulfidic - Titratable Actual Acidity (s-23F)	----	0.02	% pyrite S	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.02	% pyrite S	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.02	% pyrite S	<0.020	<0.020	0.0	No Limit
		EA029: Titratable Actual Acidity (23F)	----	2	mole H+ / t	<2	<2	0.0	No Limit
		EA029: Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	<2	<2	0.0	No Limit
		EA029: Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	<2	0.0	No Limit
<b>EA029-C: Sulfur Trail (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: KCl Extractable Sulfur (23Ce)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Peroxide Sulfur (23De)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Peroxide Oxidisable Sulfur (23E)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	0.0	No Limit
EB2532723-011	BH02 - 4.0m	EA029: KCl Extractable Sulfur (23Ce)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Peroxide Sulfur (23De)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Peroxide Oxidisable Sulfur (23E)	----	0.02	% S	<0.020	<0.020	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EA029-C: Sulfur Trail (QC Lot: 6880979) - continued</b>									
EB2532723-011	BH02 - 4.0m	EA029: acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	<10	0.0	No Limit
<b>EA029-D: Calcium Values (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: KCl Extractable Calcium (23Vh)	----	0.02	% Ca	0.063	0.062	0.0	No Limit
		EA029: Peroxide Calcium (23Wh)	----	0.02	% Ca	0.062	0.065	5.3	No Limit
		EA029: Acid Reacted Calcium (23X)	----	0.02	% Ca	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Acid Reacted Calcium (s-23X)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	<10	<10	0.0	No Limit
EB2532723-011	BH02 - 4.0m	EA029: KCl Extractable Calcium (23Vh)	----	0.02	% Ca	0.223	0.221	0.8	0% - 50%
		EA029: Peroxide Calcium (23Wh)	----	0.02	% Ca	0.232	0.234	1.1	0% - 50%
		EA029: Acid Reacted Calcium (23X)	----	0.02	% Ca	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Acid Reacted Calcium (s-23X)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	<10	<10	0.0	No Limit
<b>EA029-E: Magnesium Values (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: KCl Extractable Magnesium (23Sm)	----	0.02	% Mg	0.106	0.107	0.0	No Limit
		EA029: Peroxide Magnesium (23Tm)	----	0.02	% Mg	0.103	0.108	5.0	No Limit
		EA029: Acid Reacted Magnesium (23U)	----	0.02	% Mg	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Acid Reacted Magnesium (s-23U)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	<10	<10	0.0	No Limit
EB2532723-011	BH02 - 4.0m	EA029: KCl Extractable Magnesium (23Sm)	----	0.02	% Mg	0.194	0.193	0.0	No Limit
		EA029: Peroxide Magnesium (23Tm)	----	0.02	% Mg	0.202	0.204	1.0	0% - 50%
		EA029: Acid Reacted Magnesium (23U)	----	0.02	% Mg	<0.020	<0.020	0.0	No Limit
		EA029: sulfidic - Acid Reacted Magnesium (s-23U)	----	0.02	% S	<0.020	<0.020	0.0	No Limit
		EA029: Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	<10	<10	0.0	No Limit
<b>EA029-F: Excess Acid Neutralising Capacity (QC Lot: 6880979)</b>									
EB2532723-011	BH02 - 4.0m	EA029: Excess Acid Neutralising Capacity (23Q)	----	0.02	% CaCO3	0.572	0.556	2.8	0% - 20%
		EA029: sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.02	% S	0.183	0.178	2.8	No Limit
		EA029: acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t	114	111	2.8	0% - 50%
<b>EA029-H: Acid Base Accounting (QC Lot: 6880979)</b>									
EB2532723-001	BH01 - 0.5m	EA029: ANC Fineness Factor	----	0.5	-	1.5	1.5	0.0	No Limit
		EA029: Net Acidity (sulfur units)	----	0.02	% S	0.04	0.04	0.0	No Limit
		EA029: Net Acidity excluding ANC (sulfur units)	----	0.02	% S	0.04	0.04	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EA029-H: Acid Base Accounting (QC Lot: 6880979) - continued</b>									
EB2532723-001	BH01 - 0.5m	EA029: Liming Rate	----	1	kg CaCO3/t	2	2	0.0	No Limit
		EA029: Liming Rate excluding ANC	----	1	kg CaCO3/t	2	2	0.0	No Limit
		EA029: Net Acidity (acidity units)	----	10	mole H+ / t	27	27	0.0	No Limit
		EA029: Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	27	27	0.0	No Limit
EB2532723-011	BH02 - 4.0m	EA029: ANC Fineness Factor	----	0.5	-	1.5	1.5	0.0	No Limit
		EA029: Net Acidity (sulfur units)	----	0.02	% S	<0.02	<0.02	0.0	No Limit
		EA029: Net Acidity excluding ANC (sulfur units)	----	0.02	% S	<0.02	<0.02	0.0	No Limit
		EA029: Liming Rate	----	1	kg CaCO3/t	<1	<1	0.0	No Limit
		EA029: Liming Rate excluding ANC	----	1	kg CaCO3/t	<1	<1	0.0	No Limit
		EA029: Net Acidity (acidity units)	----	10	mole H+ / t	<10	<10	0.0	No Limit
		EA029: Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	<10	<10	0.0	No Limit
<b>EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6875672)</b>									
EB2532718-001	Anonymous	EA055: Moisture Content	----	0.1	%	<0.1	0.1	0.0	No Limit
EB2532723-025	HA03 DUP	EA055: Moisture Content	----	0.1 (1.0)*	%	7.8	7.7	0.0	No Limit
<b>EG035T: Total Recoverable Mercury by FIMS (QC Lot: 6878184)</b>									
EB2532723-001	BH01 - 0.5m	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EB2532847-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 6875884)</b>									
EB2532723-001	BH01 - 0.5m	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
<b>EP068A: Organochlorine Pesticides (OC) (QC Lot: 6875883)</b>									
EB2532723-001	BH01 - 0.5m	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP068A: Organochlorine Pesticides (OC) (QC Lot: 6875883) - continued</b>									
EB2532723-001	BH01 - 0.5m	EP068: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
<b>EP068B: Organophosphorus Pesticides (OP) (QC Lot: 6875883)</b>									
EB2532723-001	BH01 - 0.5m	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
<b>EP075(SIM)A: Phenolic Compounds (QC Lot: 6875882)</b>									
EB2533001-001	Anonymous	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP075(SIM)A: Phenolic Compounds (QC Lot: 6875882) - continued</b>									
EB2533001-001	Anonymous	EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EB2532723-001	BH01 - 0.5m	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6875882)</b>									
EB2533001-001	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EB2532723-001	BH01 - 0.5m	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5
EP075(SIM): Acenaphthylene	208-96-8			0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM): Acenaphthene	83-32-9			0.5	mg/kg	<0.5	<0.5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 6875882) - continued</b>									
EB2532723-001	BH01 - 0.5m	EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6875010)</b>									
EB2533002-010	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EB2532718-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	25	23	9.9	No Limit
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6875881)</b>									
EB2533001-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EB2532723-001	BH01 - 0.5m	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
<b>EP080/071: Total Petroleum Hydrocarbons (QC Lot: 6876312)</b>									
EB2532723-023	HA05 - 0.5m	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EB2532976-019	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6875010)</b>									
EB2533002-010	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EB2532718-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	26	24	10.3	No Limit
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6875881)</b>									
EB2533001-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EB2532723-001	BH01 - 0.5m	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6875881) - continued</b>										
EB2532723-001	BH01 - 0.5m	EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 6876312)</b>										
EB2532723-023	HA05 - 0.5m	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit	
EB2532976-019	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit	
<b>EP080: BTEXN (QC Lot: 6875010)</b>										
EB2533002-010	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
			95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EB2532718-001	Anonymous	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
		EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	0.8	0.7	0.0	No Limit	
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	7.0	6.3	10.7	0% - 50%	
			106-42-3							
	95-47-6	0.5	mg/kg	6.7	6.0	9.6	0% - 50%			
	91-20-3	1	mg/kg	<1	<1	0.0	No Limit			
<b>EP080: BTEXN (QC Lot: 6876312)</b>										
EB2532723-023	HA05 - 0.5m	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
			95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EB2532976-019	Anonymous	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
		EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit			
	91-20-3	1	mg/kg	<1	<1	0.0	No Limit			
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6878674)</b>										
EB2532723-013	BH03 - 0.5m	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit	
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit	
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit	



