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Preliminary Site Investigation
and
Detailed Site Investigation

Proposed New Gledswood Hills High School

Lot 2 DP1262720 - 9 Gregory Hills Drive, Gledswood Hills

REPORT NO 20465/6-AA.v1 17 JANUARY 2025

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Document Information

Document Title	Preliminary Site Investigation & Detailed Site Investigation Report
Site Address	9 Gregory Hills Drive, Gledswood Hills
Job No	20465/6
Report No	20465/6-AA.v1
Client	NSW Department of Education
Client Address	GPO Box 33, Sydney NSW 2001

Document Control

Rev	Date	Revision Detail / Status	Author	Reviewer	Approver
0	09/12/2024	Initial Issue	John Xu		John Xu
1	17/01/2025	Revision 1	John Xu		John Xu

Author Signature	
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Job No: 20465/6
Our Ref: 20465/6-AA.v1
17 January 2025

NSW Department of Education
GPO Box 33
SYDNEY NSW 2001

re: **Proposed New Gledswood Hills High School**
Lot 2 DP1262720
9 Gregory Hills Drive, Gledswood Hills
Preliminary Site Investigation & Detailed Site Investigation

Please find herewith our *Preliminary Site Investigation & Detailed Site Investigation* report for the above site.

A brief of the outcome of the assessment is summarised in the Executive Summary.

If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
GEOTECHNIQUE PTY LTD

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Acronyms and Abbreviations

Acronym / Abbreviation	Description
ABC	Ambient Background Concentration
ACL	Added Contaminant Limit
ACM	Asbestos containing material
ADE	ADE Consulting Group Pty Ltd / A.D. Envirotech Australia Pty Ltd
ADSI	Additional Detailed Site Investigation
AEC	Area of Environmental Concern
AF	Asbestos Fines
BTEX	Benzene Toluene, Ethyl Benzene and Xylenes
COC	Chains of Custody
CoPC	Contaminants of Potential Concern
CSM	Conceptual Site Model
DoE	Department of Education
DP	Douglas Partners Pty Ltd
DSI	Detailed Site Investigation
EDE	Ecological Indirect Exposure
EIE	Ecological Direct Exposure
EIL	Ecological Investigation Level
ENM	Excavated natural material
EP&A Act	Environmental Planning and Assessment Act
EPA	Environment Protection Authority
ESL	Ecological Screening Level
FA	Fibrous Asbestos
Geotechnique	Geotechnique Pty Ltd
GHCP	Gregory Hills Corporate Park Pty Ltd
GIPA	Government Information Public Access
ha	hectare
HHIV	Human Health Screening Values
HIL	Health Investigation Level
HS	High School
HSL	Health Screening Level
km	kilometre
LEP	Local Environmental Plan
LGA	Local Government Area
LOEC	lowest observed effect concentrations
LOR	Limit of Reporting
m	metre
NATA	National Association of Testing Authorities
NEPM	National Environment Protection Measure
NSW	New South Wales
OCP	Organochlorine Pesticides
PAEC	Potential Area of Environmental Concern

Acronym / Abbreviation	Description
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PFAS	Per and Poly Fluoroalkyl Substances
PFHxS	Perfluorohexane Sulfonate
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
POEO	Protection of Environment Operations
PQL	Practical Quantitation Limit
PSI	Preliminary Desktop Site Investigation
QA	Quality Assurance
QC	Quality Control
TRH	Total Recoverable Hydrocarbons
RAP	Remedial Action Plan
REF	Review of Environmental Factors
SAQP	Sampling, Analysis and Quality Plan
SEPP	State Environmental Planning Policy
SINSW	School Infrastructure NSW
SQG	Soil Quality Guidelines
UCL	Upper Confidence Limit
VENM	Virgin excavated natural material
VOC	Volatile organic compounds

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EXECUTIVE SUMMARY

This Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) report has been prepared by Geotechnique Pty Ltd (Geotechnique) on behalf of the NSW Department of Education (DoE) to assess the potential environmental impacts that could arise from the activities of the new Gledswood Hills High School (the **Proposal**) at 9 Gregory Hills Drive, Gledswood Hills (the **site**). The works are proposed by the DoE to meet the growth in educational demand in Gregory Hills and Gledswood Hills and the broader South West Growth Area.

The objectives of the PSI were to identify any areas of potential contamination and to assess if the site is likely to present a risk of harm to human health and the environment under the conditions of the proposed high school land use. The scope of work included a desktop review / assessment of a range of site historical data sources and a site inspection.

The objectives of the initial DSI were to determine the contamination status of the site, to assess the suitability of the site for the proposed land use, and to make recommendations with regard to any future remedial works if required. The scope of work included review of the PSI report prepared by Geotechnique, site inspection, as well as soil sampling and laboratory testing.

Site Auditor, Ms Rebeka Hall of Geosyntec Consultants Pty Ltd (Geosyntec) reviewed available environmental assessment reports including the PSI initial DSI reports and issued an Interim Advice (Ref. AU124169 IA1 dated 12 December 2024).

Subsequently, an additional DSI (ADSI) as data gap assessment was conducted by Geotechnique as requested by the Site Auditor. The objectives of the ADSI were to determine the site characterisation and to confirm site conditions are (or can be made) suitable for the proposed secondary school land use. The scope of work included site inspection, as well as soil sampling and laboratory testing.

The findings of the assessment are summarised as follows:

- The site was completely fenced, vacant and covered with grass and scattered shrubs at the time of sampling and site inspection. Several site features of concern (earth mound and fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads) were identified.
- Based on the site historical data collected, the Site Auditor's advice, as well as recent site inspection and the field work, the updated potential area of environmental concern (PAEC) / AEC and associated contaminants of potential concern (CoPC) were identified as summarised in the table presented in Section 5.4.1 of this report. The PAEC / AEC and the associated CoPC had been addressed via laboratory testing of the recovered soil samples.
- All the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory limits of reporting / practical quantitation limits or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under the condition for the proposed high school land use.
- The earth mound is suitable for retaining onsite for the proposed new high school land use.
- Potential off-site impacts of contaminants on groundwater and waterbodies are considered to be low.

- No further site investigation, remedial action plan and remediation are deemed necessary.
- Removal and appropriate disposal of fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads are required.

Based on the assessment, it is our opinion that the site is considered suitable for the proposed new Gledswood Hills high school land use.

Following the removal and appropriate disposal of fly tips, inspection of the footprints by an environmental consultant is required to ascertain the complete removal of the fly tips.

It should be noted that Geotechnique has conducted salinity sampling and testing in conjunction with intrusive geotechnical investigation. The results were presented in the report (Our Ref: 20465/5-AA Amended 1 dated 20 December 2024) prepared by Geotechnique.

Based on the assessment, earthworks (disturbance or excavation of soils) for proposed activities works should be carried out in accordance with a Saline Soil Management Plan to manage impact from saline soils to proposed upgrade works and vice versa. Reference should be made to Report on Salinity Investigation and Management Plan (Project 76510.00 dated May 2012) prepared by Douglas Partners for details of the Saline Soil Management Plan.

If suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets / pieces / pipes, ash material, imported fill materials [which are different to those encountered during this and previous assessments], etc.) are encountered during any stage of future earthworks / site preparation, we recommend that this office is contacted for assessment and an unexpected finds management protocol in **Appendix E** of this report should be implemented.

Reference should be made to Section 9.0 for details of the recommendations regarding any materials to be excavated and removed from the site, and any fill to be imported to the site.

Reference should be made to Section 10.0 for the limitations of this report.

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1.0 INTRODUCTION AND DECLARATION

This Preliminary Site Investigation and Detailed Site Investigation (DSI) report has been prepared by Geotechnique Pty Ltd (Geotechnique) on behalf of the NSW Department of Education (DoE) to assess the potential environmental impacts that could arise from the activities of the new Gledswood Hills High School (the **Proposal**) at 9 Gregory Hills Drive, Gledswood Hills (the **site**). The works are proposed by the DoE to meet the growth in educational demand in Gregory Hills and Gledswood Hills and the broader South West Growth Area. Figure 1 below shows the location of the site.

Figure 1 - Location of Proposed Gledswood Hills High School

This report has been prepared to determine the contamination status of the site, to assess the suitability of the site for the proposed land use, and to make recommendations with regard to any future remedial works if required.

2.0 SUMMARY OF ACTIVITIES

The activities work or activity proposed by DoE involves the construction and operation of a new high school at the site accommodating 1000 students, including:

- A series of school buildings along the northern, eastern and southern site boundaries.
- A school hall.
- An assembly area, sports field and multi sports courts.
- Car parking and a Kiss and Drop zone.
- Associated on and off-site infrastructure to support the school, including a new pedestrian crossing and relocation of the existing bus stop on Gregory Hills Drive to the site frontage.

Figure 2 shows footprints of proposed buildings, car park and sports fields etc.

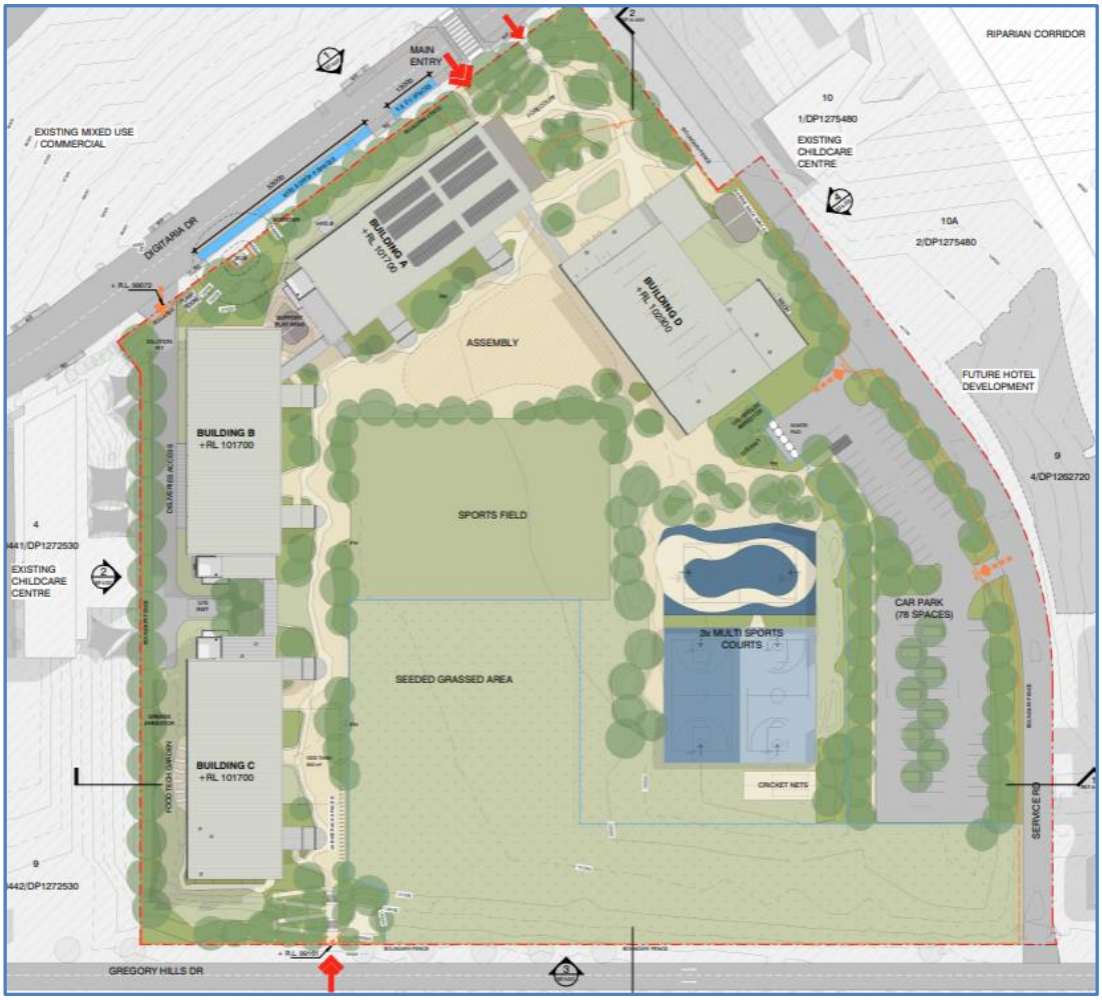

Figure 2 - Footprints of Proposed Structures in Proposed Gledswood Hills High School

3.0 SITE DESCRIPTION

The site is located at 9 Gregory Hills Drive, Gledswood Hills, within the Camden Local Government Area (LGA), approximately 60 kilometres (km) southwest of the Sydney CBD and approximately 3.5km from Narellan Town Centre. It comprises one lot, legally described as Lot 2 DP1262720, that measures approximately 4.15 hectares (ha) in area. The site is bound by Digitaria Drive to the north and Gregory Hills Drive to the south. To the east lies two vacant lots, a childcare centre and a fast-food outlet. To the west lies another childcare centre and a vacant lot (which also has approval for a childcare centre). Figure 1 is an aerial image of the site.

4.0 CONCEPT APPROVAL

The site of the proposed high school forms part of a larger site that is made up of eight separate lots, which are subject to an approved Concept Development Application (DA/2017/45/1) for a mixed-use development comprising bulky goods premises, business premises, food and drink premises, indoor recreation facilities, two hotels and a cinema.

This report has considered the concept approval (DA/2017/45/1) for a mixed-use development and it has been determined that the concept approval is not applicable to the subject of this report, and implications for assessment have not been identified.

5.0 CONSULTANT REPORT CONTENT

Geotechnique carried out the PSI and initial DSI for the site between October 2023 and February 2024 as detailed in the following:

- PSI report: Preliminary Desktop Site Investigation report Site Contamination DD PSI-Proposed Gledswood Hills New HS-Geotechnique-DDWO05592/23 (Our Ref: 20465/2-AA dated 15 February 2024); and
- Initial DSI report: Detailed Site Investigation report Site Contamination DD DSI-Proposed Gledswood Hills New HS-Geotechnique-DDWO05592/23 (Our Ref: 20465/4-AA Final v2 dated 28 February 2024).

Site Auditor Ms Rebeka Hall of Geosyntec Consultants Pty Ltd (Geosyntec) reviewed available environmental assessment reports including the PSI and initial DSI reports and issued an Interim Advice (Ref. AU124169 IA1 dated 12 December 2024).

Subsequently, an additional DSI (ADSI) as data gap assessment was conducted by Geotechnique to address the comments / issues raised by the Site Auditor.

This section presents a summary of historical / background information and the results of the investigation / assessment.

5.1 Historical / Background Information

5.1.1 Aerial Photographs

Aerial photographs taken in 1955, 1960, 1968, 1974, 1989, 1997, December 2009, September 2013, September 2018 and September 2023 were examined.

Review of the aerial photographs indicated that the site and the surrounding properties were part of a large parcel of a vacant rural land with grass and / or scattered trees covered, and no specific usage noted prior to 2000s. Disturbance of ground associated with bulk earth works was noted within the site and surrounding properties in 2010s. A tributary of South Creek transecting the north eastern portion of the site was noted and filled up in early 2010s. The surrounding properties and the region had been developed into commercial and / or residential land uses between 2010s and 2023. The site might have been filled up. During development, Gregory Hills Drive and Digitaria Drive had been formed immediately to the south and north of the site, respectively.

5.1.2 NSW Land Registry Services Records

The site comprises 1 lot registered as Lot 2 DP1262720 (refer to the Drawing No 20465/2-AA1) as listed in Section 3.0.

Based on the records of NSW Land Registry Services and review of the historical photographs, the site had been vacant with no specific usage noted. The site might have been filled up during the development of the surrounding properties in 2010s.

5.1.3 Section 10.7 Planning Certificate and Council Records

Planning Certificate (No 20225402) under Section 10.7 (2 & 5) of the Environmental Planning and Assessment Act 1979 for the site issued on 25 October 2023 by Camden Council, indicated the following:

- The land is located at 6 – 8 Digitaria Drive, Gledswood Hills.
- The land is zoned B5 Business Development.
- The land is not in an area of outstanding biodiversity value under the Biodiversity Conservation Act 2016.
- The land is not in a conservation area however described.
- An item of environmental heritage however described, is not situated on the land.
- The land is not affected by a policy adopted by the Council or with Council being notified of a policy adopted by any other public authority that restricts development of the subject land because of the likelihood of acid sulfate soils.
- Council's policy 'Management of Contaminated Lands' applies to the whole of the council area and may restrict, development of land. The policy is implemented when zoning or land use changes are proposed, or when further development is proposed, where land has been used for contaminating or potentially contaminating activities, including those activities listed in schedule 1 of the policy.
- There are requirements for salinity and salinity assessment for specific types of development within the Camden local government area. This includes mandatory building requirements, unless other requirements are identified in any site specific salinity risk assessment or salinity management plan applying to the land.
- The land does not include residential premises, within the meaning of the Home Building Act 1989, Part 8, Division 1A, that are listed on the Register regarding loose-fill asbestos insulation kept under that Division, a statement to that effect.
- The land is biodiversity certified land under the Biodiversity Conservation Act 2016, Part 8, a statement to that effect.
- The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate;
  - that the land to which the certificate relates is not significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
  - that the land to which the certificate relates is not subject to a management order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
  - that the land to which the certificate relates is not the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,

- that the land to which the certificate relates is not subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,
- that the land to which the certificate relates is not the subject of a site audit statement within the meaning of that Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.

- In relation to Council's policy 'Management of Contaminated Lands' there are report/s and information which may apply to the land.
- In relation to Council's requirements for salinity assessment for specific types of development within the Camden local government area, there are salinity report/s or management plans which apply to the land.

An enquiry was made to Council under Government Information Public Access (GIPA) Act on publicly available records on Development Applications, Building Applications and application approvals. This information can sometimes include complaints or comments from neighbouring persons or companies, which might be relevant to the contamination status of the site.

A summary of the available records of Camden Council associated with the site is listed below:

- Report on Phase 2 Contamination Assessment, Proposed Subdivision, Lot 701 DP1154772, Gregory Hills Drive, Gledswood Hills (project No. 76510.01, dated 17 February 2012) was prepared by Douglas Partners Pty Ltd (DP) for the land including the site. Viewing of the report by our Environmental Scientist in the council's office on 4 December 2023 revealed that the DP report did not identify contamination within the site.

5.1.4 ADE Consulting Group Letter Report

ADE Consulting Group Pty Ltd (ADE) was engaged by Gregory Hills Corporate Park Pty Ltd (GHCP) to prepare a letter report (Ref: GRH-05-15898.LTR.v1 final, dated 22 March 2019) to address the potential for site contamination within the development land including the site known as Gregory Hills Corporate Park, since the commencement of development works.

ADE listed the following reports relevant to the contamination status of the land including the site, and imported fill material used in the development:

- Report on Phase 2 Contamination Assessment, Proposed Subdivision, Lot 701, DP1154772, Gregory Hills Drive, Gledswood Hills, dated February 2012 prepared by Douglas Partners Pty Ltd (DP) (DP 2012);
- Fill Management Protocol (FMP), Proposed Commercial Subdivision, Lot 701, DP1154772, Gregory Hills Drive, Gledswood Hills NSW, dated 29 November 2013 prepared by A.D. Envirotech Australia Pty Ltd (ADE) (ADE 2013);
- Review of Imported Soil Materials and Gate Check Sampling, Stage 3, GHCP, Gregory Hills Drive, Gledswood Hills NSW, dated 1 April 2016 prepared by ADE (ADE 2016);
- Asbestos Materials Clearance Report, Gregory Hills Corporate Park, Gregory Hills Drive, Gregory Hills NSW, dated 7 June 2016 prepared by ADE (ADE 2016a);
- Review of Imported Fill Material, Gregory Hills Corporate Park, 2016-2017, dated 5 June 2017 prepared ADE (ADE 2017);

Viewing of the DP 2012 report was conducted by our Environmental Scientist in the council's office on 4 December 2023. ADE 2013 report was provided by School Infrastructure NSW (SINSW) for review. A desktop review of the remaining reports listed above has not been conducted as the reports have not been provided by SINSW for review.

It was understood that development works within the land including the site had involved the filling of the land to raise the level to the required design. The ADE 2013 report outlined a protocol for the assessment of imported fill to the land including the site. The FMP was applicable for assessing the suitability of soil / rock materials to be imported onto the land including the site as part of a commercial / industrial redevelopment.

Based on the findings of the various reports prepared for the land including the site, ADE considered that the soil materials imported into land including the site during the period November 2013 to April 2017 were imported in accordance with the FMP and were suitable for the proposed commercial / industrial land use.

5.1.5 NSW EPA Record of Notices and POEO Public Register

A search of NSW EPA Record of Notices for Contaminated Lands and Protection of Environment Operations (POEO) Public Register on 12 January 2024 found no records for the site and the land within a radius of 500m of the site.

5.1.6 SafeWork NSW Records

A search of the records held by SafeWork NSW had not located any records pertaining to the site.

5.1.7 Controlled Chemicals

Based on the site inspection by our Environmental Scientist in November 2023, the site was vacant and there was no presence or storage of any chemicals including controlled chemicals within the site.

5.1.8 Per and Poly Fluoroalkyl Substances (PFAS)

A search of the NSW Government PFAS investigation program (accessed via the EPA website on 29 November 2023) revealed that the listed 50 investigation sites were not related to the site and the land within a radius of 500m of the site.

5.1.9 School Asbestos Register

The Department of Education's schools asbestos register contains information about the existence and location of any known or presumed asbestos-containing materials on school sites, based on advice from experts.

A search of the records of school's asbestos register had not located any records pertaining to the site.

5.1.10 Acid Sulfate Soils

The site is outside the available acid sulfate soil risk maps. Reference to eSPADE V2.2 indicates there are no known occurrences of acid sulphate soil materials at the site and within about 500m of the site. Therefore, it is our assessment that acid sulphate soil risk at the site is "Low" and earthworks (disturbance or excavation of soils) for proposed works can be carried out without an approved Acid Sulphate Soil Management Plan.

5.1.11 Salinity

Reference to Map showing Salinity Potential in Western Sydney prepared by Department of Infrastructures, Planning and Natural Resources (2002) indicates moderate salinity potential across the site.

It was recommended that saline soil testing be completed to confirm the salinity status and to ascertain if earthworks are to be carried out in accordance with a Saline Soil Management Plan.

It should be noted that Geotechnique has conducted salinity sampling and testing in conjunction with intrusive geotechnical investigation. The results were presented in the report (Our Ref: 20465/5-AA Amended 1 dated 20 December 2024).

Based on the assessment, earthworks (disturbance or excavation of soils) for proposed activities works should be carried out in accordance with a Saline Soil Management Plan to manage impact from saline soils to proposed upgrade works and vice versa. Reference should be made to Report on Salinity Investigation and Management Plan, Lot 701 DP1154772, Gregory Hills Drive, Gledswood Hills, Project 76510.00 dated May 2012 prepared by DP (DP 2012) for details of the Saline Soil Management Plan.

5.1.12 Topography

The site inspection by our Environmental Scientist in November 2023 revealed that in general, the site was flat with raised surface level post completion of controlled filling during the previous bulk earth works, and gently slopes in directions along the northern, eastern, and southern boundaries as indicated on Drawing No 20465/2-AA1.

5.1.13 Regional Geology & Soil Landscape

The Geological Map of Wollongong - Port Hacking (Geological Series Sheet 9029-9129, Scale 1:100,000, Edition 1, 1985), published by the Department of Mineral Resources indicates the residual soils within the site to be underlain by Triassic Age Shale of the Wianamatta Group, comprising shale, carbonaceous claystone, laminite and coal in parts.

The Soil Landscape Map of Wollongong - Port Hacking (Soil Landscape Series Sheet 9029-9129, Scale 1:100,000, 1990) prepared by the Soil Conservation Service of NSW, indicates most of the site is located within the Blacktown soil landscape area that typically consists of highly plastic and relatively impermeable residual soils. The map also indicates a small portion close to northern boundary of the site to be located within the South Creek soil landscape area that typically consists of residual soils, which range from sandy clay to clay.

Based on information from all borehole locations (refer to Drawing No 20465/3-AA1) during sampling on 21 to 23 and 27 November 2023 for the initial DSI the sub-surface profile is generalised as follows:

Fill	Silty Clay, low to medium plasticity, dark brown mottled red or orange-red, with gravel was encountered in all test pit locations to depths ranging from more than approximately 0.6m to 7.5m below the existing ground level (EGL); Inclusion of sandstone / concrete boulders and / or steel star picks was noted in TP1a, TP5a, TP6a and TP8a. Gravelly Clay, low to medium plasticity, grey, was encountered in BH9, BH9a, BH11 and BH15 to depths ranging from about 1.0m to 5.3m below the EGL.
Natural Soil	Silty CLAY, medium to high plasticity, brown to orange

With the exception of inclusion of two (2) star picks noted in TP1a and concrete boulder in TP5a, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining borehole / test pit locations and recovered soil samples that would indicate potential for contamination.

Reference should be made to Tables 1a to 1c - test pit logs in **Appendix A** for descriptions of the soils encountered during sampling on 16, 18 and 19 December 2024 for the ADSI. Based on information from all test locations the sub-surface profile is generalised as follows:

Fill	Silty Clay, low to medium plasticity, dark brown mottled red, dark brown mottled orange-red, dark brown, dark brown-orange, dark brown mottled pale grey orange, dark brown mottled red-grey, dark brown mottled orange or red-orange, with or without gravel, with trace of or without root fibres, or high plasticity, orange, pale grey, pale grey mottled red, dark grey, red mottled pale grey, orange mottled pale grey, pale grey mottled orange-red, red, red mottled orange, red mottled pale grey-orange or dark brown, was encountered in test pit locations TP101 to TP115 to depths ranging from approximately 0.5m to more than 2.5m below the EGL. Inclusion of boulders, concrete boulders, plastic, plastic bags, asphalt concrete and / or iron rod was noted in all test pits. Gravelly Clay, low plasticity, grey, was encountered in TP103, TP112 and TP114 to depths ranging from about 0.5m to 2.5m below the EGL. Silty Clay, low plasticity, brown, with gravel, trace of root fibres, or medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments, was encountered in test pit locations TP116 to TP136 and J1 to depths ranging from approximately 0.5m to more than 2.5m below the EGL. Inclusion of fragments of brick or glass, boulders and / or glass was noted in TP119, TP120, TP122, TP125, TP127 and TP136. Clayey Sand, fine grained, brown, with gravel and glass, was encountered in TP120 from about 1.0m to 2.0m below the EGL. Silty Clay, low plasticity, brown, with gravel, was encountered in test pit locations TP1b to TP15a to depth more than approximately 0.2m below the EGL.
Natural Soil	Silty CLAY, high plasticity, red mottled pale grey, trace of gravel, was encountered in TP105 at depth about 2.0m below the EGL.

With the exception of inclusion of foreign materials (boulders, concrete boulders, plastic, plastic bags, asphalt concrete, iron rod, brick fragments, glass and / or fragments of glass) in fill in some test pits locations and hydrocarbon staining identified on ground surface in TP126, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining test pit locations and recovered soil samples.

All the recovered fill samples were screened for the presence of volatile organic compounds (VOC) using a calibrated Photo-Ionisation Detector (PID). The PID readings on recovered samples, as presented in test pit logs in **Appendix A**, were equal to zero, suggesting that the presence of volatiles in the fill is unlikely.

No groundwater or perched water was encountered during sampling for the DSI in conjunction with geotechnical investigation in November 2023 to a maximum depth of approximately 13.5m below the EGL and during the short time the boreholes remained open. It should be noted that fluctuations in the level of groundwater might occur due to variations in rainfall and / or other factors not evident during investigation.

5.1.14 Hydrology & Hydrogeology

There is no water body, such as a creek, river, or wetland close to and transecting the site. However, review of historical aerial photographs prior to 2009 revealed that a tributary of South Creek was transecting the northeastern portion of the site and backfilled in 2013. South Creek is located approximately 110m to the north of the site.

A site-specific groundwater analysis is outside the scope of this assessment. However, a search was carried out on 29 November 2023 through the website WaterNSW for any registered groundwater bore data within a radius of 500m of the site. The search revealed that there is one groundwater bore within this radius. The information obtained is summarised in the following table.

Bore	Date	Authorised / Intended Purpose	AMG coordinates	Water Bearing Zone (m)	Standing Water Level (m)	Salinity (mg/L)
GW107962	30.06.2005	Recreation Irrigation	$_{2}93.631_{E}$ & $_{62}33.348_{N}$	70.0-70.05.0 194.0-199.1 276.0-276.10	23.0 23.0 23.0	Fresh Fresh Fresh

5.2 Summary of Preliminary Desktop Site Investigation

The objectives of the PSI were to identify any areas of potential contamination and to assess if the site is likely to present a risk of harm to human health and the environment for the proposed high school land use.

The scope of work included a desktop review / assessment of a range of site historical data sources and a site inspection.

Based on the desktop review and assessment of a range of available site historical data sources, as well as site inspection, an area of environmental concern (AEC) / potential AEC (PAEC) (the areas of possible filling) and the associated contaminants of potential concern (CoPC) had been identified within the site; and preliminary conceptual site model (CSM) had been developed. Based on the field works for the DSI, it was identified that the entire site had in general been filled (refer to the diagram in **Appendix B** of this report).

Based on the assessment, it was our opinion that the risk of harm to human health and environment was low at present site condition without any disturbance to the ground surface / soil within the site; therefore, the site was considered environmentally suitable for the proposed new high school land use.

However, it is likely that there would be disturbance of the ground surface / soil within the site; subsequently and based on the findings of the PSI, intrusive investigations including sampling and testing for a DSI would be required to address the identified AEC / PAEC and the associated CoPC, to assess and characterise the site respect to contamination, to update the CSM, to assess the suitability of the site for the proposed land use, and to make recommendations regarding any future remedial works if required.

5.3 Summary of Initial Detailed Site Investigation

The objectives of the initial DSI were to determine the contamination status of the site, to assess the suitability of the site for the proposed land use, and to make recommendations with regard to any future remedial works if required.

In order to achieve the objectives of the assessment, the scope of work included review of the PSI report prepared by Geotechnique, site inspection, as well as soil sampling and laboratory testing.

At the time of inspection by an Environmental Scientist from Geotechnique on 21 to 23 and 27 November 2023, the site was completely fenced, vacant covered with short grass and scattered shrubs.

There were no obvious features associated with any underground storage tanks (bowser, breather pipe, inlet valve and piping).

On 21 to 23 and 27 November 2023, our Environmental Scientist carried out sampling as follow:

- Fifteen (15) locations BH1 to BH15, BH1a, BH3a, BH4a, BH8a, BH9a, TP1a, TP4a to TP6a and TP8a were drilled / excavated nominated for geotechnical investigation across the site.

Reference may be made to Drawing No 20465/3-AA1 for details of the above-mentioned borehole / test pit locations.

Soil logs was completed during the field investigation. The soil logs recording soil lithology and depth were as presented in table below.

Borehole / Test Pit	Depth Interval (m)	Soil Profile	Fill or Natural	Inclusion	Fill Thickness (m)
BH1/TP1a/ BH1a	0.0-3.0	Silty Clay, low plasticity, brown, with gravel	Fill	sandstone boulders and 2 steel star picks	3.0
	3.0-4.5	Silty Clay, medium plasticity, brown, with gravel	Fill		1.5
	4.5-5.5	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH2	0.0-1.5	Silty Clay, low to plasticity, brown, with gravel	Fill		>1.5
BH3/BH3a	0.0-4.0	Silty Clay, medium plasticity, brown, with gravel	Fill		4.0
	4.0-5.0	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH4/TP4a	0.0-3.0	Silty Clay, low plasticity, brown, with gravel	Fill		>3.0
BH5/TP5a	0.0-2.5	Silty Clay, low plasticity, brown, with gravel	Fill	sandstone and concrete boulders	>2.5
BH6/TP6a	0.0-2.5	Silty Clay, low plasticity, brown, with gravel	Fill	sandstone boulders	>2.5
BH7	0.0-0.6	Silty Clay, low plasticity, brown, with gravel	Fill		>0.6
BH8/TP8a	0.0-2.5	Silty Clay, low plasticity, brown, with gravel	Fill	sandstone boulders	>2.5

Borehole / Test Pit	Depth Interval (m)	Soil Profile	Fill or Natural	Inclusion	Fill Thickness (m)
BH9/BH9a	0.0-1.0	Silty Clay, low plasticity, brown, with gravel	Fill		1.0
	1.0-5.3	Gravelly Clay, low to medium plasticity, grey	Fill		4.3
BH10	0.0-1.3	Silty Clay, low plasticity, brown, with gravel	Fill		1.3
BH11	0.0-3.0	Silty Clay, low plasticity, brown, with gravel	Fill		3.0
	3.0-5.0	Gravelly Clay, low to medium plasticity, grey	Fill		2.0
	5.0-7.0	Silty Clay, medium plasticity, brown, with gravel	Fill		2.0
	7.0-8.0	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH12	0.0-7.0	Silty Clay, low plasticity, brown, with gravel	Fill		7.0
	7.0-8.0	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH13	0.0-7.5	Silty Clay, low plasticity, brown, with gravel	Fill		7.5
	7.5-8.5	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH14	0.0-2.0	Silty Clay, low plasticity, brown, with gravel	Fill		2.0
	2.0-7.5	Silty Clay, medium plasticity, brown, with gravel	Fill		5.5
	7.5-8.5	(CI-CH) Silty CLAY, medium to high plasticity, brown to orange	Natural clay		
BH15	0.0-1.0	Silty Clay, low plasticity, brown, with gravel	Fill		1.0
	1.0-4.8	Gravelly Clay, low to medium plasticity, grey	Fill		>3.8

With the exception of inclusion of 2 star picks noted in TP1a and concrete boulder in BH5 / TP5a, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining borehole / test pit locations and recovered soil samples during the field work by Geotechnique.

The following laboratory analysis plan was implemented:

- Thirty-three (33) fill samples and three (3) natural soil samples, as well as the corresponding duplicate samples DDS1, DDS3 and DDS4 and split samples DSS1, DSS3 and DSS4 were analysed for metals.

  Thirteen (13) fill samples, as well as the corresponding duplicate samples DDS1 and DDS3, and split samples DSS1 and DSS3 were analysed for TRH, BTEX, PAH, OCP and PCB for screening purposes.

- Seven (7) fill samples and 2 natural soil samples were selected for analysis of Cation Exchange Capacity (CEC) and pH.
- Twelve (12) fill samples were analysed for asbestos for screening purposes.
- Rinsate samples RS1 to RS4 were analysed for metals, TRH, BTEX and / or PAH.
- Trip spike samples TS1 to TS4 were analysed for BTEX.

The laboratory test results for the initial DSI indicated that there were no elevated concentrations of analytes detected in the samples analysed. All the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory limits of reporting or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under the condition for the proposed high school land use.

5.4 Additional Detailed Site Investigation

Site Auditor Ms Rebeka Hall of Geosyntec Consultants Pty Ltd (Geosyntec) reviewed available environmental assessment reports including the PSI and initial DSI reports and issued an Interim Advice.

Review of the he imported fill register (and data) reported by ADE for the works between 2013-2017 in the ADE (2016) and ADE (2017) reports revealed that the source sites for the imported fill included industrial sites, rail corridors etc. and the material was assessed for application to land proposed for future commercial / industrial land use setting not high school land use.

In addition, since the completion of the imported filling works (in 2017) the NSW EPA has updated assessment criteria, sampling and reporting guidance (including testing for PFAS which was not part of the ADE suite of works in 2013-2017).

As such, the Site Auditor requested an additional assessment so that it can be shown there has been sufficient rigour in assessing site conditions to current standards, and that the site is (or can be) suitable (from a human health and environmental perspective) for high school land use.

Subsequently, the ADSI as data gap assessment was conducted by Geotechnique to determine the site characterisation and to confirm site conditions are (or can be made) suitable for the proposed secondary school land use.

In order to achieve the objectives of the ADSI, the scope of work included site inspection, as well as soil sampling and laboratory testing.

5.4.1 Updated Conceptual Site Model

Based on the historical data collected, the Site Auditor's advice, as well as recent site inspection and the field work, the updated AEC / PAEC and associated CoPC within the site have been identified and are presented in the following Table 5.1.

Table 5.1 Updated AEC / PAEC and Associated CoPC

AEC / PAEC	CoPC
Fill materials across the site and / or an earth mound	The major CoPC due to data gaps: ➢ Metals ➢ Polycyclic Aromatic Hydrocarbons (PAH) ➢ Per- and poly-fluoroalkyl substances (PFAS) Analysis of the following CoPC based on PID field screening results: ➢ Total Recoverable Hydrocarbons (TRH) ➢ Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX) Analysis of the following CoPC at a relaxed density (about 25% of samples recovered): ➢ Organochlorine Pesticides (OCP) ➢ Organophosphate Pesticides (OPP) ➢ Polychlorinated Biphenyls (PCB) Analysis of the following CoPC based on what is observed: ➢ Asbestos
Disused truck brake pads on ground surface	➢ Metals ➢ Asbestos
Disused diesel oil bottles and diesel fuel filters, and hydrocarbon staining on ground surface	➢ Metals ➢ TRH ➢ BTEX ➢ PAH

Metals suite includes Arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni) and zinc (Zn)

The following Table 5.2 outlines the updated Conceptual Site Model (CSM) presenting the potential Source, Receptor and Exposure Pathway linkages:

Table 5.2 Updated CSM

Potential Source	Potential Receptors	Potential Exposure Pathway
Potential mechanisms for contamination include: ➢ Fill materials and / or fly tipped earth mound – importation / illegal dumping of impacted material, 'top-down' impacts (e.g. placement of fill, leaching of contaminants from fill / earth mound material, etc.) or sub-surface release (e.g. impacts from buried material). ➢ The presence of site features – 'top-down' and spill (e.g. degradation of metal features, spilling / leaking of the diesel oil / fuel, etc.) resulting in impacts on surficial soil	Human receptors include workers involved in construction activities, existing and future users of the site, such as, teachers, students, parents, visitors and intrusive maintenance workers, as well as residents (including adults and children) in the immediate vicinity of the site. Ecological receptors include flora and fauna, water bodies close to the site and groundwater.	Potential exposure pathways relevant to human receptors include ingestion, dermal absorption and inhalation of dust (all contaminants) and vapours (volatile TRH, BTEX and naphthalene). The potential for exposure would typically be associated with the construction and excavation works, as well as existing and future users of the site. Exposure for the existing and future site users could occur via direct contact with soil in unpaved areas such as gardens, inhalation of airborne asbestos fibres during soil disturbance, or inhalation of vapours within enclosed space such as buildings. Potential exposure pathways for flora and fauna include primary contact and ingestion. The following have been identified as potential exposure mechanisms for site contamination: ➢ Vapour intrusion into the existing and future buildings (either from soil contamination or volatilisation of contaminants from groundwater); ➢ Contact (dermal, ingestion or inhalation) with exposed soil in landscaped areas and / or unpaved areas; ➢ Migration of groundwater off-site and into nearby water bodies including aquatic systems and those being used for recreation; and ➢ Migration of groundwater off-site into areas where groundwater is being utilised as a resource (i.e. for irrigation).