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6878674) - continued</b>									
EB2533002-024	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6878674)</b>									
EB2532723-013	BH03 - 0.5m	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EB2533002-024	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6878674)</b>									
EB2532723-013	BH03 - 0.5m	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EB2533002-024	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit



## Method Blank (MB) and Laboratory Control Sample (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 Sample (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: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6878183)</b>								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	30.5 mg/kg	89.6	84.0	123
EG005T: Barium	7440-39-3	10	mg/kg	<10	187 mg/kg	90.4	89.0	129
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	----	----	----	----
EG005T: Boron	7440-42-8	50	mg/kg	<50	----	----	----	----
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
EG005T: Chromium	7440-47-3	2	mg/kg	<2	27.3 mg/kg	95.8	83.0	125
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	9.3 mg/kg	100	82.0	118
EG005T: Copper	7440-50-8	5	mg/kg	<5	112 mg/kg	93.5	86.0	122
EG005T: Lead	7439-92-1	5	mg/kg	<5	84.2 mg/kg	90.3	84.0	119
EG005T: Manganese	7439-96-5	5	mg/kg	<5	409 mg/kg	94.6	84.0	113
EG005T: Nickel	7440-02-0	2	mg/kg	<2	28.7 mg/kg	97.1	81.5	118
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	23.3 mg/kg	96.4	88.0	127
EG005T: Zinc	7440-66-6	5	mg/kg	<5	176 mg/kg	94.9	80.0	120
<b>EA029-A: pH Measurements (QCLot: 6880979)</b>								
EA029: pH KCl (23A)	----	0.1	pH Unit	<0.1	4.7 pH Unit	98.8	70.0	130
EA029: pH OX (23B)	----	0.1	pH Unit	<0.1	4.5 pH Unit	82.4	70.0	130
<b>EA029-B: Acidity Trail (QCLot: 6880979)</b>								
EA029: Titratable Actual Acidity (23F)	----	2	mole H+ / t	<2	23.5 mole H+ / t	109	70.0	130
EA029: Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	<2	46.5 mole H+ / t	117	70.0	130
EA029: Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	<2	----	----	----	----
EA029: sulfidic - Titratable Actual Acidity (s-23F)	----	0.02	% pyrite S	<0.020	----	----	----	----
EA029: sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.02	% pyrite S	<0.020	----	----	----	----
EA029: sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.02	% pyrite S	<0.020	----	----	----	----
<b>EA029-C: Sulfur Trail (QCLot: 6880979)</b>								
EA029: KCl Extractable Sulfur (23Ce)	----	0.02	% S	<0.020	0.064 % S	99.1	70.0	130
EA029: Peroxide Sulfur (23De)	----	0.02	% S	<0.020	0.167 % S	99.8	70.0	130
EA029: Peroxide Oxidisable Sulfur (23E)	----	0.02	% S	<0.020	----	----	----	----
EA029: acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	<10	----	----	----	----
<b>EA029-D: Calcium Values (QCLot: 6880979)</b>								



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
<b>EA029-D: Calcium Values (QCLot: 6880979) - continued</b>								
EA029: KCl Extractable Calcium (23Vh)	----	0.02	% Ca	<0.020	0.17 % Ca	107	70.0	130
EA029: Peroxide Calcium (23Wh)	----	0.02	% Ca	<0.020	0.197 % Ca	96.8	70.0	130
EA029: Acid Reacted Calcium (23X)	----	0.02	% Ca	<0.020	----	----	----	----
EA029: acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	<10	----	----	----	----
EA029: sulfidic - Acid Reacted Calcium (s-23X)	----	0.02	% S	<0.020	----	----	----	----
<b>EA029-E: Magnesium Values (QCLot: 6880979)</b>								
EA029: KCl Extractable Magnesium (23Sm)	----	0.02	% Mg	<0.020	0.23 % Mg	105	70.0	130
EA029: Peroxide Magnesium (23Tm)	----	0.02	% Mg	<0.020	0.239 % Mg	109	70.0	130
EA029: Acid Reacted Magnesium (23U)	----	0.02	% Mg	<0.020	----	----	----	----
EA029: Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	<10	----	----	----	----
EA029: sulfidic - Acid Reacted Magnesium (s-23U)	----	0.02	% S	<0.020	----	----	----	----
<b>EA029-F: Excess Acid Neutralising Capacity (QCLot: 6880979)</b>								
EA029: Excess Acid Neutralising Capacity (23Q)	----	0.02	% CaCO3	<0.020	----	----	----	----
EA029: acidity - Excess Acid Neutralising Capacity (a-23Q)	----	10	mole H+ / t	<10	----	----	----	----
EA029: sulfidic - Excess Acid Neutralising Capacity (s-23Q)	----	0.02	% S	<0.020	----	----	----	----
<b>EA029-H: Acid Base Accounting (QCLot: 6880979)</b>								
EA029: ANC Fineness Factor	----	0.5	-	<0.5	----	----	----	----
EA029: Net Acidity (sulfur units)	----	0.02	% S	<0.02	----	----	----	----
EA029: Net Acidity (acidity units)	----	10	mole H+ / t	<10	----	----	----	----
EA029: Liming Rate	----	1	kg CaCO3/t	<1	----	----	----	----
EA029: Net Acidity excluding ANC (sulfur units)	----	0.02	% S	<0.02	----	----	----	----
EA029: Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	<10	----	----	----	----
EA029: Liming Rate excluding ANC	----	1	kg CaCO3/t	<1	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 6878184)</b>								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.1 mg/kg	102	70.0	125
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6875884)</b>								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	113	71.6	155
<b>EP068A: Organochlorine Pesticides (OC) (QCLot: 6875883)</b>								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	108	72.8	127
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	111	71.0	127
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.5	126
EP068: gamma-BHC - (Lindane)	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	105	72.7	127
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	70.6	122