The site historical review, site inspection and field sampling identified previous and current site activities, as well as the sources of AEC / PAEC, which might have impacted the historical soils within the site.

Potentially contaminated media present at the site are considered to be surface soils and fill materials.

Based on the potential mobility of contaminants and associated potential leachability through the soil profile, vertical migration of contaminants from the surface soils into the underlying natural soils might have occurred. As a result, the natural soils and underlying shale bedrock are also considered to be potentially contaminated media.

Contaminants generally migrate from site via a combination of windblown dust, rainwater infiltration, groundwater migration and surface water run-off. The potential for contaminants to migrate is a combination of:

- The nature of the contaminants (solid / liquid and mobility characteristics).
- The extent of the contaminants (isolated or widespread).
- The locations of the contaminants (surface soils or at depth).
- The site topography, geology, hydrology and hydrogeology.

Off-site impacts of contaminants in soil are generally governed by the transport media available and likely receptors. The most common transport medium is water, whilst receptors include initially uncontaminated soils, groundwater, surface waterbodies, humans, flora and fauna.

The ground surface within the site was in general covered with grass. The potential for migration of contaminants via wind-blown dust is considered low as a result of the exposed soils within the site. The potential for migration of contamination via surface run-off is also expected to be minor. Some migration of contaminants via surface water might still occur in the event of heavy rain.

Migration of soil contaminants to the deeper soils or groundwater regime would generally be via leaching of contaminants from the surface soil or fill, facilitated by infiltration of surface water.

Review of historical aerial photographs prior to 2009 revealed that a tributary of South Creek was transecting the north eastern portion of the site, which might capture or divert stormwater run-off. There is potential for off-site impact of the contaminants on the waterbodies due to surface water run-off from the site if high levels and widespread contaminants are detected through this assessment.

Groundwater level was not encountered to the maximum depth of 13.5m below the EGL. Given that the naturally occurring soils beneath the site are relatively impermeable based on the regional geology information and borehole drilling / test pit excavation for this and previous assessments, the potential for recent and ongoing migration of contaminants from the site to the groundwater table below is considered low. Furthermore, the relatively impermeable clay layer and underlying shale bedrock would have minimised the potential for contaminants in the past to migrate to deeper soils or the groundwater regime. It is considered unlikely that the groundwater regime beneath the site has been impacted by contaminants in the soils. However, if high levels and widespread contaminants are detected through this assessment, a groundwater assessment will be recommended.

Sensitive receptors at the site and in the immediate vicinity, under current site conditions and based on the future land use of the site, are considered to include visitors and those studying and / or working at the site who might come into contact with potentially contaminated media. The sensitive environmental receptors that could be adversely impacted by possible contamination are considered to be surface water and groundwater.

5.4.2 Sampling, Analysis, Quality Plan and Sampling Methodology

On 16, 18 and 19 December 2024, our Environmental Scientist carried out sampling as follow:

- The subject site covers an area of 4.15 ha. In accordance with NSW EPA 2022 "Contaminated Land Guidelines Sampling Design Part 1 - Application", a minimum of fifty-one (51) sampling points are required. Only 15 locations were sampled during the DSI. Additional thirty-six (36) test pits were excavated to depth about 2.5m below the EGL. Test pits TP101 to TP136 were distributed across the site, among those test pits;
  - TP103 was next to the disused diesel oil bottles;
  - TP125 was within the earth mound;
  - TP126 was next to disused diesel fuel filters with hydrocarbon staining;
  - TP130 was next to the disused diesel oil bottle.
- Test pit J1 was excavated next to disused truck brake pads to depth about 1.5m below the EGL.
- Test pits TP1b to TP15a were excavated in the vicinity of previous 15 sampling locations BH1 to BH15 to depth about 0.2m below the EGL

Reference may be made to Drawing No 20465/8-AA1 for details of the above-mentioned test pit locations.

The sampling procedures adopted for the assessment were generally as follows:

- The test pits were excavated using an excavator, over the depth interval nominated by the Environmental Scientist / Engineer. The representative soil sample was recovered directly from the excavator bucket using a stainless steel trowel.
- The stainless steel trowel was decontaminated prior to use between each sampling location, in order to prevent cross contamination (refer to Section 5.4.5 for details of the procedures for decontamination of the trowel).
- To minimise the potential loss of organic compounds the recovered soil sample for laboratory analysis was immediately transferred to a labelled, laboratory supplied, 250ml glass jar and sealed with an airtight, Teflon screw top lid. The fully filled jar was then placed in a chilled container.
- The sample for analysis of PFAS was immediately transferred into a labelled, laboratory supplied plastic container specifically for PFAS sample and sealed with an airtight, screw top lid. The fully filled bottle was then placed in a chilled container.
- All the recovered fill samples were screened, using a calibrated PID, to screen for the presence or otherwise of VOC. A soil sample for PID screening was placed in an airtight polyethylene bag, ensuring enough air space ('headspace') above the sample is present to be screened in the field. The soil sample remained in the bag for approximately 15 minutes before being shaken (to thoroughly mix soil with the air in the headspace) and a PID reading recorded. The PID readings are summarised in Tables 1a to 1c – test pit logs in **Appendix A** and a copy of PID calibration sheets is presented in **Appendix C**.
- The recovered soil sample for asbestos analysis was transferred into a small plastic zip-lock bag, which was placed inside a container.

In order to ensure the analytical performance of the primary laboratory, duplicate and split samples were prepared for analysis. Soil samples were kept in a labelled laboratory supplied container and sealed with an airtight screw top lid. The fully filled jar was placed in a chilled container.

The following table summarising the primary sample and the corresponding duplicate / split samples recovered and analysed. As shown in the table prepared, the split sample was prepared from primary sample which was not the same as that prepared for duplicate sample.

Primary Sample	Corresponding Duplicate	Primary Sample	Corresponding Split
For analysis of Chemicals other than PFAS			
TP102 (0.0-0.3m)	DDS1	TP103 (0.0-0.3m)	DSS1
TP115 (1.0-1.3m)	DDS2	TP105 (1.0-1.3m)	DSS4
TP107 (1.0-1.3m)	DDS4	TP130 (2.0-2.3m)	DSS5
TP130 (0.0-0.3m)	DDS5	TP127 (1.0-1.3m)	DSS6
TP127 (0.0-0.3m)	DDS6	TP126 (2.0-2.3m)	DSS7
TP126 (0.0-0.3m)	DDS7	TP124 (2.0-2.3m)	DSS8
TP124 (1.0-1.3m)	DDS8		
For analysis of PFAS			
TP110 (0.0-0.3m)	DDS1	TP103 (2.0-2.3m)	DSS2
TP107 (1.0-1.3m)	DDS9	TP105 (1.0-1.3m)	DSS9
TP130 (0.0-0.3m)	DDS10	TP130 (2.0-2.3m)	DSS10
TP127 (0.0-0.3m)	DDS11	TP127 (1.0-1.3m)	DSS11
TP126 (0.0-0.3m)	DDS12	TP126 (2.0-2.3m)	DSS12
TP121 (0.0-0.3m)	DDS13	TP121 (1.0-1.3m)	DSS13
TP13a (0.0-0.15m)	DDS14	TP14a (0.0-0.15m)	DSS14

A rinsate water sample was collected at completion of sampling at each day of field work and placed in a glass bottle and vial supplied by the laboratory. The fully filled bottle and vial were labelled and placed in a chilled container.

The primary samples including rinsate and duplicate samples for analysis of chemical other than PFAS and split samples for PFAS analysis in the chilled container with trip spike sample were forwarded under COC conditions to the NATA accredited laboratory, SGS Environmental Services (SGS).

The primary samples including rinsate, trip blank and field blank samples for PFAS analysis and split samples for other chemical analysis in the chilled container were forwarded under COC conditions to the NATA accredited laboratory, Envirolab Services Pty Ltd (Envirolab).

On receipt of the samples, the laboratories returned the Sample Receipt Advice verifying the integrity of all the samples received.

Samples for asbestos analysis in plastic bags within the container were delivered to a NATA accredited testing laboratory, Australian Safer Environment & Technology Pty Ltd (ASET). All samples were sent to the laboratory with completed form. On receipt of the samples, the laboratory returned a signed COC, acknowledging the receipt of samples and verifying the integrity of all the samples received.

Based on the site observation, the soil profiles encountered and the updated conceptual site model presented in Section 5.4.1, the following laboratory analysis plan was implemented:

- One hundred and twelve (112) fill samples including samples recovered from test pits with site features of concern (disused diesel oil bottles, earth mound, discussed diesel fuel filters with hydrocarbon staining and disused truck brake pads), as well as the corresponding duplicate samples DDS1 DDS2 and DDS4 to DDS8 and split samples DSS1 and DSS4 to DSS8 were analysed for metals and PAH.

- One hundred and twenty-seven (127) fill samples including samples recovered from test pits with the abovementioned site features of concern, as well as the corresponding duplicate samples DDS1 and DDS9 to DDS14 and split samples DSS2 and DSS9 to DSS14 were analysed for PFAS.
- The PID readings on all recovered fill samples were equal to zero. With the exception of hydrocarbon staining on ground surface identified in TP126, there was no obvious hydrocarbon staining on ground, and in the remaining test pit locations and recovered soil samples. Thirty-one (31) fill samples including samples from test pits with the site features of concern, as well as the corresponding duplicate samples DDS1 and DDS4, and split samples DSS1 and DSS6 were analysed for TRH and BTEX for screening purposes.
- Twenty-nine (29) fill samples including samples from test pits with the site features of concern, as well as the corresponding duplicate samples DDS1 and DDS4, and split samples DSS1 and DSS6 were analysed for OCP, OPP and PCB for screening purposes.
- Eighteen (18) fill samples were selected for analysis of Cation Exchange Capacity (CEC) and pH.
- There were no obvious fibro-cement fragments observed on the ground, and in all the test pit locations and recovered soil samples. Thirty-seven (37) fill samples with inclusion of foreign materials including samples from test pits with the site features of concern were analysed for asbestos for screening purposes.
- Rinsate samples RS1 to RS3 were analysed for metals, TRH, BTEX, PAH, OCP, OPP, PCB and PFAS.
- Trip spike samples TS1 to TS3 were analysed for BTEX.
- Trip blank samples TB1 to TB3 were analysed for PFAS.
- Field blank samples FB1 to FB3 were analysed for PFAS.

5.4.3 Assessment Criteria

Investigation levels and screening levels developed in the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 1999 (April 2013) were used for the assessment, as follows:

- Risk-based Health Investigation Levels (HIL) for a broad range of metals and organic substances. The HIL are applicable for assessing human health risk via all relevant pathways of exposure. The HIL as listed in Table 1A (1) of Schedule B1 "*Guideline on Investigation Levels for Soil and Groundwater*" are provided for different land uses.

  The site is proposed for a new high school land use and as such the analytical results for the assessment will be assessed against the available HIL for *public open space including secondary schools* (HIL C).

- Health Screening Levels (HSL) for selected petroleum compounds, fractions and Naphthalene are applicable for assessing human health risk via inhalation pathways. The HSL depend on specific soil physicochemical properties, land use scenarios and the characteristics of building structures. The HSL listed in Table 1A(3) of Schedule B1 "*Guideline on Investigation Levels for Soil and Groundwater*" apply to different soil types and depths below surface to >4 m.

  For this assessment, the analytical results will be assessed against the available HSL for clay to depth of 0m to <4m for *recreational / open space* (HSL C).

- Ecological Screening Levels (ESL) for selected petroleum hydrocarbon compounds, TPH fractions and Benzo(a)Pyrene (BaP) are applicable for assessing the risk to terrestrial ecosystems. ESL listed in Table 1B(6) of Schedule B1 "*Guideline on Investigation Levels for Soil and Groundwater*" broadly apply to coarse and fine-grained soils and various land uses and are generally applicable to the top 2m of soil.

  For this assessment, the analytical results will be assessed against the available ESL for fine-grained soil (clay) and coarse-grained soil (sand) for *public open space* land use.

- Ecological Investigation Levels (EIL), a specific type of Soil Quality Guidelines (SQG) for selected metals, Naphthalene and DDT are applicable for assessing the risk to terrestrial ecosystems. EIL listed in Table 1B(1-5) of Schedule B1 "*Guideline on Investigation Levels for Soil and Groundwater*" depend on specific soil physicochemical properties and land use scenarios and generally apply to the top 2m of soil. The EIL are calculated using 30% effect concentration (EC30) or lowest observed effect concentrations (LOEC) toxicity data.

  For this assessment, the analytical results will be assessed against the available EIL for aged contamination in soil for *public open space* land use.

  For arsenic, Naphthalene and DDT, generic EIL for urban residential are adopted for aged contaminants. For other metals, EIL are the sum of the added contaminant limit (ACL) and the ambient background concentration (ABC). Where available, EIL are calculated using the EIL calculator developed by CSIRO for NEPC.

For assessment of PFAS test results, the assessment criteria will be adopted as detailed in the Table 2, Table 3 and Table 4 in the PFAS NEMP Version 2.0, the HEPA.

For asbestos assessment, the adopted assessment criteria are:

- 0.02% w/w for bonded ACM for *recreational* land use;
- 0.001% for friable asbestos in soil; and
- No visible asbestos for surface soil.

The site will be deemed contaminated if the above criteria are unfulfilled. Further investigation, remediation and / or management will be recommended if the site is found to be contaminated.

5.4.4 Summary of Site and Field Observation

An Environmental Scientist from Geotechnique made the following observation (refer to Drawing No 20465/8-AA1) during the site inspection for the field works carried out on 16, 18 and 19 December 2024:

- The site was completely fenced, vacant and covered with grass and scattered shrubs.
- On ground disused diesel oil bottles were in the northwest and northeast portion of the site, next to TP103 and TP130.
- Three sandstone blocks were in the northwest portion of the site, next to TP103.
- An earth mound, approximately 2.0m X 1.0m dimensions with maximum height of about 1.0m, was located within TP125 in the far northwestern corner.
- Several on ground disused diesel fuel filters with hydrocarbon staining were located on and around TP126 in the northern portion of the site.

- Several on ground truck brake pads were located on and around J1 in the northwestern portion of the site.
- There were no obvious features associated with any underground storage tanks (bowser, breather pipe, inlet valve and piping).

Soil logs was completed during the field investigation. The soil logs recording soil lithology and depth were as presented in table below. Logging of soil profiles was carried out in accordance with AS1726-2017 Australian Standard Geotechnical Site Investigations.

Test Pit	Depth Interval (m)	Soil Profile	Fill, Earth Mound or Natural	Inclusion	Fill Thickness / Earth Mound Height (m)
TP101	0.0-1.2	Silty Clay, low to medium plasticity, dark brown mottled red, with gravel	Fill	trace boulders & root fibres; plastic @0.8m	1.2
	1.2-2.5	Silty Clay, high plasticity, orange, trace of gravel	Fill	concrete boulder @1.6m; plastic bag @2.0m	>1.3
TP102	0.0-2.0	Silty Clay, low to medium plasticity, dark brown mottled orange-red, with gravel	Fill	trace boulders & root fibres; trace plastic @0.4m	2.0
	2.0-2.5	Silty Clay, high plasticity, pale grey	Fill		>0.5
TP103	0.0-1.5	Silty Clay, low to medium plasticity, dark brown, with gravel	Fill	ground surface disused diesel oil bottles; trace root fibres	1.5
	1.5-2.0	Silty Clay, low to medium plasticity, dark grey to pale grey	Fill		0.5
	2.0-2.4	Gravelly Clay, low plasticity, dark brown, with gravel	Fill		0.4
	2.4-2.5	Silty Clay, low to medium plasticity, orange mottled red	Fill		>0.1
TP104	0.0-2.0	Silty Clay, low to medium plasticity, dark brown-orange	Fill	with gravel & root fibres; iron rod & plastic @0.5m	2.0
	2.0-2.5	Silty Clay, high plasticity, pale grey	Fill	trace boulder @1.7m; trace sand @ 2.3m	>0.5
TP105	0.0-0.8	Silty Clay, low to medium plasticity, dark brown mottled red, with gravel	Fill	plastic bag @0.4m	0.8
	0.8-1.3	Silty Clay, high plasticity, pale grey mottled red	Fill		0.5
	1.3-1.8	Silty Clay, high plasticity, dark grey	Fill		0.5
	1.8-2.0	Silty Clay, high plasticity, red mottled pale grey	Fill		0.2
	2.0-2.5	(CH) Silty CLAY, high plasticity, red mottled pale grey, trace of gravel	Natural Clay		0.5

Test Pit	Depth Interval (m)	Soil Profile	Fill, Earth Mound or Natural	Inclusion	Fill Thickness / Earth Mound Height (m)
TP106	0.0-1.0	Silty Clay, low to medium plasticity, dark brown mottled red-orange, with gravel	Fill	trace boulders & root fibres	1.0
	1.0-1.8	Silty Clay, high plasticity, mottled pale grey	Fill		0.8
	1.8-2.5	Silty Clay, high plasticity, orange	Fill		0.7
TP107	0.0-2.0	Silty Clay, low to medium plasticity, dark brown mottled orange-red, with gravel	Fill	trace of root fibres; trace concrete boulder @0.7m; with boulder @1.8m	2.0
	2.0-2.5	Silty Clay, high plasticity, pale grey	Fill		>0.5
TP108	0.0-1.2	Silty Clay, low to medium plasticity, dark brown mottled pale grey orange, with gravel	Fill	trace boulder & root fibres; bricks @0.3m	1.2
	1.2-2.0	Silty Clay, low to medium plasticity, red-orange	Fill		0.8
	2.0-2.5	Silty Clay, high plasticity, pale grey	Fill		>0.5
TP109	0.0-0.8	Silty Clay, low to medium plasticity, dark brown mottled red-grey, with gravel	Fill	trace boulder & root fibres	0.8
	0.8-1.0	Silty Clay, low to medium plasticity, dark grey, shale fragments	Fill		0.2
	1.0-2.4	Silty Clay, low to medium plasticity, red	Fill		1.4
	2.4-2.5	Silty Clay, high plasticity, orange mottled pale grey	Fill		>0.1
TP110	0.0-1.6	Silty Clay, low to medium plasticity, dark brown mottled orange red, with gravel	Fill	trace root fibres; trace boulder @0.5m; with sand @1.0m	1.6
	1.6-2.0	Silty Clay, low to medium plasticity, dark brown mottled orange	Fill		0.4
	2.0-2.5	Silty Clay, high plasticity, mottled pale grey	Fill	boulder @2.0m	>0.5
TP111	0.0-0.6	Silty Clay, low to medium plasticity, dark brown, with gravel	Fill	trace root fibres	0.6
	0.6-2.5	Silty Clay, high plasticity, pale grey mottled orange-red	Fill	trace boulder & sand @1.8m	>1.9
TP112	0.0-0.5	Gravelly Clay, low plasticity, dark brown, with gravel	Fill		0.5
	0.5-2.0	Silty Clay, low to medium plasticity, red mottled pale grey orange, with sand & gravel	Fill	trace boulder @1.2m	1.5
	2.0-2.5	Silty Clay, low to medium plasticity, dark brown, with gravel	Fill		>0.5

Test Pit	Depth Interval (m)	Soil Profile	Fill, Earth Mound or Natural	Inclusion	Fill Thickness / Earth Mound Height (m)
TP113	0.0-1.5	Silty Clay, low to medium plasticity, dark brown mottled red-orange, with gravel	Fill	trace root fibres; trace boulder, concrete @1.0m	1.5
	1.5-2.0	Silty Clay, low to medium plasticity, pale grey	Fill		0.5
	2.0-2.5	Silty Clay, high plasticity, red, trace of gravel	Fill	trace boulder @2.2m	>0.5
TP114	0.0-1.8	Silty Clay, low to medium plasticity, dark brown mottled red & pale grey, with gravel	Fill	trace root fibres; trace asphalt concrete boulder & plastic @0.5m; trace boulder @1.0m	1.8
	1.8-2.3	Silty Clay, high plasticity, red mottled orange	Fill		0.5
	2.3-2.5	Gravelly Clay, low plasticity, dark brown, with gravel	Fill		>0.2
TP115	0.0-0.5	Silty Clay, low to medium plasticity, dark brown, with gravel	Fill	trace root fibres	0.5
	0.5-2.2	Silty Clay, high plasticity, red mottled pale grey orange	Fill	iron rod & plastic @1.2m; trace boulder @2.2m	1.7
	2.2-2.5	Silty Clay, high plasticity, dark brown	Fill		>0.3
TP116 to TP118	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP119	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill	trace brick fragments @1.2m	>1.5
TP120	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill	trace brick fragments @0.2m	1.0
	1.0-2.0	Clayey Sand, fine grained, brown, with gravel and glass	Fill	glass	1.0
	2.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>0.5
TP121	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5

Test Pit	Depth Interval (m)	Soil Profile	Fill, Earth Mound or Natural	Inclusion	Fill Thickness / Earth Mound Height (m)
TP122	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill	fragments of glass @0.3m	1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP123 & TP124	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP125	0.0-1.0	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Earth Mound		1.0m above ground surface
	1.0-3.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>2.5
TP126	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill	ground surface disused diesel fuel filters with hydrocarbon staining	1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP127	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill	trace boulder @1.0m	>1.5
TP128 & TP129	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP130	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill	ground surface disused diesel oil bottle	1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP131 & TP132	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5

Test Pit	Depth Interval (m)	Soil Profile	Fill, Earth Mound or Natural	Inclusion	Fill Thickness / Earth Mound Height (m)
TP133	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, low to medium plasticity, brown, with gravel	Fill		>1.5
TP134 & TP135	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.5
TP136	0.0-1.0	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill		1.0
	1.0-2.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill	trace boulder @2.0m	>1.5
J1	0.0-0.5	Silty Clay, low plasticity, brown, with gravel, trace of root fibres	Fill	ground surface truck brake pads	0.5
	0.5-1.5	Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	Fill		>1.0
TP1b to TP15a	0.0-0.2	Silty Clay, low plasticity, brown, with gravel	Fill		>0.2

With the exception of inclusion of foreign materials (boulders, concrete boulders, plastic, plastic bags, asphalt concrete, brick fragments and / or fragments of glass) in fill in some test pits locations and hydrocarbon staining identified on ground surface in TP126, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining test pit locations and recovered soil samples that would indicate potential for contamination.

All the recovered fill samples were screened for the presence of VOC using a calibrated PID. The PID readings on recovered soil samples, as presented in test pit logs in **Appendix A**, were equal to zero, suggesting that the presence of volatiles in the fill is unlikely.

5.4.5 Filed Quality Assurance And Quality Control

Sampling Personnel

Geotechnique undertook all the sampling associated with this ADSI. An Environmental Scientist (Kienan Brown) from Geotechnique located sampling positions based on the project brief prepared by the Project Manager and site conditions, logged the soil profile encountered, recovered soil samples at a frequency determined by the sampling plan (project brief), carried out insitu PID screening and / or packaged the samples (refer to Section 5.4.2).

Kienan Brown has undergone supervised training in Geotechnique procedures for sampling and logging.

Field Instrument Calibration

As stated in Section 5.4.2, a calibrated PID was used in the field to screen for the presence of volatile compounds in the recovered fill samples (head space screening). The PID was calibrated on-site on the day of field sampling before use. A copy of the PID calibration sheets is included in **Appendix C** of this report.

Decontamination Procedures

Soil sampling was carried out using an excavator.

A stainless steel trowel was used to transfer the soil sample from the bulk bucket sample to the laboratory supplied glass jar, plastic container and plastic bag. Decontamination of the trowel involved the following:

- Removal of soils adhering to the trowel by scrubbing with a brush;
- Washing the trowel thoroughly in a solution of reagent water using brushes and disposable towels;
- Rinsing the trowel thoroughly with distilled water;
- Repeating the washing / rinsing steps and rinsing with distilled water;
- Drying the trowel with a clean cloth.

A rinsate water sample was recovered at completion of sampling (one each day).

Rinsate Samples

Rinsate water samples (Rinsate R1 to R3) were recovered on completion of the field work (one each day) in order to identify possible cross contamination.

The rinsate water samples were analysed for metals, TRH, BTEX, PAH, OCP, OPP, PCB and PFAS. The test results for the rinsate water samples are summarised in Tables A1 and A2. A copy of the laboratory analytical reports / certificates of analysis is included in **Appendix D**.

As indicated in Tables A1 to A3, concentrations of analytes in the rinsate water samples were less than the laboratory limits of reporting (LOR) / Practical Quantitation Limits (PQL), indicating that the cleaning and decontamination processes adopted in the field were considered adequate.

Trip Spike Samples

Trip spike sample was obtained from the laboratory on a regular basis, prior to conducting field sampling where volatile substances are suspected. The samples are held in the Penrith office of Geotechnique, at less than 4°C, for a period of not more than fourteen days. During the field work, the trip spike sample was kept in the chilled container with soil samples recovered from the site. The trip spike sample was then forwarded to the primary laboratory together with the soil samples recovered from the site.

The trip spike is prepared by the laboratory by adding a known amount of a pure petrol standard to a clean sand sample. The sample is mixed thoroughly to ensure a relatively homogenous distribution of the spike throughout the sample. When the sample is submitted for analysis, the same procedure is adopted for testing as the soil samples being analysed from the site.

The purpose of the trip spike is to detect any loss, or potential loss, of volatiles from the soil samples, during field work, transportation, sample extraction or testing.

Trip spike samples (TS1 to TS3) were forwarded to the primary analytical laboratory with the samples collected from the site and tested for BTEX. The test results for the trip spike samples, reported as a percentage recovery of the applied and known spike concentrations, are shown in Table B. A copy of the laboratory analytical reports is included in **Appendix D**.

As indicated in Table B, the results show a good recovery of the spike concentrations, ranging between 90% and 117%, which were within the acceptable ranges (60% - 130%). Furthermore, zero PID readings for the recovered samples were recorded in the field, all the BTEX results for the soil samples analysed were less than laboratory detection limits and there was no visible or olfactory indication of hydrocarbon contamination.

Based on the above, it is considered that any loss of volatiles from the recovered samples that might have occurred would not affect the outcome / conclusion of this report.

Trip Blank Samples

A trip blank sample is used to assess whether there is any possible cross contamination introduced during the field sampling and shipping.

The trip blank sample comprises a clean sample (does not contain PFAS) supplied by the laboratory.

The trip blank sample was taken to the site, labelled as TB1, TB2 and TB3 (one each day) kept closed and placed in a chilled container with soil samples recovered from the site. The trip blank sample was then forwarded to the primary laboratory together with the soil samples recovered from the site.

The trip blank samples were analysed for PFAS. The test results are summarised in Table C. A copy of the laboratory certificates of analysis is included in **Appendix D**.

As shown in the Table C, the analyte concentrations were less than the laboratory PQL, which indicates there was no cross contamination.

Field Blank Samples

A field blank sample is used to assess whether cross contamination of the sample has occurred as a result of ambient exposure to field conditions during sampling.

The field blank sample comprises a clean sample (does not contain PFAS) supplied by the laboratory.

The field blank sample was taken to the site and labelled as FB1, FB2 and FB3 (one each day). The lid of the container was opened to expose to the ambient condition of the site during sampling and was sealed and placed in a chilled esky upon completion of the field work. The field blank sample was then forwarded to the primary laboratory together with the soil samples recovered from the site.

The field blank samples were analysed for PFAS. The test results are summarised in Table C. A copy of the laboratory certificates of analysis is included in **Appendix D**.

As shown in the Table C, the analyte concentrations were less than the laboratory PQL, which indicates that cross contamination was unlikely.

Duplicate Samples

A field duplicate sample was prepared in the field through the following processes:

- A larger than normal quantity of soil was recovered from the sample location selected for duplication.
- The sample was divided into two portions, using the decontaminated trowel.
- One portion of the sub-sample was immediately transferred into a labelled, laboratory supplied container and sealed with an airtight, screw top lid. The fully filled container was then placed in a chilled container.
- The remaining portion was stored in the same way and labelled as the original sample.

Duplicate sample was prepared on the basis of sample numbers recovered during the field work. The duplicate sample frequency was computed using the total number of samples analysed as part of the assessment. The duplicate sample frequencies computed are as follows:

• Metals:	112 samples analysed;	7 duplicates;	6% frequency
• TRH & BTEX:	31 samples analysed;	2 duplicates;	6% frequency
• PAH:	112 samples analysed;	7 duplicates;	6% frequency
• OCP, OPP & PCB:	29 samples analysed;	2 duplicates;	7% frequency
• PFAS:	127 samples analysed;	7 duplicates;	6% frequency

The duplicate frequency adopted complies with Schedule B3 Guideline on Laboratory Analysis of Potentially Contaminated Soils of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), which recommends a duplicate frequency of 5%.

The duplicate sample test results are summarised in Tables D1 to D14. A copy of the laboratory analytical reports and certificates of analysis is included in **Appendix D**.

A comparison was made of the laboratory test results for the duplicate sample with the original sample, and the Relative Percentage Differences (RPD) were computed in order to assess the accuracy of the laboratory test procedures. RPD within 30% are generally considered acceptable. However, this variation can be higher for organic analysis than for inorganics and for low concentrations of analytes or non-homogeneous samples.

As shown in Tables C1 to C9, the comparisons between the duplicate and corresponding original sample indicated generally acceptable RPD, with the exception of RPD for Cr (32% and 31%) in Tables D4 and D5, Cu (42% and 32%) in Tables D1, D2 and D5, Pb (36% and 46%) in Tables D3 and D7, Hg (67%) in Table D7, Zn (49 and 40%) in Tables D5 and D7, Total PAH (33% and 143%) in Tables D1 and D2, PFOS (67% and 150%) in Tables D9, D10 and D13, and PFOS+PFHxS (86%, 67% and 160%) in Tables D9, D10 and D13, which were in excess of 30%, mainly due to the non-homogeneous nature of the soil samples, low concentrations of some analytes and / or expected for organic analysis.

All the concentrations with RPD in excess of 30% in the duplicate pairs were both less than the relevant assessment criteria.

Based on the overall duplicate sample numbers and comparisons, the RPD are not considered crucial, therefore it is concluded that the test results provided by the primary laboratory are of adequate accuracy and reliability for this assessment.

Split Samples

Split sample provides a check on the analytical performance of the primary laboratory. The split sample was prepared based on sample numbers recovered during the field work, in the same manner as the duplicate sample as outline above. The split sample was forwarded to a secondary laboratory for analysis.

The split sample frequency was computed using the total number of samples analysed as part of this assessment. The split sample frequencies computed are as follows:

- Metals: 112 samples analysed; 7 splits; 6% frequency
- TRH & BTEX: 31 samples analysed; 2 splits; 6% frequency
- PAH: 112 samples analysed; 6 splits; 5% frequency
- OCP, OPP & PCB: 29 samples analysed; 2 splits; 7% frequency
- OCP: 127 samples analysed; 7 splits; 6% frequency

The split sample frequency adopted complies with Schedule B3 of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), which recommends a frequency of 5%.

The split sample test results are summarised in Tables E1 to E13. A copy of the laboratory analytical reports and certificates of analysis is included in **Appendix D**.

Based on Schedule B3 of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013) the difference in the results between the split samples should generally be within 30% of the mean concentration determined by both laboratories, i.e., RPD should be within 30%. However, higher variations can be expected for organic analyses compared to inorganic analyses and for samples with low analyte concentrations or non-homogeneous samples.

As shown in Tables E1 to E13 the comparisons between the split and corresponding original samples in general indicated acceptable RPD, with the exception of RPD for Cr (35% and 33%) in Tables E2 and E5, Cu (38% and 34%) in Tables E2 and E6, Pb (33%) in Table E2, Ni (37%, 50% and 40%) in Tables E2, E3 and E4, and Zn (35%, 66%, 65% and 46%) in Tables E2, E3, E4 and E6, which are in excess of 30%. This is considered to be due to the non-homogeneous nature of the soil samples.

All the concentrations with RPD in excess of 30% in the split pairs were both less than the relevant assessment criteria.

Based on the overall split sample numbers and comparisons, the variations are not considered critical, therefore it is concluded that the test results provided by the primary laboratory can be relied upon for this assessment.

As discussed above, some duplicate / split sample comparisons reported RPD exceeding the generally accepted limit for some metals (Cr, Cu, Pb, Hg, Ni and / or Zn), Total PAH, PFOS and PFOS+PFHxS. This has been attributed to the heterogeneity of the samples, the low concentrations of some analytes and / or. Expected for organic analysis. The results are still considered acceptable, as virtually all remaining QA and QC sample data falls within acceptance limits.

Based on the above, it is considered that the QA and QC data quality indicators have been complied with in the field. As such, it is concluded that the laboratory test data obtained as part of this assessment is reliable and useable.

5.4.6 Laboratory Quality Assurance And Quality Control

Laboratory Accreditation

Only laboratories accredited by the NATA for chemical analyses were used for analysis of samples recovered as part of this assessment. The laboratory must also incorporate quality laboratory management systems to ensure that trained analysts using validated methods and suitably calibrated equipment produce reliable results.

In addition to the quality control samples, the laboratory must also ensure that all analysts receive certification as to their competence in carrying out the analysis and participate in national and international proficiency studies. SGS, Envirolab and ASET, the laboratories used for this assessment, are accredited by NATA. SGS, Envirolab and ASET also operate Quality Systems designed to comply with ISO / IEC 17025.

Sample Holding Times

The following table lists the allowable holding times of soils and water, detailed in Schedule B3 of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013) and in Standard Methods for the Examination of Water and Wastewater (APHA).

ANALYTE	HOLDING TIME (SOIL)	HOLDING TIME (WATER)
Metals *	6 months	6 months
Hg	28 days	28 days
TRH	14 days	7 days
BTEX	14 days	14 days
PAH	14 days	7 days
OCP	14 days	7 days
OPP	14 days	7 days
PCB	14 days	7days
PFAS	28 days	14 days
pH	7 days	-
CEC	28 days	-

* Metals include As, Cd, Cr, Cu Pb, Ni and Zn

It should be noted that there is no specific holding time for asbestos analysis.

The actual holding times of the laboratories used for this assessment are shown in the laboratory analytical reports / certificates of analyses in **Appendix D** of this report. All analyses were in general conducted within the relevant holding times, with the exception of TRH, PAH, OCP, OPP and PCB in rinsate water samples.

The extraction times for analysis of TRH, PAH, OCP, OPP and PCB in 2 rinsate water samples RS2 and RS3 by SGS (Report Nos SE276224 & SE276225R2) were 9 days or 8 days, which were technically 2 days or 1 day over the 'recommended' holding time. It is our opinion that 2 days or 1 day over is insignificant for the analysis as the samples were kept refrigerated the whole time in the laboratory.

Test Methods and LOR / PQL

The test methods and LOR / PQL adopted by the laboratories are indicated with the analytical reports / certificates of analysis in **Appendix D**.

All reported laboratory LOR / PQL were less than the assessment criteria adopted for each analyte or analyte group.

Method Blanks

Method blank samples are designed to monitor the introduction of incidental or accidental interferences into the analysis, which might result in a false increase in analyte concentration. The blank comprises reagents specific to each individual analytical method and is analysed in the same manner as the site sample. The reagents are carried through the preparation, extraction and digestion procedures and analysed at the beginning of every sample batch analysis, or at least 1 in 20 samples.

Reagent blank samples for soil samples were analysed by the primary and secondary laboratories for Metals, TRH, BTEX, PAH, OCP, OPP, PCB and PFAS.

The reagent blank sample for rinsate water samples were analysed for metals, TRH, BTEX, PAH, OCP, OPP and PCB by SGS and for PFAS by Envirolab.

All reported blank concentrations were below the LOR or PQL, as detailed in the laboratory analytical reports from SGS and certificates of analysis from Envirolab. The results complied with the acceptance criteria for each laboratory (must not be detected at the LOR / PQL).

The test results indicate that there was no interference to the analysis.

Laboratory Duplicate Samples

The laboratory prepares duplicate samples from the supplied samples (original samples) and/or laboratory spike samples, carries out preparation and testing in the same manner as the original sample. The duplicate sample provides an indication of laboratory precision and reproducibility.

The laboratory prepared duplicates were analysed for the same range of analytes as the samples submitted from the site.

SGS requires 1 duplicate analysed for every 10 samples whilst Envirolab requires 1 duplicate analysed for every 20 samples.

The comparisons between the laboratory duplicates and original samples have been reported on the laboratory test results certificates as RPD.

Maximum Allowable Difference (MAD) was suggested by SGS as RPD criteria for Lab Duplicates.
Note: MAD = 100 x Statistical Detection Limit (SDL) / Mean + Limiting Repeatability

Reference may be made to SGS analytical reports in **Appendix D** for details of the reported duplicate sample numbers, RPD ranges, as well as acceptance criteria.

As presented in the SGS analytical reports, the duplicate sample numbers and reported RPD were in general within the acceptance criteria adopted by the laboratory.

Some duplicate samples comparison reported RPD exceeding the laboratory accepted limit for Total PAH, mainly due to the heterogeneity of the soil samples.

All the concentrations with RPD in excess of the laboratory acceptable limit in the duplicate pairs were both less than the assessment criteria.

Based on the overall duplicate sample numbers and comparisons, the RPD are not considered crucial.

The RPD acceptance for Envirolab is typically in the range of 20% to 50% (if concentrations are greater than 10 times the PQL). The acceptance RPD is higher for concentrations less than 10 times the PQL as the results approach PQL and estimated measurement uncertainty will statistically increase.

As presented in the Envirolab certificates of analysis, the duplicate sample numbers and reported RPD were within the acceptance criteria adopted by the laboratory.

Based on the above the duplicate sample numbers and reported RPD for SGS and Envirolab were within the acceptance criteria adopted by the laboratories.

Laboratory Control Samples

A laboratory control sample is a sample of material with known concentrations of various analytes, such as a standard reference material or control matrix. The control sample is analysed with the sample batch and the recorded concentrations reported as a percentage recovery of the known or expected concentration. At least one control sample is included in each run to confirm calibration validity.

The acceptance criteria for both laboratories are presented below:

SGS: 80% to 120% for metals / inorganics and 60% to 130% for organics

Envirolab: 70% to 130% for metals / inorganics and 60% to 140% for organics

Reference may be made to SGS analytical reports and Envirolab certificates of analyses in **Appendix D** for details of the reported percentage recoveries.

The control sample data presented by the laboratories, fall within the acceptance limits of the laboratories.

Matrix Spikes

The purpose of matrix spikes is to monitor the performance of the analytical methods used and to determine whether matrix interferences exist. Samples are spiked with identical concentrations of the target analyte before extraction or digestion. The results are reported as percentage recoveries of the known spike concentration.

The acceptance criteria for the matrix spike recoveries in soil samples for SGS and Envirolab are 60% to 140% for organics and 70% to 130% for metals / inorganics.

The acceptance criteria for the matrix spike recoveries in water samples for SGS are 60% to 140% for organics and 80% to 120% for metals / inorganics.

The matrix spike data presented by SGS generally fall within the laboratory acceptance criteria, with the exception of the following failed matrix spike recoveries:

Report No	Reported Recovery	Acceptance Criteria	Comments
SE276128	68% for Zn	70%-130%	Recovery failed acceptance criteria due to sample heterogeneity
SE276224	-670% for TRH C15-C28, -170% for TRH C29-C36 and -906% for TRH >C16-C34	60%-140%	Recovery failed acceptance criteria due to sample heterogeneity
SE276225R2	67%, 68% & 35% for Zn	70%-130%	Recovery failed acceptance criteria due to matrix interference
	41% for TRH C15-C28 and 29% for TRH >C16-C36	60%-140%	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).

The matrix spike data reported by Envirolab are within the laboratory acceptance criteria.

Surrogate Spikes

Surrogate spikes are used during analysis for organics to provide a means of checking that no gross errors have occurred at any stage of the procedure, leading to significant analyte losses. The surrogate spikes are added to each sample, blank, matrix spike, duplicate and control sample before the extraction stage. The percentage recovery of the known spike is recorded and reported on the laboratory report / certificate.

The acceptance limits for the laboratories are as follows:

SGS: 60% to 130% for soil and 40% to 130% for water

Envirolab: 60% to 140%

Reference may be made to SGS analytical reports and Envirolab certificates of analyse in **Appendix D** for details of the reported recovery percentages.

As shown in laboratory reports / certificates, the surrogate spike data presented by the laboratories fall within the acceptance limits of the laboratories.

As discussed in above, some duplicate sample comparisons reported RPD by SGS exceeding the generally accepted limit for PAH, mainly due to the heterogeneity of the soil samples. Some of SGS laboratory matrix spike recoveries failed acceptance criteria due to the heterogeneity of the samples, matrix interference or the presence of significant concentration of analyte. The results are still considered acceptable as virtually all remaining QA and QC sample data of both laboratories fall within the acceptance criteria adopted. As such, these variations are not considered to have affected the laboratory data provided.

Based on the above, it is considered that the QA and QC data quality indicators have been complied with in the laboratories. As such, it is concluded that the laboratory test data obtained as part of this assessment is reliable and useable.

5.4.7 Laboratory Test Results, Assessment & Discussion

The laboratory test results for the analysed soil samples are presented in Tables F to K together with the assessment criteria adopted. A copy of the laboratory analytical reports and certificates of analysis is included in **Appendix D**. A discussion of the test results is presented below.

The laboratory test results indicated that:

- The concentrations of metals were below the relevant available HIL C and / or EIL (Table F).
- The concentrations of F1 (TRH C6-C10 less BTEX), F2 (TRH >C10-C16 less Naphthalene and TRH>C10-C16), F3 (TRH >C16-C34), F4 (TRH >C34-C40) and BTEX were below the relevant available HSL C and / or ESL adopted (Table G). Moreover, the test results of F1, F2, F4 and BTEX were less than the laboratory LOR. The test results of F3 were in general less than the laboratory LOR.

  There was no HSL C (not limiting) for clay and sand for F1, F2 (TRH >C10-C16 less Naphthalene) and BTEX.
- All the concentrations of Benzo(a)pyrene (BaP) (TEQ), Total PAH and Naphthalene were well below the relevant HIL C or EIL (Table H). Moreover, the test results of Naphthalene were less than the laboratory LOR.

  With the exception of highlighted BaP concentration, the remaining concentrations of BaP were well below the ESL.

  The highlighted BaP concentration (1.5mg/kg) in sample TP111 (1.0-1.3m) exceeded the ESL of 0.7mg/kg.

  In order to establish that the fill is considered not to pose a risk of harm to environment, the following statistical approach were adopted for assessment of BaP test results:

  - The 95% UCL of the mean, using Pro Upper Confidence Limit (UCL) (Version 5.1) should not exceed the assessment criterion;
  - The standard deviation of the data set should be less than 50% of the assessment criterion; and
  - No individual sample result should be greater than 250% of the assessment criterion.

  Subsequently, a statistical analysis was applied to BaP data from this and previous assessments and presented in Table H1. As indicated in Table H1:

  - The 95% UCL of the mean concentration of BaP (0.2mg/kg) was well below the ESL (0.7mg/kg) for public open space including secondary schools;
  - The standard deviation of data set for BaP (0.139mg/kg) was less than 50% of the ESL (0.35mg/kg);
  - The maximum BaP concentration was 1.5mg/kg for sample TP111 (1.0-1.3m). As such, no individual sample result was greater than 250% of the ESL for BaP (1.75mg/kg).

  Based on the above, it was assessed that the test results for BaP meet the adopted acceptance criteria under condition for secondary school land use.

  There was no HSL C (not limiting) for clay and sand for Naphthalene in all depths.

- The concentrations of OCP were well below the relevant HIL C and less than the laboratory LOR. Concentrations of DDT were also below the EIL (Table I).
- The concentrations of Chlorpyrifos (OPP) were well below the HIL C and less than the laboratory LOR (Table I).
- The concentrations of PCB were below the HIL C and less than laboratory LOR (Table I).
- The concentrations of PFAS including the sum of Perfluorooctane Sulfonate (PFOS) and Perfluorohexane Sulfonate (PFHxS), i.e. PFOS+PFHxS, as well as Perfluorooctanoic Acid (PFOA) were well below the adopted Human Health Screening Values (HHSV) for public open space land use (Table J).

  The concentrations of PFOS were well below the adopted Ecological Direct Exposure (EDE) and Ecological Indirect Exposure (EIE).

  The concentrations of PFOA were well below the adopted EIE.

  The concentrations of PFOS+PFHxS were well below the adopted relevant Biota guideline values.
- No ACM (>7mm) was detected at the LOR of 0.01% w/w, which was below the soil assessment criterion of 0.02% w/w (Table K). No asbestos fines (AF) and fibrous asbestos (FA) was detected at the LOR of 0.001% w/w, which was below the soil assessment criterion (0.001% w/w).

5.5 Consultation

The SINSW reviewed the initial DSI report and provided comments in an email dated 8 April 2024.

Geotechnique provided the responses in an email dated 11 April 2024.

Site Auditor Ms Rebeka Hall of Geosyntec reviewed available environmental assessment reports including the PSI and initial DSI reports and issued an Interim Advice (Ref. AU124169 IA1 dated 12 December 2024).

Geotechnique provided responses to Site Auditor's Comments in an email dated 13 December 2024.

The ADSI as data gap assessment was required by the Site Auditor. Subsequently, a Sampling, Analysis and Quality Plan (SAQP) was prepared by Geotechnique and submitted to Site Auditor Ms R Hall for review and comments in an email dated 17 December 2024.

The SAQP was approved by the Site Auditor in an email date 18 December 2024.

5.6 Site Characterisation

Based on the site historical data collected, the Site Auditor's advice, as well as recent site inspection and the field work, the updated PAEC / AEC and associated CoPC were identified as summarised in the table presented in Section 5.4.1 of this report.

It was understood that development works within the land including the site had involved the filling of the land to raise the level to the required design. As outlined in Section 5.1.4 of this report, ADE considered that the soil materials imported into land including the site during the period November 2013 to April 2017 were imported in accordance with the FMP and were suitable for the proposed commercial / industrial land use.

During the intrusive investigation for combined geotechnical and contamination assessment by Geotechnique in November 2023, 15 locations were drilled / excavated. The site was completely fenced, vacant covered with short grass and scattered shrubs. There were no site features of concern identified. Fill material was encountered at depths ranging from more than approximately 0.6m to 7.5m below the EGL across the site. No groundwater or perched water was encountered to a maximum depth of approximately 13.5m below the EGL and during the short time the boreholes remained open.

With the exception of inclusion of 2 star picks noted in TP1a and concrete boulder in BH5 / TP5a, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining borehole / test pit locations and recovered soil samples that would indicate potential for contamination.

A confirmatory sampling and testing for screening purposes were conducted in order to determine / ascertain the contamination status of the fill material being imported to and placed on the site. A number of the recovered soil samples were selected for analysis of CoPC including metals, TRH, BTEX, PAH, OCP, PCB and / or Asbestos.

The field works for the ADSI as data gap assessment was conducted by Geotechnique in December 2024 to address the comments / issues raised by the Site Auditor.

At the time of site inspection during the field works for the ADSI, the site was completely fenced, vacant and covered with grass and scattered shrubs. Several site features of concern (earth mound and fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads) were identified.

Fifty-two (52) test pits were excavated. Fill material was encountered at depths ranging from more than approximately 0.2m to 2.5m below the EGL across the site.

With the exception of inclusion of foreign materials (boulders, concrete boulders, plastic, plastic bags, asphalt concrete, brick fragments and / or fragments of glass) in fill in some test pits locations and hydrocarbon staining identified on ground surface in TP126, there were no obvious fibro-cement fragments and foreign materials, no detectable odour and no obvious staining / discolouration of the soil and vegetation in the remaining test pit locations and recovered soil samples that would indicate potential for contamination.

All the recovered fill samples were screened for the presence of VOC using a calibrated PID. The PID readings on recovered soil samples were equal to zero, suggesting that the presence of volatiles in the fill is unlikely.

A number of the recovered soil samples were selected for analysis of CoPC including metals, TRH, BTEX, PAH, OCP, OPP, PCB, PFAS and / or Asbestos associated with fill and the abovementioned site features of concern.

There were no elevated concentrations of analytes detected in the samples analysed for the initial DSI and ADSI. All the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory LOR / PQL or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under the condition for the proposed high school land use.

Based on the foregoing, it is our opinion that this and previous assessments are sufficient to determine that fill material being imported to and placed on site is no longer of concern and no further investigation is deemed necessary.

There were no high levels of contaminants detected through the DSI and ADSI. As such, it is our opinion that the potential off-site impacts of contaminants on groundwater and waterbodies are considered to be low.

Based on the forgoing, it is our opinion that no further site investigation, remedial action plan (RAP) and remediation are deemed necessary. Therefore, the site is environmentally suitable for the proposed new Gledswood Hills High School.

Removal and appropriate disposal of fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads due to aesthetic issues are required.

6.0 POTENTIAL CONTAMINATION CONSTRAINTS OR RISKS

Based on anticipated site conditions, no contamination is identified within the site, subsequently, no remediation is required.

The potential constraints or risks on proposed high school construction are:

- The presence of fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads, which requires removal and appropriate disposal, and inspection of the footprints of the fly tips post complete removal.
- Unexpected findings of suspect material during any stage of future earthworks / site preparation, which can be appropriately managed in accordance with the recommended unexpected finds management protocol in **Appendix E** of this report.

7.0 MITIGATION MEASURES FOR CONTAMINATION RISKS

The following table presents recommended mitigation measure for removal and appropriate disposal of fly tips and the identified unexpected finds.

Project Stage Design (D) Construction (C) Operation (O)	Mitigation Measures	Reason for Mitigation Measures	Relevant Section of Report
C	Removal and appropriate disposal of fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads; Inspection of the footprints of the fly tips post complete removal	To address aesthetic issues and to remove the source of potential contamination and unacceptable aesthetic impacts from the site	N/A
C	In the event of unexpected finds, carry out contamination assessment and prepare a RAP if contamination is identified in consultation with Independent Site Auditor	To determine the presence or otherwise of an unacceptable risk to human health and environment and to manage the site suitable for the proposed high school land use	Appendix E

8.0 SIGNIFICANCE OF ENVIRONMENTAL IMPACTS

Based on nature of potential contamination risks or issues at the site, it is our assessment that the potential impacts of the activities work or activity can be appropriately managed in accordance with the recommended unexpected finds management protocol. Therefore, from contamination consideration, it is determined that the extent and nature of potential impacts from the proposed work or activity are "Low" and will not have significant impact on the locality, community and / or the environment.

9.0 CONCLUSION AND RECOMMENDATIONS

The findings of the assessment are summarised as follows:

- The site was completely fenced, vacant and covered with grass and scattered shrubs at the time of sampling and site inspection. Several site features of concern (earth mound and fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads) were identified.
- Based on the historical data collected, the Site Auditor's advice, as well as recent site inspection and the field work, the updated PAEC / AEC and associated CoPC were identified as summarised in the table presented in Section 5.4.1 of this report. The PAEC / AEC and the associated CoPC had been addressed via laboratory testing of the recovered soil samples.
- All the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory limits of reporting / practical quantitation limits or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under the condition for the proposed new high school land use.
- The earth mound is suitable for retaining onsite for the proposed new high school land use.
- Potential off-site impacts of contaminants on groundwater and waterbodies are considered to be low.
- No further site investigation, RAP and remediation are deemed necessary.
- Removal and appropriate disposal of fly tips including disused diesel oil bottled, diesel fuel filters and truck brake pads are required.

Based on the assessment, it is our opinion that the site is considered suitable for the proposed new Gledswood Hills high school land use.

Following the removal and appropriate disposal of fly tips, inspection of the footprints by an environmental consultant is required to ascertain the complete removal of the fly tips.

It should be noted that Geotechnique has conducted salinity sampling and testing in conjunction with intrusive geotechnical investigation. The results were presented in the report (Our Ref: 20465/5-AA Amended 1 dated 20 December 2024).

Based on the assessment, earthworks (disturbance or excavation of soils) for proposed works should be carried out in accordance with a Saline Soil Management Plan to manage impact from saline soils to proposed upgrade works and vice versa. Reference should be made to Report on Salinity Investigation and Management Plan (Project 76510.00 dated May 2012) prepared by Douglas Partners for details of the Saline Soil Management Plan.

If suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets / pieces / pipes, ash material, imported fill materials [which are different to those encountered during this and previous assessments], etc.) are encountered during any stage of future earthworks / site preparation, we recommend that this office is contacted for assessment and an unexpected finds management protocol in **Appendix E** of this report should be implemented.

For any materials to be excavated and removed from the site, reference should be made to Construction & Demolition Waste Management Plan prepared by Elephants Foot.

Any imported soil (fill) must be assessed by a qualified environmental consultant, prior to importation, to ensure suitability for the proposed use. In addition, the imported fill must not contain asbestos and ash, be free of unusual odour, not discoloured and not acid sulphate soil or potential acid sulphate soil. The imported fill should either be virgin excavated natural material (VENM) or excavated natural material (ENM).

10.0 LIMITATIONS

The services performed by Geotechnique in preparing this report were conducted in a manner consistent with the level of quality and skill generally exercised by members of the profession and consulting practice.

This report has been prepared for the purposes stated within. This report can also be relied upon by SINSW, DoE, Site Auditor and relevant authorities for activities and building application assessment processes. Any reliance on this report by other parties shall be at such parties' sole risk as the report might not contain sufficient information for other purposes.

This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval is provided by Geotechnique.

The information in this report is considered accurate at the date of issue, in accordance with current site conditions during site inspection and field sampling for the ADSI (16, 18 and 19 December 2024). Any variations to the site form or use beyond those dates could nullify the conclusion stated.

No contamination assessment can eliminate all risk; even a rigorous professional assessment might not detect all contamination within a site. Whilst the assessment conducted at the site was carried out in accordance with current NSW guidelines, the potential always exists for contaminants and contaminated soils to be present between sampled locations and in the grass covered areas.

Presented in **Appendix F** is a document entitled "Environmental Notes", which should be read in conjunction with this report.

LIST OF REFERENCES

Acid Sulphate Soil Manual - New South Wales, Acid sulphate Soil Management Advisory Committee 1988

Australian Standard AS1726-2017, Geotechnical Site Investigation 2017

Contaminated Land Guidelines Sampling Design Part 1 - Application – NSW EPA 2022

Contaminated Land Management Act 1997

Contaminated Land Management Regulation 1998

Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites – NSW Environment Protection Authority 2020

Geological Map of Wollongong - Port Hacking (Geological Series Sheet 9029-9129, Scale 1:100,000, Edition 1) – Geological Survey of New South Wales, Department of Minerals and Energy 1985

Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

National Environment Protection (Assessment of Site Contamination) Measures, 1999 (April 2013) - National Environmental Protection Council

PFAS National Environmental Management Plan (NEMP) Version 2.0, the Heads of EPAs Australia and New Zealand (HEPA), January 2020

Protection of the Environment Operations Act – 1997

Resource Recovery Order / Exemption Under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 – The Excavated Natural Material Order / Exemption 2014 NSW Environment Protection Authority

SINSW website: https://www.schoolinfrastructure.nsw.gov.au/

Soil Landscape Map of Port Hacking - Wollongong 1:100,000 Sheet (9029-9129) – Soil Conservation Service of NSW 1990

Salinity Potential in Western Sydney (scale approximately 1:140,000), Department of Infrastructure, Planning and Natural Resources 2002

State Environmental Planning Policy (Resilience and Hazards) 2021 under the Environmental Planning and Assessment Act 1979

The NSW Government PFAS Investigation Program: https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program

Trace Element Concentrations in Soils from Rural and Urban Areas of Australia, Henry Olszowy et al., 1995

Waste Classification Guidelines Part 1: Classifying Waste – NSW EPA 2014

DRAWINGS

Drawing No	
20465/2-AA1	*Site Layout*
20465/3-AA1	*Borehole and Test Pit Locations*
20465/8-AA1	*Site Features & Test Pit / Borehole Locations*

LEGEND

Site Boundary

Slope

Imagery © NearMap.com

0 20 40 60 80 100m

Scale 1:2000

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Gledswood / Gregory Hills New High School
Lot 2 DP1262720
9 Gregory Hills Drive, Gledswood Hills

Site Layout

Drawing No: 20465/2-AA1
Job No: 20465/2
Drawn By: MH
Date: 24 January 2024
Checked By: JX/JH

File No: 20465-2
Layers: 0, AA1

Imagery © NearMap.com

LEGEND

- Site Boundary
- Borehole
- Test Pit

0 20 40 60 80 100m

Scale 1:2000

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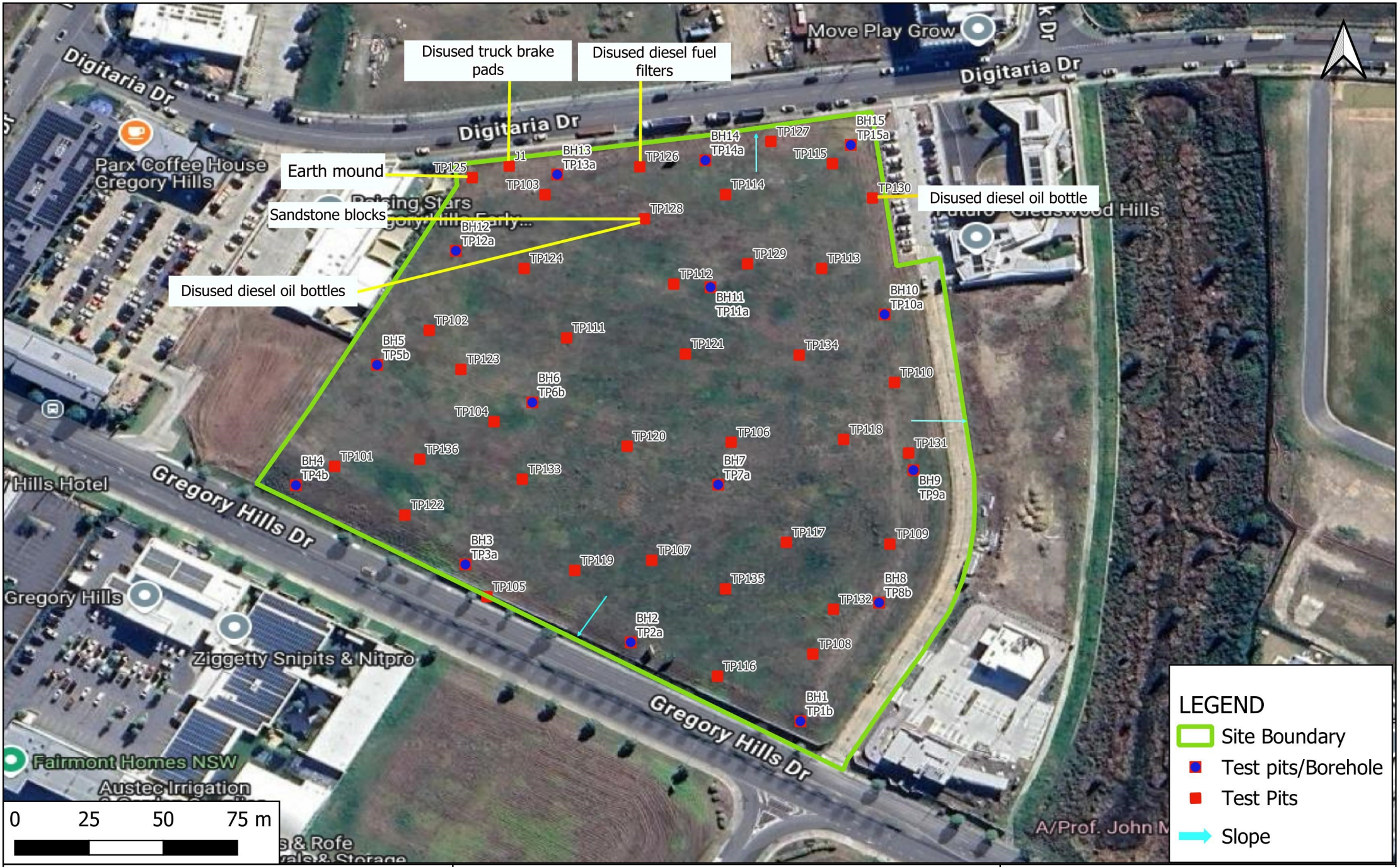
9 Gregory Hills Drive, Gledswood Hills

Borehole and Test Pit Locations

Drawing No: 20465/3-AA1
Job No: 20465/3
Drawn By: MH
Date: 24 January 2024
Checked By: JH

File No: 20465-3
Layers: 0, AA1



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Proposed New Gledswood Hills High School
Lot 2 DP 1262720
9 Gregory Hills Drive, Gledswood Hills

Site Features & Test Pit / Borehole Locations

Drawing No: 20465/8-AA1
Job No: 20465/8
Drawn By: AN
Date: 13 JANUARY 2025
Checked By:KB/JX

File No: 20465/8

LABORATORY TEST RESULT SUMMARY TABLES

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Table B	*Trip Spike*
Table C	*Trip Blank & Field Blank*
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Tables E1-E13	*Split Sample*
Table F	*Metals, Cation Exchange Capacity (CEC) & pH Test Results – Discrete Samples*
Table G	*Total Recoverable Hydrocarbons (TRH) and BTEX Test Results –Discrete Samples*
Table H	*Polycyclic Aromatic Hydrocarbons (PAH) Test Results – Discrete Samples*
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Table I	*Organochlorine Pesticides (OCP), Organophosphate Pesticides (OPP) & Polychlorinated Biphenyls (PCB) Test Results – Discrete Samples*
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TABLE A1
RINSATE
(Ref No: 20465/8)

SAMPLE DATE	RS1 16/12/2024	RS2 18/12/2024	RS3 19/12/2024
METAL	**(mg/L)**	**(mg/L)**	**(mg/L)**
Arsenic	<0.02	<0.02	<0.02
Cadmium	<0.001	<0.001	<0.001
Chromium	<0.005	<0.005	<0.005
Copper	<0.005	<0.005	<0.005
Lead	<0.02	<0.02	<0.02
Mercury	<0.00005	<0.00005	<0.00005
Nickel	<0.005	<0.005	<0.005
Zinc	<0.01	<0.01	<0.01
TOTAL RECOVERABLE HYDROCARBON (TRH)	**(µg/L)**	**(µg/L)**	**(µg/L)**
F1 (C6-C10 less BTEX)	<50	<50	<50
F2 (>C10-C16)	<60	<60	<60
F3 (>C16-C34)	<500	<500	<500
F4 (>C34-C40)	<500	<500	<500
BTEX	**(µg/L)**	**(µg/L)**	**(µg/L)**
Benzene	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5
Ethyl Benzene	<0.5	<0.5	<0.5
Xylenes	<1.5	<1.5	<1.5
POLYCYCLIC AROMATIC HYDROCARBON (PAH)	**(µg/L)**	**(µg/L)**	**(µg/L)**
Total PAH	<1	<1	<1
Naphthalene	<0.1	<0.1	<0.1
Benzo(a)Pyrene	<0.1	<0.1	<0.1
ORGANOCHLORINE PESTICIDE (OCP)	**(µg/L)**	**(µg/L)**	**(µg/L)**
Hexachlorobenzene (HCB)	<0.1	<0.1	<0.1
Heptachlor	<0.1	<0.1	<0.1
Aldrin+Dieldrin	<0.2	<0.2	<0.2
Endrin	<0.1	<0.1	<0.1
Methoxychlor	<0.1	<0.1	<0.1
Mirex	<0.1	<0.1	<0.1
Endosulfan (Alpha, Beta & Sulphate)	<0.3	<0.3	<0.3
DDD+DDE+DDT	<0.3	<0.3	<0.3
Chlordane (alpha & gamma)	<0.2	<0.2	<0.2
ORGANOPHOSPHATE PESTICIDE (OPP)	**(µg/L)**	**(µg/L)**	**(µg/L)**
Chlorpyrifos	<0.2	<0.2	<0.2
POLYCHLORINATED BIPHENYL (PCB)	**(µg/L)**	**(µg/L)**	**(µg/L)**
PCB	<5	<5	<5

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TABLE A2

RINSATE

(Ref No: 20465/8)

SAMPLE	RS1	RS2	RS3
DATE	16/12/2024	18/12/2024	19/12/2024
PFAS	(µg/L)	(µg/L)	(µg/L)
PFOS	<0.01	<0.01	<0.01
PFHxS	<0.01	<0.01	<0.01
PFOS+PFHxS	<0.01	<0.01	<0.01
PFOA	<0.01	<0.01	<0.01

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TABLE B
TRIP SPIKE
(Ref No: 20465/8)

Sample	Sampling Date	BTEX			
		Benzene	Toluene	Ethylbenzene	Xylenes
TS1	16/12/2024	115%	116%	117%	115%
TS2	18/12/2024	99%	98%	99%	98%
TS3	19/12/2024	90%	95%	95%	95%

Note : results are reported as percentage recovery of known spike concentrations

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TABLE C

TRIP BLANK & FIELD BLANK

(Ref No: 20465/8)

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	TB1 Trip Blank 16/12/2024 **µg/kg**	**TB2** Trip Blank 18/12/2024 **µg/kg**	**TB3** Trip Blank 19/12/2024 **µg/kg**	**FB1** Field Blank 16/12/2024 **µg/kg**	**FB2** Field Blank 18/12/2024 **µg/kg**	**FB3** Field Blank 19/12/2024 **µg/kg**
PFAS						
PFOS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PFHxS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PFOS+PFHxS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PFOA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

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TABLE D1
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP102 0.0-0.3 (m) mg/kg	DDS1 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	6	0
Cadmium	<0.3	<0.3	-
Chromium	9.9	12	19
Copper	21	32	42
Lead	21	17	21
Mercury	<0.05	<0.05	-
Nickel	11	13	17
Zinc	46	51	10
TOTAL RECOVERABLE HYDROCARBONS (TRH)			
F1 (C6-C10 less BTEX)	<25	<25	-
F2 (>C10-C16)	<25	<25	-
F3 (>C16-C34)	<90	<90	-
F4 (>C34-C40)	<120	<120	-
BTEX			
Benzene	<0.1	<0.1	-
Toluene	<0.1	<0.1	-
Ethyl Benzene	<0.1	<0.1	-
Xylenes	<0.3	<0.3	-
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	<0.3	-
Total PAH	0.7	0.5	33
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	0.1	0.1	0
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.2	<0.2	-
Endrin	<0.1	<0.1	-
Methoxychlor	<0.1	<0.1	-
Mirex	<0.1	<0.1	-
Endosulfan (alpha, beta & sulphate)	<0.3	<0.3	-
DDD+DDE+DDT	<0.3	<0.3	-
Chlordane (alpha & gamma)	<0.2	<0.2	-
ORGANOPHOSPHATE PESTICIDES (OPP)			
Chlorpyrifos (Chlorpyrifos Ethyl)	<0.2	<0.2	-
POLYCHLORINATED BIPHENYLS (PCB)			
Total PCB	<0.1	<0.1	-

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TABLE D2
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP115 1.0-1.3 (m) mg/kg	DDS2 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	4	4	0
Cadmium	<0.3	<0.3	-
Chromium	7.1	7.2	1
Copper	18	13	32
Lead	27	24	12
Mercury	<0.05	<0.05	-
Nickel	5.7	4.9	15
Zinc	39	35	11
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	0.3	-
Total PAH	0.3	1.8	143
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	0.2	-

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TABLE D3
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP107 1.0-1.3 (m) mg/kg	DDS4 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	7	6	15
Cadmium	<0.3	<0.3	-
Chromium	7.2	9.3	25
Copper	28	26	7
Lead	26	18	36
Mercury	0.06	<0.05	-
Nickel	10	12	18
Zinc	52	54	4
TOTAL RECOVERABLE HYDROCARBONS (TRH)			
F1 (C6-C10 less BTEX)	<25	<25	-
F2 (>C10-C16)	<25	<25	-
F3 (>C16-C34)	<90	<90	-
F4 (>C34-C40)	<120	<120	-
BTEX			
Benzene	<0.1	<0.1	-
Toluene	<0.1	<0.1	-
Ethyl Benzene	<0.1	<0.1	-
Xylenes	<0.3	<0.3	-
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	<0.3	-
Total PAH	0.2	0.2	0
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.1	-
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.2	<0.2	-
Endrin	<0.1	<0.1	-
Methoxychlor	<0.1	<0.1	-
Mirex	<0.1	<0.1	-
Endosulfan (alpha, beta & sulphate)	<0.3	<0.3	-
DDD+DDE+DDT	<0.3	<0.3	-
Chlordane (alpha & gamma)	<0.2	<0.2	-
ORGANOPHOSPHATE PESTICIDES (OPP)			
Chlorpyrifos (Chlorpyrifos Ethyl)	<0.2	<0.2	-
POLYCHLORINATED BIPHENYLS (PCB)			
Total PCB	<0.1	<0.1	-

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TABLE D4
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP130 0.0-0.3 (m) mg/kg	DDS5 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	7	15
Cadmium	<0.3	<0.3	-
Chromium	13	18	32
Copper	13	13	0
Lead	20	23	14
Mercury	<0.05	<0.05	-
Nickel	7.5	8.1	8
Zinc	25	29	15
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	<0.3	-
Total PAH	<0.8	<0.8	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.1	-

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TABLE D5
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP127 0.0-0.3 (m) mg/kg	DDS6 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	5	18
Cadmium	<0.3	<0.3	-
Chromium	8.8	12	31
Copper	22	16	32
Lead	18	20	11
Mercury	<0.05	<0.05	-
Nickel	8.2	7.9	4
Zinc	46	28	49
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	<0.3	-
Total PAH	<0.8	<0.8	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.1	-

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TABLE D6
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP126 0.0-0.3 (m) mg/kg	DDS7 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	7	7	0
Cadmium	<0.3	<0.3	-
Chromium	16	16	0
Copper	14	14	0
Lead	21	21	0
Mercury	<0.05	<0.05	-
Nickel	7.7	7.3	5
Zinc	26	24	8
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	<0.3	<0.3	-
Total PAH	<0.8	<0.8	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.1	-

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TABLE D7
DUPLICATE SAMPLE
(Ref No: 20465/8)

ANALYTE	TP124 1.0-1.3 (m) mg/kg	DDS8 mg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	4	5	22
Cadmium	<0.3	<0.3	-
Chromium	9	7.9	13
Copper	49	45	9
Lead	94	59	46
Mercury	0.2	0.1	67
Nickel	5.3	7	28
Zinc	150	100	40
POLYCYCLIC AROMATIC HYDROCARBONS			
Benzo(a)Pyrene TEQ	0.5	0.5	0
Total PAH	2.8	2.5	11
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	0.3	0.3	0

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TABLE D8

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP110 0.0-0.3 (m) µg/kg	DDS1 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.2	0.2	0
PFHxS	<0.1	<0.1	-
PFOS+PFHxS	0.2	0.2	0
PFOA	<0.1	<0.1	-

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TABLE D9

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP107 1.0-1.3 (m) µg/kg	DDS9 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.4	0.2	67
PFHxS	0.1	<0.1	-
PFOS+PFHxS	0.5	0.2	86
PFOA	0.1	0.1	0

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TABLE D10

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP130 0.0-0.3 (m) µg/kg	DDS10 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.1	0.2	67
PFHxS	<0.1	<0.1	-
PFOS+PFHxS	0.1	0.2	67
PFOA	<0.1	<0.1	-

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TABLE D11

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP127 0.0-0.3 (m) µg/kg	DDS11 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.1	0.1	0
PFHxS	<0.1	<0.1	-
PFOS+PFHxS	0.1	0.1	0
PFOA	<0.1	<0.1	-

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TABLE D12

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP126 0.0-0.3 (m) µg/kg	DDS12 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.1	0.1	0
PFHxS	<0.1	<0.1	-
PFOS+PFHxS	0.1	0.1	0
PFOA	<0.1	<0.1	-

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TABLE D13

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP121 0.0-0.3 (m) µg/kg	DDS13 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.1	0.7	150
PFHxS	<0.1	0.2	-
PFOS+PFHxS	0.1	0.9	160
PFOA	<0.1	<0.1	-

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TABLE D14

DUPLICATE

(Ref No: 20465/8)

ANALYTE	TP13a 0.0-0.15 (m) µg/kg	DDS14 - µg/kg	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS			
PFOS	0.2	0.2	0
PFHxS	<0.1	<0.1	-
PFOS+PFHxS	0.2	0.2	0
PFOA	<0.1	<0.1	-

GEOTECHNIQUE
PTY LTD

TABLE E1
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP103 0.0-0.3 (m) mg/kg (SGS)	DSS1 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	6	0
Cadmium	<0.3	<0.4	-
Chromium	8.9	10	12
Copper	22	22	0
Lead	16	21	27
Mercury	<0.05	<0.1	-
Nickel	9.7	10	3
Zinc	54	41	27
TOTAL RECOVERABLE HYDROCARBONS (TRH)			
F1 (C6-C10 less BTEX)	<25	<25	-
F2 (>C10-C16)	<25	<50	-
F3 (>C16-C34)	<90	<100	-
F4 (>C34-C40)	<120	<100	-
BTEX			
Benzene	<0.1	<0.2	-
Toluene	<0.1	<0.5	-
Ethyl Benzene	<0.1	<1	-
Xylenes	<0.3	<1	-
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.1	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.05	-
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.2	<0.2	-
Endrin	<0.1	<0.1	-
Methoxychlor	<0.1	<0.1	-
Endosulfan (alpha (I), beta (II) & sulphate)	<0.3	<0.3	-
DDD+DDE+DDT	<0.3	<0.1	-
Chlordane (alpha & gamma)	<0.2	<0.2	-
ORGANOPHOSPHATE PESTICIDES (OPP)			
Chlorpyriphos	<0.2	<0.1	-
POLYCHLORINATED BIPHENYLS (PCB)			
Total PCB	<0.1	<0.1	-

GEOTECHNIQUE
PTY LTD

TABLE E2
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP105 1.0-1.3 (m) mg/kg (SGS)	DSS4 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	8	29
Cadmium	<0.3	<0.4	-
Chromium	14	20	35
Copper	15	22	38
Lead	20	28	33
Mercury	<0.05	<0.1	-
Nickel	7.6	11	37
Zinc	28	40	35
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.1	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.05	-

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TABLE E3
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP130 2.0-2.3 (m) mg/kg (SGS)	DSS5 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	7	15
Cadmium	<0.3	<0.4	-
Chromium	7.7	10	26
Copper	25	33	28
Lead	18	23	24
Mercury	0.05	<0.1	-
Nickel	12	20	50
Zinc	47	93	66
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.8	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.05	-

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TABLE E4
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP127 1.0-1.3 (m) mg/kg (SGS)	DSS6 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	8	29
Cadmium	<0.3	<0.4	-
Chromium	12	12	0
Copper	24	24	0
Lead	19	21	10
Mercury	<0.05	<0.1	-
Nickel	12	8	40
Zinc	49	25	65
TOTAL RECOVERABLE HYDROCARBONS (TRH)			
F1 (C6-C10 less BTEX)	<25	<25	-
F2 (>C10-C16)	<25	<50	-
F3 (>C16-C34)	<90	<100	-
F4 (>C34-C40)	<120	<100	-
BTEX			
Benzene	<0.1	<0.2	-
Toluene	<0.1	<0.5	-
Ethyl Benzene	<0.1	<1	-
Xylenes	<0.3	<1	-
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.8	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.05	-
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.2	<0.2	-
Endrin	<0.1	<0.1	-
Methoxychlor	<0.1	<0.1	-
Endosulfan (alpha (I), beta (II) & sulphate)	<0.3	<0.3	-
DDD+DDE+DDT	<0.3	<0.1	-
Chlordane (alpha & gamma)	<0.2	<0.2	-
ORGANOPHOSPHATE PESTICIDES (OPP)			
Chlorpyriphos	<0.2	<0.1	-
POLYCHLORINATED BIPHENYLS (PCB)			
Total PCB	<0.1	<0.1	-

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TABLE E5
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP126 2.0-2.3 (m) mg/kg (SGS)	DSS7 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	8	9	12
Cadmium	<0.3	<0.4	-
Chromium	9.3	13	33
Copper	32	36	12
Lead	25	27	8
Mercury	<0.05	<0.1	-
Nickel	13	14	7
Zinc	56	48	15
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.8	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	0.1	<0.05	-

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TABLE E6
SPLIT SAMPLE
(Ref No: 20465/8)

ANALYTE	TP124 2.0-2.3 (m) mg/kg (SGS)	DSS8 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
Arsenic	6	8	29
Cadmium	<0.3	<0.4	-
Chromium	12	14	15
Copper	12	17	34
Lead	21	24	13
Mercury	<0.05	<0.1	-
Nickel	3.9	4	3
Zinc	32	51	46
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)			
Benzo(a)Pyrene TEQ	<0.3	<0.5	-
Total PAH	<0.8	<0.05	-
Naphthalene	<0.1	<0.1	-
Benzo(a)Pyrene	<0.1	<0.05	-

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TABLE E7

SPLIT

(Ref No: 20465/8)

ANALYTE	TP103 2.0-2.3 (m) µg/kg (ENVIROLAB)	DSS2 mg/kg (SGS)	DSS2 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	<0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	<0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E8

SPLIT

(Ref No: 20465/8)

ANALYTE	TP105 1.0-1.3 (m) µg/kg (ENVIROLAB)	DSS9 mg/kg (SGS)	DSS9 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	<0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	<0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E9

SPLIT

(Ref No: 20465/8)

ANALYTE	TP130 2.0-2.3 (m) µg/kg (ENVIROLAB)	DSS10 mg/kg (SGS)	DSS10 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	<0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	<0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E10
SPLIT
(Ref No: 20465/8)

ANALYTE	TP127 1.0-1.3 (m) µg/kg (ENVIROLAB)	DSS11 mg/kg (SGS)	DSS11 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	<0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	<0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E11
SPLIT
(Ref No: 20465/8)

ANALYTE	TP126 2.0-2.3 (m) µg/kg (ENVIROLAB)	DSS12 mg/kg (SGS)	DSS12 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	0.5	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	0.5	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E12
SPLIT
(Ref No: 20465/8)