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
<b>EP068A: Organochlorine Pesticides (OC) (QCLot: 6875883) - continued</b>								
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	116	64.8	127
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	109	72.4	122
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	119	67.4	125
EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	117	65.6	124
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	102	70.4	122
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	117	65.6	125
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.1	124
EP068: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	100	72.4	125
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	63.2	127
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.3	69.7	120
EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
EP068: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	61.2	124
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	55.5	125
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.9	57.1	117
EP068: 4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	113	51.9	125
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.8	46.5	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	82.2	34.0	130
EP068: Sum of DDD + DDE + DDT	72-54-8/72-5-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
<b>EP068B: Organophosphorus Pesticides (OP) (QCLot: 6875883)</b>								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	94.8	55.8	126
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.5	45.9	136
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	36.1	20.0	147
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	44.1	125
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	100	70.3	125
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	110	63.2	124
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	99.4	44.2	129
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	104	52.3	133
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	108	62.9	126
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	69.2	123
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	115	37.6	138
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	119	59.6	131



Sub-Matrix: SOIL

Method: Compound				CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report		
								Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High
<b>EP068B: Organophosphorus Pesticides (OP) (QCLot: 6875883) - continued</b>										
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	96.2	46.4	144		
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	108	56.8	128		
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	75.0	24.4	135		
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	106	55.9	123		
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	45.0	138		
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	106	41.6	141		
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	48.4	20.0	145		
<b>EP075(SIM)A: Phenolic Compounds (QCLot: 6875882)</b>										
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	127	78.0	134		
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	120	78.0	132		
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	118	78.0	132		
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	3 mg/kg	121	77.2	135		
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	109	42.9	156		
EP075(SIM): 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	111	70.3	141		
EP075(SIM): 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	104	69.9	135		
EP075(SIM): 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	122	72.9	136		
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	120	53.3	138		
EP075(SIM): 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	132	50.9	140		
EP075(SIM): 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	94.8	45.5	140		
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	3 mg/kg	57.4	20.0	130		
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6875882)</b>										
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.5 mg/kg	127	72.6	133		
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.5 mg/kg	123	63.2	144		
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.5 mg/kg	123	66.0	132		
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	128	76.2	134		
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.5 mg/kg	# 141	71.8	137		
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	1.5 mg/kg	125	77.1	143		
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.5 mg/kg	# 141	74.1	140		
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	1.5 mg/kg	# 140	72.0	139		
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	114	58.0	145		
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	1.5 mg/kg	121	63.0	147		
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 150	70.5	142		
	205-82-3									
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	1.5 mg/kg	130	75.5	138		



Sub-Matrix: SOIL

Method Blank (MB) Report				Laboratory Control Spike (LCS) Report				
				Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)		Low
Method: Compound	CAS Number	LOR	Unit	Result				
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6875882) - continued</b>								
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.5 mg/kg	137	68.5	140
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.5 mg/kg	120	58.4	143
EP075(SIM): Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.5 mg/kg	122	52.1	149
EP075(SIM): Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	1.5 mg/kg	119	64.6	140
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6875010)</b>								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	18 mg/kg	95.6	64.2	107
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6875881)</b>								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	334 mg/kg	117	63.3	125
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	432 mg/kg	114	56.1	122
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6876312)</b>								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	18 mg/kg	106	64.2	107
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6875010)</b>								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	22.5 mg/kg	94.0	63.5	105
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6875881)</b>								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	446 mg/kg	114	61.2	132
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	299 mg/kg	121	52.6	130
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6876312)</b>								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	22.5 mg/kg	101	63.5	105
<b>EP080: BTEXN (QCLot: 6875010)</b>								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	95.9	68.0	107
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	91.6	69.0	108
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	93.4	68.0	109
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	96.5	70.0	114
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	96.9	74.0	116
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	92.0	74.0	109
<b>EP080: BTEXN (QCLot: 6876312)</b>								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	89.0	68.0	107
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	91.3	69.0	108
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	95.4	68.0	109
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	90.4	70.0	114
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	111	74.0	116



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
						LCS	Low	High
<b>EP080: BTEXN (QCLot: 6876312) - continued</b>								
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	98.7	74.0	109
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6878674)</b>								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.0011 mg/kg	92.3	67.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	94.5	62.0	125
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	102	63.0	131
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6878674)</b>								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	91.9	66.0	130
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.0	64.0	127
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	65.0	127
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.0	66.0	126
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.4	64.0	128
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6878674)</b>								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	94.0	57.0	140
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00118 mg/kg	100	59.0	135
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	108	60.0	132
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.0012 mg/kg	112	54.8	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	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery(%)	Acceptable Limits (%)	
					MS	Low	High
<b>EG005(ED093)T: Total Metals by ICP-AES (QCLot: 6878183)</b>							
EB2532847-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	88.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	85.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	90.2	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	99.1	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	88.6	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.2	70.0	130
		EG005T: Selenium	7782-49-2	50 mg/kg	93.4	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	81.3	70.0	130
<b>EG035T: Total Recoverable Mercury by FIMS (QCLot: 6878184)</b>							
EB2532847-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	90.6	70.0	130
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6875884)</b>							



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
Laboratory sample ID		Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery(%) MS	Acceptable Limits (%) Low High
<b>EP066: Polychlorinated Biphenyls (PCB) (QCLot: 6875884) - continued</b>							
EB2532723-007	BH02 - 0.5m	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	102	70.0	130
<b>EP068A: Organochlorine Pesticides (OC) (QCLot: 6875883)</b>							
EB2532723-007	BH02 - 0.5m	EP068: gamma-BHC - (Lindane)	58-89-9	0.5 mg/kg	104	70.0	136
		EP068: Heptachlor	76-44-8	0.5 mg/kg	114	65.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	108	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	102	67.0	129
		EP068: Endrin	72-20-8	0.5 mg/kg	104	60.0	137
		EP068: 4,4'-DDT	50-29-3	0.5 mg/kg	115	51.9	130
<b>EP068B: Organophosphorus Pesticides (OP) (QCLot: 6875883)</b>							
EB2532723-007	BH02 - 0.5m	EP068: Diazinon	333-41-5	0.5 mg/kg	98.9	70.0	131
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	110	63.2	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	118	59.6	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	108	56.8	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	108	55.9	134
<b>EP075(SIM)A: Phenolic Compounds (QCLot: 6875882)</b>							
EB2532723-007	BH02 - 0.5m	EP075(SIM): Phenol	108-95-2	1.5 mg/kg	112	70.0	130
		EP075(SIM): 2-Chlorophenol	95-57-8	1.5 mg/kg	109	70.0	130
		EP075(SIM): 2-Nitrophenol	88-75-5	1.5 mg/kg	108	42.9	156
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	1.5 mg/kg	107	53.3	138
		EP075(SIM): Pentachlorophenol	87-86-5	3 mg/kg	87.2	20.0	130
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 6875882)</b>							
EB2532723-007	BH02 - 0.5m	EP075(SIM): Acenaphthene	83-32-9	1.5 mg/kg	109	66.0	132
		EP075(SIM): Pyrene	129-00-0	1.5 mg/kg	123	70.0	130
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6875010)</b>							
EB2532723-001	BH01 - 0.5m	EP080: C6 - C9 Fraction	----	8 mg/kg	87.3	70.0	130
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6875881)</b>							
EB2532723-007	BH02 - 0.5m	EP071: C10 - C14 Fraction	----	334 mg/kg	112	70.0	130
		EP071: C15 - C28 Fraction	----	432 mg/kg	116	70.0	130
<b>EP080/071: Total Petroleum Hydrocarbons (QCLot: 6876312)</b>							
EB2532723-024	QCBH02	EP080: C6 - C9 Fraction	----	8 mg/kg	121	70.0	130
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6875010)</b>							
EB2532723-001	BH01 - 0.5m	EP080: C6 - C10 Fraction	C6_C10	8 mg/kg	87.6	70.0	130
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6875881)</b>							
EB2532723-007	BH02 - 0.5m	EP071: >C10 - C16 Fraction	----	446 mg/kg	112	70.0	130
		EP071: >C16 - C34 Fraction	----	299 mg/kg	122	70.0	130
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6876312)</b>							