ANALYTE	TP121 1.0-1.3 (m) µg/kg (ENVIROLAB)	DSS13 mg/kg (SGS)	DSS13 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE E13
SPLIT
(Ref No: 20465/8)

ANALYTE	TP14a 0.0-0.15 (m) µg/kg (ENVIROLAB)	DSS14 mg/kg (SGS)	DSS14 µg/kg (SGS)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
PFAS				
PFOS	<0.1	<0.005	<5	-
PFHxS	<0.1	<0.005	<5	-
PFOS+PFHxS	<0.1	<0.005	<5	-
PFOA	<0.1	<0.005	<5	-

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TABLE F
METAL, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	METAL (mg/kg)								CEC ($cmol_c/kg$)	pH
		ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
TP101	0.0-0.3	6	<0.3	9.7	27	29	<0.05	12	65	16	7.5
TP101	0.5-0.8	4	<0.3	10	21	21	<0.05	12	54	-	-
TP101	1.5-1.8	4	<0.3	9.0	22	21	<0.05	12	61	-	-
TP102	0.0-0.3	6	<0.3	9.9	21	21	<0.05	11	46	-	-
TP102	0.4-0.7	6	<0.3	6.8	12	19	<0.05	3.8	27	-	-
TP102	2.0-2.3	5	<0.3	7.9	26	41	<0.05	11	68	-	-
TP103	0.0-0.3	6	<0.3	8.9	22	16	<0.05	9.7	54	14	9.1
TP103	1.0-1.3	5	<0.3	7.3	25	20	<0.05	11	55	-	-
TP103	2.0-2.3	10	<0.3	10	16	12	<0.05	6.6	28	-	-
TP104	0.5-0.8	6	<0.3	11	30	33	0.13	10	63	28	8.2
TP104	1.5-1.8	7	<0.3	14	28	30	0.92	15	65	-	-
TP104	2.0-2.3	5	<0.3	7.9	25	31	0.07	9.6	62	-	-
TP105	0.0-0.3	6	<0.3	14	19	17	<0.05	11	37	10	6.1
TP105	1.0-1.3	6	<0.3	14	15	20	<0.05	7.6	28	-	-
TP105	1.5-1.8	3	<0.3	9.8	28	13	<0.05	10	52	-	-
TP106	0.0-0.3	7	<0.3	8.9	24	23	<0.05	10	55	25	8.3
TP106	1.0-1.3	9	<0.3	14	57	500	0.63	6.1	190	-	-
TP106	2.0-2.3	13	<0.3	6.8	30	29	0.07	15	78	-	-
TP107	0.0-0.3	5	<0.3	8.4	23	22	<0.05	10	51	-	-
TP107	1.0-1.3	7	<0.3	7.2	28	26	0.06	10	52	21	8.6
TP107	2.0-2.3	7	<0.3	14	24	25	<0.05	12	57	-	-
TP108	0.0-0.3	5	<0.3	7.2	22	18	<0.05	13	58	-	-
TP108	0.5-0.8	5	<0.3	7.2	23	25	0.06	12	67	17	8.7
TP108	1.5-1.8	6	<0.3	9.4	17	16	<0.05	6	26	-	-
TP109	0.0-0.3	7	<0.3	7.3	25	17	<0.05	12	58	-	-
TP109	1.0-1.3	5	<0.3	7.6	21	18	0.06	15	72	-	-

GEOTECHNIQUE
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TABLE F
METAL, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	METAL (mg/kg)								CEC ($cmol_c/kg$)	pH
		ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
TP109	2.0-2.3	6	<0.3	7.8	25	18	<0.05	12	56	-	-
TP110	0.0-0.3	6	<0.3	11	20	21	<0.05	9.5	44	-	-
TP110	1.0-1.3	8	<0.3	5.5	11	23	<0.05	1.4	14	7.9	4.8
TP110	2.0-2.3	6	<0.3	7.7	22	33	0.17	11	68	-	-
TP111	0.0-0.3	7	<0.3	13	18	21	<0.05	9.0	41	-	-
TP111	1.0-1.3	4	<0.3	23	81	120	0.17	6.2	190	-	-
TP111	2.0-2.3	6	<0.3	11	30	66	0.08	8.5	57	-	-
TP112	0.0-0.3	8	<0.3	9.2	36	23	<0.05	12	59	-	-
TP112	1.0-1.3	4	<0.3	10	11	15	<0.05	2.8	18	-	-
TP112	2.0-2.3	6	<0.3	6.5	23	27	<0.05	5.6	40	-	-
TP113	0.0-0.3	6	<0.3	8.6	21	21	0.06	9.0	48	-	-
TP113	1.0-1.3	7	<0.3	8.8	23	22	<0.05	9.2	53	-	-
TP113	2.0-2.3	7	<0.3	8.7	27	26	<0.05	14	62	-	-
TP114	0.5-0.8	5	<0.3	11	26	23	<0.05	13	72	-	-
TP114	1.0-1.3	4	<0.3	9.0	22	14	<0.05	8.3	37	-	-
TP114	2.0-2.3	9	<0.3	8.0	30	15	<0.05	17	63	-	-
TP115	0.0-0.3	5	<0.3	10	16	12	<0.05	5.8	33	-	-
TP115	1.0-1.3	4	<0.3	7.1	18	27	<0.05	5.7	39	16	10.7
TP115	2.0-2.2	8	<0.3	11	24	28	<0.05	10	55	-	-
TP116	0.0-0.3	6	<0.3	9.4	23	20	<0.05	11	54	17	8.7
TP116	1.0-1.3	5	<0.3	8.0	19	21	<0.05	8.6	53	-	-
TP116	2.0-2.3	8	<0.3	11	18	13	<0.05	7.8	32	-	-
TP117	0.0-0.3	6	<0.3	7.2	23	17	<0.05	13	53	-	-
TP117	1.0-1.3	4	<0.3	7.0	27	14	0.06	5.6	31	12	6.5
TP117	2.0-2.3	9	0.4	4.7	26	20	0.09	30	88	-	-
TP118	0.0-0.3	6	<0.3	7.9	22	21	0.06	11	57	-	-

GEOTECHNIQUE
PTY LTD

TABLE F
METAL, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	METAL (mg/kg)								CEC ($cmol_c/kg$)	pH
		ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
TP118	1.0-1.3	4	<0.3	7.0	17	16	0.07	8.6	35	-	-
TP118	2.0-2.3	6	<0.3	9.0	20	21	0.12	5.9	38	-	-
TP119	0.0-0.3	6	<0.3	9.0	22	21	<0.05	11	49	-	-
TP119	1.0-1.3	5	<0.3	11	18	20	<0.05	6	33	-	-
TP119	2.0-2.3	7	<0.3	10	28	30	<0.05	11	59	-	-
TP120	0.0-0.3	4	<0.3	9.8	22	19	<0.05	9.6	63	-	-
TP120	1.0-1.3	4	<0.3	5.6	15	17	<0.05	7.7	43	13	8.9
TP120	2.0-2.3	4	<0.3	6.8	20	29	0.06	8.2	52	-	-
TP121	0.0-0.3	6	<0.3	9.4	52	99	0.72	7.4	74	-	-
TP121	1.0-1.3	5	<0.3	12	17	50	<0.05	5.2	43	-	-
TP121	2.0-2.3	7	<0.3	9.3	26	27	0.12	7.7	43	-	-
TP122	0.0-0.3	5	<0.3	8.0	22	22	<0.05	8.1	54	17	9.2
TP122	1.0-1.3	6	<0.3	13	24	21	<0.05	11	46	-	-
TP122	2.0-2.3	5	<0.3	11	22	21	<0.05	9.4	51	-	-
TP123	0.0-0.3	15	<0.3	5.4	17	20	<0.05	9.1	48	-	-
TP123	1.0-1.3	5	<0.3	8.3	19	18	<0.05	12	51	16	7.9
TP123	2.0-2.3	5	<0.3	6.4	20	18	0.07	9.3	47	-	-
TP124	0.0-0.3	6	<0.3	17	9.9	19	<0.05	3.0	21	-	-
TP124	1.0-1.3	4	<0.3	9	49	94	0.2	5.3	150	-	-
TP124	2.0-2.3	6	<0.3	12	12	21	<0.05	3.9	32	-	-
TP125	0.0-0.3	9	<0.3	8.8	29	19	<0.05	9.5	44	28	7.9
TP125	1.0-1.3	5	<0.3	9.3	12	15	<0.05	2.9	14	-	-
TP125	2.0-2.3	6	<0.3	12	16	16	<0.05	7.6	32	-	-
TP125	3.0-3.3	24	0.4	9.9	38	28	<0.05	10	50	-	-
TP126	0.0-0.3	7	<0.3	16	14	21	<0.05	7.7	26	11	5.9
TP126	1.0-1.3	8	<0.3	13	25	15	<0.05	14	52	-	-

GEOTECHNIQUE
PTY LTD

TABLE F
METAL, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	METAL (mg/kg)								CEC ($cmol_c/kg$)	pH
		ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
TP126	2.0-2.3	8	<0.3	9.3	32	25	<0.05	13	56	-	-
TP127	0.0-0.3	6	<0.3	8.8	22	18	<0.05	8.2	46	-	-
TP127	1.0-1.3	6	<0.3	12	24	19	<0.05	12	49	14	7.5
TP127	2.0-2.3	6	<0.3	15	19	19	<0.05	8.1	40	-	-
TP128	0.0-0.3	6	<0.3	8.7	23	21	<0.05	11	51	-	-
TP128	1.0-1.3	5	<0.3	9.5	23	31	0.09	15	89	-	-
TP128	2.0-2.3	7	<0.3	8.4	37	53	0.06	7.3	59	-	-
TP129	0.0-0.3	6	<0.3	10	26	23	<0.05	11	50	-	-
TP129	1.0-1.3	4	<0.3	8.6	16	15	<0.05	9.1	25	-	-
TP129	2.0-2.3	6	<0.3	12	19	19	<0.05	7.6	36	-	-
TP130	0.0-0.3	6	<0.3	13	13	20	<0.05	7.5	25	9.0	6.0
TP130	1.0-1.3	14	<0.3	6.8	16	38	0.06	4.7	24	-	-
TP130	2.0-2.3	6	<0.3	7.7	25	18	0.05	12	47	-	-
TP131	0.0-0.3	5	<0.3	11	18	17	<0.05	8.2	37	-	-
TP131	1.0-1.3	6	<0.3	6.8	30	22	0.15	8.6	38	-	-
TP131	2.0-2.3	5	<0.3	6.6	28	42	0.13	8.2	78	-	-
TP132	0.0-0.3	6	<0.3	13	17	19	<0.05	9.7	39	-	-
TP132	1.0-1.3	6	<0.3	27	35	79	0.1	17	100	11	8.2
TP132	2.0-2.3	6	<0.3	6.5	25	17	0.06	12	54	-	-
TP133	0.0-0.3	6	<0.3	6.4	17	19	<0.05	8.4	38	-	-
TP133	1.0-1.3	7	<0.3	11	26	37	0.14	10	57	-	-
TP133	2.0-2.3	6	<0.3	8.0	27	26	0.07	10	57	-	-
TP134	0.0-0.3	7	<0.3	7.0	27	22	0.05	9.5	55	-	-
TP134	1.0-1.3	7	<0.3	4.9	17	14	<0.05	1.8	15	-	-
TP134	2.0-2.3	13	<0.3	9.3	25	26	<0.05	9.5	56	-	-
TP135	0.0-0.3	6	28	9.3	27	24	<0.05	14	76	-	-

GEOTECHNIQUE PTY LTD

TABLE F
METAL, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	METAL (mg/kg) ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC	CEC ($cmol_c/kg$)	pH
TP135	1.0-1.3	5	<0.3	8.4	25	14	<0.05	7.4	41	-	-
TP135	2.0-2.3	7	<0.3	7.3	33	17	<0.05	17	73	-	-
TP136	0.0-0.3	6	<0.3	6.2	24	19	<0.05	13	64	-	-
TP136	1.0-1.3	7	<0.3	8.2	33	28	0.1	11	58	-	-
TP136	2.0-2.3	6	<0.3	8.0	28	30	0.08	9.1	53	-	-
J1	0.0-0.3	6	<0.3	16	14	19	<0.05	7.5	25	11	6.3
J1	0.5-0.8	7	<0.3	10	30	26	0.11	11	52	-	-
J1	1.0-1.3	8	<0.3	12	17	14	<0.05	7.7	31	-	-
Limit of Reporting (LOR)		1	0.3	0.5	0.5	1	0.05	0.5	2	0.02	0.1
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)											
Health-based Investigation Levels (HIL) [a] C - Recreational C		300	90	300 [c]	17000	600	13 [d]	1200	30000		
Ecological Investigation Levels (EIL) [b]- Public open space		100 [e]	-	190[f]	90	1200 [g]	-	100	230		

Notes:
a: Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.
b: EIL of aged chromium (III), copper, nickel & zinc were derived from calculation spreadsheet developed by CSIRO for NEPC; Old Suburb with Low Traffic; the lowest CEC=7.9 cmolc/kg & pH=4.8; the assumed clay content=1 % were selected for derivation of EIL; a conservative approach.
c: Chromium (VI)
d: Methyl Mercury
e: Generic EIL for aged arsenic
f: Chromium (III)
g: Generic added contaminant limit for aged lead + ambient background concentration; Old Suburb with Low Traffic.

GEOTECHNIQUE PTY LTD

TABLE G
TOTAL RECOVERABLE HYDROCARBONS (TRH) AND BTEX TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

											NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)																			
			TRH (mg/kg)					BTEX (mg/kg)				Health Screening Levels (HSL) C Recreational / open space						Ecological Screening Levels for fine-grained soil Public open space								Ecological Screening Levels for coarse-grained soil Public open space							
Sample Location	Depth (m)	Soil type	F1	F2*	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2*	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES
TP101	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP102	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP103	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP104	0.5-0.8	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP105	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP106	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP107	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP109	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP114	0.5-0.8	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP115	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP116	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP117	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP119	2.0-2.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP120	1.0-1.3	Sand	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	-	-	-	-	-	-	-	-	180	120	300	2800	50	85	70	105
TP122	0.0-0.3	Clay	<25	<25	<25	160	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP123	2.0-2.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP124	2.0-2.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP125	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP126	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP126	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP127	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP128	2.0-2.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP129	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP130	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP130	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-

GEOTECHNIQUE PTY LTD

TABLE G
TOTAL RECOVERABLE HYDROCARBONS (TRH) AND BTEX TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

												NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)																	
			TRH (mg/kg)					BTEX (mg/kg)				Health Screening Levels (HSL) C Recreational / open space						Ecological Screening Levels for fine-grained soil Public open space								Ecological Screening Levels for coarse-grained soil Public open space							
Sample Location	Depth (m)	Soil type	F1	F2*	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2*	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES
TP131	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP132	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP133	2.0-2.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP135	1.0-1.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
TP136	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
J1	0.0-0.3	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	NL	NL	NL	NL	NL	NL	180	120	1300	5600	65	105	125	45	-	-	-	-	-	-	-	-
Limit of Reporting (LOR)			25	25	25	90	120	0.1	0.1	0.1	0.3																				

Notes:
F1: C6-C10 less BTEX
F2*: >C10-C16 less Naphthalene
F2**: >C10-C16
F3: >C16-C34
F4: >C34-C40
NL: Not Limiting

GEOTECHNIQUE PTY LTD

TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP101	0.0-0.3	Clay	0.3	1.6	<0.1	0.2	3	300	NL	170	0.7
TP101	0.5-0.8	Clay	0.5	2.7	<0.1	0.3	3	300	NL	170	0.7
TP101	1.5-1.8	Clay	0.6	5.1	<0.1	0.4	3	300	NL	170	0.7
TP102	0.0-0.3	Clay	<0.3	0.7	<0.1	0.1	3	300	NL	170	0.7
TP102	0.4-0.7	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP102	2.0-2.3	Clay	<0.3	1.3	<0.1	0.1	3	300	NL	170	0.7
TP103	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP103	1.0-1.3	Clay	<0.3	0.6	<0.1	0.1	3	300	NL	170	0.7
TP103	2.0-2.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP104	0.5-0.8	Clay	0.4	2.0	<0.1	0.2	3	300	NL	170	0.7
TP104	1.5-1.8	Clay	<0.3	0.2	<0.1	<0.1	3	300	NL	170	0.7
TP104	2.0-2.3	Clay	<0.3	0.2	<0.1	<0.1	3	300	NL	170	0.7
TP105	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP105	1.0-1.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP105	1.5-1.8	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP106	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP106	1.0-1.3	Clay	0.3	1.6	<0.1	0.2	3	300	NL	170	0.7

GEOTECHNIQUE PTY LTD

TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP106	2.0-2.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP107	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP107	1.0-1.3	Clay	<0.3	0.2	<0.1	<0.1	3	300	NL	170	0.7
TP107	2.0-2.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP108	0.0-0.3	Clay	<0.3	0.1	<0.1	<0.1	3	300	NL	170	0.7
TP108	0.5-0.8	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP108	1.5-1.8	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP109	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP109	1.0-1.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP109	2.0-2.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP110	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP110	1.0-1.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP110	2.0-2.3	Clay	<0.3	0.1	<0.1	0.1	3	300	NL	170	0.7
TP111	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP111	1.0-1.3	Clay	2.2	14	<0.1	**1.5**	3	300	NL	170	0.7
TP111	2.0-2.3	Clay	0.5	3.2	<0.1	0.3	3	300	NL	170	0.7
TP112	0.0-0.3	Clay	<0.3	0.2	<0.1	<0.1	3	300	NL	170	0.7

GEOTECHNIQUE PTY LTD

TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP112	1.0-1.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP112	2.0-2.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP113	0.0-0.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP113	1.0-1.3	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP113	2.0-2.3	Clay	0.4	2.1	<0.1	0.2	3	300	NL	170	0.7
TP114	0.5-0.8	Clay	<0.3	<0.1	<0.1	<0.1	3	300	NL	170	0.7
TP114	1.0-1.3	Clay	<0.3	0.2	<0.1	<0.1	3	300	NL	170	0.7
TP114	2.0-2.3	Clay	<0.3	0.5	<0.1	<0.1	3	300	NL	170	0.7
TP115	0.0-0.3	Clay	<0.3	1.0	<0.1	0.1	3	300	NL	170	0.7
TP115	1.0-1.3	Clay	<0.3	0.3	<0.1	<0.1	3	300	NL	170	0.7
TP115	2.0-2.2	Clay	<0.3	0.5	<0.1	0.1	3	300	NL	170	0.7
TP116	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP116	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP116	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP117	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP117	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP117	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7

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TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP118	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP118	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP118	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP119	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP119	1.0-1.3	Clay	0.5	2.7	<0.1	0.3	3	300	NL	170	0.7
TP119	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP120	0.0-0.3	Clay	0.5	2.8	<0.1	0.3	3	300	NL	170	0.7
TP120	1.0-1.3	Sand	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP120	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP121	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP121	1.0-1.3	Clay	0.4	1.9	<0.1	0.2	3	300	NL	170	0.7
TP121	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP122	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP122	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP122	2.0-2.3	Clay	<0.3	<0.8	<0.1	0.1	3	300	NL	170	0.7
TP123	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP123	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7

GEOTECHNIQUE PTY LTD

TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP123	2.0-2.3	Clay	0.3	1.6	<0.1	0.2	3	300	NL	170	0.7
TP124	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP124	1.0-1.3	Clay	0.5	2.8	<0.1	0.3	3	300	NL	170	0.7
TP124	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP125	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP125	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP125	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP125	3.0-3.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP126	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP126	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP126	2.0-2.3	Clay	<0.3	<0.8	<0.1	0.1	3	300	NL	170	0.7
TP127	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP127	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP127	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP128	0.0-0.3	Clay	0.3	1.1	<0.1	0.2	3	300	NL	170	0.7
TP128	1.0-1.3	Clay	0.6	3.8	<0.1	0.4	3	300	NL	170	0.7
TP128	2.0-2.3	Clay	<0.3	1.5	<0.1	0.1	3	300	NL	170	0.7

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TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

			PAH (mg/kg)				NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
							Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP129	0.0-0.3	Clay	<0.3	1.3	<0.1	0.1	3	300	NL	170	0.7
TP129	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP129	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP130	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP130	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP130	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP131	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP131	1.0-1.3	Clay	0.4	1.7	<0.1	0.2	3	300	NL	170	0.7
TP131	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP132	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP132	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP132	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP133	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP133	1.0-1.3	Clay	0.5	2.8	<0.1	0.3	3	300	NL	170	0.7
TP133	2.0-2.3	Clay	<0.3	<0.8	<0.1	0.1	3	300	NL	170	0.7
TP134	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP134	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7

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TABLE H
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

							NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
			PAH (mg/kg)				Health-based Investigation Levels (HIL) C [a] Recreational C		Health Screening Level (HSL) C - Recreational / open space	Generic Ecological Investigation Level (EIL) - Public open space	Ecological Screening Level (ESL) - Public open space
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)
TP134	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP135	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP135	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP135	2.0-2.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP136	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
TP136	1.0-1.3	Clay	0.4	2.0	<0.1	0.2	3	300	NL	170	0.7
TP136	2.0-2.3	Clay	0.5	2.9	<0.1	0.3	3	300	NL	170	0.7
J1	0.0-0.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
J1	0.5-0.8	Clay	0.4	2.4	<0.1	0.3	3	300	NL	170	0.7
J1	1.0-1.3	Clay	<0.3	<0.8	<0.1	<0.1	3	300	NL	170	0.7
Limit of Reporting (LOR)			0.3	0.1	0.1	0.1					

Notes: a: Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.

NL: Not Limiting

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TABLE H1
Benzo(a)pyrene (BaP) TEST RESULTS WITH STATISTICAL DATA
DISCRETE SAMPLES
(Ref No: 20465/8)

		(mg/kg)
Sample Location	Depth (m)	BaP
TP101	0.0-0.3	0.2
TP101	0.5-0.8	0.3
TP101	1.5-1.8	0.4
TP102	0.0-0.3	0.1
TP102	0.4-0.7	<0.1
TP102	2.0-2.3	0.1
TP103	0.0-0.3	<0.1
TP103	1.0-1.3	0.1
TP103	2.0-2.3	<0.1
TP104	0.5-0.8	0.2
TP104	1.5-1.8	<0.1
TP104	2.0-2.3	<0.1
TP105	0.0-0.3	<0.1
TP105	1.0-1.3	<0.1
TP105	1.5-1.8	<0.1
TP106	0.0-0.3	<0.1
TP106	1.0-1.3	0.2
TP106	2.0-2.3	<0.1
TP107	0.0-0.3	<0.1
TP107	1.0-1.3	<0.1
TP107	2.0-2.3	<0.1
TP108	0.0-0.3	<0.1
TP108	0.5-0.8	<0.1
TP108	1.5-1.8	<0.1
TP109	0.0-0.3	<0.1
TP109	1.0-1.3	<0.1
TP109	2.0-2.3	<0.1
TP110	0.0-0.3	<0.1
TP110	1.0-1.3	<0.1
TP110	2.0-2.3	0.1
TP111	0.0-0.3	<0.1
TP111	1.0-1.3	1.5
TP111	2.0-2.3	0.3
TP112	0.0-0.3	<0.1
TP112	1.0-1.3	<0.1
TP112	2.0-2.3	<0.1
TP113	0.0-0.3	<0.1
TP113	1.0-1.3	<0.1
TP113	2.0-2.3	0.2
TP114	0.5-0.8	<0.1
TP114	1.0-1.3	<0.1
TP114	2.0-2.3	<0.1
TP115	0.0-0.3	0.1
TP115	1.0-1.3	<0.1
TP115	2.0-2.2	0.1
TP116	0.0-0.3	<0.1
TP116	1.0-1.3	<0.1
TP116	2.0-2.3	<0.1
TP117	0.0-0.3	<0.1
TP117	1.0-1.3	<0.1
TP117	2.0-2.3	<0.1
TP118	0.0-0.3	<0.1
TP118	1.0-1.3	<0.1
TP118	2.0-2.3	<0.1
TP119	0.0-0.3	<0.1
TP119	1.0-1.3	0.3
TP119	2.0-2.3	<0.1
TP120	0.0-0.3	0.3
TP120	1.0-1.3	<0.1
TP120	2.0-2.3	<0.1
TP121	0.0-0.3	<0.1
TP121	1.0-1.3	0.2
TP121	2.0-2.3	<0.1
TP122	0.0-0.3	<0.1
TP122	1.0-1.3	<0.1
TP122	2.0-2.3	0.1
TP123	0.0-0.3	<0.1
TP123	1.0-1.3	<0.1
TP123	2.0-2.3	0.2
TP124	0.0-0.3	<0.1
TP124	1.0-1.3	0.3

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TABLE H1
Benzo(a)pyrene (BaP) TEST RESULTS WITH STATISTICAL DATA
DISCRETE SAMPLES
(Ref No: 20465/8)

		(mg/kg)
Sample Location	Depth (m)	BaP
TP124	2.0-2.3	<0.1
TP125	0.0-0.3	<0.1
TP125	1.0-1.3	<0.1
TP125	2.0-2.3	<0.1
TP125	3.0-3.3	<0.1
TP126	0.0-0.3	<0.1
TP126	1.0-1.3	<0.1
TP126	2.0-2.3	0.1
TP127	0.0-0.3	<0.1
TP127	1.0-1.3	<0.1
TP127	2.0-2.3	<0.1
TP128	0.0-0.3	0.2
TP128	1.0-1.3	0.4
TP128	2.0-2.3	0.1
TP129	0.0-0.3	0.1
TP129	1.0-1.3	<0.1
TP129	2.0-2.3	<0.1
TP130	0.0-0.3	<0.1
TP130	1.0-1.3	<0.1
TP130	2.0-2.3	<0.1
TP131	0.0-0.3	<0.1
TP131	1.0-1.3	0.2
TP131	2.0-2.3	<0.1
TP132	0.0-0.3	<0.1
TP132	1.0-1.3	<0.1
TP132	2.0-2.3	<0.1
TP133	0.0-0.3	<0.1
TP133	1.0-1.3	0.3
TP133	2.0-2.3	0.1
TP134	0.0-0.3	<0.1
TP134	1.0-1.3	<0.1
TP134	2.0-2.3	<0.1
TP135	0.0-0.3	<0.1
TP135	1.0-1.3	<0.1
TP135	2.0-2.3	<0.1
TP136	0.0-0.3	<0.1
TP136	1.0-1.3	0.2
TP136	2.0-2.3	0.3
J1	0.0-0.3	<0.1
J1	0.5-0.8	0.3
J1	1.0-1.3	<0.1
BH1	0.0-0.15	<0.1
BH3	0.0-0.15	0.1
TP4a	1.0-1.3	<0.1
BH5	0.0-0.15	0.1
TP6a	2.0-2.3	<0.1
BH7	0.0-0.15	<0.1
TP8a	2.0-2.3	<0.1
BH9	0.0-0.15	0.2
BH9	1.0-1.3	<0.1
BH11	0.0-0.15	<0.1
BH11	3.0-3.3	<0.1
BH12	0.0-0.15	<0.1
BH15	1.0-1.3	<0.1
Limit of Reporting (LOR)		0.1
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)		
Ecological Screening Level (ESL) a- Public open space		0.7
ProUCL 5.1 [b]		
Number of Sample		125
Mean [c]		0.137
Standard Deviation		0.139
Coefficient of Variance		1.015
95% Upper Confidence Limit (UCL)		0.2

Notes: a: Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.

b: Refer to attached ProUCL (Version 5.1) calculations for details.

c: For statistical purposes, concentration less than LOR is assumed equal to LOR.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.17/01/2025 1:14:44 PM
From File	20465-8 work sheet - BaP.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

BaP

General Statistics

Total Number of Observations	125	Number of Distinct Observations	5
		Number of Missing Observations	0
Minimum	0.1	Mean	0.137
Maximum	1.5	Median	0.1
SD	0.139	Std. Error of Mean	0.0124
Coefficient of Variation	1.015	Skewness	7.965

Normal GOF Test

Shapiro Wilk Test Statistic	0.304	**Shapiro Wilk GOF Test**
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.437	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.0796	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.157	95% Adjusted-CLT UCL (Chen-1995)	0.167
		95% Modified-t UCL (Johnson-1978)	0.159

Gamma GOF Test

A-D Test Statistic	30.26	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.757	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.483	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.0834	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.637	k star (bias corrected MLE)	3.555
Theta hat (MLE)	0.0376	Theta star (bias corrected MLE)	0.0385
nu hat (MLE)	909.2	nu star (bias corrected)	888.7
MLE Mean (bias corrected)	0.137	MLE Sd (bias corrected)	0.0726
		Approximate Chi Square Value (0.05)	820.5
Adjusted Level of Significance	0.0481	Adjusted Chi Square Value	819.7

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.148	95% Adjusted Gamma UCL (use when n<50)	0.148

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.475	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.488	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.0796	Data Not Lognormal at 5% Significance Level

56	**Data Not Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					-2.303		Mean of logged Data				-2.133
60	Maximum of Logged Data					0.405		SD of logged Data				0.422
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					0.139		90% Chebyshev (MVUE) UCL				0.145
64	95% Chebyshev (MVUE) UCL					0.152		97.5% Chebyshev (MVUE) UCL				0.161
65	99% Chebyshev (MVUE) UCL					0.18						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data do not follow a Discernible Distribution (0.05)**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					0.157		95% Jackknife UCL				0.157
72	95% Standard Bootstrap UCL					0.157		95% Bootstrap-t UCL				0.183
73	95% Hall's Bootstrap UCL					0.239		95% Percentile Bootstrap UCL				0.159
74	95% BCA Bootstrap UCL					0.168						
75	90% Chebyshev(Mean, Sd) UCL					0.174		95% Chebyshev(Mean, Sd) UCL				0.191
76	97.5% Chebyshev(Mean, Sd) UCL					0.214		99% Chebyshev(Mean, Sd) UCL				0.26
77												
78	**Suggested UCL to Use**											
79	95% Student's-t UCL					0.157		or 95% Modified-t UCL				0.159
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

GEOTECHNIQUE PTY LTD

TABLE I

ORGANOCHLORINE PESTICIDES (OCP), ORGANOPHOSPHATE PESTICIDES (OPP) & POLYCHLORINATED BIPHENYLS (PCB) TEST RESULTS

DISCRETE SAMPLES

(Ref No: 20465/8)

Sample Location	Depth (m)	OCP (mg/kg)										(mg/kg)	(mg/kg)
		HEXACHLOROBENZENE (HCB)	HEPTACHLOR	ALDRIN+DIELDRIN	ENDRIN	METHOXYCHLOR	MIREX	ENDOSULFAN (alpha, beta & sulphate)	DDD+DDE+DDT	DDT	CHLORDANE (alpha & gamma)	Chlorpyrifos (Chlorpyrifos Ethyl)	PCB
TP101	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP102	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP103	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP104	0.5-0.8	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP105	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP106	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP107	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP109	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP114	0.5-0.8	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP115	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP116	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP117	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP119	2.0-2.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP120	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP122	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP123	2.0-2.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP124	2.0-2.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP125	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP126	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP127	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1

GEOTECHNIQUE PTY LTD

TABLE I

ORGANOCHLORINE PESTICIDES (OCP), ORGANOPHOSPHATE PESTICIDES (OPP) & POLYCHLORINATED BIPHENYLS (PCB) TEST RESULTS

DISCRETE SAMPLES

(Ref No: 20465/8)

Sample Location	Depth (m)	OCP (mg/kg)										(mg/kg)	(mg/kg)
		HEXACHLOROBENZENE (HCB)	HEPTACHLOR	ALDRIN+DIELDRIN	ENDRIN	METHOXYCHLOR	MIREX	ENDOSULFAN (alpha, beta & sulphate)	DDD+DDE+DDT	DDT	CHLORDANE (alpha & gamma)	Chlorpyrifos (Chlorpyrifos Ethyl)	PCB
TP128	2.0-2.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP129	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP130	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP131	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP132	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP133	2.0-2.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP135	1.0-1.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
TP136	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
J1	0.0-0.3	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.2	<0.2	<0.1
Limit of Reporting (LOR)		0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.6	0.2	0.2	0.2	0.1
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)													
Health-based Investigation Levels (HIL) C [a] - Recreational C		10	10	10	20	400	20	340	400		70	250	1
Ecological Investigation Levels (EIL) - Public open space										180 [b]			

Notes: a: Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.

b: Generic EIL for DDT

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TABLE J
PER- AND POLY- FLUOROALKYL SUBSTANCE (PFAS)
(Ref No: 20465/8)

Location	Depth (m)	PFAS (µg/kg) PFOS	PFHxS	PFOS+PFHxS	PFOA
TP101	0.0-0.3	0.6	<0.1	0.6	<0.1
TP101	0.5-0.8	0.5	<0.1	0.5	<0.1
TP101	1.5-1.8	0.5	<0.1	0.5	<0.1
TP102	0.0-0.3	0.1	<0.1	0.1	<0.1
TP102	0.4-0.7	0.3	<0.1	0.3	<0.1
TP102	2.0-2.3	0.9	<0.1	0.9	<0.1
TP103	0.0-0.3	0.2	<0.1	0.2	<0.1
TP103	1.0-1.3	0.3	<0.1	0.3	<0.1
TP103	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP104	0.5-0.8	0.6	<0.1	0.6	0.2
TP104	1.5-1.8	0.5	<0.1	0.5	0.2
TP104	2.0-2.3	0.4	<0.1	0.4	0.3
TP105	0.0-0.3	0.2	<0.1	0.2	<0.1
TP105	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP105	1.5-1.8	2.8	0.7	3.6	<0.1
TP106	0.0-0.3	0.3	<0.1	0.3	<0.1
TP106	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP106	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP107	0.0-0.3	0.3	<0.1	0.3	<0.1
TP107	1.0-1.3	0.4	0.1	0.5	0.1
TP107	2.0-2.3	0.2	<0.1	0.2	<0.1
TP108	0.0-0.3	0.3	<0.1	0.3	<0.1
TP108	0.5-0.8	0.3	<0.1	0.3	0.3
TP108	1.5-1.8	0.2	<0.1	0.2	<0.1
TP109	0.0-0.3	<0.1	<0.1	<0.1	<0.1
TP109	1.0-1.3	0.1	<0.1	0.1	<0.1
TP109	2.0-2.3	0.1	<0.1	0.1	<0.1
TP110	0.0-0.3	0.2	<0.1	0.2	<0.1
TP110	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP110	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP111	0.0-0.3	0.4	<0.1	0.4	<0.1
TP111	1.0-1.3	0.2	<0.1	0.2	<0.1
TP111	2.0-2.3	0.3	<0.1	0.3	<0.1
TP112	0.0-0.3	0.2	<0.1	0.2	<0.1
TP112	1.0-1.3	1	0.3	1.3	<0.1
TP112	2.0-2.3	0.2	<0.1	0.2	<0.1
TP113	0.0-0.3	0.2	<0.1	0.2	<0.1
TP113	1.0-1.3	0.2	<0.1	0.2	<0.1
TP113	2.0-2.3	0.2	<0.1	0.2	<0.1
TP114	0.5-0.8	0.2	<0.1	0.2	<0.1
TP114	1.0-1.3	0.2	<0.1	0.2	<0.1
TP114	2.3-2.5	0.1	<0.1	0.1	<0.1
TP115	0.0-0.3	0.1	<0.1	0.1	<0.1
TP115	1.0-1.3	0.3	<0.1	0.3	<0.1
TP115	2.0-2.2	0.4	<0.1	0.4	<0.1
TP116	0.0-0.3	0.3	<0.1	0.3	<0.1
TP116	1.0-1.3	0.2	<0.1	0.2	<0.1
TP116	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP117	0.0-0.3	0.3	<0.1	0.3	<0.1
TP117	1.0-1.3	<0.1	<0.1	<0.1	<0.1

GEOTECHNIQUE PTY LTD

TABLE J
PER- AND POLY- FLUOROALKYL SUBSTANCE (PFAS)
(Ref No: 20465/8)

Location	Depth (m)	PFAS (µg/kg) PFOS	PFHxS	PFOS+PFHxS	PFOA
TP117	2.0-2.3	0.3	<0.1	0.3	<0.1
TP118	0.0-0.3	0.2	<0.1	0.2	<0.1
TP118	1.0-1.3	0.2	<0.1	0.2	<0.1
TP118	2.0-2.3	0.2	<0.1	0.2	<0.1
TP119	0.0-0.3	0.3	<0.1	0.3	<0.1
TP119	1.0-1.3	0.2	<0.1	0.2	<0.1
TP119	2.0-2.3	0.4	<0.1	0.4	<0.1
TP120	0.0-0.3	0.4	<0.1	0.4	<0.1
TP120	1.0-1.3	0.5	<0.1	0.5	0.2
TP120	2.0-2.3	0.2	<0.1	0.2	<0.1
TP121	0.0-0.3	0.1	<0.1	0.1	<0.1
TP121	1.0-1.3	0.1	<0.1	0.1	<0.1
TP121	2.0-2.3	0.1	<0.1	0.1	<0.1
TP122	0.0-0.3	0.1	<0.1	0.1	0.3
TP122	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP122	2.0-2.3	0.2	<0.1	0.2	<0.1
TP123	0.0-0.3	0.4	<0.1	0.4	<0.1
TP123	1.0-1.3	0.1	<0.1	0.1	<0.1
TP123	2.0-2.3	0.9	0.2	1.1	0.1
TP124	0.0-0.3	<0.1	<0.1	<0.1	<0.1
TP124	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP124	2.0-2.3	0.1	<0.1	0.1	<0.1
TP125	0.0-0.3	0.2	<0.1	0.2	<0.1
TP125	1.0-1.3	0.2	<0.1	0.2	<0.1
TP125	2.0-2.3	0.2	<0.1	0.2	<0.1
TP125	3.0-3.3	0.2	<0.1	0.2	<0.1
TP125	3.0-3.3	0.2	<0.1	0.2	<0.1
TP126	0.0-0.3	0.1	<0.1	0.1	<0.1
TP126	1.0-1.3	0.5	<0.1	0.5	0.1
TP126	2.0-2.3	0.5	<0.1	0.5	<0.1
TP127	0.0-0.3	0.1	<0.1	0.1	<0.1
TP127	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP127	2.0-2.3	1.4	0.1	1.6	<0.1
TP128	0.0-0.3	0.3	<0.1	0.3	<0.1
TP128	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP128	2.0-2.3	0.1	<0.1	0.1	<0.1
TP129	0.0-0.3	0.4	<0.1	0.4	0.2
TP129	1.0-1.3	0.2	<0.1	0.2	<0.1
TP129	2.0-2.3	0.3	<0.1	0.3	<0.1
TP130	0.0-0.3	0.1	<0.1	0.1	<0.1
TP130	1.0-1.3	0.1	<0.1	0.1	<0.1
TP130	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP131	0.0-0.3	0.3	<0.1	0.3	<0.1
TP131	1.0-1.3	0.1	<0.1	0.1	<0.1
TP131	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP132	0.0-0.3	0.2	<0.1	0.2	<0.1
TP132	1.0-1.3	0.1	<0.1	0.1	<0.1
TP132	2.0-2.3	0.2	<0.1	0.2	<0.1
TP133	0.0-0.3	0.4	<0.1	0.4	<0.1
TP133	1.0-1.3	0.5	0.1	0.6	0.2