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
Laboratory sample ID		Sample ID	Method: Compound	CAS Number	Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low High
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 6876312) - continued</b>							
EB2532723-024	QCBH02	EP080: C6 - C10 Fraction	C6_C10	8 mg/kg	121	70.0	130
<b>EP080: BTEXN (QCLot: 6875010)</b>							
EB2532723-001	BH01 - 0.5m	EP080: Benzene	71-43-2	2 mg/kg	92.0	70.0	130
		EP080: Toluene	108-88-3	2 mg/kg	87.5	70.0	130
<b>EP080: BTEXN (QCLot: 6876312)</b>							
EB2532723-024	QCBH02	EP080: Benzene	71-43-2	2 mg/kg	88.1	70.0	130
		EP080: Toluene	108-88-3	2 mg/kg	91.2	70.0	130
<b>EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6878674)</b>							
EB2532723-022	HA04 - 0.5m	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0011 mg/kg	85.9	72.0	128
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00118 mg/kg	90.7	67.0	130
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	102	68.0	136
<b>EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6878674)</b>							
EB2532723-022	HA04 - 0.5m	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	96.7	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	92.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	95.2	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	101	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	96.8	69.0	133
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6878674)</b>							
EB2532723-022	HA04 - 0.5m	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	95.3	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00118 mg/kg	113	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	113	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0012 mg/kg	118	54.8	124



## QA/QC Compliance Assessment to assist with Quality Review

Work Order : **EB2532723**

Page : 1 of 13

Amendment : **1**

Client : **CQ ENVIRONMENTAL**

Laboratory : Environmental Division Brisbane

Contact : OSCAR DALLA PRIA

Telephone : +61 7 4978 7944

Project : 25054

Date Samples Received : 19-Sep-2025

Site : ----

Issue Date : 07-Oct-2025

Sampler : MICHAEL WHITEHEAD

No. of samples received : 25

Order number : 25054

No. of samples analysed : 25

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** Matrix Spike outliers occur.
- Laboratory Control outliers exist - please see following pages for full details.
- For all regular sample matrices, where applicable to the methodology, **NO** surrogate recovery outliers occur.

#### Outliers : Analysis Holding Time Compliance

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

#### Outliers : Frequency of Quality Control Samples

- **NO** Quality Control Sample Frequency Outliers exist.



**Outliers : Quality Control Samples**

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
<b>Laboratory Control Spike (LCS) Recoveries</b>							
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	QC-6875882-002	----	Phenanthrene	85-01-8	141 %	71.8-137%	Recovery greater than upper control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	QC-6875882-002	----	Fluoranthene	206-44-0	141 %	74.1-140%	Recovery greater than upper control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	QC-6875882-002	----	Pyrene	129-00-0	140 %	72.0-139%	Recovery greater than upper control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	QC-6875882-002	----	Benzo(b+j)fluoranthene	205-99-2 205-82-3	150 %	70.5-142%	Recovery greater than upper control limit

**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			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
<b>EA029-A: pH Measurements</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m,	15-Sep-2025	24-Sep-2025	10-Jun-2028	✓	24-Sep-2025	23-Dec-2025	✓
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m,	16-Sep-2025	24-Sep-2025	11-Jun-2028	✓	24-Sep-2025	23-Dec-2025	✓
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m	17-Sep-2025	24-Sep-2025	12-Jun-2028	✓	24-Sep-2025	23-Dec-2025	✓



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	
<b>EA029-B: Acidity Trail</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m, 15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m, 16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m, 17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>EA029-C: Sulfur Trail</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m, 15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m, 16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m, 17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>EA029-D: Calcium Values</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m, 15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m, 16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m, 17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔	



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	
<b>EA029-E: Magnesium Values</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m,	15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m,	16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m	17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>EA029-F: Excess Acid Neutralising Capacity</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m,	15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m,	16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m	17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>EA029-G: Retained Acidity</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m,	15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m,	16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m	17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔



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	
<b>EA029-H: Acid Base Accounting</b>								
<b>Snap Lock Bag - frozen (EA029)</b> BH03 - 0.5m, BH03 - 2.0m	BH03 - 1.0m,	15-Sep-2025	24-Sep-2025	10-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 0.5m, BH02 - 0.5m, BH02 - 2.0m, BH02 - 4.0m, BH03 - 3.0m, BH03 - 5.0m	BH01 - 1.0m, BH02 - 1.0m, BH02 - 3.0m, BH02 - 5.0m, BH03 - 4.0m,	16-Sep-2025	24-Sep-2025	11-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>Snap Lock Bag - frozen (EA029)</b> BH01 - 2.0m, BH01 - 4.0m,	BH01 - 3.0m, BH01 - 5.0m	17-Sep-2025	24-Sep-2025	12-Jun-2028	✔	24-Sep-2025	23-Dec-2025	✔
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
<b>Soil Glass Jar - Unpreserved (EA055)</b> BH03 - 0.5m		15-Sep-2025	----	----	----	22-Sep-2025	29-Sep-2025	✔
<b>Soil Glass Jar - Unpreserved (EA055)</b> BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP	BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	----	----	----	22-Sep-2025	30-Sep-2025	✔
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
<b>Soil Glass Jar - Unpreserved (EG005T)</b> BH03 - 0.5m		15-Sep-2025	23-Sep-2025	14-Mar-2026	✔	24-Sep-2025	14-Mar-2026	✔
<b>Soil Glass Jar - Unpreserved (EG005T)</b> BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP	BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	23-Sep-2025	15-Mar-2026	✔	24-Sep-2025	15-Mar-2026	✔
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
<b>Soil Glass Jar - Unpreserved (EG035T)</b> BH03 - 0.5m		15-Sep-2025	23-Sep-2025	13-Oct-2025	✔	24-Sep-2025	13-Oct-2025	✔
<b>Soil Glass Jar - Unpreserved (EG035T)</b> BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP	BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	23-Sep-2025	14-Oct-2025	✔	24-Sep-2025	14-Oct-2025	✔



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
<b>EP066: Polychlorinated Biphenyls (PCB)</b>							
Soil Glass Jar - Unpreserved (EP066) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP066) BH01 - 0.5m, BH02 - 0.5m	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP066) HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
<b>EP068A: Organochlorine Pesticides (OC)</b>							
Soil Glass Jar - Unpreserved (EP068) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP068) HA01 - 0.5m, HA03 - 0.5m HA02 - 0.5m,	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP068) BH01 - 0.5m, HA04 - 0.5m, QCBH02, BH02 - 0.5m, HA05 - 0.5m, HA03 DUP	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
<b>EP068B: Organophosphorus Pesticides (OP)</b>							
Soil Glass Jar - Unpreserved (EP068) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP068) HA01 - 0.5m, HA03 - 0.5m HA02 - 0.5m,	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	24-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP068) BH01 - 0.5m, HA04 - 0.5m, QCBH02, BH02 - 0.5m, HA05 - 0.5m, HA03 DUP	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
<b>EP075(SIM)A: Phenolic Compounds</b>							
Soil Glass Jar - Unpreserved (EP075(SIM)) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP075(SIM)) BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔



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
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>							
Soil Glass Jar - Unpreserved (EP075(SIM)) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP075(SIM)) BH01 - 0.5m, BH02 - 0.5m, HA01 - 0.5m, HA02 - 0.5m, HA03 - 0.5m, HA04 - 0.5m, HA05 - 0.5m, QCBH02, HA03 DUP	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
<b>EP080/071: Total Petroleum Hydrocarbons</b>							
Soil Glass Jar - Unpreserved (EP080) BH03 - 0.5m	15-Sep-2025	22-Sep-2025	29-Sep-2025	✔	24-Sep-2025	29-Sep-2025	✔
Soil Glass Jar - Unpreserved (EP071) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP080) BH01 - 0.5m, BH02 - 0.5m, HA01 - 0.5m, HA02 - 0.5m, HA03 - 0.5m, HA04 - 0.5m, HA05 - 0.5m, QCBH02, HA03 DUP	16-Sep-2025	22-Sep-2025	30-Sep-2025	✔	24-Sep-2025	30-Sep-2025	✔
Soil Glass Jar - Unpreserved (EP071) BH01 - 0.5m, BH02 - 0.5m, HA01 - 0.5m, HA02 - 0.5m, HA03 - 0.5m	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP071) HA04 - 0.5m, HA05 - 0.5m, QCBH02, HA03 DUP	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	26-Sep-2025	02-Nov-2025	✔



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	
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
Soil Glass Jar - Unpreserved (EP080) BH03 - 0.5m	15-Sep-2025	22-Sep-2025	29-Sep-2025	✔	24-Sep-2025	29-Sep-2025	✔	
Soil Glass Jar - Unpreserved (EP071) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	29-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔	
Soil Glass Jar - Unpreserved (EP080) BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP	BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	22-Sep-2025	30-Sep-2025	✔	24-Sep-2025	30-Sep-2025	✔
Soil Glass Jar - Unpreserved (EP071) BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m	BH02 - 0.5m, HA02 - 0.5m,	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	25-Sep-2025	02-Nov-2025	✔
Soil Glass Jar - Unpreserved (EP071) HA04 - 0.5m, QCBH02,	HA05 - 0.5m, HA03 DUP	16-Sep-2025	23-Sep-2025	30-Sep-2025	✔	26-Sep-2025	02-Nov-2025	✔
<b>EP080: BTEXN</b>								
Soil Glass Jar - Unpreserved (EP080) BH03 - 0.5m	15-Sep-2025	22-Sep-2025	29-Sep-2025	✔	24-Sep-2025	29-Sep-2025	✔	
Soil Glass Jar - Unpreserved (EP080) BH01 - 0.5m, HA01 - 0.5m, HA03 - 0.5m, HA05 - 0.5m, HA03 DUP	BH02 - 0.5m, HA02 - 0.5m, HA04 - 0.5m, QCBH02,	16-Sep-2025	22-Sep-2025	30-Sep-2025	✔	24-Sep-2025	30-Sep-2025	✔
<b>EP231A: Perfluoroalkyl Sulfonic Acids</b>								
HDPE Soil Jar (EP231X) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	14-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	
HDPE Soil Jar (EP231X) HA04 - 0.5m	16-Sep-2025	23-Sep-2025	15-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	
<b>EP231B: Perfluoroalkyl Carboxylic Acids</b>								
HDPE Soil Jar (EP231X) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	14-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	
HDPE Soil Jar (EP231X) HA04 - 0.5m	16-Sep-2025	23-Sep-2025	15-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	
<b>EP231D: (n:2) Fluorotelomer Sulfonic Acids</b>								
HDPE Soil Jar (EP231X) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	14-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	
HDPE Soil Jar (EP231X) HA04 - 0.5m	16-Sep-2025	23-Sep-2025	15-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔	

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 Work Order : EB2532723 Amendment 1  
 Client : CQ ENVIRONMENTAL  
 Project : 25054



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
<b>EP231P: PFAS Sums</b>							
HDPE Soil Jar (EP231X) BH03 - 0.5m	15-Sep-2025	23-Sep-2025	14-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔
HDPE Soil Jar (EP231X) HA04 - 0.5m	16-Sep-2025	23-Sep-2025	15-Mar-2026	✔	24-Sep-2025	02-Nov-2025	✔



## 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	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
<b>Laboratory Duplicates (DUP)</b>							
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Suspension Peroxide Oxidation-Combined Acidity and Sulphate	EA029	2	18	11.11	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-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	37	10.81	10.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Laboratory Control Samples (LCS)</b>							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Suspension Peroxide Oxidation-Combined Acidity and Sulphate	EA029	1	18	5.56	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-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	37	5.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Method Blanks (MB)</b>							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Suspension Peroxide Oxidation-Combined Acidity and Sulphate	EA029	1	18	5.56	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-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	37	5.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
<b>Matrix Spikes (MS)</b>							
PAH/Phenols (SIM)	EP075(SIM)	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	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	Method	Count		Rate (%)			Quality Control Specification
		QC	Regular	Actual	Expected	Evaluation	
<b>Matrix Spikes (MS) - Continued</b>							
Pesticides by GCMS	EP068	1	10	10.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	10	10.00	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-AES	EG005T	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	5.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	37	5.41	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
Suspension Peroxide Oxidation-Combined Acidity and Sulphate	EA029	SOIL	In house: Referenced to Ahern et al 2004 - a suspension peroxide oxidation method following the 'sulfur trail' by determining the level of 1M KCL extractable sulfur and the sulfur level after oxidation of soil sulphides. The 'acidity trail' is followed by measurement of TAA, TPA and TSA. Liming Rate is based on results for samples as submitted and incorporates a minimum safety factor of 1.5.
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 Schedule B(3).
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 Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl <sub>2</sub> ) (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 SnCl <sub>2</sub> which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 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 Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 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 Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. 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 Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. A portion of homogenised sample is extracted along with isotope dilution standards (where commercially available) in a solution of ammonium acetate in acetonitrile/methanol. Where relevant, interferences from co-extracted organics are removed using dispersive clean-up media (dSPE). A portion of extract is combined with an equal volume of reagent water and filtered for instrumental analysis.

Preparation Methods	Method	Matrix	Method Descriptions
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<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
Drying at 85 degrees, bagging and labelling (ASS)	EN020PR	SOIL	In house
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 Schedule B(3).
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.
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.



## SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EB2532723**

Client	: CQ ENVIRONMENTAL	Laboratory	: Environmental Division Brisbane
Contact	: OSCAR DALLA PRIA	Contact	: Kelly Schafer
Address	: 15 LORD STREET GLADSTONE QLD 4680	Address	: 2 Byth Street Stafford QLD Australia 4053
E-mail	: oscar.dallapria@cqgroup.com.au	E-mail	: kelly.schafer@alsglobal.com
Telephone	: ----	Telephone	: +61 7 4978 7944
Facsimile	: ----	Facsimile	: +61-7-3243 7218
Project	: 25054	Page	: 1 of 3
Order number	: 25054	Quote number	: EB2017CQENVIRO0004 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: MICHAEL WHITEHEAD		

### Dates

Date Samples Received	: 19-Sep-2025 11:40	Issue Date	: 19-Sep-2025
Client Requested Due Date	: 26-Sep-2025	Scheduled Reporting Date	: <b>26-Sep-2025</b>

### Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 1.2, 1.0, 1.1°C - Ice present
Receipt Detail	: Esky	No. of samples received / analysed	: 25 / 25

### General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **\*Samples were originally received by ALS Gladstone on 18/9/2025 and have been forwarded to ALS Brisbane for analysis. Temperature on arrival in ALS Brisbane has been noted above.**
- Discounted Package Prices apply only when specific ALS Group Codes ('W', 'S', 'NT' suites) are referenced on COCs.
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Unless otherwise stated, analytical work for this work order will be conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818.
- **Breaches in recommended extraction / analysis holding times (if any) are displayed overleaf in the Proactive Holding Time Report table.**
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**



## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exists.