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TABLE J
PER- AND POLY- FLUOROALKYL SUBSTANCE (PFAS)
(Ref No: 20465/8)

Location	Depth (m)	PFAS (µg/kg) PFOS	PFHxS	PFOS+PFHxS	PFOA
TP133	2.0-2.3	0.3	<0.1	0.3	0.1
TP134	0.0-0.3	0.3	<0.1	0.3	<0.1
TP134	1.0-1.3	<0.1	<0.1	<0.1	<0.1
TP134	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP135	0.0-0.3	0.2	<0.1	0.2	<0.1
TP135	1.0-1.3	0.3	<0.1	0.3	0.3
TP135	2.0-2.3	<0.1	<0.1	<0.1	<0.1
TP136	0.0-0.3	0.2	<0.1	0.2	<0.1
TP136	1.0-1.3	0.4	<0.1	0.4	<0.1
TP136	2.0-2.3	0.4	<0.1	0.4	0.1
J1	0.0-0.3	0.2	<0.1	0.2	<0.1
J1	0.5-0.8	0.6	<0.1	0.6	<0.1
J1	1.0-1.3	0.2	<0.1	0.2	<0.1
TP1b	0.0-0.15	0.2	<0.1	0.2	<0.1
TP2a	0.0-0.15	0.1	<0.1	0.1	<0.1
TP3a	0.0-0.15	0.2	<0.1	0.2	<0.1
TP4b	0.0-0.15	0.2	<0.1	0.2	<0.1
TP5b	0.0-0.15	0.3	<0.1	0.3	<0.1
TP6b	0.0-0.15	0.4	<0.1	0.4	<0.1
TP7a	0.0-0.15	<0.1	<0.1	<0.1	<0.1
TP8b	0.0-0.15	0.3	<0.1	0.3	<0.1
TP9a	0.0-0.15	0.4	<0.1	0.4	<0.1
TP10a	0.0-0.15	0.2	<0.1	0.2	<0.1
TP11a	0.0-0.15	0.2	<0.1	0.2	<0.1
TP12a	0.0-0.15	0.2	<0.1	0.2	<0.1
TP13a	0.0-0.15	0.2	<0.1	0.2	<0.1
TP14a	0.0-0.15	<0.1	<0.1	<0.1	<0.1
TP15a	0.0-0.15	<0.1	<0.1	<0.1	<0.1
Practical Quantitation Limit (PQL)		0.1	0.1	0.1	0.1
Maximum		2.8	0.7	3.6	0.3
PFAS National Environmental Management Plan 2020					
Human Health Investigation Values - Public open space (HIL C)				1 mg/kg	10 mg/kg
				1,000 µg/kg	10,000 µg/kg
Ecological Guideline Values					
Ecological Direct Exposure		1 mg/kg			10 mg/kg
		1,000 µg/kg			10,000 µg/kg
Ecological Indirect Exposure		0.01 mg/kg			
		10 µg/kg			
Biota guideline values					
Ecological Direct Exposure for Mammalian Diet				4.6 µg/kg	
Ecological Direct Exposure for Avian Diet				8.2 µg/kg	
Ecological Exposure Protective of Birds				0.2 µg/g	
				200 µg/kg	

GEOTECHNIQUE
PTY LTD

TABLE K
ASBESTOS TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	ASBESTOS (% w/w)		
Soil Sample		Bonded ACM (>7mm)	AF	FA
TP101	0.0 - 0.3	<0.01	<0.001	<0.001
TP101	0.5 - 0.8	<0.01	<0.001	<0.001
TP101	1.5 - 1.8	<0.01	<0.001	<0.001
TP101	2.0 - 2.3	<0.01	<0.001	<0.001
TP102	0.0 - 0.3	<0.01	<0.001	<0.001
TP102	0.4 - 0.7	<0.01	<0.001	<0.001
TP103	0.0 - 0.3	<0.01	<0.001	<0.001
TP104	0.5-0.8	<0.01	<0.001	<0.001
TP104	1.5-1.8	<0.01	<0.001	<0.001
TP105	0.0-0.3	<0.01	<0.001	<0.001
TP105	0.4-0.7	<0.01	<0.001	<0.001
TP106	0.0-0.3	<0.01	<0.001	<0.001
TP107	0.5-0.8	<0.01	<0.001	<0.001
TP107	1.5-1.8	<0.01	<0.001	<0.001
TP108	0.0-0.3	<0.01	<0.001	<0.001
TP109	0.0-0.3	<0.01	<0.001	<0.001
TP110	0.5-0.8	<0.01	<0.001	<0.001
TP110	2.0-2.3	<0.01	<0.001	<0.001
TP111	1.5-1.8	<0.01	<0.001	<0.001
TP112	1.0-1.3	<0.01	<0.001	<0.001
TP113	1.0-1.3	<0.01	<0.001	<0.001
TP113	2.0-2.3	<0.01	<0.001	<0.001
TP114	0.5 - 0.8	<0.01	<0.001	<0.001

GEOTECHNIQUE
PTY LTD

TABLE K
ASBESTOS TEST RESULTS
DISCRETE SAMPLES
(Ref No: 20465/8)

Sample Location	Depth (m)	ASBESTOS (% w/w)		
Soil Sample		Bonded ACM (>7mm)	AF	FA
TP114	1.0 - 1.3	<0.01	<0.001	<0.001
TP115	1.0 - 1.3	<0.01	<0.001	<0.001
TP115	2.0 - 2.2	<0.01	<0.001	<0.001
TP119	1.0 - 1.3	<0.01	<0.001	<0.001
TP120	0.0 - 0.3	<0.01	<0.001	<0.001
TP120	1.0 - 1.3	<0.01	<0.001	<0.001
TP122	0.0 - 0.3	<0.01	<0.001	<0.001
TP125	0.0 - 0.3	<0.01	<0.001	<0.001
TP125	1.0 - 1.3	<0.01	<0.001	<0.001
TP126	0.0 - 0.3	<0.01	<0.001	<0.001
TP127	1.0 - 1.3	<0.01	<0.001	<0.001
TP130	0.0 - 0.3	<0.01	<0.001	<0.001
TP136	2.0 - 2.3	<0.01	<0.001	<0.001
J1	0.0 - 0.3	<0.01	<0.001	<0.001
Limits of Reporting (LOR)		0.01	0.001	0.001
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
Health Screening Levels [a] - Recreational C		0.02	0.001	0.001

Notes: ACM: Asbestos Containing Material
AF: Asbestos Fines
FA: Fibrous Asbestos
a: Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.

APPENDIX A

TABLES 1A TO 1C – TEST PIT LOGS

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1a

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP101	0.0-1.2	0.0-0.3	16/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red, with gravel	0.0 ppm	trace boulder & root fibres
		0.5-0.8			0.0 ppm	plastic @0.8m
		1.0-1.2			0.0 ppm	
	1.2-2.5	1.5-1.8		FILL: Silty Clay, high plasticity, orange, trace of gravel	0.0 ppm	concrete boulder @1.6m
		2.0-2.3			0.0 ppm	plastic bag @2.0m
TP102	0.0-2.0	0.0-0.3	16/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled orange-red, with gravel	0.0 ppm	trace boulder & root fibres
		0.4-0.7			0.0 ppm	trace plastic @0.4m
		1.0-1.3			0.0 ppm	
		1.5-1.8			0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, pale grey	0.0 ppm	
TP103	0.0-1.5	0.0-0.3	16/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown, with gravel	0.0 ppm	ground surface disused diesel oil bottles; trace root fibres
		0.5-0.8			0.0 ppm	
		1.0-1.3			0.0 ppm	
	1.5-2.0	1.5-1.8		FILL: Silty Clay, low to medium plasticity, dark grey to pale grey	0.0 ppm	
	2.0-2.4	2.0-2.3		FILL: Gravelly Clay, low plasticity, dark brown, with gravel	0.0 ppm	
	2.4-2.5	NS		FILL: Silty Clay, low to medium plasticity, orange mottled red	0.0 ppm	

NS = No Sample

*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1a

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP104	0.0-2.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown orange	0.0 ppm	with gravel & root fibres
		0.5-0.8			0.0 ppm	iron rod &plastic @0.5m
		1.0-1.3			0.0 ppm	
		1.5-1.8			0.0 ppm	trace boulder @1.7m
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, pale grey	0.0 ppm	sand @2.3m
TP105	0.0-0.8	0.0-0.3	19/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red, with gravel	0.0 ppm	trace boulder & trace root fibres; plastic bag @0.4m
		0.4-0.7			0.0 ppm	
	0.8-1.3	1.0-1.3		FILL: Silty Clay, high plasticity, pale grey mottled red	0.0 ppm	
	1.3-1.8	1.5-1.8		FILL: Silty Clay, high plasticity, dark grey	0.0 ppm	
	1.8-2.0	NS		FILL: Silty Clay, high plasticity, red mottled pale grey	0.0 ppm	
	2.0-2.5	2.0-2.3		(CH) Silty CLAY, high plasticity, red mottled pale grey , trace of gravel		
TP106	0.0-1.0	0.0-0.3	18/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red-orange, with gravel	0.0 ppm	trace boulder & root fibres
		0.5-0.8			0.0 ppm	
	1.0-1.8	1.0-1.3		FILL: Silty Clay, high plasticity, red mottled pale grey	0.0 ppm	
		1.5-1.8			0.0 ppm	
	1.8-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, orange	0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1a

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP107	0.0-2.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled orange-red, with gravel	0.0 ppm	trace root fibres
		0.5-0.8			0.0 ppm	trace concrete boulder @0.7m
		1.0-1.3			0.0 ppm	
		1.5-1.8			0.0 ppm	with boulder @1.8m
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, pale grey	0.0 ppm	
TP108	0.0-1.2	0.0-0.3	18/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled pale grey orange, with gravel	0.0 ppm	trace boulder & root fibres; bricks @0.3m
		0.5-0.8			0.0 ppm	
		1.0-1.2			0.0 ppm	
	1.2-2.0	1.5-1.8		FILL: Silty Clay, low to medium plasticity, red-orange	0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, pale grey	0.0 ppm	
TP109	0.0-0.8	0.0-0.3	18/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red-grey, with gravel	0.0 ppm	trace boulder & root fibres
		0.5-0.8			0.0 ppm	
	0.8-1.0	NS		FILL: Silty Clay, low to medium plasticity, dark grey, shale fragments	0.0 ppm	
	1.0-2.4	1.0-1.3		FILL: Silty Clay, low to medium plasticity, red	0.0 ppm	
		1.5-1.8			0.0 ppm	
		2.0-2.3			0.0 ppm	
	2.4-2.5	NS		FILL: Silty Clay, high plasticity, orange mottled pale grey	0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1a

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP110	0.0-1.6	0.0-0.3	18/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled orange red, with gravel	0.0 ppm	trace root fibres
		0.5-0.8			0.0 ppm	trace boulder @0.5m
		1.0-1.3			0.0 ppm	with sand @1.0m
	1.6-2.0	1.6-1.9		FILL: Silty Clay, low to medium plasticity, dark brown mottled orange	0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, red mottled pale grey	0.0 ppm	boulder @2.0m
TP111	0.0-0.6	0.0-0.3	19/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown, with gravel	0.0 ppm	trace root fibres
	0.6-2.5	0.6-0.9		FILL: Silty Clay, high plasticity, pale grey mottled orange-red	0.0 ppm	
		1.0-1.3			0.0 ppm	
		1.5-1.8			0.0 ppm	trace boulder & sand @1.8m
		2.0-2.3			0.0 ppm	
TP112	0.0-0.5	0.0-0.3	19/12/2024	FILL: Gravelly Clay, low plasticity, dark brown, with gravel	0.0 ppm	
	0.5-2.0	0.5-0.8		FILL: Silty Clay, low to medium plasticity, red-orange, with sand & gravel	0.0 ppm	
		1.0-1.3			0.0 ppm	trace boulder @1.2m
		1.5-1.8			0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, low to medium plasticity, dark brown, with gravel	0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1a

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP113	0.0-1.5	0.0-0.3	18/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red-orange, with gravel	0.0 ppm	trace root fibres
		0.5-0.8			0.0 ppm	
		1.0-1.3			0.0 ppm	trace concrete boulder; concrete @1.0m
	1.5-2.0	1.5-1.8		FILL: Silty Clay, low to medium plasticity, dark grey	0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, high plasticity, red, trace of gravel	0.0 ppm	trace boulder @2.2m
		-				
TP114	0.0-1.8	0.0-0.3	16/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown mottled red & pale grey, with gravel	0.0 ppm	trace root fibres
		0.5-0.8			0.0 ppm	trace asphalt concrete boulder & plastic @0.5m
		1.0-1.3			0.0 ppm	trace of boulder @1.0m
		1.5-1.8			0.0 ppm	
	1.8-2.3	2.0-2.3		FILL: Silty Clay, high plasticity, red mottled orange	0.0 ppm	
	2.3-2.5	2.3-2.5		FILL: Gravelly Clay, low plasticity, dark brown, with gravel	0.0 ppm	
TP115	0.0-0.5	0.0-0.3	16/12/2024	FILL: Silty Clay, low to medium plasticity, dark brown, with gravel	0.0 ppm	trace root fibres
	0.5-2.2	0.5-0.8		FILL: Silty Clay, high plasticity, red mottled pale grey-orange	0.0 ppm	
		1.0-1.3			0.0 ppm	iron rod & plastic @1.2m
		1.5-1.8			0.0 ppm	
		2.0-2.2			0.0 ppm	trace boulder @2.2m
	2.2-2.5	NS		FILL: Silty Clay, high plasticity, dark brown	0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1b

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP116	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP117	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP118	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP119	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	trace brick fragments @1.2m
		2.0-2.3			0.0 ppm	
TP120	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	trace brick fragments @0.2m
	1.0-2.0	1.0-1.3		FILL: Clayey Sand, fine grained, brown, with gravel and glass	0.0 ppm	
	2.0-2.5	2.0-2.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
TP121	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1b

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP122	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	fragments of glass @0.3m
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP123	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP124	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP125	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	earth mound 1.0m above ground surface
	1.0-3.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	trace boulder @1.2m
		2.0-2.3			0.0 ppm	
		3.0-3.3			0.0 ppm	
TP126	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	ground surface diesel fuel filter with hydrocarbon staining
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP127	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	trace boulder @1.0m
		2.0-2.3			0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1b

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP128	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP129	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP130	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	ground surface diesel oil bottle
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP131	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP132	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP133	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, low to medium plasticity, brown, with gravel	0.0 ppm	
		2.0-2.3			0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Gledswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8-AA1
		Logged & Sampled by:	KB

Table 1b

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP134	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP135	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	
TP136	0.0-1.0	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	
	1.0-2.5	1.0-1.3		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		2.0-2.3			0.0 ppm	trace boulder @2.0m
J1	0.0-0.5	0.0-0.3	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel, trace of root fibres	0.0 ppm	ground surface truck brake pads
	0.5-1.5	0.5-0.8		FILL: Silty Clay, medium to high plasticity, brown and grey mottled with orange, with gravel and shale fragments	0.0 ppm	
		1.0-1.3			0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

GEOTECHNIQUE PTY LTD

Project:	Proposed New Geldswood Hills High School	**Job No:**	20465/8
Location:	9 Gregory Hills Drive, Gledswood Hills	**Drawing No:**	20465/8
		Logged & Sampled by:	KB

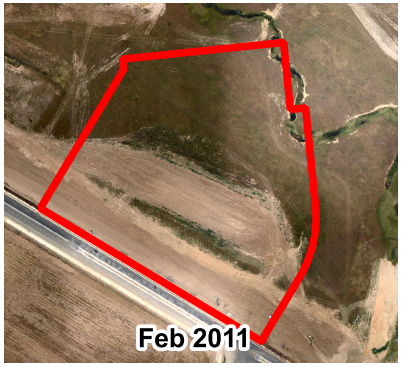
Table 1c

Test Pit	Depth (m)	Sample Depth (m)	Date	Material Description	PID	Remarks*
TP1b	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP2a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP3a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP4b	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP5b	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP6b	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP7a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP8b	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP9a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP10a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP11a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP12a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP13a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP14a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Silty Clay, low plasticity, brown, with gravel	0.0 ppm	
TP15a	0.0-0.2	0.0-0.15	19/12/2024	FILL: Clayey Gravel, low plasticity, medium to coarse grained, grey	0.0 ppm	

NS = No Sample
*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

APPENDIX B

DIAGRAM SHOWING FILL WITHIN THE SITE



Surface Elevation Increase from Febuary 2011 to July 2019

Site Boundary

Contours (1m)

increase in surface elev 2011 to 2019

Band 1 (Gray)

7

0

decrease in surface elev 2011 to 2019

Band 1 (Gray)

0

-3

APPENDIX C

PID CALIBRATION SHEETS

GEOTECHNIQUE
PTY LTD

PID CALIBRATION

CLIENT	NSW Department of Education	JOB NO	20465/8
PROJECT	Proposed New Gledswood Hills High School	DATE	16/12/2024
ADDRESS	9 Gregory Hills Drive, Gledswood Hills	CHECKED BY	KB
PID MODEL	**PID MODEL: PGM – 7600 MINIRAE 2000**	CALIBRATED BY	KB
SERIAL NO	**SERIAL NO: 110 – 005380**		

This performance of this PID has been checked and calibrated as follows:

☑ **Charged***

☑ **Calibrate** **0.0ppm** **Reading:** 0.0 **ppm**

100ppm **Isobutylene** **Reading:** 100 **ppm**

Gas Bottle Number 173 **Lot No** 51809

Signed & Approved Date: 16/12/2024

Note: * Should be between 5.V and 6.2V

GEOTECHNIQUE
PTY LTD

PID CALIBRATION

CLIENT	NSW Department of Education	JOB NO	20465/8
PROJECT	Proposed New Gledswood Hills High School	DATE	18/12/2024
ADDRESS	9 Gregory Hills Drive, Gledswood Hills	CHECKED BY	KB
PID MODEL	**PID MODEL: PGM – 7600 MINIRAE 2000**	CALIBRATED BY	KB
SERIAL NO	**SERIAL NO: 110 – 005380**		

This performance of this PID has been checked and calibrated as follows:

☑ **Charged***

☑ **Calibrate** **0.0ppm** **Reading:** 0.0 **ppm**

100ppm **Isobutylene** **Reading:** 100 **ppm**

Gas Bottle Number 173 **Lot No** 51809

Signed & Approved [signature] Date: 18/12/2024

Note: * Should be between 5.V and 6.2V

GEOTECHNIQUE
PTY LTD

PID CALIBRATION

CLIENT	NSW Department of Education	JOB NO	20465/8
PROJECT	Proposed New Gledswood Hills High School	DATE	19/12/2024
ADDRESS	9 Gregory Hills Drive, Gledswood Hills	CHECKED BY	KB
PID MODEL	**PID MODEL: PGM – 7600 MINIRAE 2000**	CALIBRATED BY	KB
SERIAL NO	**SERIAL NO: 110 – 005380**		

This performance of this PID has been checked and calibrated as follows:

☑ **Charged***

☑ **Calibrate** **0.0ppm** **Reading:** 0.0 **ppm**

100ppm **Isobutylene** **Reading:** 100 **ppm**

Gas Bottle Number 173 **Lot No** 51809

Signed & Approved Date: 19/12/2024

Note: * Should be between 5.V and 6.2V

APPENDIX D

LABORATORY ANALYTICAL REPORTS / CERTIFICATES OF ANALYSIS

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	20

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE276128 R0**
Date Received	19/12/2024
Date Reported	6/1/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Bennet LO
Senior Chemist

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
Organic Section Head

Shane MCDERMOTT
Laboratory Manager

Teresa NGUYEN
Organic Chemist

VOC's in Soil [AN433] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016	TS1 SOIL - 16/12/2024 SE276128.019
Benzene	mg/kg	0.1	<0.1	[115%]
Toluene	mg/kg	0.1	<0.1	[116%]
Ethylbenzene	mg/kg	0.1	<0.1	[117%]
m/p-xylene	mg/kg	0.2	<0.2	[115%]
o-xylene	mg/kg	0.1	<0.1	[118%]
Naphthalene (VOC)*	mg/kg	0.1	<0.1	-
Total Xylenes*	mg/kg	0.3	<0.3	-
Total BTEX*	mg/kg	0.3	<0.3	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP101 CLAY 0.5-0.8 16/12/2024 SE276128.002	TP101 CLAY 1.5-1.8 16/12/2024 SE276128.003	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP102 CLAY 0.4-0.7 16/12/2024 SE276128.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	0.2	0.8	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.3	0.4	0.9	0.2	<0.1
Pyrene	mg/kg	0.1	0.3	0.4	0.8	0.2	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.2	0.4	<0.1	<0.1
Chrysene	mg/kg	0.1	0.2	0.3	0.4	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.2	0.3	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	0.3	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	0.2	0.4	0.6	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	0.2	0.3	0.4	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.2	0.3	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	0.2	0.3	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	0.2	0.4	0.5	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	0.3	0.5	0.6	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.3	0.4	0.6	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	1.6	3.0	5.1	0.7	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	1.6	2.7	5.1	0.7	<0.1

PARAMETER	UOM	LOR	TP102 CLAY 2.0-2.3 16/12/2024 SE276128.006	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP103 CLAY 1.0-1.3 16/12/2024 SE276128.008	TP103 CLAY 2.0-2.3 16/12/2024 SE276128.009	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	<0.1	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.2	<0.1	0.2	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.2	<0.1	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	1.4	<0.1	0.6	<0.1	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	1.3	<0.1	0.6	<0.1	<0.1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/12/2024 (continued)

PARAMETER	UOM	LOR	TP114 CLAY 1.0-1.3 16/12/2024 SE276128.011	TP114 CLAY 2.0-2.3 16/12/2024 SE276128.012	TP115 CLAY 0.0-0.3 16/12/2024 SE276128.013	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014	TP115 CLAY 2.0-2.2 16/12/2024 SE276128.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	0.5	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.3	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	<0.1	0.2	0.2	0.1
Pyrene	mg/kg	0.1	0.1	<0.1	0.2	0.2	0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.1	0.1	<0.1	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	0.2
Total PAH (18)	mg/kg	0.1	0.2	1.3	1.0	0.3	0.5
Total PAH (NEPM/WHO 16)	mg/kg	0.1	0.2	0.5	1.0	0.3	0.5

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016	DDS2 CLAY - 16/12/2024 SE276128.017
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	0.3
Pyrene	mg/kg	0.1	0.2	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.2
Chrysene	mg/kg	0.1	0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	0.3
Benzo(a)pyrene	mg/kg	0.1	0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	0.3
Total PAH (18)	mg/kg	0.1	0.5	1.8
Total PAH (NEPM/WHO 16)	mg/kg	0.1	0.5	1.8

OC Pesticides in Soil [AN420] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 19/12/2024 (continued)

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016
Alpha BHC	mg/kg	0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1
Endrin	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1

OP Pesticides in Soil [AN420] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016
Arochlor 1016	mg/kg	0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1

pH in soil (1:5) [AN101] Tested: 20/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
pH	pH Units	0.1	**7.5**	**9.1**	**10.7**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	9.7	9.5	12
Exchangeable Calcium Percentage*	%	0.1	61.2	67.3	78.6
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.30	0.44	0.24
Exchangeable Potassium Percentage*	%	0.1	1.9	3.1	1.6
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	3.3	3.6	1.5
Exchangeable Magnesium Percentage*	%	0.1	20.8	25.6	9.9
Exchangeable Sodium, Na	cmol (+)/kg	0.01	2.6	0.56	1.5
Exchangeable Sodium Percentage*	%	0.1	16.1	3.9	9.9
Cation Exchange Capacity	cmol (+)/kg	0.02	16	14	16

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP101 CLAY 0.5-0.8 16/12/2024 SE276128.002	TP101 CLAY 1.5-1.8 16/12/2024 SE276128.003	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP102 CLAY 0.4-0.7 16/12/2024 SE276128.005
Arsenic, As	mg/kg	1	6	4	4	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.7	10	9.0	9.9	6.8
Copper, Cu	mg/kg	0.5	27	21	22	21	12
Lead, Pb	mg/kg	1	29	21	21	21	19
Nickel, Ni	mg/kg	0.5	12	12	12	11	3.8
Zinc, Zn	mg/kg	2	65	54	61	46	27

PARAMETER	UOM	LOR	TP102 CLAY 2.0-2.3 16/12/2024 SE276128.006	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP103 CLAY 1.0-1.3 16/12/2024 SE276128.008	TP103 CLAY 2.0-2.3 16/12/2024 SE276128.009	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010
Arsenic, As	mg/kg	1	5	6	5	10	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.9	8.9	7.3	10	11
Copper, Cu	mg/kg	0.5	26	22	25	16	26
Lead, Pb	mg/kg	1	41	16	20	12	23
Nickel, Ni	mg/kg	0.5	11	9.7	11	6.6	13
Zinc, Zn	mg/kg	2	68	54	55	28	72

PARAMETER	UOM	LOR	TP114 CLAY 1.0-1.3 16/12/2024 SE276128.011	TP114 CLAY 2.0-2.3 16/12/2024 SE276128.012	TP115 CLAY 0.0-0.3 16/12/2024 SE276128.013	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014	TP115 CLAY 2.0-2.2 16/12/2024 SE276128.015
Arsenic, As	mg/kg	1	4	9	5	4	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.0	8.0	10	7.1	11
Copper, Cu	mg/kg	0.5	22	30	16	18	24
Lead, Pb	mg/kg	1	14	15	12	27	28
Nickel, Ni	mg/kg	0.5	8.3	17	5.8	5.7	10
Zinc, Zn	mg/kg	2	37	63	33	39	55

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016	DDS2 CLAY - 16/12/2024 SE276128.017
Arsenic, As	mg/kg	1	6	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	7.2
Copper, Cu	mg/kg	0.5	32	13
Lead, Pb	mg/kg	1	17	24
Nickel, Ni	mg/kg	0.5	13	4.9
Zinc, Zn	mg/kg	2	51	35

Mercury in Soil [AN312] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP101 CLAY 0.5-0.8 16/12/2024 SE276128.002	TP101 CLAY 1.5-1.8 16/12/2024 SE276128.003	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP102 CLAY 0.4-0.7 16/12/2024 SE276128.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP102 CLAY 2.0-2.3 16/12/2024 SE276128.006	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP103 CLAY 1.0-1.3 16/12/2024 SE276128.008	TP103 CLAY 2.0-2.3 16/12/2024 SE276128.009	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP114 CLAY 1.0-1.3 16/12/2024 SE276128.011	TP114 CLAY 2.0-2.3 16/12/2024 SE276128.012	TP115 CLAY 0.0-0.3 16/12/2024 SE276128.013	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014	TP115 CLAY 2.0-2.2 16/12/2024 SE276128.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016	DDS2 CLAY - 16/12/2024 SE276128.017
Mercury	mg/kg	0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 19/12/2024

PARAMETER	UOM	LOR	TP101 CLAY 0.0-0.3 16/12/2024 SE276128.001	TP101 CLAY 0.5-0.8 16/12/2024 SE276128.002	TP101 CLAY 1.5-1.8 16/12/2024 SE276128.003	TP102 CLAY 0.0-0.3 16/12/2024 SE276128.004	TP102 CLAY 0.4-0.7 16/12/2024 SE276128.005
% Moisture	%w/w	1	7.6	7.7	7.8	8.0	9.4

PARAMETER	UOM	LOR	TP102 CLAY 2.0-2.3 16/12/2024 SE276128.006	TP103 CLAY 0.0-0.3 16/12/2024 SE276128.007	TP103 CLAY 1.0-1.3 16/12/2024 SE276128.008	TP103 CLAY 2.0-2.3 16/12/2024 SE276128.009	TP114 CLAY 0.5-0.8 16/12/2024 SE276128.010
% Moisture	%w/w	1	9.5	7.0	7.5	15.8	10.3

PARAMETER	UOM	LOR	TP114 CLAY 1.0-1.3 16/12/2024 SE276128.011	TP114 CLAY 2.0-2.3 16/12/2024 SE276128.012	TP115 CLAY 0.0-0.3 16/12/2024 SE276128.013	TP115 CLAY 1.0-1.3 16/12/2024 SE276128.014	TP115 CLAY 2.0-2.2 16/12/2024 SE276128.015
% Moisture	%w/w	1	7.5	6.8	4.3	7.4	11.4

PARAMETER	UOM	LOR	DDS1 CLAY - 16/12/2024 SE276128.016	DDS2 CLAY - 16/12/2024 SE276128.017	DSS2 CLAY - 16/12/2024 SE276128.020
% Moisture	%w/w	1	8.5	7.7	12.5

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [AN404] Tested: 20/12/2024

PARAMETER	UOM	LOR	DSS2 CLAY - 16/12/2024 SE276128.020
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
Sum PFOS and PFHxS	mg/kg	0.005	<0.005
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of US EPA PFAS (PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of Positive PFAS	mg/kg	0.005	<0.005

VOCs in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 23/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

OC Pesticides in Water [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
Alpha BHC	µg/L	0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Aldrin	µg/L	0.1	<0.1
Beta BHC	µg/L	0.1	<0.1
Delta BHC	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Total OC	µg/L	1	<1
Total OC	µg/L	1	<1

OP Pesticides in Water [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2

PCBs in Water [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Metals in Water (Dissolved) by ICPOES [AN320] Tested: 30/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Arsenic, As	mg/L	0.02	<0.020
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	<0.01

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 20/12/2024

PARAMETER	UOM	LOR	RS1 WATER - 16/12/2024 SE276128.018
Mercury	mg/L	0.00005	<0.00005

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.

AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken . This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE276128 R0

CLIENT DETAILS

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Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	20

LABORATORY DETAILS

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SGS Reference	**SE276128 R0**
Date Received	19 Dec 2024
Date Reported	06 Jan 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items

SAMPLE SUMMARY

Sample counts by matrix	19 Clay/Soil, 1 Wate	Type of documentation received	COC
Date documentation received	19/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	8.6°C
Sample container provider	SGS	Turnaround time requested	Standard/Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334400	16 Dec 2024	19 Dec 2024	13 Jan 2025	24 Dec 2024	13 Jan 2025	27 Dec 2024
TP103	SE276128.007	LB334400	16 Dec 2024	19 Dec 2024	13 Jan 2025	24 Dec 2024	13 Jan 2025	27 Dec 2024
TP115	SE276128.014	LB334400	16 Dec 2024	19 Dec 2024	13 Jan 2025	24 Dec 2024	13 Jan 2025	27 Dec 2024

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334060	16 Dec 2024	19 Dec 2024	13 Jan 2025	20 Dec 2024	13 Jan 2025	23 Dec 2024

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP101	SE276128.002	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP101	SE276128.003	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP102	SE276128.004	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP102	SE276128.005	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP102	SE276128.006	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP103	SE276128.007	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP103	SE276128.008	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP103	SE276128.009	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP114	SE276128.010	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP114	SE276128.011	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP114	SE276128.012	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP115	SE276128.013	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP115	SE276128.014	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
TP115	SE276128.015	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
DDS1	SE276128.016	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024
DDS2	SE276128.017	LB334040	16 Dec 2024	19 Dec 2024	13 Jan 2025	19 Dec 2024	13 Jan 2025	27 Dec 2024

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334472	16 Dec 2024	19 Dec 2024	14 Jun 2025	30 Dec 2024	14 Jun 2025	30 Dec 2024

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP101	SE276128.002	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP101	SE276128.003	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP102	SE276128.004	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP102	SE276128.005	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP102	SE276128.006	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP103	SE276128.007	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP103	SE276128.008	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP103	SE276128.009	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP114	SE276128.010	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP114	SE276128.011	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP114	SE276128.012	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP115	SE276128.013	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP115	SE276128.014	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
TP115	SE276128.015	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
DDS1	SE276128.016	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
DDS2	SE276128.017	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024
DSS2	SE276128.020	LB334024	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	24 Dec 2024	23 Dec 2024

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP101	SE276128.002	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP101	SE276128.003	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.004	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.005	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024

HOLDING TIME SUMMARY

SE276128 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP102	SE276128.006	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.007	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.008	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.009	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.010	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.011	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.012	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.013	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.014	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.015	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
DDS1	SE276128.016	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS2	SE276128.017	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334253	16 Dec 2024	19 Dec 2024	23 Dec 2024	23 Dec 2024	01 Feb 2025	30 Dec 2024

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP101	SE276128.002	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP101	SE276128.003	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.004	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.005	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.006	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.007	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.008	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.009	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.010	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.011	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.012	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.013	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.014	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.015	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
DDS1	SE276128.016	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS2	SE276128.017	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334253	16 Dec 2024	19 Dec 2024	23 Dec 2024	23 Dec 2024	01 Feb 2025	30 Dec 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP101	SE276128.002	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP101	SE276128.003	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.004	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.005	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.006	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.007	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.008	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.009	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.010	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.011	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.012	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.013	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.014	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.015	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS1	SE276128.016	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS2	SE276128.017	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024

HOLDING TIME SUMMARY

SE276128 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334253	16 Dec 2024	19 Dec 2024	23 Dec 2024	23 Dec 2024	01 Feb 2025	30 Dec 2024

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP101	SE276128.002	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP101	SE276128.003	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.004	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.005	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP102	SE276128.006	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.007	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.008	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP103	SE276128.009	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.010	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.011	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP114	SE276128.012	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.013	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.014	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
TP115	SE276128.015	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
DDS1	SE276128.016	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024
DDS2	SE276128.017	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	30 Dec 2024

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334253	16 Dec 2024	19 Dec 2024	23 Dec 2024	23 Dec 2024	01 Feb 2025	30 Dec 2024

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DSS2	SE276128.020	LB334103	16 Dec 2024	19 Dec 2024	13 Jan 2025	20 Dec 2024	17 Jan 2025	23 Dec 2024

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334070	16 Dec 2024	19 Dec 2024	23 Dec 2024	20 Dec 2024	21 Dec 2024	20 Dec 2024
TP103	SE276128.007	LB334070	16 Dec 2024	19 Dec 2024	23 Dec 2024	20 Dec 2024	21 Dec 2024	20 Dec 2024
TP115	SE276128.014	LB334070	16 Dec 2024	19 Dec 2024	23 Dec 2024	20 Dec 2024	21 Dec 2024	20 Dec 2024

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP101	SE276128.002	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP101	SE276128.003	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP102	SE276128.004	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP102	SE276128.005	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP102	SE276128.006	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP103	SE276128.007	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP103	SE276128.008	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP103	SE276128.009	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP114	SE276128.010	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP114	SE276128.011	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP114	SE276128.012	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP115	SE276128.013	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP115	SE276128.014	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
TP115	SE276128.015	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
DDS1	SE276128.016	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024
DDS2	SE276128.017	LB334029	16 Dec 2024	19 Dec 2024	14 Jun 2025	19 Dec 2024	14 Jun 2025	27 Dec 2024

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP101	SE276128.002	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.003	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.004	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.005	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP102	SE276128.006	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.007	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.008	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP103	SE276128.009	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.010	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.011	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP114	SE276128.012	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.013	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.014	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
TP115	SE276128.015	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS1	SE276128.016	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024
DDS2	SE276128.017	LB334017	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	28 Jan 2025	24 Dec 2024

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334253	16 Dec 2024	19 Dec 2024	23 Dec 2024	23 Dec 2024	01 Feb 2025	30 Dec 2024

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP102	SE276128.004	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP103	SE276128.007	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP114	SE276128.010	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP115	SE276128.014	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
DDS1	SE276128.016	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TS1	SE276128.019	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334388	16 Dec 2024	19 Dec 2024	30 Dec 2024	24 Dec 2024	30 Dec 2024	27 Dec 2024

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP101	SE276128.001	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP102	SE276128.004	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP103	SE276128.007	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP114	SE276128.010	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TP115	SE276128.014	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
DDS1	SE276128.016	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	23 Dec 2024
TS1	SE276128.019	LB334033	16 Dec 2024	19 Dec 2024	30 Dec 2024	19 Dec 2024	30 Dec 2024	24 Dec 2024

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS1	SE276128.018	LB334388	16 Dec 2024	19 Dec 2024	30 Dec 2024	24 Dec 2024	30 Dec 2024	27 Dec 2024

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP101	SE276128.001	%	60 - 130%	95
	TP102	SE276128.004	%	60 - 130%	98
	TP103	SE276128.007	%	60 - 130%	98
	TP114	SE276128.010	%	60 - 130%	99
	TP115	SE276128.014	%	60 - 130%	96
	DDS1	SE276128.016	%	60 - 130%	99

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	RS1	SE276128.018	%	40 - 130%	105

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP101	SE276128.001	%	60 - 130%	94
	TP102	SE276128.004	%	60 - 130%	95
	TP103	SE276128.007	%	60 - 130%	94
	TP114	SE276128.010	%	60 - 130%	96
	TP115	SE276128.014	%	60 - 130%	93
	DDS1	SE276128.016	%	60 - 130%	97
d14-p-terphenyl (Surrogate)	TP101	SE276128.001	%	60 - 130%	95
	TP102	SE276128.004	%	60 - 130%	94
	TP103	SE276128.007	%	60 - 130%	94
	TP114	SE276128.010	%	60 - 130%	94
	TP115	SE276128.014	%	60 - 130%	90
	DDS1	SE276128.016	%	60 - 130%	95

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS1	SE276128.018	%	40 - 130%	87
d14-p-terphenyl (Surrogate)	RS1	SE276128.018	%	40 - 130%	95

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP101	SE276128.001	%	70 - 130%	94
	TP101	SE276128.002	%	70 - 130%	93
	TP101	SE276128.003	%	70 - 130%	94
	TP102	SE276128.004	%	70 - 130%	95
	TP102	SE276128.005	%	70 - 130%	93
	TP102	SE276128.006	%	70 - 130%	96
	TP103	SE276128.007	%	70 - 130%	94
	TP103	SE276128.008	%	70 - 130%	92
	TP103	SE276128.009	%	70 - 130%	95
	TP114	SE276128.010	%	70 - 130%	96
	TP114	SE276128.011	%	70 - 130%	92
	TP114	SE276128.012	%	70 - 130%	90
	TP115	SE276128.013	%	70 - 130%	94
	TP115	SE276128.014	%	70 - 130%	93
	TP115	SE276128.015	%	70 - 130%	93
	DDS1	SE276128.016	%	70 - 130%	97
	DDS2	SE276128.017	%	70 - 130%	94
d14-p-terphenyl (Surrogate)	TP101	SE276128.001	%	70 - 130%	95
	TP101	SE276128.002	%	70 - 130%	95
	TP101	SE276128.003	%	70 - 130%	95
	TP102	SE276128.004	%	70 - 130%	94
	TP102	SE276128.005	%	70 - 130%	94
	TP102	SE276128.006	%	70 - 130%	97
	TP103	SE276128.007	%	70 - 130%	94
	TP103	SE276128.008	%	70 - 130%	92
	TP103	SE276128.009	%	70 - 130%	96
	TP114	SE276128.010	%	70 - 130%	94
	TP114	SE276128.011	%	70 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP114	SE276128.012	%	70 - 130%	93
	TP115	SE276128.013	%	70 - 130%	94
	TP115	SE276128.014	%	70 - 130%	90
	TP115	SE276128.015	%	70 - 130%	90
	DDS1	SE276128.016	%	70 - 130%	95
	DDS2	SE276128.017	%	70 - 130%	91
d5-nitrobenzene (Surrogate)	TP101	SE276128.001	%	70 - 130%	91
	TP101	SE276128.002	%	70 - 130%	94
	TP101	SE276128.003	%	70 - 130%	95
	TP102	SE276128.004	%	70 - 130%	96
	TP102	SE276128.005	%	70 - 130%	93
	TP102	SE276128.006	%	70 - 130%	96
	TP103	SE276128.007	%	70 - 130%	95
	TP103	SE276128.008	%	70 - 130%	94
	TP103	SE276128.009	%	70 - 130%	96
	TP114	SE276128.010	%	70 - 130%	96
	TP114	SE276128.011	%	70 - 130%	92
	TP114	SE276128.012	%	70 - 130%	95
	TP115	SE276128.013	%	70 - 130%	95
	TP115	SE276128.014	%	70 - 130%	93
	TP115	SE276128.015	%	70 - 130%	92
	DDS1	SE276128.016	%	70 - 130%	96
	DDS2	SE276128.017	%	70 - 130%	94