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA029 SPOCAS	SOIL - EA055-103 Moisture Content	SOIL - EP231 (solids) PFAS - Short Suite (12 analytes)	SOIL - S-19 TRH/BTEXNI/PAH/Ph/OC/OP/PCB8 metals
EB2532723-001	16-Sep-2025 16:20	BH01 - 0.5m	✓	✓		✓
EB2532723-002	16-Sep-2025 16:45	BH01 - 1.0m	✓			
EB2532723-003	17-Sep-2025 07:30	BH01 - 2.0m	✓			
EB2532723-004	17-Sep-2025 07:40	BH01 - 3.0m	✓			
EB2532723-005	17-Sep-2025 07:50	BH01 - 4.0m	✓			
EB2532723-006	17-Sep-2025 08:10	BH01 - 5.0m	✓			
EB2532723-007	16-Sep-2025 12:30	BH02 - 0.5m	✓	✓		✓
EB2532723-008	16-Sep-2025 12:35	BH02 - 1.0m	✓			
EB2532723-009	16-Sep-2025 13:10	BH02 - 2.0m	✓			
EB2532723-010	16-Sep-2025 13:25	BH02 - 3.0m	✓			
EB2532723-011	16-Sep-2025 13:40	BH02 - 4.0m	✓			
EB2532723-012	16-Sep-2025 14:00	BH02 - 5.0m	✓			
EB2532723-013	15-Sep-2025 15:00	BH03 - 0.5m	✓	✓	✓	✓
EB2532723-014	15-Sep-2025 15:10	BH03 - 1.0m	✓			
EB2532723-015	15-Sep-2025 16:00	BH03 - 2.0m	✓			
EB2532723-016	16-Sep-2025 07:45	BH03 - 3.0m	✓			
EB2532723-017	16-Sep-2025 08:00	BH03 - 4.0m	✓			
EB2532723-018	16-Sep-2025 08:30	BH03 - 5.0m	✓			
EB2532723-019	16-Sep-2025 08:40	HA01 - 0.5m		✓		✓
EB2532723-020	16-Sep-2025 09:10	HA02 - 0.5m		✓		✓
EB2532723-021	16-Sep-2025 10:00	HA03 - 0.5m		✓		✓
EB2532723-022	16-Sep-2025 11:15	HA04 - 0.5m		✓	✓	✓
EB2532723-023	16-Sep-2025 13:00	HA05 - 0.5m		✓		✓
EB2532723-024	16-Sep-2025 12:30	QCBH02		✓		✓
EB2532723-025	16-Sep-2025 00:00	HA03 DUP		✓		✓

## Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.





# CHAIN OF CUSTODY

ALS Laboratory, please tick →

GLADSTONE 48 Callamondali Drive Clifton QLD 4880  
Ph: 07 4875 7044 E: ALSenviro.gladstone@global.com

CLIENT: GQG Consulting	TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)				
OFFICE: GLADSTONE	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) <input type="checkbox"/> Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes	No	N/A	
PROJECT: 25054	PROJECT NO.:	ALS QUOTE NO.:	Free Ice / frozen Ice bricks present upon receipt?	Yes	No	N/A
ORDER NUMBER:	PURCHASE ORDER NO.:	COUNTRY OF ORIGIN:	Random Sample Temperature on Receipt:	°C		
PROJECT MANAGER:	CONTACT PH:	COC SEQUENCE NUMBER (Circle)	Other comment:			
SAMPLER: Michael Whitehead	SAMPLER MOBILE: 0403 443 329	COC: ① 2 3 4 5 6 7	RECEIVED BY: <i>Kochager</i>	RELINQUISHED BY: <i>GW</i>	RECEIVED BY: <i>CHRISTINA</i>	
COC Emailed to ALS? NO	EDD FORMAT (or default):	DF: 1 ② 3 4 5 6 7	DATE/TIME: 15-9-25 16:45	DATE/TIME: 18-9-25 15:00	DATE/TIME: 19/9/25 11:40	
Email Reports to (will default to PM if no other addresses are listed): oscar.dallapria@cqgroup.com.au; Patrice.Brown@cqgroup.com.au						
Email Invoice to (will default to PM if no other addresses are listed): accounts@cqgroup.com.au						

### COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfilled bottle required) or Dissolved (field filtered bottle required).						Additional Information	
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	S-19 (TRH/BTEXN /PAH/Phenols/OC/OP/PCB, 15 Metals)	EP231 (PFAS - Short Suite (12 analytes))	EA029 - SPOCAS Suite					Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	BH01 - 0.5m	16-9-25 1620	SOIL			X		X					
2	BH01 - 1.0m	16-9-25 1645	SOIL					X					
3	BH01 - 2.0m	17-9-25 7:30	SOIL					X					
4	BH01 - 3.0m	17-9-25 740	SOIL					X					
5	BH01 - 4.0m	17-9-25 750	SOIL					X					
6	BH01 - 5.0m	17-9-25 810	SOIL					X					
7	BH02 - 0.5m	16-9-25 1230	SOIL			X		X					
8	BH02 - 1.0m	16-9-25 1235	SOIL					X					
9	BH02 - 2.0m	16-9-25 1310	SOIL					X					
10	BH02 - 3.0m	16-9-25 1325	SOIL					X					
11	BH02 - 4.0m	16-9-25 1340	SOIL					X					
12	BH02 - 5.0m	16-9-25 1400	SOIL					X					
13	BH03 - 0.5m	15-9-25 1500	SOIL			X	X	X					
14	BH03 - 1.0m	15-9 15:10	SOIL	ASS				X					
					TOTAL								

Environmental Division  
Brisbane  
Work Order Reference  
**EB2532723**



Tel: +61-7-3552-8685

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic  
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass  
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Solids; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles



# CHAIN OF CUSTODY

ALS Laboratory: please tick →

1 DGLADSTONE 48 Callamondah Drive Clinton QLD 4880  
Ph: 07 4978 7944 E: ALS@enviro.gladstone.qld.gov.au

CLIENT: GQG Consulting		TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date):		FOR LABORATORY USE ONLY (Circle)		
OFFICE: GLADSTONE		(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) <input type="checkbox"/> Non Standard or urgent TAT (List due date):		Custody Seal Intact? Yes No N/A		
PROJECT: 25054	PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)			Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:	PURCHASE ORDER NO.:	COUNTRY OF ORIGIN:	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C		
PROJECT MANAGER:	CONTACT PH:		OF: 1 2 3 4 5 6 7	Other comment:		
SAMPLER: Michael Whitehead	SAMPLER MOBILE: 0403 443 329	RELINQUISHED BY:	RECEIVED BY:		RELINQUISHED BY:	RECEIVED BY:
COC Emailed to ALS? NO	EDD FORMAT (or default):	<i>M. Whitehead</i>	<i>K. Schaefer</i>			<i>CHAS P. J. M. J.</i>
Email Reports to (will default to PM if no other addresses are listed): oscar.dallapria@cqgroup.com.au; Patrice.Brown@cqgroup.com.au		DATE/TIME:	DATE/TIME:		DATE/TIME:	DATE/TIME:
Email Invoice to (will default to PM if no other addresses are listed): accounts@cqgroup.com.au		15-9 16:45	15-9-25 16:45			19/9/25 11:40

### COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered solids required) or Dissolved (field filtered solids required).					Additional Information	
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	S-19 (TRH/BTEXN /PAH/Phenols/OC/OP/PCB, 15 Metals)	EP231 (PFAS - Short Suite (12 analytes))	EA029 - SPOCAS Suite				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
15	BH03 - 2.0m	15-9 16:00	SOIL	ASS				X				
16	BH03 - 3.0m	16-9-25 745	SOIL					X				
17	BH03 - 4.0m	16-9-25 800	SOIL					X				
18	BH03 - 5.0m	16-9-25 830	SOIL					X				
19	HA01 - 0.5m	16-9-25 840	SOIL			X						
20	HA02 - 0.5m	16-9-25 910	SOIL			X						
21	HA03 - 0.5m	16-9-25 1000	SOIL			X						
22	HA04 - 0.5m	16-9-25 11:15	SOIL			X	X					
23	HA05-0.5m	16-9-25 1300	SOIL			X						
24	SCBH02 - 0.5m	16-9-25 1230	SOIL			X						
25	HA03 - DUP		SOIL			X						
			SOIL									
			SOIL									
			SOIL									
TOTAL												

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airtight Unpreserved Plastic; V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulfate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airtight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation Bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LJ = Lugala Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

**Appendix F:**

*Analytical Results Tables*

Table F.1: Analytical soil results reported against relevant NEMP 2013 guidelines

Parameter	Unit	LoR	NEPM 2013 Table 1A(1) HILs Comm/Ind Soil	NEPM 2013 Table 1A(3) HSLs (0 - <1 m) Comm/Ind	NEPM 2013 Table 1B(4) EILs Comm/Ind	NEPM 2013 Table 1B(5) ESLs Comm/Ind (soil type = fine)	BH01 - 0.5m	BH02 - 0.5m	BH03 - 0.5m	HA01 - 0.5m	HA02 - 0.5m	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QC BH02	HA03 DUP
Arsenic	mg/kg	5	3000	NA	170	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Barium	mg/kg	10	NA	NA	NA	NA	320	30	80	120	90	730	40	60	30	460
Beryllium	mg/kg	1	500	NA	NA	NA	<1	<1	<1	<1	<1	1	<1	<1	<1	1
Boron	mg/kg	50	300000	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Cadmium	mg/kg	1	800	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	mg/kg	2	3000	NA	NA	NA	16	13	11	16	10	15	13	10	11	15
Cobalt	mg/kg	2	4000	NA	NA	NA	19	6	9	20	10	70	9	20	6	57
Copper	mg/kg	5	250,000	NA	NA	NA	22	9	11	17	26	20	28	25	8	18
Lead	mg/kg	5	1,500	NA	1,800	NA	5	5	<5	<5	5	10	<5	6	<5	8
Manganese	mg/kg	5	40,000	NA	NA	NA	4160	513	829	1450	473	6100	466	201	685	3500
Nickel	mg/kg	2	4,000	NA	NA	NA	7	<2	4	10	4	9	8	5	<2	7
Selenium	mg/kg	5	10000	NA	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vanadium	mg/kg	5	NA	NA	NA	NA	107	76	80	66	84	119	78	88	54	99
Zinc	mg/kg	5	400,000	NA	NA	NA	16	<5	8	14	12	12	14	10	<5	10

Parameter	Unit	LoR	NEPM 2013 Table 1A(1) HILs Comm/Ind Soil	NEPM 2013 Table 1A(3) HSLs (0 - <1 m) Comm/Ind	NEPM 2013 Table 1B(4) EILs Comm/Ind	NEPM 2013 Table 1B(5) ESLs Comm/Ind (soil type = fine)	BH01 - 0.5m	BH02 - 0.5m	BH03 - 0.5m	HA01 - 0.5m	HA02 - 0.5m	HA03 - 0.5m	HA04 - 0.5m	HA05 - 0.5m	QC BH02	HA03 DUP
TRH Fraction (C <sub>6</sub> - C <sub>10</sub> )	mg/kg	10	NA	310	NA	215	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	mg/kg	0.2	NA	4	NA	95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
F2 (>C <sub>10</sub> - C <sub>16</sub> )	mg/kg	50	NA	NA	NA	170	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
F3 (>C <sub>16</sub> - C <sub>34</sub> )	mg/kg	100	NA	NA	NA	2500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
F4 (>C <sub>34</sub> )	mg/kg	100	NA	NA	NA	6600	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Toluene	mg/kg	0.5	NA	NA	NA	135	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5	NA	NA	NA	185	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes	mg/kg	0.5	NA	NA	NA	95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	NA	NA	NA	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	1.0	NA	NA	370	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DDT	mg/kg	0.2	NA	NA	640	NA	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Table F.2: Parameters reported against QASSTM guidelines

ASS																					
Indicator	Unit	LoR	Qld ASS trigger limit	BH01 - 0.5m	BH01 - 1.0m	BH01 - 2.0m	BH01 - 3.0m	BH01 - 4.0m	BH01 - 5.0m	BH02 - 0.5m	BH02 - 1.0m	BH02 - 2.0m	BH02 - 3.0m	BH02 - 4.0m	BH02 - 5.0m	BH03 - 0.5m	BH03 - 1.0m	BH03 - 2.0m	BH03 - 3.0m	BH03 - 4.0m	BH03 - 5.0m
Actual Acidity pH KCl (23A)	pH	0.1	<4.0	4.7	5.6	8.4	8.6	8.6	8.2	5.2	5.4	8.5	7.3	7.7	7.7	5.4	5.9	8.6	8.7	8.8	8.7
Actual Acidity pH OX (23B)	pH	0.1	<3.0	4.9	7	8.7	9.2	9.2	8.6	6.5	6.6	8.8	8.6	8.6	8.9	6.2	6.7	8.8	8.7	8.5	8.9
Net Acidity (acidity units)	mole H+ / t	10	0 - 1,000 t material disturbed - 18 (Sands to loamy sands) - 36 (Clayey sands to light clays) - 62 (Fine to heavy clays/silts) > 1,000 t material disturbed	27	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Net Acidity (Equivalent Sulphur)	% S	0.02	0 - 1,000 t material disturbed - 0.03 (Sands to loamy sands) - 0.06 (Clayey sands to light clays) - 62 (Fine to heavy clays/silts) > 1,000 t material disturbed	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ANC Fineness Factor	-	0.5	> Potential Acidity	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Potential Sulphic Acidity Peroxide Oxidisable Sulfur	mole H+ / t	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