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS1	SE276128.018	%	40 - 130%	87
d14-p-terphenyl (Surrogate)	RS1	SE276128.018	%	40 - 130%	95
d5-nitrobenzene (Surrogate)	RS1	SE276128.018	%	40 - 130%	94

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP101	SE276128.001	%	60 - 130%	95
	TP102	SE276128.004	%	60 - 130%	98
	TP103	SE276128.007	%	60 - 130%	98
	TP114	SE276128.010	%	60 - 130%	99
	TP115	SE276128.014	%	60 - 130%	96
	DDS1	SE276128.016	%	60 - 130%	99

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	RS1	SE276128.018	%	40 - 130%	102

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	67
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 300%	92
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 300%	87
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 300%	100
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	100
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	89
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	131
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	91
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	5 - 150%	103
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	101
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	95
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	35 - 150%	91
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	95
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	30 - 150%	100
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	93
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	20 - 150%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	40 - 150%	105
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	82
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	30 - 170%	70
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	89
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	20 - 150%	91
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	82
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	DSS2	SE276128.020	%	10 - 150%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP101	SE276128.001	%	60 - 130%	95
	TP102	SE276128.004	%	60 - 130%	91
	TP103	SE276128.007	%	60 - 130%	88
	TP114	SE276128.010	%	60 - 130%	89
	TP115	SE276128.014	%	60 - 130%	87
	DDS1	SE276128.016	%	60 - 130%	97
	TS1	SE276128.019	%	60 - 130%	84
d4-1,2-dichloroethane (Surrogate)	TP101	SE276128.001	%	60 - 130%	97
	TP102	SE276128.004	%	60 - 130%	83
	TP103	SE276128.007	%	60 - 130%	86
	TP114	SE276128.010	%	60 - 130%	83
	TP115	SE276128.014	%	60 - 130%	82
	DDS1	SE276128.016	%	60 - 130%	97
	TS1	SE276128.019	%	60 - 130%	81
d8-toluene (Surrogate)	TP101	SE276128.001	%	60 - 130%	98
	TP102	SE276128.004	%	60 - 130%	100
	TP103	SE276128.007	%	60 - 130%	90
	TP114	SE276128.010	%	60 - 130%	90
	TP115	SE276128.014	%	60 - 130%	90
	DDS1	SE276128.016	%	60 - 130%	102
	TS1	SE276128.019	%	60 - 130%	96

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS1	SE276128.018	%	40 - 130%	88
d4-1,2-dichloroethane (Surrogate)	RS1	SE276128.018	%	40 - 130%	96
d8-toluene (Surrogate)	RS1	SE276128.018	%	40 - 130%	86

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP101	SE276128.001	%	60 - 130%	95
	TP102	SE276128.004	%	60 - 130%	91
	TP103	SE276128.007	%	60 - 130%	88
	TP114	SE276128.010	%	60 - 130%	89
	TP115	SE276128.014	%	60 - 130%	87
	DDS1	SE276128.016	%	60 - 130%	97
d4-1,2-dichloroethane (Surrogate)	TP101	SE276128.001	%	60 - 130%	97
	TP102	SE276128.004	%	60 - 130%	83
	TP103	SE276128.007	%	60 - 130%	86
	TP114	SE276128.010	%	60 - 130%	83
	TP115	SE276128.014	%	60 - 130%	82
	DDS1	SE276128.016	%	60 - 130%	97
d8-toluene (Surrogate)	TP101	SE276128.001	%	60 - 130%	98
	TP102	SE276128.004	%	60 - 130%	100
	TP103	SE276128.007	%	60 - 130%	90
	TP114	SE276128.010	%	60 - 130%	90
	TP115	SE276128.014	%	60 - 130%	90
	DDS1	SE276128.016	%	60 - 130%	102

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS1	SE276128.018	%	40 - 130%	88
d4-1,2-dichloroethane (Surrogate)	RS1	SE276128.018	%	60 - 130%	96
d8-toluene (Surrogate)	RS1	SE276128.018	%	40 - 130%	86

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB334060.001	Mercury	mg/L	0.00005	<0.00005

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB334040.001	Mercury	mg/kg	0.05	<0.05

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result
LB334472.001	Arsenic, As	mg/L	0.02	<0.020
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334017.001	Alpha BHC	mg/kg	0.1	<0.1
	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Lindane (gamma BHC)	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1
	Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
	Alpha Endosulfan	mg/kg	0.1	<0.1
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.1	<0.1
	Endrin	mg/kg	0.1	<0.1
	Beta Endosulfan	mg/kg	0.1	<0.1
	p,p'-DDD	mg/kg	0.1	<0.1
	Endrin aldehyde	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endrin ketone	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	96

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334253.001	Alpha BHC	µg/L	0.1	<0.1
	Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
	Beta BHC	µg/L	0.1	<0.1
	Lindane (gamma BHC)	µg/L	0.1	<0.1
	Delta BHC	µg/L	0.1	<0.1
	Heptachlor	µg/L	0.1	<0.1
	Aldrin	µg/L	0.1	<0.1
	Heptachlor epoxide	µg/L	0.1	<0.1
	Gamma Chlordane	µg/L	0.1	<0.1
	Alpha Chlordane	µg/L	0.1	<0.1
	Alpha Endosulfan	µg/L	0.1	<0.1
	p,p'-DDE	µg/L	0.1	<0.1
	Dieldrin	µg/L	0.1	<0.1
	Endrin	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334253.001		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	90

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334017.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	96
		d14-p-terphenyl (Surrogate)	%	-	97

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334253.001		Azinphos-methyl	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	68
		d14-p-terphenyl (Surrogate)	%	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334017.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334017.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	93
		2-fluorobiphenyl (Surrogate)	%	-	96
		d14-p-terphenyl (Surrogate)	%	-	97

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334253.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	80
		2-fluorobiphenyl (Surrogate)	%	-	68
		d14-p-terphenyl (Surrogate)	%	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334017.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	96

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334253.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB334103.001	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
	Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
	Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB334103.001	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
	Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
	Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	mg/kg	0.01	<0.01
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	mg/kg	0.01	<0.01
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	mg/kg	0.01	<0.01

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB334029.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334017.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334253.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334033.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	96
		Bromofluorobenzene (Surrogate)	%	-	96
	Totals	Total BTEX*	mg/kg	0.3	<0.3

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334033.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276132.002	LB334060.014	Mercury	µg/L	0.00005	<0.0001	<0.0001	200	195
SE276136.003	LB334060.024	Mercury	µg/L	0.00005	<0.0001	<0.0001	154	67

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334040.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE276128.017	LB334040.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.018	LB334472.014	Arsenic, As	mg/L	0.02	<0.020	<0.020	200	0
		Cadmium, Cd	mg/L	0.001	<0.001	<0.001	200	0
		Chromium, Cr	mg/L	0.005	<0.005	<0.005	200	0
		Copper, Cu	mg/L	0.005	<0.005	<0.005	200	0
		Lead, Pb	mg/L	0.02	<0.02	<0.02	200	0
		Nickel, Ni	mg/L	0.005	<0.005	<0.005	200	0
		Zinc, Zn	mg/L	0.01	<0.01	<0.01	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334024.011	% Moisture	%w/w	1	10.3	8.4	41	21
SE276128.020	LB334024.020	% Moisture	%w/w	1	12.5	8.6	40	37

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.50	0.50	30	1
SE276128.016	LB334017.024		Alpha BHC	mg/kg	0.1	<0.1	0.0002254738	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0.0016702246	200	0
			Beta BHC	mg/kg	0.1	<0.1	0.0005825103	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	0.0005458958	200	0
			Delta BHC	mg/kg	0.1	<0.1	0.0035014239	200	0
			Heptachlor	mg/kg	0.1	<0.1	0.0005866679	200	0
			Aldrin	mg/kg	0.1	<0.1	0.0025594053	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.016	LB334017.024		Heptachlor epoxide	mg/kg	0.1	<0.1	0.0008094793	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0.0020740687	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0.0010029547	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	0.0030770235	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	0.0025747207	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0.0012120595	200	0
			Dieldrin	mg/kg	0.1	<0.1	0.0318187811	200	0
			Endrin	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0.0024031929	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	0.0004200088	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0.0007734231	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0.0004305368	200	0
			Endrin ketone	mg/kg	0.1	<0.1	0.0026011868	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0.0042566756	200	0
			Mirex	mg/kg	0.1	<0.1	0.0049730732	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	0	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	0	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.50	0.4657831376	30	6

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
SE276128.016	LB334017.024		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0.0001706806	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0002315664	200	0
			Dichlorvos	mg/kg	0.5	<0.5	0.0005860111	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.0017259468	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0.0001302786	200	0
			Malathion	mg/kg	0.2	<0.2	0.0007269751	200	0
			Methidathion	mg/kg	0.5	<0.5	0.0001028766	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	3.4252882096	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4530635471	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4460443023	30	6

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014		Fluoranthene	mg/kg	0.1	<0.1	<0.1	141	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	134	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	149	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	180	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	191	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	185	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	162	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	192	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	194	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.48	0.48	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.48	0.48	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.47	0.49	30	3
SE276128.016	LB334017.024		Naphthalene	mg/kg	0.1	<0.1	0.0104105474	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0.0398805850	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.0292615007	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0143558244	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0040255070	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0087948616	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.1001885104	137	0
			Anthracene	mg/kg	0.1	<0.1	0.0180516920	200	0
			Fluoranthene	mg/kg	0.1	0.2	0.1445871830	96	9
			Pyrene	mg/kg	0.1	0.2	0.1548476093	94	2
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0925504176	141	0
			Chrysene	mg/kg	0.1	0.1	0.1151140667	120	7
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0921388445	142	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0974046755	136	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	0.1895435200	139	0
			Benzo(a)pyrene	mg/kg	0.1	0.1	0.1219876841	115	8
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0807476770	147	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0173979216	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0835219408	152	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	0.1231388248	179	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	0.1936388248	116	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	0.2641388248	126	0
			Total PAH (18)	mg/kg	0.1	0.5	0.6367250537	47	17
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.48	0.4545020312	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.49	0.4530635471	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.47	0.4460443023	30	6

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276146.001	LB334253.014	Naphthalene	µg/L	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	200	0
		Acenaphthylene	µg/L	0.1	<0.1	<0.1	200	0
		Acenaphthene	µg/L	0.1	<0.1	<0.1	200	0
		Fluorene	µg/L	0.1	<0.1	<0.1	200	0
		Phenanthrene	µg/L	0.1	<0.1	<0.1	200	0
		Anthracene	µg/L	0.1	<0.1	<0.1	200	0
		Fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
		Pyrene	µg/L	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	200	0
		Chrysene	µg/L	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276146.001	LB334253.014		Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2	<0.2	200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.4	30	26
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.4	30	29
			d14-p-terphenyl (Surrogate)	µg/L	-	0.3	0.4	30	28

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.50	0.50	30	1
SE276128.016	LB334017.024		Arochlor 1016	mg/kg	0.1	<0.1	0	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	0	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	0	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	0	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	0	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	0	200	0
			Total PCBs	mg/kg	0.1	<0.1	0	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.50	0.466	30	6

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276116.001	LB334103.015	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	109	105	200	4
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	97	94	200	3
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	104	101	200	3
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	109	108	200	0
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	97	97	200	0
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	101	98	200	3
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	143	136	200	5
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	90	82	200	8
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	112	88	200	25
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	100	83	200	19
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	120	101	200	17

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

pH in soil (1:5) (continued)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.014	LB334070.009	pH	pH Units	0.1	10.7	10.9	31	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334029.014	Arsenic, As	mg/kg	1	5	5	49	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	11	8.9	35	21
		Copper, Cu	mg/kg	0.5	26	26	32	1
		Nickel, Ni	mg/kg	0.5	13	12	34	7
		Lead, Pb	mg/kg	1	23	20	35	15
		Zinc, Zn	mg/kg	2	72	66	33	9
SE276128.017	LB334029.022	Arsenic, As	mg/kg	1	4	3	61	20
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.2	6.6	37	8
		Copper, Cu	mg/kg	0.5	13	16	34	20
		Nickel, Ni	mg/kg	0.5	4.9	5.6	40	13
		Lead, Pb	mg/kg	1	24	25	34	8
		Zinc, Zn	mg/kg	2	35	40	35	12

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.010	LB334017.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	178	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE276128.016	LB334017.024		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276146.001	LB334253.014		TRH C10-C14	µg/L	50	77	110	84	35
			TRH C15-C28	µg/L	200	680	980	54	36
			TRH C29-C36	µg/L	200	480	680	64	36
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	1300	1800	50	36
		TRH F Bands	TRH >C10-C16	µg/L	60	110	150	76	35
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	110	150	76	35
			TRH >C16-C34 (F3)	µg/L	500	1100	1500	68	36
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276047.008	LB334033.012	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276047.008	LB334033.012	Monocyclic	o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.6	50	11
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.2	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.2	50	8
		Totals	Total BTEX*	mg/kg	0.3	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE276128.016	LB334033.023	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	8.5	50	14
			d8-toluene (Surrogate)	mg/kg	-	10	9.0	50	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	8.7	50	12
		Totals	Total BTEX*	mg/kg	0.3	<0.3	<0.3	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	11.8	30	22
			d8-toluene (Surrogate)	µg/L	-	9.3	9.4	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	9.2	11.1	30	19
		Totals	Total BTEX	µg/L	3	<3	<3	200	0
SE276203.031	LB334388.026	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	11.2	30	14
			d8-toluene (Surrogate)	µg/L	-	9.5	9.4	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	10.1	30	16
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276047.008	LB334033.012		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.6	50	11
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.2	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.2	50	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE276128.016	LB334033.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	8.5	50	14
			d8-toluene (Surrogate)	mg/kg	-	10	9.0	50	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	8.7	50	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	11.8	30	22
			d8-toluene (Surrogate)	µg/L	-	9.3	9.4	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	9.2	11.1	30	19
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE276203.031	LB334388.026		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	11.2	30	14
			d8-toluene (Surrogate)	µg/L	-	9.5	9.4	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	10.1	30	16
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334040.002	Mercury	mg/kg	0.05	0.18	0.2	80 - 120	88

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334472.002	Arsenic, As	mg/L	0.02	0.46	0.5	80 - 120	93
	Cadmium, Cd	mg/L	0.001	0.44	0.5	80 - 120	87
	Chromium, Cr	mg/L	0.005	0.45	0.5	80 - 120	90
	Copper, Cu	mg/L	0.005	0.44	0.5	80 - 120	88
	Lead, Pb	mg/L	0.02	0.45	0.5	80 - 120	89
	Nickel, Ni	mg/L	0.005	0.44	0.5	80 - 120	89
	Zinc, Zn	mg/L	0.01	0.45	0.5	80 - 120	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	98
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	103
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	100
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	111
		Endrin	mg/kg	0.1	0.2	0.2	60 - 140	100
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	88
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334253.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	98
		Heptachlor	µg/L	0.1	0.2	0.2	60 - 140	103
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	100
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	100
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	111
		p,p'-DDT	µg/L	0.1	0.2	0.2	60 - 140	88
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	101
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Ethion	mg/kg	0.2	1.7	2	60 - 140	84
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	97
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	101

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334253.002		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	10	8	60 - 140	129
		Diazinon (Dimpylate)	µg/L	0.5	11	8	60 - 140	137
		Dichlorvos	µg/L	0.5	7.8	8	60 - 140	97
		Ethion	µg/L	0.2	11	8	60 - 140	132
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002		Naphthalene	mg/kg	0.1	3.8	4	60 - 140	96
		Acenaphthylene	mg/kg	0.1	3.7	4	60 - 140	92
		Acenaphthene	mg/kg	0.1	3.9	4	60 - 140	97
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.0	4	60 - 140	100
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	112
		Pyrene	mg/kg	0.1	4.8	4	60 - 140	120
		Benzo(a)pyrene	mg/kg	0.1	4.8	4	60 - 140	121
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.47	0.5	70 - 130	94
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.48	0.5	70 - 130	97

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.50	0.5	70 - 130	101

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334253.002		Naphthalene	µg/L	0.1	45	40	60 - 140	113
		Acenaphthylene	µg/L	0.1	51	40	60 - 140	126
		Acenaphthene	µg/L	0.1	49	40	60 - 140	123
		Phenanthrene	µg/L	0.1	48	40	60 - 140	120
		Anthracene	µg/L	0.1	45	40	60 - 140	114
		Fluoranthene	µg/L	0.1	47	40	60 - 140	118
		Pyrene	µg/L	0.1	44	40	60 - 140	109
		Benzo(a)pyrene	µg/L	0.1	47	40	60 - 140	118
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.45	0.5	40 - 130	90
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.40	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	µg/L	-	0.38	0.5	40 - 130	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002		Arochlor 1260	mg/kg	0.1	0.4	0.4	60 - 140	110
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334253.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	100

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334103.002	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	0.004	40 - 160	77
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	0.004	40 - 160	98
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	0.004	40 - 160	106
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	0.004	40 - 160	90
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	0.004	40 - 160	84
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	0.004	40 - 160	102
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	0.004	40 - 160	90
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	0.004	40 - 160	95

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334070.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334029.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	3.4	4.81	70 - 130	70
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	95
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	97

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334017.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	92
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	89
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	91
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	89

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334253.002		TRH C10-C14	µg/L	50	1100	1200	60 - 140	92
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	102
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	106
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	103
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334033.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.7	5	60 - 140	74
		Toluene	mg/kg	0.1	4.3	5	60 - 140	86
		Ethylbenzene	mg/kg	0.1	4.0	5	60 - 140	81
		m/p-xylene	mg/kg	0.2	7.9	10	60 - 140	79
		o-xylene	mg/kg	0.1	4.1	5	60 - 140	82

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002	Monocyclic Aromatic	Benzene	µg/L	0.5	40	45.45	60 - 140	87
		Toluene	µg/L	0.5	39	45.45	60 - 140	85
		Ethylbenzene	µg/L	0.5	52	45.45	60 - 140	115
		m/p-xylene	µg/L	1	100	90.9	60 - 140	114
		o-xylene	µg/L	0.5	53	45.45	60 - 140	116
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334033.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	71
		TRH C6-C9	mg/kg	20	59	80	60 - 140	74
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002		TRH C6-C10	µg/L	50	810	946.63	60 - 140	86
		TRH C6-C9	µg/L	40	690	818.71	60 - 140	85
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	520	639.67	60 - 140	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276112.001	LB334060.004	Mercury	mg/L	0.00005	0.0019	<0.0001	0.008	95

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334040.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	83

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.072	LB334472.004	Arsenic, As	mg/L	0.02	0.58	<0.020	0.5	116
		Cadmium, Cd	mg/L	0.001	0.54	<0.001	0.5	107
		Chromium, Cr	mg/L	0.005	0.56	<0.005	0.5	111
		Copper, Cu	mg/L	0.005	0.53	<0.005	0.5	107
		Lead, Pb	mg/L	0.02	0.54	<0.02	0.5	108
		Nickel, Ni	mg/L	0.005	0.55	<0.005	0.5	111
		Zinc, Zn	mg/L	0.01	0.56	<0.01	0.5	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004	Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
		Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
		Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	102
		Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	109
		Aldrin	mg/kg	0.1	0.2	<0.1	0.2	107
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
		Dieldrin	mg/kg	0.1	0.2	<0.1	0.2	110
		Endrin	mg/kg	0.1	0.2	<0.1	0.2	109
		Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	93
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
		Total OC Pesticides	mg/kg	0.1	1.3	<0.1	-	-
		Total OC VIC EPA IWRG621	mg/kg	0.1	1.3	<0.1	-	-
		Total Other OCP VIC EPA IWRG621	mg/kg	0.1	0.6	<0.1	-	-
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.48	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	105
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	103
		Dichlorvos	mg/kg	0.5	1.7	<0.5	2	87
		Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
		Ethion	mg/kg	0.2	2.1	<0.2	2	102
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
		Malathion	mg/kg	0.2	<0.2	<0.2	-	-
		Methidathion	mg/kg	0.5	<0.5	<0.5	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.0	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004		Naphthalene	mg/kg	0.1	3.8	<0.1	4	94
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.7	<0.1	4	91
			Acenaphthene	mg/kg	0.1	3.8	<0.1	4	94
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.5	0.1	4	108
			Anthracene	mg/kg	0.1	3.9	<0.1	4	96
			Fluoranthene	mg/kg	0.1	4.6	0.3	4	108
			Pyrene	mg/kg	0.1	4.8	0.3	4	112
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.1	-	-
			Chrysene	mg/kg	0.1	0.3	0.2	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.1	-	-
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	0.4	0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.9	0.2	4	118
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.1	0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	4.9	0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	5.0	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	5.0	0.3	-	-
			Total PAH (18)	mg/kg	0.1	35	1.6	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.46	0.46	-	92
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.46	0.47	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.47	0.48	-	94

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1260	mg/kg	0.1	0.4	<0.1	0.4	110
			Total PCBs	mg/kg	0.1	0.4	<0.1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.48	0.48	-	95

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334029.004	Arsenic, As	mg/kg	1	46	6	50	79
		Cadmium, Cd	mg/kg	0.3	40	<0.3	50	80
		Chromium, Cr	mg/kg	0.5	50	9.7	50	81
		Copper, Cu	mg/kg	0.5	63	27	50	73
		Nickel, Ni	mg/kg	0.5	50	12	50	76
		Lead, Pb	mg/kg	1	64	29	50	70 ⓖ
		Zinc, Zn	mg/kg	2	99	65	50	68 ⓖ

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004	TRH C10-C14	mg/kg	20	52	<20	40	110
		TRH C15-C28	mg/kg	45	64	<45	40	97
		TRH C29-C36	mg/kg	45	53	<45	40	90
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	170	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276128.001	LB334017.004	TRH F Bands	TRH >C10-C16	mg/kg	25	52	<25	40	108
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	52	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	91
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276047.001	LB334033.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.1	<0.1	5	83
			Toluene	mg/kg	0.1	5.0	<0.1	5	99
			Ethylbenzene	mg/kg	0.1	4.8	<0.1	5	95
			m/p-xylene	mg/kg	0.2	9.3	<0.2	10	93
			o-xylene	mg/kg	0.1	4.9	<0.1	5	97
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	8.1	-	72
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.6	-	90
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.7	-	84
		Totals	Total BTEX*	mg/kg	0.3	28	<0.3	-	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE276136.002	LB334388.028	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5	45.45	102
			Toluene	µg/L	0.5	<0.5	45.45	95
			Ethylbenzene	µg/L	0.5	<0.5	45.45	106
			m/p-xylene	µg/L	1	<1	90.9	107
			o-xylene	µg/L	0.5	<0.5	45.45	108
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	9.5	-	103
			Bromofluorobenzene (Surrogate)	µg/L	-	9.6	-	109
		Totals	Total BTEX	µg/L	3	<3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276047.001	LB334033.004		TRH C6-C10	mg/kg	25	73	<25	92.5	79
			TRH C6-C9	mg/kg	20	67	<20	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	8.1	-	72
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.6	-	90
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	8.7	-	84
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.1	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	<25	62.5	72

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE276136.002	LB334388.028		TRH C6-C10	µg/L	50	<50	946.63	88
			TRH C6-C9	µg/L	40	<40	818.71	88
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	9.5	-	103
			Bromofluorobenzene (Surrogate)	µg/L	-	9.6	-	109
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	-	-
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	639.67	86

MATRIX SPIKE DUPLICATES

SE276128 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** Tuesday, 31 December 2024

Except pH Results Required By 24 hrs **Date:** Friday, 20 December 2024

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: JOHN XU

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC OP PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP;OPP& PCB	Cyanide	VOC	Phenol	PFAS (extended)	TCLP PAH	TCLP	Metals (Retest)
1	TP101	0.0-0.3	16/12/2024	G		Clay		✔	✔			✔																	
2	TP101	0.5-0.8	16/12/2024	G		Clay	✔										✔												
	TP101	1.0-1.2	16/12/2024	G		Clay																							
3	TP101	1.5-1.8	16/12/2024	G		Clay	✔										✔												
	TP101	2.0-2.3	16/12/2024	G		Clay																							
4	TP102	0.0-0.3	16/12/2024	G		Clay						✔																	
5	TP102	0.4-0.7	16/12/2024	G		Clay	✔										✔												
	TP102	1.0-1.3	16/12/2024	G		Clay																							
	TP102	1.5-1.8	16/12/2024	G		Clay																							
6	TP102	2.0-2.3	16/12/2024	G		Clay	✔										✔												
7	TP103	0.0-0.3	16/12/2024	G		Clay		✔	✔			✔																	
	TP103	0.5-0.8	16/12/2024	G		Clay																							
8	TP103	1.0-1.3	16/12/2024	G		Clay	✔										✔												
	TP103	1.5-1.8	16/12/2024	G		Clay																							
9	TP103	2.0-2.3	16/12/2024	G		Clay	✔										✔												
	TP114	0.0-0.3	16/12/2024	G		Clay																							
10	TP114	0.5-0.8	16/12/2024	G		Clay						✔																	
11	TP114	1.0-1.3	16/12/2024	G		Clay	✔										✔												
	TP114	1.5-1.8	16/12/2024	G		Clay																							
12	TP114	2.0-2.3	16/12/2024	G		Clay	✔										✔												
	TP114	2.3-2.5	16/12/2024	G		Clay																							
13	TP115	0.0-0.3	16/12/2024	G		Clay	✔										✔												
	TP115	0.5-0.8	16/12/2024	G		Clay																							
14	TP115	1.0-1.3	16/12/2024	G		Clay		✔	✔			✔																	
	TP115	1.5-1.8	16/12/2024	G		Clay																							
15	TP115	2.0-2.2	16/12/2024	G		Clay	✔										✔												
16	DDS1		16/12/2024	G		Clay						✔																	
17	DDS2		16/12/2024	G		Clay	✔										✔												
18	RS1		16/12/2024		Vial+WG							✔																	

SGS EHS Sydney COC

SE276128

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** Tuesday, 31 December 2024

Except pH Results Required By 24 hrs **Date:** Friday, 20 December 2024

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: JOHN XU

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC OP PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP& PCB	Cyanide	VOC	Phenol	PFAS (extended)	TCLP PAH	TCLP	Metals (Retest)
19	TS1		16/12/2024	Vial											✔														
	DSS1		16/12/2024	SP		Clay																							
20	DSS2		16/12/2024	SP		Clay																				✔			
	DSS3		16/12/2024	SP		Clay																							
	DSS4		16/12/2024	SP		Clay																							

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	19/12/2024			19/12/24 @ 3:25

WG: Water sample (glass bottle) G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag)
WP: Water sample (plastic bottle) SP Soil sample (plastic jar) ✔ Test required

SAMPLE RECEIPT ADVICE

SE276128

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	20

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 19/12/2024
Report Due	Tue 31/12/2024
SGS Reference	**SE276128**

SUBMISSION DETAILS

This is to confirm that 20 samples were received on Thursday 19/12/2024. Results are expected to be ready by COB Tuesday 31/12/2024.
Please quote SGS reference SE276128 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	19 Clay/Soil, 1 Water	Type of documentation received	COC
Date documentation received	19/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	8.6°C
Sample container provider	SGS	Turnaround time requested	Standard/Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

14 Soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE276128

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP101 0.0-0.3	27	14	27	8	1	10	11	7
002	TP101 0.5-0.8	-	-	27	-	-	-	-	-
003	TP101 1.5-1.8	-	-	27	-	-	-	-	-
004	TP102 0.0-0.3	27	14	27	8	-	10	11	7
005	TP102 0.4-0.7	-	-	27	-	-	-	-	-
006	TP102 2.0-2.3	-	-	27	-	-	-	-	-
007	TP103 0.0-0.3	27	14	27	8	1	10	11	7
008	TP103 1.0-1.3	-	-	27	-	-	-	-	-
009	TP103 2.0-2.3	-	-	27	-	-	-	-	-
010	TP114 0.5-0.8	27	14	27	8	-	10	11	7
011	TP114 1.0-1.3	-	-	27	-	-	-	-	-
012	TP114 2.0-2.3	-	-	27	-	-	-	-	-
013	TP115 0.0-0.3	-	-	27	-	-	-	-	-
014	TP115 1.0-1.3	27	14	27	8	1	10	11	7
015	TP115 2.0-2.2	-	-	27	-	-	-	-	-
016	DDS1	27	14	27	8	-	10	11	7
017	DDS2	-	-	27	-	-	-	-	-
019	TS1	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE276128

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	TP101 0.0-0.3	9	1	1	-	7	-	-
002	TP101 0.5-0.8	-	1	1	-	7	-	-
003	TP101 1.5-1.8	-	1	1	-	7	-	-
004	TP102 0.0-0.3	-	1	1	-	7	-	-
005	TP102 0.4-0.7	-	1	1	-	7	-	-
006	TP102 2.0-2.3	-	1	1	-	7	-	-
007	TP103 0.0-0.3	9	1	1	-	7	-	-
008	TP103 1.0-1.3	-	1	1	-	7	-	-
009	TP103 2.0-2.3	-	1	1	-	7	-	-
010	TP114 0.5-0.8	-	1	1	-	7	-	-
011	TP114 1.0-1.3	-	1	1	-	7	-	-
012	TP114 2.0-2.3	-	1	1	-	7	-	-
013	TP115 0.0-0.3	-	1	1	-	7	-	-
014	TP115 1.0-1.3	9	1	1	-	7	-	-
015	TP115 2.0-2.2	-	1	1	-	7	-	-
016	DDS1	-	1	1	-	7	-	-
017	DDS2	-	1	1	-	7	-	-
018	RS1	-	-	-	-	-	11	7
020	DSS2	-	-	1	57	-	-	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276128

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	TRH (Total Recoverable Hydrocarbons) in Water
018	RS1	1	7	25	13	23	9	9

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	34

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Date Received	20/12/2024
Date Reported	6/1/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

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VOC's in Soil [AN433] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031	TS2 SOIL - 18/12/2024 SE276224.034
Benzene	mg/kg	0.1	<0.1	[99%]
Toluene	mg/kg	0.1	<0.1	[98%]
Ethylbenzene	mg/kg	0.1	<0.1	[99%]
m/p-xylene	mg/kg	0.2	<0.2	[99%]
o-xylene	mg/kg	0.1	<0.1	[98%]
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	-
Total BTEX*	mg/kg	0.3	<0.3	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP104 SOIL 1.5-1.8 19/12/2024 SE276224.002	TP104 SOIL 2.0-2.3 19/12/2024 SE276224.003	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP105 SOIL 1.0-1.3 19/12/2024 SE276224.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.3**	**0.1**	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.3**	**0.1**	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	**0.3**	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	**0.3**	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	**0.4**	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	**0.4**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	**2.0**	**0.2**	**0.2**	<0.1	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	**2.0**	**0.2**	**0.2**	<0.1	<0.1

PARAMETER	UOM	LOR	TP105 SOIL 1.5-1.8 19/12/2024 SE276224.006	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP106 SOIL 1.0-1.3 18/12/2024 SE276224.008	TP106 SOIL 2.0-2.3 18/12/2024 SE276224.009	TP107 SOIL 0.0-0.3 19/12/2024 SE276224.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	**0.3**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	<0.1	<0.1	**1.6**	<0.1	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	<0.1	<0.1	**1.6**	<0.1	<0.1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP107 SOIL 2.0-2.3 19/12/2024 SE276224.012	TP108 SOIL 0.0-0.3 18/12/2024 SE276224.013	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014	TP108 SOIL 1.5-1.8 18/12/2024 SE276224.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	**0.2**	<0.1	**0.1**	<0.1	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	**0.2**	<0.1	**0.1**	<0.1	<0.1

PARAMETER	UOM	LOR	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016	TP109 SOIL 1.0-1.3 18/12/2024 SE276224.017	TP109 SOIL 2.0-2.3 18/12/2024 SE276224.018	TP110 SOIL 0.0-0.3 18/12/2024 SE276224.019	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP110 SOIL 2.0-2.3 18/12/2024 SE276224.021	TP111 SOIL 0.0-0.3 19/12/2024 SE276224.022	TP111 SOIL 1.0-1.3 19/12/2024 SE276224.023	TP111 SOIL 2.0-2.3 19/12/2024 SE276224.024	TP112 SOIL 0.0-0.3 19/12/2024 SE276224.025
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.9	0.3	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	2.2	0.6	0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	2.3	0.6	0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	1.3	0.3	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	1.2	0.3	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	1.0	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	1.2	0.2	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	2.2	0.5	<0.2
Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	1.5	0.3	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	1.0	0.2	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.8	0.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	2.2	0.4	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	2.2	0.5	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	2.2	0.5	<0.2
Total PAH (18)	mg/kg	0.1	0.1	<0.1	14	3.2	0.2
Total PAH (NEPM/WHO 16)	mg/kg	0.1	0.1	<0.1	14	3.2	0.2

PARAMETER	UOM	LOR	TP112 SOIL 1.0-1.3 19/12/2024 SE276224.026	TP112 SOIL 2.0-2.3 19/12/2024 SE276224.027	TP113 SOIL 0.0-0.3 18/12/2024 SE276224.028	TP113 SOIL 1.0-1.3 18/12/2024 SE276224.029	TP113 SOIL 2.0-2.3 18/12/2024 SE276224.030
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.4
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.4
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	0.3
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	0.3
Total PAH (18)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	2.6
Total PAH (NEPM/WHO 16)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	2.1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**
Pyrene	mg/kg	0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2
Total PAH (18)	mg/kg	0.1	**0.2**
Total PAH (NEPM/WHO 16)	mg/kg	0.1	**0.2**

OC Pesticides in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Alpha BHC	mg/kg	0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1
Endrin	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1

OP Pesticides in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Arochlor 1016	mg/kg	0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1

pH in soil (1:5) [AN101] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014
pH	pH Units	0.1	**8.2**	**6.1**	**8.3**	**8.6**	**8.7**

PARAMETER	UOM	LOR	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
pH	pH Units	0.1	**4.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 27/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	22	4.9	16	16	9.3
Exchangeable Calcium Percentage*	%	0.1	79.2	47.0	62.9	72.9	53.8
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.30	0.24	0.34	0.33	0.30
Exchangeable Potassium Percentage*	%	0.1	1.1	2.3	1.3	1.5	1.7
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	3.1	4.5	6.0	3.5	4.2
Exchangeable Magnesium Percentage*	%	0.1	11.0	43.3	23.6	16.4	24.1
Exchangeable Sodium, Na	cmol (+)/kg	0.01	2.4	0.76	3.1	2.0	3.5
Exchangeable Sodium Percentage*	%	0.1	8.7	7.4	12.2	9.2	20.4
Cation Exchange Capacity	cmol (+)/kg	0.02	28	10	25	21	17

PARAMETER	UOM	LOR	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	2.8
Exchangeable Calcium Percentage*	%	0.1	35.7
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.38
Exchangeable Potassium Percentage*	%	0.1	4.8
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	3.0
Exchangeable Magnesium Percentage*	%	0.1	38.5
Exchangeable Sodium, Na	cmol (+)/kg	0.01	1.7
Exchangeable Sodium Percentage*	%	0.1	21.0
Cation Exchange Capacity	cmol (+)/kg	0.02	7.9

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP104 SOIL 1.5-1.8 19/12/2024 SE276224.002	TP104 SOIL 2.0-2.3 19/12/2024 SE276224.003	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP105 SOIL 1.0-1.3 19/12/2024 SE276224.005
Arsenic, As	mg/kg	1	6	7	5	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	14	7.9	14	14
Copper, Cu	mg/kg	0.5	30	28	25	19	15
Lead, Pb	mg/kg	1	33	30	31	17	20
Nickel, Ni	mg/kg	0.5	10	15	9.6	11	7.6
Zinc, Zn	mg/kg	2	63	65	62	37	28

PARAMETER	UOM	LOR	TP105 SOIL 1.5-1.8 19/12/2024 SE276224.006	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP106 SOIL 1.0-1.3 18/12/2024 SE276224.008	TP106 SOIL 2.0-2.3 18/12/2024 SE276224.009	TP107 SOIL 0.0-0.3 19/12/2024 SE276224.010
Arsenic, As	mg/kg	1	3	7	9	13	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.8	8.9	14	6.8	8.4
Copper, Cu	mg/kg	0.5	28	24	57	30	23
Lead, Pb	mg/kg	1	13	23	500	29	22
Nickel, Ni	mg/kg	0.5	10	10	6.1	15	10
Zinc, Zn	mg/kg	2	52	55	190	78	51

PARAMETER	UOM	LOR	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP107 SOIL 2.0-2.3 19/12/2024 SE276224.012	TP108 SOIL 0.0-0.3 18/12/2024 SE276224.013	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014	TP108 SOIL 1.5-1.8 18/12/2024 SE276224.015
Arsenic, As	mg/kg	1	7	7	5	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.2	14	7.2	7.2	9.4
Copper, Cu	mg/kg	0.5	28	24	22	23	17
Lead, Pb	mg/kg	1	26	25	18	25	16
Nickel, Ni	mg/kg	0.5	10	12	13	12	6.0
Zinc, Zn	mg/kg	2	52	57	58	67	26

PARAMETER	UOM	LOR	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016	TP109 SOIL 1.0-1.3 18/12/2024 SE276224.017	TP109 SOIL 2.0-2.3 18/12/2024 SE276224.018	TP110 SOIL 0.0-0.3 18/12/2024 SE276224.019	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
Arsenic, As	mg/kg	1	7	5	6	6	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.3	7.6	7.8	11	5.5
Copper, Cu	mg/kg	0.5	25	21	25	20	11
Lead, Pb	mg/kg	1	17	18	18	21	23
Nickel, Ni	mg/kg	0.5	12	15	12	9.5	1.4
Zinc, Zn	mg/kg	2	58	72	56	44	14

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

(continued)