**Appendix G:**

*RPD Calculations*

**Table G.1: RPD Calculations**

EB2532723 Analyte grouping/Analyte	CAS Number	Unit	Limit of reporting	HA03 - 0.5m	HA03 DUP	H03 RPD(%)	BH02 - 0.5m	QCBH02	BH02 RPD(%)
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>									
Moisture Content		%	1.0	8.1	7.8	3.703703704	5.1	4.4	13.7254902
<b>EG005(ED093)T: Total Metals by ICP-AES</b>									
Arsenic	7440-38-2	mg/kg	5	<5	<5	0	<5	<5	0
Barium	7440-39-3	mg/kg	10	730	460	36.98630137	30	30	0
Beryllium	7440-41-7	mg/kg	1	1	1		<1	<1	0
Boron	7440-42-8	mg/kg	50	<50	<50		<50	<50	0
Cadmium	7440-43-9	mg/kg	1	<1	<1	0	<1	<1	0
Chromium	7440-47-3	mg/kg	2	15	15	0	13	11	15.38461538
Cobalt	7440-48-4	mg/kg	2	70	57		6	6	
Copper	7440-50-8	mg/kg	5	20	18	10	9	8	11.11111111
Lead	7439-92-1	mg/kg	5	10	8	20	5	<5	0
Manganese	7439-96-5	mg/kg	5	6100	3500	42.62295082	513	685	33.52826511
Nickel	7440-02-0	mg/kg	2	9	7	22.22222222	<2	<2	0
Selenium	7782-49-2	mg/kg	5	<5	<5	0	<5	<5	0
Vanadium	7440-62-2	mg/kg	5	119	99	16.80672269	76	54	28.94736842
Zinc	7440-66-6	mg/kg	5	12	10	16.66666667	<5	<5	0
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	
<b>EP066: Polychlorinated Biphenyls (PCB)</b>									
Total Polychlorinated biphenyls		mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	
<b>EP068A: Organochlorine Pesticides (OC)</b>									
alpha-BHC	319-84-6	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Hexachlorobenzene (HCB)	118-74-1	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
beta-BHC	319-85-7	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
gamma-BHC - (Lindane)	58-89-9	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
delta-BHC	319-86-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Heptachlor	76-44-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Aldrin	309-00-2	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Heptachlor epoxide	1024-57-3	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Total Chlordane (sum)		mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
trans-Chlordane	5103-74-2	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
alpha-Endosulfan	959-98-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
cis-Chlordane	5103-71-9	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Dieldrin	60-57-1	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
4,4` -DDE	72-55-9	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Endrin	72-20-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Endosulfan (sum)	115-29-7	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
beta-Endosulfan	33213-65-9	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0

EB2532723 Analyte grouping/Analyte	CAS Number	Unit	Limit of reporting	HA03 - 0.5m	HA03 DUP	H03 RPD(%)	BH02 - 0.5m	QCBH02	BH02 RPD(%)
4.4` -DDD	72-54-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Endrin aldehyde	7421-93-4	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Endosulfan sulfate	1031-07-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
4.4` -DDT	50-29-3	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Endrin ketone	53494-70-5	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Methoxychlor	72-43-5	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
<b>EP068B: Organophosphorus Pesticides (OP)</b>									
Dichlorvos	62-73-7	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Demeton-S-methyl	919-86-8	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Monocrotophos	6923-22-4	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Dimethoate	60-51-5	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Diazinon	333-41-5	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Chlorpyrifos-methyl	5598-13-0	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Parathion-methyl	298-00-0	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Malathion	121-75-5	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Fenthion	55-38-9	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Chlorpyrifos	2921-88-2	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Parathion	56-38-2	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Pirimphos-ethyl	23505-41-1	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Chlorfenvinphos	470-90-6	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Bromophos-ethyl	4824-78-6	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Fenamiphos	22224-92-6	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Prothiofos	34643-46-4	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Ethion	563-12-2	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Carbophenothion	786-19-6	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
Azinphos Methyl	86-50-0	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0
<b>EP075(SIM)A: Phenolic Compounds</b>									
Phenol	108-95-2	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2-Chlorophenol	95-57-8	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2-Methylphenol	95-48-7	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
3- & 4-Methylphenol	1319-77-3	mg/kg	1	<1	<1	0	<1	<1	0
2-Nitrophenol	88-75-5	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2,4-Dimethylphenol	105-67-9	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2,4-Dichlorophenol	120-83-2	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2,6-Dichlorophenol	87-65-0	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0

EB2532723 Analyte grouping/Analyte	CAS Number	Unit	Limit of reporting	HA03 - 0.5m	HA03 DUP	H03 RPD(%)	BH02 - 0.5m	QCBH02	BH02 RPD(%)
Pentachlorophenol	87-86-5	mg/kg	2	<2	<2	0	<2	<2	0
<b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>									
Naphthalene	91-20-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Acenaphthylene	208-96-8	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Acenaphthene	83-32-9	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Fluorene	86-73-7	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Phenanthrene	85-01-8	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Anthracene	120-12-7	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Fluoranthene	206-44-0	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Pyrene	129-00-0	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benz(a)anthracene	56-55-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Chrysene	218-01-9	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(k)fluoranthene	207-08-9	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(a)pyrene	50-32-8	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Indeno(1.2.3.cd)pyrene	193-39-5	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Dibenz(a.h)anthracene	53-70-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(g.h.i)perylene	191-24-2	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Sum of polycyclic aromatic hydrocarbons		mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(a)pyrene TEQ (zero)		mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Benzo(a)pyrene TEQ (half LOR)		mg/kg	0.5	<b>0.6</b>	<b>0.6</b>	0	<b>0.6</b>	<b>0.6</b>	0
Benzo(a)pyrene TEQ (LOR)		mg/kg	0.5	<b>1.2</b>	<b>1.2</b>	0	<b>1.2</b>	<b>1.2</b>	0
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction		mg/kg	10	<10	<10	0	<10	<10	0
C10 - C14 Fraction		mg/kg	50	<50	<50	0	<50	<50	0
C15 - C28 Fraction		mg/kg	100	<100	<100	0	<100	<100	0
C29 - C36 Fraction		mg/kg	100	<100	<100	0	<100	<100	0
C10 - C36 Fraction (sum)		mg/kg	50	<50	<50	0	<50	<50	0
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	mg/kg	10	<10	<10	0	<10	<10	0
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	mg/kg	10	<10	<10	0	<10	<10	0
>C10 - C16 Fraction		mg/kg	50	<50	<50	0	<50	<50	0
>C16 - C34 Fraction		mg/kg	100	<100	<100	0	<100	<100	0
>C34 - C40 Fraction		mg/kg	100	<100	<100	0	<100	<100	0
>C10 - C40 Fraction (sum)		mg/kg	50	<50	<50	0	<50	<50	0
>C10 - C16 Fraction minus Naphthalene (F2)		mg/kg	50	<50	<50	0	<50	<50	0
<b>EP080: BTEXN</b>									
Benzene	71-43-2	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Toluene	108-88-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Ethylbenzene	100-41-4	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0

EB2532723 Analyte grouping/Analyte	CAS Number	Unit	Limit of reporting	HA03 - 0.5m	HA03 DUP	H03 RPD(%)	BH02 - 0.5m	QCBH02	BH02 RPD(%)
meta- & para-Xylene	108-38-3 106-42-3	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
ortho-Xylene	95-47-6	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Total Xylenes		mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
Sum of BTEX		mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0
Naphthalene	91-20-3	mg/kg	1	<1	<1	0	<1	<1	0