PARAMETER	UOM	LOR	TP110 SOIL 2.0-2.3 18/12/2024 SE276224.021	TP111 SOIL 0.0-0.3 19/12/2024 SE276224.022	TP111 SOIL 1.0-1.3 19/12/2024 SE276224.023	TP111 SOIL 2.0-2.3 19/12/2024 SE276224.024	TP112 SOIL 0.0-0.3 19/12/2024 SE276224.025
Arsenic, As	mg/kg	1	6	7	4	6	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.7	13	23	11	9.2
Copper, Cu	mg/kg	0.5	22	18	81	30	36
Lead, Pb	mg/kg	1	33	21	120	66	23
Nickel, Ni	mg/kg	0.5	11	9.0	6.2	8.5	12
Zinc, Zn	mg/kg	2	68	41	190	57	59

PARAMETER	UOM	LOR	TP112 SOIL 1.0-1.3 19/12/2024 SE276224.026	TP112 SOIL 2.0-2.3 19/12/2024 SE276224.027	TP113 SOIL 0.0-0.3 18/12/2024 SE276224.028	TP113 SOIL 1.0-1.3 18/12/2024 SE276224.029	TP113 SOIL 2.0-2.3 18/12/2024 SE276224.030
Arsenic, As	mg/kg	1	4	6	6	7	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	10	6.5	8.6	8.8	8.7
Copper, Cu	mg/kg	0.5	11	23	21	23	27
Lead, Pb	mg/kg	1	15	27	21	22	26
Nickel, Ni	mg/kg	0.5	2.8	5.6	9.0	9.2	14
Zinc, Zn	mg/kg	2	18	40	48	53	62

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Arsenic, As	mg/kg	1	6
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.3
Copper, Cu	mg/kg	0.5	26
Lead, Pb	mg/kg	1	18
Nickel, Ni	mg/kg	0.5	12
Zinc, Zn	mg/kg	2	54

Mercury in Soil [AN312] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP104 SOIL 1.5-1.8 19/12/2024 SE276224.002	TP104 SOIL 2.0-2.3 19/12/2024 SE276224.003	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP105 SOIL 1.0-1.3 19/12/2024 SE276224.005
Mercury	mg/kg	0.05	**0.13**	**0.92**	**0.07**	<0.05	<0.05

PARAMETER	UOM	LOR	TP105 SOIL 1.5-1.8 19/12/2024 SE276224.006	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP106 SOIL 1.0-1.3 18/12/2024 SE276224.008	TP106 SOIL 2.0-2.3 18/12/2024 SE276224.009	TP107 SOIL 0.0-0.3 19/12/2024 SE276224.010
Mercury	mg/kg	0.05	<0.05	<0.05	**0.63**	**0.07**	<0.05

PARAMETER	UOM	LOR	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP107 SOIL 2.0-2.3 19/12/2024 SE276224.012	TP108 SOIL 0.0-0.3 18/12/2024 SE276224.013	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014	TP108 SOIL 1.5-1.8 18/12/2024 SE276224.015
Mercury	mg/kg	0.05	**0.06**	<0.05	<0.05	**0.06**	<0.05

PARAMETER	UOM	LOR	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016	TP109 SOIL 1.0-1.3 18/12/2024 SE276224.017	TP109 SOIL 2.0-2.3 18/12/2024 SE276224.018	TP110 SOIL 0.0-0.3 18/12/2024 SE276224.019	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
Mercury	mg/kg	0.05	<0.05	**0.06**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP110 SOIL 2.0-2.3 18/12/2024 SE276224.021	TP111 SOIL 0.0-0.3 19/12/2024 SE276224.022	TP111 SOIL 1.0-1.3 19/12/2024 SE276224.023	TP111 SOIL 2.0-2.3 19/12/2024 SE276224.024	TP112 SOIL 0.0-0.3 19/12/2024 SE276224.025
Mercury	mg/kg	0.05	**0.17**	<0.05	**0.17**	**0.08**	<0.05

PARAMETER	UOM	LOR	TP112 SOIL 1.0-1.3 19/12/2024 SE276224.026	TP112 SOIL 2.0-2.3 19/12/2024 SE276224.027	TP113 SOIL 0.0-0.3 18/12/2024 SE276224.028	TP113 SOIL 1.0-1.3 18/12/2024 SE276224.029	TP113 SOIL 2.0-2.3 18/12/2024 SE276224.030
Mercury	mg/kg	0.05	<0.05	<0.05	**0.06**	<0.05	<0.05

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP104 SOIL 0.5-0.8 19/12/2024 SE276224.001	TP104 SOIL 1.5-1.8 19/12/2024 SE276224.002	TP104 SOIL 2.0-2.3 19/12/2024 SE276224.003	TP105 SOIL 0.0-0.3 19/12/2024 SE276224.004	TP105 SOIL 1.0-1.3 19/12/2024 SE276224.005
% Moisture	%w/w	1	9.5	12.9	9.7	11.4	18.2

PARAMETER	UOM	LOR	TP105 SOIL 1.5-1.8 19/12/2024 SE276224.006	TP106 SOIL 0.0-0.3 18/12/2024 SE276224.007	TP106 SOIL 1.0-1.3 18/12/2024 SE276224.008	TP106 SOIL 2.0-2.3 18/12/2024 SE276224.009	TP107 SOIL 0.0-0.3 19/12/2024 SE276224.010
% Moisture	%w/w	1	17.3	8.4	11.5	9.8	5.3

PARAMETER	UOM	LOR	TP107 SOIL 1.0-1.3 19/12/2024 SE276224.011	TP107 SOIL 2.0-2.3 19/12/2024 SE276224.012	TP108 SOIL 0.0-0.3 18/12/2024 SE276224.013	TP108 SOIL 0.5-0.8 18/12/2024 SE276224.014	TP108 SOIL 1.5-1.8 18/12/2024 SE276224.015
% Moisture	%w/w	1	6.3	9.3	7.3	5.8	11.5

PARAMETER	UOM	LOR	TP109 SOIL 0.0-0.3 18/12/2024 SE276224.016	TP109 SOIL 1.0-1.3 18/12/2024 SE276224.017	TP109 SOIL 2.0-2.3 18/12/2024 SE276224.018	TP110 SOIL 0.0-0.3 18/12/2024 SE276224.019	TP110 SOIL 1.0-1.3 18/12/2024 SE276224.020
% Moisture	%w/w	1	4.2	8.7	12.8	7.8	8.6

PARAMETER	UOM	LOR	TP110 SOIL 2.0-2.3 18/12/2024 SE276224.021	TP111 SOIL 0.0-0.3 19/12/2024 SE276224.022	TP111 SOIL 1.0-1.3 19/12/2024 SE276224.023	TP111 SOIL 2.0-2.3 19/12/2024 SE276224.024	TP112 SOIL 0.0-0.3 19/12/2024 SE276224.025
% Moisture	%w/w	1	7.5	13.9	12.5	11.3	4.1

PARAMETER	UOM	LOR	TP112 SOIL 1.0-1.3 19/12/2024 SE276224.026	TP112 SOIL 2.0-2.3 19/12/2024 SE276224.027	TP113 SOIL 0.0-0.3 18/12/2024 SE276224.028	TP113 SOIL 1.0-1.3 18/12/2024 SE276224.029	TP113 SOIL 2.0-2.3 18/12/2024 SE276224.030
% Moisture	%w/w	1	12.3	13.9	4.7	9.0	11.2

PARAMETER	UOM	LOR	DDS4 SOIL - 19/12/2024 SE276224.031	DSS9 SOIL - 19/12/2024 SE276224.032
% Moisture	%w/w	1	9.6	17.0

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [AN404] Tested: 23/12/2024

PARAMETER	UOM	LOR	DSS9 SOIL - 19/12/2024 SE276224.032
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
Sum PFOS and PFHxS	mg/kg	0.005	<0.005
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of US EPA PFAS (PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of Positive PFAS	mg/kg	0.005	<0.005

VOCs in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

OC Pesticides in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
Alpha BHC	µg/L	0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Aldrin	µg/L	0.1	<0.1
Beta BHC	µg/L	0.1	<0.1
Delta BHC	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Total OC	µg/L	1	<1
Total OC	µg/L	1	<1

OP Pesticides in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2

PCBs in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Metals in Water (Dissolved) by ICPOES [AN320] Tested: 30/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Arsenic, As	mg/L	0.02	<0.020
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	<0.01

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS2 WATER - 18/12/2024 SE276224.033
Mercury	mg/L	0.00005	<0.00005

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.

AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE276224 R0

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Order Number	**20465/8**
Samples	34

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SGS Reference	**SE276224 R0**
Date Received	20 Dec 2024
Date Reported	06 Jan 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	OC Pesticides in Water	1 item
	OP Pesticides in Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	1 item
	PCBs in Water	1 item
	TRH (Total Recoverable Hydrocarbons) in Water	1 item
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
Matrix Spike	TRH (Total Recoverable Hydrocarbons) in Soil	3 items

SAMPLE SUMMARY

Sample counts by matrix	33 Soil, 1 Water	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Two Days/Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP105	SE276224.004	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP106	SE276224.007	LB334446	18 Dec 2024	20 Dec 2024	15 Jan 2025	27 Dec 2024	15 Jan 2025	02 Jan 2025
TP107	SE276224.011	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP108	SE276224.014	LB334446	18 Dec 2024	20 Dec 2024	15 Jan 2025	27 Dec 2024	15 Jan 2025	02 Jan 2025
TP110	SE276224.020	LB334446	18 Dec 2024	20 Dec 2024	15 Jan 2025	27 Dec 2024	15 Jan 2025	02 Jan 2025

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334447	18 Dec 2024	20 Dec 2024	15 Jan 2025	27 Dec 2024	15 Jan 2025	27 Dec 2024

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP104	SE276224.002	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP104	SE276224.003	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP105	SE276224.004	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP105	SE276224.005	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP105	SE276224.006	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP106	SE276224.007	LB334359	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	30 Dec 2024
TP106	SE276224.008	LB334359	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	30 Dec 2024
TP106	SE276224.009	LB334359	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	30 Dec 2024
TP107	SE276224.010	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP107	SE276224.011	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP107	SE276224.012	LB334359	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	30 Dec 2024
TP108	SE276224.013	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP108	SE276224.014	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP108	SE276224.015	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP109	SE276224.016	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP109	SE276224.017	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP109	SE276224.018	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP110	SE276224.019	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP110	SE276224.020	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP110	SE276224.021	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP111	SE276224.022	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP111	SE276224.023	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP111	SE276224.024	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP112	SE276224.025	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP112	SE276224.026	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP112	SE276224.027	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP113	SE276224.028	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP113	SE276224.029	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
TP113	SE276224.030	LB334360	18 Dec 2024	20 Dec 2024	15 Jan 2025	23 Dec 2024	15 Jan 2025	03 Jan 2025
DDS4	SE276224.031	LB334360	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334472	18 Dec 2024	20 Dec 2024	16 Jun 2025	30 Dec 2024	16 Jun 2025	30 Dec 2024

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP104	SE276224.002	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP104	SE276224.003	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP105	SE276224.004	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP105	SE276224.005	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP105	SE276224.006	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP106	SE276224.007	LB334341	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP106	SE276224.008	LB334341	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP106	SE276224.009	LB334341	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP107	SE276224.010	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP107	SE276224.011	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP107	SE276224.012	LB334341	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP108	SE276224.013	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP108	SE276224.014	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP108	SE276224.015	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP109	SE276224.016	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP109	SE276224.017	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP109	SE276224.018	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP110	SE276224.019	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP110	SE276224.020	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP110	SE276224.021	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP111	SE276224.022	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP111	SE276224.023	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP111	SE276224.024	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP112	SE276224.025	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP112	SE276224.026	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP112	SE276224.027	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP113	SE276224.028	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP113	SE276224.029	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP113	SE276224.030	LB334342	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS4	SE276224.031	LB334342	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DSS9	SE276224.032	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP104	SE276224.002	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP104	SE276224.003	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.004	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.005	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.006	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.007	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.008	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.009	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.010	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.011	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.012	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.013	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.014	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.015	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.016	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP109	SE276224.017	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.018	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.019	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.020	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.021	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.022	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.023	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.024	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.025	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.026	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.027	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.028	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.029	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.030	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS4	SE276224.031	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334429	18 Dec 2024	20 Dec 2024	25 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP104	SE276224.002	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP104	SE276224.003	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.004	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.005	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.006	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.007	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.008	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.009	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.010	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.011	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.012	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.013	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.014	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.015	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.016	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP109	SE276224.017	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.018	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.019	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.020	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.021	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.022	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.023	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.024	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.025	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.026	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.027	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.028	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.029	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.030	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS4	SE276224.031	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334429	18 Dec 2024	20 Dec 2024	25 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP104	SE276224.002	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP104	SE276224.003	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.004	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.005	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.006	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.007	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.008	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.009	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.010	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.011	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.012	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP108	SE276224.013	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP108	SE276224.014	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP108	SE276224.015	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP109	SE276224.016	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP109	SE276224.017	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP109	SE276224.018	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP110	SE276224.019	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP110	SE276224.020	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP110	SE276224.021	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP111	SE276224.022	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP111	SE276224.023	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP111	SE276224.024	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP112	SE276224.025	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP112	SE276224.026	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP112	SE276224.027	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP113	SE276224.028	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP113	SE276224.029	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP113	SE276224.030	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
DDS4	SE276224.031	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334429	18 Dec 2024	20 Dec 2024	25 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP104	SE276224.002	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP104	SE276224.003	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.004	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.005	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.006	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.007	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.008	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.009	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.010	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.011	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.012	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.013	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.014	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.015	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.016	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.017	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.018	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.019	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.020	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.021	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.022	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.023	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.024	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.025	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.026	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.027	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.028	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.029	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.030	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS4	SE276224.031	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334429	18 Dec 2024	20 Dec 2024	25 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DSS9	SE276224.032	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP105	SE276224.004	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP106	SE276224.007	LB334305	18 Dec 2024	20 Dec 2024	25 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP107	SE276224.011	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP108	SE276224.014	LB334305	18 Dec 2024	20 Dec 2024	25 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP110	SE276224.020	LB334305	18 Dec 2024	20 Dec 2024	25 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP104	SE276224.002	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP104	SE276224.003	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP105	SE276224.004	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP105	SE276224.005	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP105	SE276224.006	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP106	SE276224.007	LB334350	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP106	SE276224.008	LB334350	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP106	SE276224.009	LB334350	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP107	SE276224.010	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP107	SE276224.011	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP107	SE276224.012	LB334350	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP108	SE276224.013	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP108	SE276224.014	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP108	SE276224.015	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP109	SE276224.016	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP109	SE276224.017	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP109	SE276224.018	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP110	SE276224.019	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP110	SE276224.020	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP110	SE276224.021	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP111	SE276224.022	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP111	SE276224.023	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP111	SE276224.024	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP112	SE276224.025	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP112	SE276224.026	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP112	SE276224.027	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP113	SE276224.028	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP113	SE276224.029	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
TP113	SE276224.030	LB334351	18 Dec 2024	20 Dec 2024	16 Jun 2025	23 Dec 2024	16 Jun 2025	30 Dec 2024
DDS4	SE276224.031	LB334351	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP104	SE276224.002	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP104	SE276224.003	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.004	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP105	SE276224.005	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP105	SE276224.006	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.007	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP106	SE276224.008	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP106	SE276224.009	LB334327	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.010	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP107	SE276224.011	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP107	SE276224.012	LB334327	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.013	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

HOLDING TIME SUMMARY

SE276224 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP108	SE276224.014	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP108	SE276224.015	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.016	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP109	SE276224.017	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP109	SE276224.018	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.019	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.020	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP110	SE276224.021	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.022	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.023	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP111	SE276224.024	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.025	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.026	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP112	SE276224.027	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.028	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.029	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP113	SE276224.030	LB334328	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS4	SE276224.031	LB334328	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334429	18 Dec 2024	20 Dec 2024	25 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP105	SE276224.004	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP106	SE276224.007	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	27 Dec 2024
TP107	SE276224.011	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP109	SE276224.016	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	27 Dec 2024
DDS4	SE276224.031	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TS2	SE276224.034	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	27 Dec 2024

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334388	18 Dec 2024	20 Dec 2024	01 Jan 2025	24 Dec 2024	01 Jan 2025	27 Dec 2024

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP104	SE276224.001	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP105	SE276224.004	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP106	SE276224.007	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	27 Dec 2024
TP107	SE276224.011	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP109	SE276224.016	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	27 Dec 2024
DDS4	SE276224.031	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TS2	SE276224.034	LB334332	18 Dec 2024	20 Dec 2024	01 Jan 2025	23 Dec 2024	01 Jan 2025	06 Jan 2025†

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS2	SE276224.033	LB334388	18 Dec 2024	20 Dec 2024	01 Jan 2025	24 Dec 2024	01 Jan 2025	27 Dec 2024

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP104	SE276224.001	%	60 - 130%	93
	TP105	SE276224.004	%	60 - 130%	93
	TP106	SE276224.007	%	60 - 130%	90
	TP107	SE276224.011	%	60 - 130%	97
	TP109	SE276224.016	%	60 - 130%	94
	DDS4	SE276224.031	%	60 - 130%	92

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	RS2	SE276224.033	%	40 - 130%	113

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP104	SE276224.001	%	60 - 130%	90
	TP105	SE276224.004	%	60 - 130%	91
	TP106	SE276224.007	%	60 - 130%	96
	TP107	SE276224.011	%	60 - 130%	94
	TP109	SE276224.016	%	60 - 130%	90
	DDS4	SE276224.031	%	60 - 130%	88
d14-p-terphenyl (Surrogate)	TP104	SE276224.001	%	60 - 130%	90
	TP105	SE276224.004	%	60 - 130%	91
	TP106	SE276224.007	%	60 - 130%	101
	TP107	SE276224.011	%	60 - 130%	94
	TP109	SE276224.016	%	60 - 130%	91
	DDS4	SE276224.031	%	60 - 130%	89

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS2	SE276224.033	%	40 - 130%	86
d14-p-terphenyl (Surrogate)	RS2	SE276224.033	%	40 - 130%	87

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP104	SE276224.001	%	70 - 130%	90
	TP104	SE276224.002	%	70 - 130%	93
	TP104	SE276224.003	%	70 - 130%	91
	TP105	SE276224.004	%	70 - 130%	91
	TP105	SE276224.005	%	70 - 130%	96
	TP105	SE276224.006	%	70 - 130%	94
	TP106	SE276224.007	%	70 - 130%	96
	TP106	SE276224.008	%	70 - 130%	92
	TP106	SE276224.009	%	70 - 130%	92
	TP107	SE276224.010	%	70 - 130%	94
	TP107	SE276224.011	%	70 - 130%	94
	TP107	SE276224.012	%	70 - 130%	92
	TP108	SE276224.013	%	70 - 130%	93
	TP108	SE276224.014	%	70 - 130%	90
	TP108	SE276224.015	%	70 - 130%	93
	TP109	SE276224.016	%	70 - 130%	90
	TP109	SE276224.017	%	70 - 130%	93
	TP109	SE276224.018	%	70 - 130%	93
	TP110	SE276224.019	%	70 - 130%	92
	TP110	SE276224.020	%	70 - 130%	93
	TP110	SE276224.021	%	70 - 130%	92
	TP111	SE276224.022	%	70 - 130%	91
	TP111	SE276224.023	%	70 - 130%	91
	TP111	SE276224.024	%	70 - 130%	93
	TP112	SE276224.025	%	70 - 130%	79
	TP112	SE276224.026	%	70 - 130%	92
	TP112	SE276224.027	%	70 - 130%	92
	TP113	SE276224.028	%	70 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP113	SE276224.029	%	70 - 130%	87
	TP113	SE276224.030	%	70 - 130%	92
	DDS4	SE276224.031	%	70 - 130%	88
d14-p-terphenyl (Surrogate)	TP104	SE276224.001	%	70 - 130%	90
	TP104	SE276224.002	%	70 - 130%	93
	TP104	SE276224.003	%	70 - 130%	89
	TP105	SE276224.004	%	70 - 130%	91
	TP105	SE276224.005	%	70 - 130%	95
	TP105	SE276224.006	%	70 - 130%	92
	TP106	SE276224.007	%	70 - 130%	101
	TP106	SE276224.008	%	70 - 130%	94
	TP106	SE276224.009	%	70 - 130%	87
	TP107	SE276224.010	%	70 - 130%	94
	TP107	SE276224.011	%	70 - 130%	94
	TP107	SE276224.012	%	70 - 130%	93
	TP108	SE276224.013	%	70 - 130%	93
	TP108	SE276224.014	%	70 - 130%	92
	TP108	SE276224.015	%	70 - 130%	95
	TP109	SE276224.016	%	70 - 130%	91
	TP109	SE276224.017	%	70 - 130%	95
	TP109	SE276224.018	%	70 - 130%	95
	TP110	SE276224.019	%	70 - 130%	93
	TP110	SE276224.020	%	70 - 130%	92
	TP110	SE276224.021	%	70 - 130%	93
	TP111	SE276224.022	%	70 - 130%	92
	TP111	SE276224.023	%	70 - 130%	94
	TP111	SE276224.024	%	70 - 130%	94
	TP112	SE276224.025	%	70 - 130%	81
	TP112	SE276224.026	%	70 - 130%	93
	TP112	SE276224.027	%	70 - 130%	93
	TP113	SE276224.028	%	70 - 130%	90
	TP113	SE276224.029	%	70 - 130%	88
	TP113	SE276224.030	%	70 - 130%	94
	DDS4	SE276224.031	%	70 - 130%	89
d5-nitrobenzene (Surrogate)	TP104	SE276224.001	%	70 - 130%	88
	TP104	SE276224.002	%	70 - 130%	94
	TP104	SE276224.003	%	70 - 130%	90
	TP105	SE276224.004	%	70 - 130%	90
	TP105	SE276224.005	%	70 - 130%	94
	TP105	SE276224.006	%	70 - 130%	91
	TP106	SE276224.007	%	70 - 130%	92
	TP106	SE276224.008	%	70 - 130%	91
	TP106	SE276224.009	%	70 - 130%	90
	TP107	SE276224.010	%	70 - 130%	92
	TP107	SE276224.011	%	70 - 130%	94
	TP107	SE276224.012	%	70 - 130%	91
	TP108	SE276224.013	%	70 - 130%	105
	TP108	SE276224.014	%	70 - 130%	100
	TP108	SE276224.015	%	70 - 130%	101
	TP109	SE276224.016	%	70 - 130%	97
	TP109	SE276224.017	%	70 - 130%	98
	TP109	SE276224.018	%	70 - 130%	98
	TP110	SE276224.019	%	70 - 130%	94
	TP110	SE276224.020	%	70 - 130%	96
	TP110	SE276224.021	%	70 - 130%	96
	TP111	SE276224.022	%	70 - 130%	94
	TP111	SE276224.023	%	70 - 130%	92
	TP111	SE276224.024	%	70 - 130%	95
	TP112	SE276224.025	%	70 - 130%	83
	TP112	SE276224.026	%	70 - 130%	94
	TP112	SE276224.027	%	70 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	TP113	SE276224.028	%	70 - 130%	90
	TP113	SE276224.029	%	70 - 130%	87
	TP113	SE276224.030	%	70 - 130%	95
	DDS4	SE276224.031	%	70 - 130%	91

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS2	SE276224.033	%	40 - 130%	86
d14-p-terphenyl (Surrogate)	RS2	SE276224.033	%	40 - 130%	87
d5-nitrobenzene (Surrogate)	RS2	SE276224.033	%	40 - 130%	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP104	SE276224.001	%	60 - 130%	93
	TP105	SE276224.004	%	60 - 130%	93
	TP106	SE276224.007	%	60 - 130%	90
	TP107	SE276224.011	%	60 - 130%	97
	TP109	SE276224.016	%	60 - 130%	94
	DDS4	SE276224.031	%	60 - 130%	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	RS2	SE276224.033	%	40 - 130%	111

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	93
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 300%	63
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 300%	80
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 300%	90
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	89
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	85
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	118
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	92
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	5 - 150%	90
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	91
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	89
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	35 - 150%	81
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	95
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	30 - 150%	97
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	84
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	20 - 150%	80
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	40 - 150%	98
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	87
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	30 - 170%	61
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	89
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	20 - 150%	54
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	85
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	DSS9	SE276224.032	%	10 - 150%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP104	SE276224.001	%	60 - 130%	87
	TP105	SE276224.004	%	60 - 130%	87
	TP106	SE276224.007	%	60 - 130%	87
	TP107	SE276224.011	%	60 - 130%	89
	TP109	SE276224.016	%	60 - 130%	96
	DDS4	SE276224.031	%	60 - 130%	89
	TS2	SE276224.034	%	60 - 130%	90
d4-1,2-dichloroethane (Surrogate)	TP104	SE276224.001	%	60 - 130%	87
	TP105	SE276224.004	%	60 - 130%	86
	TP106	SE276224.007	%	60 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	TP107	SE276224.011	%	60 - 130%	89
	TP109	SE276224.016	%	60 - 130%	86
	DDS4	SE276224.031	%	60 - 130%	93
	TS2	SE276224.034	%	60 - 130%	79
d8-toluene (Surrogate)	TP104	SE276224.001	%	60 - 130%	88
	TP105	SE276224.004	%	60 - 130%	88
	TP106	SE276224.007	%	60 - 130%	79
	TP107	SE276224.011	%	60 - 130%	90
	TP109	SE276224.016	%	60 - 130%	101
	DDS4	SE276224.031	%	60 - 130%	93
	TS2	SE276224.034	%	60 - 130%	80

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS2	SE276224.033	%	40 - 130%	89
d4-1,2-dichloroethane (Surrogate)	RS2	SE276224.033	%	40 - 130%	71
d8-toluene (Surrogate)	RS2	SE276224.033	%	40 - 130%	64

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP104	SE276224.001	%	60 - 130%	87
	TP105	SE276224.004	%	60 - 130%	87
	TP106	SE276224.007	%	60 - 130%	87
	TP107	SE276224.011	%	60 - 130%	89
	TP109	SE276224.016	%	60 - 130%	96
	DDS4	SE276224.031	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	TP104	SE276224.001	%	60 - 130%	87
	TP105	SE276224.004	%	60 - 130%	86
	TP106	SE276224.007	%	60 - 130%	84
	TP107	SE276224.011	%	60 - 130%	89
	TP109	SE276224.016	%	60 - 130%	86
	DDS4	SE276224.031	%	60 - 130%	93
d8-toluene (Surrogate)	TP104	SE276224.001	%	60 - 130%	88
	TP105	SE276224.004	%	60 - 130%	88
	TP106	SE276224.007	%	60 - 130%	79
	TP107	SE276224.011	%	60 - 130%	90
	TP109	SE276224.016	%	60 - 130%	101
	DDS4	SE276224.031	%	60 - 130%	93

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS2	SE276224.033	%	40 - 130%	89
d4-1,2-dichloroethane (Surrogate)	RS2	SE276224.033	%	60 - 130%	71
d8-toluene (Surrogate)	RS2	SE276224.033	%	40 - 130%	64

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB334447.001	Mercury	mg/L	0.00005	<0.00005

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB334359.001	Mercury	mg/kg	0.05	<0.05
LB334360.001	Mercury	mg/kg	0.05	<0.05

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result
LB334472.001	Arsenic, As	mg/L	0.02	<0.020
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334327.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97
LB334328.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334328.001		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334327.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	93
LB334328.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334328.001	Surrogates	d14-p-terphenyl (Surrogate)	%	-	94

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Azinphos-methyl	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334327.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	97
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	93
LB334328.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	117
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	94

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	82
		2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334327.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	97
LB334328.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	89

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334429.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB334316.001	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
	Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB334316.001	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
	Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
	Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
	Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	mg/kg	0.01	<0.01
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	mg/kg	0.01	<0.01
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	mg/kg	0.01	<0.01

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB334350.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2
LB334351.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334327.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB334328.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334429.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334332.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334332.001	Monocyclic Aromatic Hydrocarbons	m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	105
	Totals	Total BTEX*	mg/kg	0.3	<0.3

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334332.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.003	LB334359.014	Mercury	mg/kg	0.05	0.07	0.08	97	8
SE276224.012	LB334359.024	Mercury	mg/kg	0.05	<0.05	<0.05	199	0
SE276224.022	LB334360.014	Mercury	mg/kg	0.05	<0.05	<0.05	178	0
SE276224.031	LB334360.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.018	LB334472.014	Arsenic, As	mg/L	0.02	0.00127	-0.00031	200	0
		Cadmium, Cd	mg/L	0.001	-0.00011	-6E-005	200	0
		Chromium, Cr	mg/L	0.005	-0.00055	-0.00065	200	0
		Copper, Cu	mg/L	0.005	-0.00038	-0.00096	200	0
		Lead, Pb	mg/L	0.02	<0.02	<0.02	200	0
		Nickel, Ni	mg/L	0.005	0.00063	2E-005	200	0
		Zinc, Zn	mg/L	0.01	-0.00105	-0.00137	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.003	LB334341.011	% Moisture	%w/w	1	9.7	8.8	41	10
SE276224.012	LB334341.021	% Moisture	%w/w	1	9.3	10.5	40	12
SE276224.022	LB334342.011	% Moisture	%w/w	1	13.9	12.4	38	11
SE276224.031	LB334342.021	% Moisture	%w/w	1	9.6	7.5	42	25
SE276225.077	LB334318.007	% Moisture	%w/w	1	10.2	9.3	40	10

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.011	LB334327.026		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.48	0.41	30	16
SE276224.031	LB334328.024		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.031	LB334328.024		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.46	0.46	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.011	LB334327.026		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	16
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	16
SE276224.031	LB334328.024		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.003	LB334327.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	0.1	142	22
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	0.1	0.2	107	44
		Pyrene	mg/kg	0.1	0.1	0.1	115	29
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	173	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.003	LB334327.014		Chrysene	mg/kg	0.1	<0.1	<0.1	164	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	185	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	193	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	157	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	199	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.1	0.2	0.4	62	70 ②
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.45	0.47	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.45	0.47	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.45	0.46	30	4
SE276224.011	LB334327.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	161	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.1	0.1	114	22
			Pyrene	mg/kg	0.1	0.1	0.1	113	15
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	171	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	148	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	178	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	171	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	175	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	147	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	177	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	195	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.1	0.2	<0.8	72	19
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.47	0.4	30	17
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.47	0.4	30	16
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.47	0.4	30	16
SE276224.022	LB334328.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.022	LB334328.014		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.47	0.48	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.46	0.47	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.46	0.48	30	4
SE276224.031	LB334328.024		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	173	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.1	0.1	119	5
			Pyrene	mg/kg	0.1	0.1	0.1	121	8
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	182	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	152	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	175	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	173	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	174	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	154	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	187	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.1	0.2	0.2	75	6
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.46	0.44	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.44	0.44	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.44	0.45	30	1

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.011	LB334327.026		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.48	0.41	30	16
SE276224.031	LB334328.024		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.46	0.46	30	1

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE275259B.009	LB334316.004	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: ME-(AU)-[ENV]AN404**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE275259B.009	LB334316.004	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	84	84	200	0
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	82	82	200	0
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	86	87	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	85	87	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	86	83	200	3
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	117	115	200	2
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	107	97	200	10
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	76	84	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	101	113	200	12
SE276225.075	LB334316.015	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	96	89	200	7
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	81	82	200	1
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	88	88	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	92	90	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	89	87	200	3
		(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	103	96	200	7
		(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	90	96	200	6
		(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	85	91	200	7
		(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	82	86	200	4
		(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	84	92	200	9
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	87	86	200	1
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	118	124	200	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.075	LB334316.015	(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	94	200	1
		(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	83	86	200	3
		(D3-N-MeFOSAA) Isotopically Labelled Internal	%	-	69	58	200	18
		(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	63	55	200	13
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	72	58	200	21
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	95	86	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	120	97	200	21
		(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	89	87	200	3
		(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	93	91	200	1
		(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	90	104	200	14
		(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	91	89	200	2

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334305.014	pH	pH Units	0.1	9.178	9.17	31	0
SE276225.065	LB334305.022	pH	pH Units	0.1	6.257	6.243	32	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.003	LB334350.014	Arsenic, As	mg/kg	1	5	4	53	13
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.9	7.2	37	9
		Copper, Cu	mg/kg	0.5	25	23	32	9
		Nickel, Ni	mg/kg	0.5	9.6	8.5	36	12
		Lead, Pb	mg/kg	1	31	29	33	7
		Zinc, Zn	mg/kg	2	62	56	33	11
SE276224.012	LB334350.024	Arsenic, As	mg/kg	1	7	6	45	15
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	14	9.9	34	31
		Copper, Cu	mg/kg	0.5	24	28	32	13
		Nickel, Ni	mg/kg	0.5	12	17	33	29
		Lead, Pb	mg/kg	1	25	20	34	24
		Zinc, Zn	mg/kg	2	57	65	33	14
SE276224.022	LB334351.014	Arsenic, As	mg/kg	1	7	7	44	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	13	14	34	4
		Copper, Cu	mg/kg	0.5	18	21	33	17
		Nickel, Ni	mg/kg	0.5	9.0	10	35	13
		Lead, Pb	mg/kg	1	21	20	35	1
		Zinc, Zn	mg/kg	2	41	45	35	11
SE276224.031	LB334351.024	Arsenic, As	mg/kg	1	6	6	46	4
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.3	9.4	35	2
		Copper, Cu	mg/kg	0.5	26	23	32	13
		Nickel, Ni	mg/kg	0.5	12	11	34	15
		Lead, Pb	mg/kg	1	18	18	36	3
		Zinc, Zn	mg/kg	2	54	50	34	8

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.011	LB334327.026		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE276224.031	LB334328.024		TRH C10-C14	mg/kg	20	<20	<20	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276224.031	LB334328.024		TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276220.002	LB334332.028	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.7	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.8	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.8	50	3
		Totals	Total BTEX*	mg/kg	0.3	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE276225.019	LB334332.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	7.0	50	29
			d8-toluene (Surrogate)	mg/kg	-	10.3	7.0	50	39
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.3	9.3	50	10
		Totals	Total BTEX*	mg/kg	0.3	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	11.8	30	22
			d8-toluene (Surrogate)	µg/L	-	9.3	9.4	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	9.2	11.1	30	19
		Totals	Total BTEX	µg/L	3	<3	<3	200	0
SE276203.031	LB334388.026	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	11.2	30	14
			d8-toluene (Surrogate)	µg/L	-	9.5	9.4	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	10.1	30	16
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276220.002	LB334332.026		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.7	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.8	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.8	50	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE276225.019	LB334332.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	7.0	50	29
			d8-toluene (Surrogate)	mg/kg	-	10.3	7.0	50	39
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.3	9.3	50	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<50	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	22
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	19
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE276203.031	LB334388.026		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<50	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	14
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	16
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334359.002	Mercury	mg/kg	0.05	0.20	0.2	80 - 120	98
LB334360.002	Mercury	mg/kg	0.05	0.20	0.2	80 - 120	99

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334472.002	Arsenic, As	mg/L	0.02	0.46	0.5	80 - 120	93
	Cadmium, Cd	mg/L	0.001	0.44	0.5	80 - 120	87
	Chromium, Cr	mg/L	0.005	0.45	0.5	80 - 120	90
	Copper, Cu	mg/L	0.005	0.44	0.5	80 - 120	88
	Lead, Pb	mg/L	0.02	0.45	0.5	80 - 120	89
	Nickel, Ni	mg/L	0.005	0.44	0.5	80 - 120	89
	Zinc, Zn	mg/L	0.01	0.45	0.5	80 - 120	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334327.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	99
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	119
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	119
		Dieldrin	mg/kg	0.1	0.3	0.2	60 - 140	128
		Endrin	mg/kg	0.1	0.3	0.2	60 - 140	127
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	89
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98
LB334328.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	113
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	119
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	108
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	115
		Endrin	mg/kg	0.1	0.3	0.2	60 - 140	135
		p,p'-DDT	mg/kg	0.1	0.3	0.2	60 - 140	126
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.46	0.5	40 - 130	92

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	118
		Heptachlor	µg/L	0.1	0.2	0.2	60 - 140	124
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	120
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	124
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	120
		p,p'-DDT	µg/L	0.1	0.2	0.2	60 - 140	105
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.13	0.15	40 - 130	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334327.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	105
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	106
		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	2.2	2	60 - 140	108
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	95
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	95
LB334328.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.3	2	60 - 140	115
		Diazinon (Dimpylate)	mg/kg	0.5	2.3	2	60 - 140	115
		Dichlorvos	mg/kg	0.5	2.2	2	60 - 140	108
		Ethion	mg/kg	0.2	2.8	2	60 - 140	138
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	98

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	8.1	8	60 - 140	101
		Diazinon (Dimpylate)	µg/L	0.5	8.4	8	60 - 140	105
		Dichlorvos	µg/L	0.5	6.4	8	60 - 140	80
		Ethion	µg/L	0.2	8.6	8	60 - 140	107
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	92

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002	Surrogates	d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334327.002		Naphthalene	mg/kg	0.1	3.4	4	60 - 140	86
		Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	89
		Acenaphthene	mg/kg	0.1	3.5	4	60 - 140	86
		Phenanthrene	mg/kg	0.1	3.8	4	60 - 140	94
		Anthracene	mg/kg	0.1	3.6	4	60 - 140	89
		Fluoranthene	mg/kg	0.1	3.6	4	60 - 140	91
		Pyrene	mg/kg	0.1	3.8	4	60 - 140	95
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.48	0.5	70 - 130	96
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.47	0.5	70 - 130	95
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.48	0.5	70 - 130	95
LB334328.002		Naphthalene	mg/kg	0.1	3.2	4	60 - 140	81
		Acenaphthylene	mg/kg	0.1	3.4	4	60 - 140	86
		Acenaphthene	mg/kg	0.1	3.1	4	60 - 140	78
		Phenanthrene	mg/kg	0.1	3.5	4	60 - 140	89
		Anthracene	mg/kg	0.1	3.5	4	60 - 140	87
		Fluoranthene	mg/kg	0.1	3.6	4	60 - 140	90
		Pyrene	mg/kg	0.1	3.8	4	60 - 140	94
		Benzo(a)pyrene	mg/kg	0.1	3.7	4	60 - 140	93
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.53	0.5	70 - 130	106
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.47	0.5	70 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.49	0.5	70 - 130	98

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Naphthalene	µg/L	0.1	37	40	60 - 140	93
		Acenaphthylene	µg/L	0.1	40	40	60 - 140	101
		Acenaphthene	µg/L	0.1	40	40	60 - 140	99
		Phenanthrene	µg/L	0.1	38	40	60 - 140	96
		Anthracene	µg/L	0.1	37	40	60 - 140	91
		Fluoranthene	µg/L	0.1	38	40	60 - 140	94
		Pyrene	µg/L	0.1	36	40	60 - 140	90
		Benzo(a)pyrene	µg/L	0.1	37	40	60 - 140	94
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.42	0.5	40 - 130	85
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.46	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	µg/L	-	0.38	0.5	40 - 130	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334327.002		Arochlor 1260	mg/kg	0.1	0.5	0.4	60 - 140	117
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98
LB334328.002		Arochlor 1260	mg/kg	0.1	0.5	0.4	60 - 140	132
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.46	0.5	40 - 130	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Arochlor 1260	µg/L	1	<1	0.4	60 - 140	100

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334316.002	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	0.004	40 - 160	94
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	0.004	40 - 160	99
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	0.004	40 - 160	92
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	0.004	40 - 160	101
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	0.004	40 - 160	87

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334316.002	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	0.004	40 - 160	100

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334305.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334350.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.4	4.81	70 - 130	92
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101
LB334351.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	90
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	99
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	97
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	100
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334327.002		TRH C10-C14	mg/kg	20	44	40	60 - 140	110
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	101
	TRH F Bands	TRH >C10-C16	mg/kg	25	42	40	60 - 140	105
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	102
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	103
LB334328.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	86
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	101
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	88
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	92

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		TRH C10-C14	µg/L	50	1100	1200	60 - 140	92
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	102
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	106
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	103
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334332.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.5	5	60 - 140	90
		Toluene	mg/kg	0.1	4.4	5	60 - 140	88
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	8.8	10	60 - 140	88
		o-xylene	mg/kg	0.1	4.6	5	60 - 140	93

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002	Monocyclic Aromatic	Benzene	µg/L	0.5	40	45.45	60 - 140	87
		Toluene	µg/L	0.5	39	45.45	60 - 140	85
		Ethylbenzene	µg/L	0.5	52	45.45	60 - 140	115
		m/p-xylene	µg/L	1	100	90.9	60 - 140	114
		o-xylene	µg/L	0.5	53	45.45	60 - 140	116

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334332.002		TRH C6-C10	mg/kg	25	91	92.5	60 - 140	98
		TRH C6-C9	mg/kg	20	80	80	60 - 140	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	64	62.5	60 - 140	102

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002		TRH C6-C10	µg/L	50	810	946.63	60 - 140	86
		TRH C6-C9	µg/L	40	690	818.71	60 - 140	85
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	520	639.67	60 - 140	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276224.033	LB334447.004	Mercury	mg/L	0.00005	0.0019	<0.00005	0.008	100

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334359.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	97
SE276224.013	LB334360.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	98

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.072	LB334472.004	Arsenic, As	mg/L	0.02	0.58	0.0024	0.5	116
		Cadmium, Cd	mg/L	0.001	0.54	-5E-005	0.5	107
		Chromium, Cr	mg/L	0.005	0.56	-0.0003	0.5	111
		Copper, Cu	mg/L	0.005	0.53	-0.00057	0.5	107
		Lead, Pb	mg/L	0.02	0.54	-0.00103	0.5	108
		Nickel, Ni	mg/L	0.005	0.55	0.0012	0.5	111
		Zinc, Zn	mg/L	0.01	0.56	0.00154	0.5	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334327.004	Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
		Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
		Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
		Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	114
		Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	127
		Aldrin	mg/kg	0.1	0.3	<0.1	0.2	130
		Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	-	-
		Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
		Dieldrin	mg/kg	0.1	0.3	<0.1	0.2	127
		Endrin	mg/kg	0.1	0.3	<0.1	0.2	130
		Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
		p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	102
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
		Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
		Total OC Pesticides	mg/kg	0.1	1.5	<0.1	-	-
		Total OC VIC EPA IWRG621	mg/kg	0.1	1.5	<0.1	-	-
		Total Other OCP VIC EPA IWRG621	mg/kg	0.1	0.7	<0.1	-	-
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.49	0.49	-	98

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334327.004	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.3	<0.2	2	117
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	<0.5	2	112
		Dichlorvos	mg/kg	0.5	2.0	<0.5	2	97
		Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
		Ethion	mg/kg	0.2	2.7	<0.2	2	137
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
		Malathion	mg/kg	0.2	<0.2	<0.2	-	-
		Methidathion	mg/kg	0.5	<0.5	<0.5	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334327.004		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	9.3	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	91
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.003	LB334327.027		Naphthalene	mg/kg	0.1		<0.1	4	87
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	89
			Acenaphthene	mg/kg	0.1		<0.1	4	86
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	99
			Anthracene	mg/kg	0.1		<0.1	4	90
			Fluoranthene	mg/kg	0.1		<0.1	4	96
			Pyrene	mg/kg	0.1		<0.1	4	102
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j&k)fluoranthene	mg/kg	0.2		0.00115707211	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	108
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3		<0.3	-	-
			Total PAH (18)	mg/kg	0.1		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.5	-	96
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	93
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	92
SE276224.013	LB334328.004		Naphthalene	mg/kg	0.1	3.2	<0.1	4	79
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.3	<0.1	4	82
			Acenaphthene	mg/kg	0.1	3.0	<0.1	4	75
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.4	<0.1	4	85
			Anthracene	mg/kg	0.1	3.3	<0.1	4	82
			Fluoranthene	mg/kg	0.1	3.4	0.1	4	81
			Pyrene	mg/kg	0.1	3.5	<0.1	4	86
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	3.8	<0.1	4	94
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	3.8	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	3.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	3.9	<0.3	-	-
			Total PAH (18)	mg/kg	0.1	27	0.1	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.52	0.52	-	104
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.46	0.46	-	93
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.46	0.46	-	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334327.004		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1260	mg/kg	0.1	0.5	<0.1	0.4	123
			Total PCBs	mg/kg	0.1	0.5	<0.1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.49	0.49	-	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334350.004		Arsenic, As	mg/kg	1	50	6	50	88
			Cadmium, Cd	mg/kg	0.3	45	<0.3	50	90
			Chromium, Cr	mg/kg	0.5	68	24	50	89
			Copper, Cu	mg/kg	0.5	51	3.0	50	96
			Nickel, Ni	mg/kg	0.5	47	1.4	50	91
			Lead, Pb	mg/kg	1	110	65	50	83
			Zinc, Zn	mg/kg	2	61	15	50	92
SE276224.013	LB334351.004		Arsenic, As	mg/kg	1	45	5	50	81
			Cadmium, Cd	mg/kg	0.3	39	<0.3	50	78
			Chromium, Cr	mg/kg	0.5	49	7.2	50	83
			Copper, Cu	mg/kg	0.5	63	22	50	82
			Nickel, Ni	mg/kg	0.5	54	13	50	81
			Lead, Pb	mg/kg	1	60	18	50	83
			Zinc, Zn	mg/kg	2	110	58	50	99

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334327.004		TRH C10-C14	mg/kg	20	57	<20	40	112
			TRH C15-C28	mg/kg	45	260	530	40	-670 ⓖ
			TRH C29-C36	mg/kg	45	180	250	40	-175 ⓖ
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	500	780	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	430	730	-	-
		TRH F	TRH >C10-C16	mg/kg	25	57	<25	40	89
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	57	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	370	730	40	-906 ⓖ
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334332.004	Monocyclic	Benzene	mg/kg	0.1	4.8	<0.1	5	96
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	94
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	100
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	95
			o-xylene	mg/kg	0.1	5.1	<0.1	5	101
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	0.2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.2	-	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	-	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	-	94
		Totals	Total BTEX*	mg/kg	0.3	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE276136.002	LB334388.028	Monocyclic	Benzene	µg/L	0.5	<0.5	45.45	102
		Aromatic	Toluene	µg/L	0.5	<0.5	45.45	95
			Ethylbenzene	µg/L	0.5	<0.5	45.45	106
			m/p-xylene	µg/L	1	<1	90.9	107
			o-xylene	µg/L	0.5	<0.5	45.45	108
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	9.5	-	103

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE276136.002	LB334388.028	Surrogates	Bromofluorobenzene (Surrogate)	µg/L	-	9.6	-	109
		Totals	Total BTEX	µg/L	3	<3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334332.004		TRH C6-C10	mg/kg	25	80	<25	92.5	87
			TRH C6-C9	mg/kg	20	71	<20	80	89
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.2	-	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	-	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	51	<25	62.5	82

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE276136.002	LB334388.028		TRH C6-C10	µg/L	50	<50	946.63	88
			TRH C6-C9	µg/L	40	<40	818.71	88
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	9.5	-	103
			Bromofluorobenzene (Surrogate)	µg/L	-	9.6	-	109
		VPH F	Benzene (F0)	µg/L	0.5	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	639.67	86

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 1 SGS Ref: SE276224_COC

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** Tuesday, 31 December 2024

Except pH Results Required By 2 days **Date:** Tuesday, 24 December 2024

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: JOHN XU

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC OP PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP& PCB	Cyanide	VOC	Phenol	PFAS (extended)	TCLP PAH	TCLP	Metals (Retest)
	TP104	0.0-0.3	19/12/2024	G		Clay																							
1	TP104	0.5-0.8	19/12/2024	G		Clay		✔	✔			✔																	
	TP104	1.0-1.3	19/12/2024	G		Clay																							
2	TP104	1.5-1.8	19/12/2024	G		Clay	✔										✔												
3	TP104	2.0-2.3	19/12/2024	G		Clay	✔										✔												
4	TP105	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
	TP105	0.4-0.7	19/12/2024	G		Clay																							
5	TP105	1.0-1.3	19/12/2024	G		Clay	✔										✔												
6	TP105	1.5-1.8	19/12/2024	G		Clay	✔										✔												
	TP105	2.0-2.3	19/12/2024	G		Clay																							
7	TP106	0.0-0.3	18/12/2024	G		Clay		✔	✔			✔																	
	TP106	0.5-0.8	18/12/2024	G		Clay																							
8	TP106	1.0-1.3	18/12/2024	G		Clay	✔										✔												
	TP106	1.5-1.8	18/12/2024	G		Clay																							
9	TP106	2.0-2.3	18/12/2024	G		Clay	✔										✔												
10	TP107	0.0-0.3	19/12/2024	G		Clay	✔										✔												
	TP107	0.5-0.8	19/12/2024	G		Clay																							
11	TP107	1.0-1.3	19/12/2024	G		Clay		✔	✔			✔																	
	TP107	1.5-1.8	19/12/2024	G		Clay																							
12	TP107	2.0-2.3	19/12/2024	G		Clay	✔										✔												
13	TP108	0.0-0.3	18/12/2024	G		Clay	✔										✔												
14	TP108	0.5-0.8	18/12/2024	G		Clay	✔	✔	✔								✔												
	TP108	1.0-1.2	18/12/2024	G		Clay																							
15	TP108	1.5-1.8	18/12/2024	G		Clay	✔										✔												
	TP108	2.0-2.3	18/12/2024	G		Clay																							
16	TP109	0.0-0.3	18/12/2024	G		Clay						✔																	
	TP109	0.5-0.8	18/12/2024	G		Clay																							
17	TP109	1.0-1.3	18/12/2024	G		Clay	✔										✔												
	TP109	1.5-1.8	18/12/2024	G		Clay																							

SGS EHS Sydney COC
SE276224

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** Tuesday, 31 December 2024

Except pH Results Required By 2 days **Date:** Tuesday, 31 December 2024

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: JOHN XU

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC OP PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP& PCB	Cyanide	VOC	Phenol	PFAS (extended)	TCLP PAH	TCLP	Metals (Retest)
18	TP109	2.0-2.3	18/12/2024	G		Clay	✔										✔												
19	TP110	0.0-0.3	18/12/2024	G		Clay	✔										✔												
	TP110	0.5-0.8	18/12/2024	G		Clay																							
20	TP110	1.0-1.3	18/12/2024	G		Clay	✔	✔	✔								✔												
	TP110	1.6-1.9	18/12/2024	G		Clay																							
21	TP110	2.0-2.3	18/12/2024	G		Clay	✔										✔												
22	TP111	0.0-0.3	19/12/2024	G		Clay	✔										✔												
	TP111	0.6-0.9	19/12/2024	G		Clay																							
23	TP111	1.0-1.3	19/12/2024	G		Clay	✔										✔												
	TP111	1.5-1.8	19/12/2024	G		Clay																							
24	TP111	2.0-2.3	19/12/2024	G		Clay	✔										✔												
25	TP112	0.0-0.3	19/12/2024	G		Clay	✔										✔												
	TP112	0.5-0.8	19/12/2024	G		Clay																							
26	TP112	1.0-1.3	19/12/2024	G		Clay	✔										✔												
	TP112	1.5-1.8	19/12/2024	G		Clay																							
27	TP112	2.0-2.3	19/12/2024	G		Clay	✔										✔												
28	TP113	0.0-0.3	18/12/2024	G		Clay	✔										✔												
	TP113	0.5-0.8	18/12/2024	G		Clay																							
29	TP113	1.0-1.3	18/12/2024	G		Clay	✔										✔												
	TP113	1.5-1.8	18/12/2024	G		Clay																							
30	TP113	2.0-2.3	18/12/2024	G		Clay	✔										✔												
	DDS3		18/12/2024	G		Clay																							
31	DDS4		19/12/2024	G		Clay						✔																	
	DSS5		18/12/2024	PFASC		-																							
	DSS6		18/12/2024	PFASC		-																							
	DSS7		18/12/2024	PFASC		-																							
	DSS8		18/12/2024	PFASC		-																							
32	DSS9		19/12/2024	PFASC		-																				✔			
33	RS2		18/12/2024		Vial+WG							✔																	

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** Tuesday, 31 December 2024

Except pH Results Required By 2 days **Date:** Tuesday, 24 December 2024

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: JOHN XU

Location: Gledswood Hills

Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC OP PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP& PCB	Cyanide	VOC	Phenol	PFAS (extended)	TCLP PAH	TCLP	Metals (Retest)
34-35 TS2		18/12/2024	Viel											✔														

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	20/12/2024	Joel K		20.12.24 @ 2PM

WG: Water sample (glass bottle) G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag)
WP: Water sample (plastic bottle) PFASC Soil sample (PFAS container) ✔ Test required

SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	34

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 20/12/2024
Report Due	Tue 31/12/2024
SGS Reference	**SE276224**

SUBMISSION DETAILS

This is to confirm that 34 samples were received on Friday 20/12/2024. Results are expected to be ready by COB Tuesday 31/12/2024. Please quote SGS reference SE276224 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	33 Soil, 1 Water	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Two Days/Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

25 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP104 0.5-0.8	27	14	27	8	1	10	11	7
002	TP104 1.5-1.8	-	-	27	-	-	-	-	-
003	TP104 2.0-2.3	-	-	27	-	-	-	-	-
004	TP105 0.0-0.3	27	14	27	8	1	10	11	7
005	TP105 1.0-1.3	-	-	27	-	-	-	-	-
006	TP105 1.5-1.8	-	-	27	-	-	-	-	-
007	TP106 0.0-0.3	27	14	27	8	1	10	11	7
008	TP106 1.0-1.3	-	-	27	-	-	-	-	-
009	TP106 2.0-2.3	-	-	27	-	-	-	-	-
010	TP107 0.0-0.3	-	-	27	-	-	-	-	-
011	TP107 1.0-1.3	27	14	27	8	1	10	11	7
012	TP107 2.0-2.3	-	-	27	-	-	-	-	-
013	TP108 0.0-0.3	-	-	27	-	-	-	-	-
014	TP108 0.5-0.8	-	-	27	-	1	-	-	-
015	TP108 1.5-1.8	-	-	27	-	-	-	-	-
016	TP109 0.0-0.3	27	14	27	8	-	10	11	7
017	TP109 1.0-1.3	-	-	27	-	-	-	-	-
018	TP109 2.0-2.3	-	-	27	-	-	-	-	-
019	TP110 0.0-0.3	-	-	27	-	-	-	-	-
020	TP110 1.0-1.3	-	-	27	-	1	-	-	-
021	TP110 2.0-2.3	-	-	27	-	-	-	-	-
022	TP111 0.0-0.3	-	-	27	-	-	-	-	-
023	TP111 1.0-1.3	-	-	27	-	-	-	-	-
024	TP111 2.0-2.3	-	-	27	-	-	-	-	-

CONTINUED OVERLEAF

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The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	TP112 0.0-0.3	-	-	27	-	-	-	-
026	TP112 1.0-1.3	-	-	27	-	-	-	-
027	TP112 2.0-2.3	-	-	27	-	-	-	-
028	TP113 0.0-0.3	-	-	27	-	-	-	-
029	TP113 1.0-1.3	-	-	27	-	-	-	-
030	TP113 2.0-2.3	-	-	27	-	-	-	-
031	DDS4	27	14	27	8	10	11	7
034	TS2	-	-	-	-	-	11	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	TP104 0.5-0.8	9	1	1	7
002	TP104 1.5-1.8	-	1	1	7
003	TP104 2.0-2.3	-	1	1	7
004	TP105 0.0-0.3	9	1	1	7
005	TP105 1.0-1.3	-	1	1	7
006	TP105 1.5-1.8	-	1	1	7
007	TP106 0.0-0.3	9	1	1	7
008	TP106 1.0-1.3	-	1	1	7
009	TP106 2.0-2.3	-	1	1	7
010	TP107 0.0-0.3	-	1	1	7
011	TP107 1.0-1.3	9	1	1	7
012	TP107 2.0-2.3	-	1	1	7
013	TP108 0.0-0.3	-	1	1	7
014	TP108 0.5-0.8	9	1	1	7
015	TP108 1.5-1.8	-	1	1	7
016	TP109 0.0-0.3	-	1	1	7
017	TP109 1.0-1.3	-	1	1	7
018	TP109 2.0-2.3	-	1	1	7
019	TP110 0.0-0.3	-	1	1	7
020	TP110 1.0-1.3	9	1	1	7
021	TP110 2.0-2.3	-	1	1	7
022	TP111 0.0-0.3	-	1	1	7
023	TP111 1.0-1.3	-	1	1	7
024	TP111 2.0-2.3	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
025	TP112 0.0-0.3	1	1	-	7	-	-
026	TP112 1.0-1.3	1	1	-	7	-	-
027	TP112 2.0-2.3	1	1	-	7	-	-
028	TP113 0.0-0.3	1	1	-	7	-	-
029	TP113 1.0-1.3	1	1	-	7	-	-
030	TP113 2.0-2.3	1	1	-	7	-	-
031	DDS4	1	1	-	7	-	-
032	DSS9	-	-	57	-	-	-
033	RS2	-	-	-	-	11	7

CONTINUED OVERLEAF

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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE276224

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	TRH (Total Recoverable Hydrocarbons) in Water
033	RS2	1	7	25	13	23	9	9

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	77

LABORATORY DETAILS

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SGS Reference	**SE276225 R2**
Date Received	20/12/2024
Date Reported	13/1/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

This report cancels and supersedes the report No. SE276225 R1 dated 10.01.2025 due to a laboratory correction of BTEX/VPH results for sample #1.

SIGNATORIES

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Senior Chemist

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
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VOC's in Soil [AN433] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

VOC's in Soil [AN433] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065	TS3 SOIL - 19/12/2024 SE276225.073
Benzene	mg/kg	0.1	<0.1	[90%]
Toluene	mg/kg	0.1	<0.1	[95%]
Ethylbenzene	mg/kg	0.1	<0.1	[95%]
m/p-xylene	mg/kg	0.2	<0.2	[96%]
o-xylene	mg/kg	0.1	<0.1	[95%]
Total Xylenes*	mg/kg	0.3	<0.3	-
Total BTEX*	mg/kg	0.6	<0.6	-
Naphthalene (VOC)*	mg/kg	0.1	<0.1	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**87**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	**110**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**160**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**190**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP116 CLAY 1.0-1.3 19/12/2024 SE276225.002	TP116 CLAY 2.0-2.3 19/12/2024 SE276225.003	TP117 CLAY 0.0-0.3 19/12/2024 SE276225.004	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP117 CLAY 2.0-2.3 19/12/2024 SE276225.006	TP118 CLAY 0.0-0.3 19/12/2024 SE276225.007	TP118 CLAY 1.0-1.3 19/12/2024 SE276225.008	TP118 CLAY 2.0-2.3 19/12/2024 SE276225.009	TP119 CLAY 0.0-0.3 19/12/2024 SE276225.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP119 CLAY 1.0-1.3 19/12/2024 SE276225.011	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 CLAY 0.0-0.3 19/12/2024 SE276225.013	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP120 CLAY 2.0-2.3 19/12/2024 SE276225.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.5**	**0.1**	**0.4**	<0.1	**0.1**
Pyrene	mg/kg	0.1	**0.5**	**0.1**	**0.4**	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	**0.3**	<0.1	**0.2**	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.2**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.3**	<0.1	**0.3**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	**0.4**	<0.2	**0.4**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	**0.5**	<0.3	**0.5**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.4**	<0.2	**0.4**	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**2.7**	<0.8	**2.8**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**2.7**	<0.8	**2.8**	<0.8	<0.8

PARAMETER	UOM	LOR	TP121 CLAY 0.0-0.3 19/12/2024 SE276225.016	TP121 CLAY 1.0-1.3 19/12/2024 SE276225.017	TP121 CLAY 2.0-2.3 19/12/2024 SE276225.018	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP122 CLAY 1.0-1.3 19/12/2024 SE276225.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	**0.1**	**0.1**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	**0.3**	**0.2**	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	**0.3**	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	**0.2**	**0.1**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**1.9**	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**1.9**	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP122 CLAY 2.0-2.3 19/12/2024 SE276225.021	TP123 CLAY 0.0-0.3 19/12/2024 SE276225.022	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 0.0-0.3 19/12/2024 SE276225.025
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	**0.1**	<0.1	**0.2**	**0.2**
Pyrene	mg/kg	0.1	**0.1**	**0.1**	<0.1	**0.2**	**0.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	**0.2**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	**0.1**	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	**0.2**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.2**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.3**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.2**	<0.2	<0.2	**0.3**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**1.6**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**1.6**	<0.8

PARAMETER	UOM	LOR	TP124 CLAY 1.0-1.3 19/12/2024 SE276225.026	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP125 CLAY 1.0-1.3 19/12/2024 SE276225.029	TP125 CLAY 2.0-2.3 19/12/2024 SE276225.030
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.5**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.5**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	**0.4**	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	**0.5**	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.4**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**2.8**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**2.8**	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP125 CLAY 3.0-3.3 19/12/2024 SE276225.031	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033	TP126 CLAY 2.0-2.3 19/12/2024 SE276225.034	TP127 CLAY 0.0-0.3 19/12/2024 SE276225.035
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP127 CLAY 2.0-2.3 19/12/2024 SE276225.037	TP128 CLAY 0.0-0.3 19/12/2024 SE276225.038	TP128 CLAY 1.0-1.3 19/12/2024 SE276225.039	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	**0.1**
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.6**	**0.3**
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.7**	**0.3**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	**0.1**
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.3**	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.3**	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.3**	**0.1**
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.4**	**0.1**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.3**	**0.1**
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	**0.5**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	**0.6**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**0.6**	**0.2**
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.1**	**3.8**	**1.5**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.1**	**3.8**	**1.5**

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP129 CLAY 0.0-0.3 19/12/2024 SE276225.041	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP129 CLAY 2.0-2.3 19/12/2024 SE276225.043	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.2**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**1.3**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.3**	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	TP130 CLAY 2.0-2.3 19/12/2024 SE276225.046	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP131 CLAY 1.0-1.3 19/12/2024 SE276225.048	TP131 CLAY 2.0-2.3 19/12/2024 SE276225.049	TP132 CLAY 0.0-0.3 19/12/2024 SE276225.050
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.4**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.7**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.7**	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP132 CLAY 2.0-2.3 19/12/2024 SE276225.052	TP133 CLAY 0.0-0.3 19/12/2024 SE276225.053	TP133 CLAY 1.0-1.3 19/12/2024 SE276225.054	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.4**	**0.1**
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.5**	**0.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	**0.1**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.4**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.5**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.5**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.8**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.8**	<0.8

PARAMETER	UOM	LOR	TP134 CLAY 0.0-0.3 19/12/2024 SE276225.056	TP134 CLAY 1.0-1.3 19/12/2024 SE276225.057	TP134 CLAY 2.0-2.3 19/12/2024 SE276225.058	TP135 CLAY 0.0-0.3 19/12/2024 SE276225.059	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP135 CLAY 2.0-2.3 19/12/2024 SE276225.061	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	TP136 CLAY 1.0-1.3 19/12/2024 SE276225.063	TP136 CLAY 2.0-2.3 19/12/2024 SE276225.064	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.3**	**0.5**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.4**	**0.6**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.3**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.3**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.2**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.3**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.2**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**0.4**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.4**	**0.5**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**0.4**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**2.0**	**2.9**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**2.0**	**2.9**	<0.8

PARAMETER	UOM	LOR	J1 CLAY 0.5-0.8 19/12/2024 SE276225.066	J1 CLAY 1.0-1.3 19/12/2024 SE276225.067	DDS5 CLAY - 19/12/2024 SE276225.068	DDS6 CLAY - 19/12/2024 SE276225.069	DDS7 CLAY - 19/12/2024 SE276225.070
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.4**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.5**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	**0.3**	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	**0.4**	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.4**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**2.4**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**2.4**	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	DDS8 CLAY - 19/12/2024 SE276225.071
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.2**
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.4**
Pyrene	mg/kg	0.1	**0.5**
Benzo(a)anthracene	mg/kg	0.1	**0.2**
Chrysene	mg/kg	0.1	**0.2**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**
Benzo(k)fluoranthene	mg/kg	0.1	**0.2**
Benzo(a)pyrene	mg/kg	0.1	**0.3**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.1**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.2**
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	**0.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	**0.5**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.4**
Total PAH (18)	mg/kg	0.8	**2.5**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**2.5**

OC Pesticides in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

OP Pesticides in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1

pH in soil (1:5) [AN101] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023
pH	pH Units	0.1	**8.7**	**6.5**	**8.9**	**9.2**	**7.9**

PARAMETER	UOM	LOR	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051
pH	pH Units	0.1	**7.9**	**5.9**	**7.5**	**6.0**	**8.2**

PARAMETER	UOM	LOR	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
pH	pH Units	0.1	**6.3**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 27/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	12	5.2	7.7	11	8.0
Exchangeable Calcium Percentage*	%	0.1	67.5	42.4	59.7	67.2	49.6
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.31	0.31	0.26	0.24	0.27
Exchangeable Potassium Percentage*	%	0.1	1.8	2.5	2.0	1.4	1.7
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	3.7	4.9	2.6	2.9	5.5
Exchangeable Magnesium Percentage*	%	0.1	21.7	39.4	20.1	17.2	33.9
Exchangeable Sodium, Na	cmol (+)/kg	0.01	1.5	1.9	2.4	2.4	2.4
Exchangeable Sodium Percentage*	%	0.1	9.0	15.6	18.2	14.1	14.8
Cation Exchange Capacity	cmol (+)/kg	0.02	17	12	13	17	16

PARAMETER	UOM	LOR	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	24	5.1	6.1	3.8	5.5
Exchangeable Calcium Percentage*	%	0.1	85.9	48.2	44.6	41.7	51.0
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.17	0.20	0.26	0.16	0.23
Exchangeable Potassium Percentage*	%	0.1	0.6	1.9	1.9	1.7	2.1
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	2.2	4.4	5.2	4.4	3.5
Exchangeable Magnesium Percentage*	%	0.1	7.8	41.7	37.9	49.0	32.0
Exchangeable Sodium, Na	cmol (+)/kg	0.01	1.6	0.87	2.1	0.68	1.6
Exchangeable Sodium Percentage*	%	0.1	5.7	8.2	15.6	7.5	14.8
Cation Exchange Capacity	cmol (+)/kg	0.02	28	11	14	9.0	11

PARAMETER	UOM	LOR	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Exchangeable Calcium, Ca	cmol (+)/kg	0.01	5.4
Exchangeable Calcium Percentage*	%	0.1	50.9
Exchangeable Potassium, K	cmol (+)/kg	0.01	0.20
Exchangeable Potassium Percentage*	%	0.1	1.9
Exchangeable Magnesium, Mg	cmol (+)/kg	0.02	3.9
Exchangeable Magnesium Percentage*	%	0.1	36.6
Exchangeable Sodium, Na	cmol (+)/kg	0.01	1.1
Exchangeable Sodium Percentage*	%	0.1	10.6
Cation Exchange Capacity	cmol (+)/kg	0.02	11

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP116 CLAY 1.0-1.3 19/12/2024 SE276225.002	TP116 CLAY 2.0-2.3 19/12/2024 SE276225.003	TP117 CLAY 0.0-0.3 19/12/2024 SE276225.004	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005
Arsenic, As	mg/kg	1	6	5	8	6	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.4	8.0	11	7.2	7.0
Copper, Cu	mg/kg	0.5	23	19	18	23	27
Lead, Pb	mg/kg	1	20	21	13	17	14
Nickel, Ni	mg/kg	0.5	11	8.6	7.8	13	5.6
Zinc, Zn	mg/kg	2	54	53	32	53	31

PARAMETER	UOM	LOR	TP117 CLAY 2.0-2.3 19/12/2024 SE276225.006	TP118 CLAY 0.0-0.3 19/12/2024 SE276225.007	TP118 CLAY 1.0-1.3 19/12/2024 SE276225.008	TP118 CLAY 2.0-2.3 19/12/2024 SE276225.009	TP119 CLAY 0.0-0.3 19/12/2024 SE276225.010
Arsenic, As	mg/kg	1	9	6	4	6	6
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.7	7.9	7.0	9.0	9.0
Copper, Cu	mg/kg	0.5	26	22	17	20	22
Lead, Pb	mg/kg	1	20	21	16	21	21
Nickel, Ni	mg/kg	0.5	30	11	8.6	5.9	11
Zinc, Zn	mg/kg	2	88	57	35	38	49

PARAMETER	UOM	LOR	TP119 CLAY 1.0-1.3 19/12/2024 SE276225.011	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 CLAY 0.0-0.3 19/12/2024 SE276225.013	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP120 CLAY 2.0-2.3 19/12/2024 SE276225.015
Arsenic, As	mg/kg	1	5	7	4	4	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	10	9.8	5.6	6.8
Copper, Cu	mg/kg	0.5	18	28	22	15	20
Lead, Pb	mg/kg	1	20	30	19	17	29
Nickel, Ni	mg/kg	0.5	6.0	11	9.6	7.7	8.2
Zinc, Zn	mg/kg	2	33	59	63	43	52

PARAMETER	UOM	LOR	TP121 CLAY 0.0-0.3 19/12/2024 SE276225.016	TP121 CLAY 1.0-1.3 19/12/2024 SE276225.017	TP121 CLAY 2.0-2.3 19/12/2024 SE276225.018	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP122 CLAY 1.0-1.3 19/12/2024 SE276225.020
Arsenic, As	mg/kg	1	6	5	7	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.4	12	9.3	8.0	13
Copper, Cu	mg/kg	0.5	52	17	26	22	24
Lead, Pb	mg/kg	1	99	50	27	22	21
Nickel, Ni	mg/kg	0.5	7.4	5.2	7.7	8.1	11
Zinc, Zn	mg/kg	2	74	43	43	54	46

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

(continued)

PARAMETER	UOM	LOR	TP122 CLAY 2.0-2.3 19/12/2024 SE276225.021	TP123 CLAY 0.0-0.3 19/12/2024 SE276225.022	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 0.0-0.3 19/12/2024 SE276225.025
Arsenic, As	mg/kg	1	5	15	5	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	11	5.4	8.3	6.4	17
Copper, Cu	mg/kg	0.5	22	17	19	20	9.9
Lead, Pb	mg/kg	1	21	20	18	18	19
Nickel, Ni	mg/kg	0.5	9.4	9.1	12	9.3	3.0
Zinc, Zn	mg/kg	2	51	48	51	47	21

PARAMETER	UOM	LOR	TP124 CLAY 1.0-1.3 19/12/2024 SE276225.026	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP125 CLAY 1.0-1.3 19/12/2024 SE276225.029	TP125 CLAY 2.0-2.3 19/12/2024 SE276225.030
Arsenic, As	mg/kg	1	4	6	9	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.0	12	8.8	9.3	12
Copper, Cu	mg/kg	0.5	49	12	29	12	16
Lead, Pb	mg/kg	1	94	21	19	15	16
Nickel, Ni	mg/kg	0.5	5.3	3.9	9.5	2.9	7.6
Zinc, Zn	mg/kg	2	150	32	44	14	32

PARAMETER	UOM	LOR	TP125 CLAY 3.0-3.3 19/12/2024 SE276225.031	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033	TP126 CLAY 2.0-2.3 19/12/2024 SE276225.034	TP127 CLAY 0.0-0.3 19/12/2024 SE276225.035
Arsenic, As	mg/kg	1	24	7	8	8	6
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.9	16	13	9.3	8.8
Copper, Cu	mg/kg	0.5	38	14	25	32	22
Lead, Pb	mg/kg	1	28	21	15	25	18
Nickel, Ni	mg/kg	0.5	10	7.7	14	13	8.2
Zinc, Zn	mg/kg	2	50	26	52	56	46

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP127 CLAY 2.0-2.3 19/12/2024 SE276225.037	TP128 CLAY 0.0-0.3 19/12/2024 SE276225.038	TP128 CLAY 1.0-1.3 19/12/2024 SE276225.039	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040
Arsenic, As	mg/kg	1	6	6	6	5	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	12	15	8.7	9.5	8.4
Copper, Cu	mg/kg	0.5	24	19	23	23	37
Lead, Pb	mg/kg	1	19	19	21	31	53
Nickel, Ni	mg/kg	0.5	12	8.1	11	15	7.3
Zinc, Zn	mg/kg	2	49	40	51	89	59

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

(continued)

PARAMETER	UOM	LOR	TP129 CLAY 0.0-0.3 19/12/2024 SE276225.041	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP129 CLAY 2.0-2.3 19/12/2024 SE276225.043	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
Arsenic, As	mg/kg	1	6	4	6	6	14
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	10	8.6	12	13	6.8
Copper, Cu	mg/kg	0.5	26	16	19	13	16
Lead, Pb	mg/kg	1	23	15	19	20	38
Nickel, Ni	mg/kg	0.5	11	9.1	7.6	7.5	4.7
Zinc, Zn	mg/kg	2	50	25	36	25	24

PARAMETER	UOM	LOR	TP130 CLAY 2.0-2.3 19/12/2024 SE276225.046	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP131 CLAY 1.0-1.3 19/12/2024 SE276225.048	TP131 CLAY 2.0-2.3 19/12/2024 SE276225.049	TP132 CLAY 0.0-0.3 19/12/2024 SE276225.050
Arsenic, As	mg/kg	1	6	5	6	5	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.7	11	6.8	6.6	13
Copper, Cu	mg/kg	0.5	25	18	30	28	17
Lead, Pb	mg/kg	1	18	17	22	42	19
Nickel, Ni	mg/kg	0.5	12	8.2	8.6	8.2	9.7
Zinc, Zn	mg/kg	2	47	37	38	78	39

PARAMETER	UOM	LOR	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP132 CLAY 2.0-2.3 19/12/2024 SE276225.052	TP133 CLAY 0.0-0.3 19/12/2024 SE276225.053	TP133 CLAY 1.0-1.3 19/12/2024 SE276225.054	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055
Arsenic, As	mg/kg	1	6	6	6	7	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	27	6.5	6.4	11	8.0
Copper, Cu	mg/kg	0.5	35	25	17	26	27
Lead, Pb	mg/kg	1	79	17	19	37	26
Nickel, Ni	mg/kg	0.5	17	12	8.4	10	10
Zinc, Zn	mg/kg	2	100	54	38	57	57

PARAMETER	UOM	LOR	TP134 CLAY 0.0-0.3 19/12/2024 SE276225.056	TP134 CLAY 1.0-1.3 19/12/2024 SE276225.057	TP134 CLAY 2.0-2.3 19/12/2024 SE276225.058	TP135 CLAY 0.0-0.3 19/12/2024 SE276225.059	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060
Arsenic, As	mg/kg	1	7	7	13	6	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	28	<0.3
Chromium, Cr	mg/kg	0.5	7.0	4.9	9.3	9.3	8.4
Copper, Cu	mg/kg	0.5	27	17	25	27	25
Lead, Pb	mg/kg	1	22	14	26	24	14
Nickel, Ni	mg/kg	0.5	9.5	1.8	9.5	14	7.4
Zinc, Zn	mg/kg	2	55	15	56	76	41

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 23/12/2024

(continued)

PARAMETER	UOM	LOR	TP135 CLAY 2.0-2.3 19/12/2024 SE276225.061	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	TP136 CLAY 1.0-1.3 19/12/2024 SE276225.063	TP136 CLAY 2.0-2.3 19/12/2024 SE276225.064	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Arsenic, As	mg/kg	1	7	6	7	6	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.3	6.2	8.2	8.0	16
Copper, Cu	mg/kg	0.5	33	24	33	28	14
Lead, Pb	mg/kg	1	17	19	28	30	19
Nickel, Ni	mg/kg	0.5	17	13	11	9.1	7.5
Zinc, Zn	mg/kg	2	73	64	58	53	25

PARAMETER	UOM	LOR	J1 CLAY 0.5-0.8 19/12/2024 SE276225.066	J1 CLAY 1.0-1.3 19/12/2024 SE276225.067	DDS5 CLAY - 19/12/2024 SE276225.068	DDS6 CLAY - 19/12/2024 SE276225.069	DDS7 CLAY - 19/12/2024 SE276225.070
Arsenic, As	mg/kg	1	7	8	7	5	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	10	12	18	12	16
Copper, Cu	mg/kg	0.5	30	17	13	16	14
Lead, Pb	mg/kg	1	26	14	23	20	21
Nickel, Ni	mg/kg	0.5	11	7.7	8.1	7.9	7.3
Zinc, Zn	mg/kg	2	52	31	29	28	24

PARAMETER	UOM	LOR	DDS8 CLAY - 19/12/2024 SE276225.071
Arsenic, As	mg/kg	1	5
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.9
Copper, Cu	mg/kg	0.5	45
Lead, Pb	mg/kg	1	59
Nickel, Ni	mg/kg	0.5	7.0
Zinc, Zn	mg/kg	2	100

Mercury in Soil [AN312] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP116 CLAY 1.0-1.3 19/12/2024 SE276225.002	TP116 CLAY 2.0-2.3 19/12/2024 SE276225.003	TP117 CLAY 0.0-0.3 19/12/2024 SE276225.004	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.06**

PARAMETER	UOM	LOR	TP117 CLAY 2.0-2.3 19/12/2024 SE276225.006	TP118 CLAY 0.0-0.3 19/12/2024 SE276225.007	TP118 CLAY 1.0-1.3 19/12/2024 SE276225.008	TP118 CLAY 2.0-2.3 19/12/2024 SE276225.009	TP119 CLAY 0.0-0.3 19/12/2024 SE276225.010
Mercury	mg/kg	0.05	**0.09**	**0.06**	**0.07**	**0.12**	<0.05

PARAMETER	UOM	LOR	TP119 CLAY 1.0-1.3 19/12/2024 SE276225.011	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 CLAY 0.0-0.3 19/12/2024 SE276225.013	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP120 CLAY 2.0-2.3 19/12/2024 SE276225.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.06**

PARAMETER	UOM	LOR	TP121 CLAY 0.0-0.3 19/12/2024 SE276225.016	TP121 CLAY 1.0-1.3 19/12/2024 SE276225.017	TP121 CLAY 2.0-2.3 19/12/2024 SE276225.018	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP122 CLAY 1.0-1.3 19/12/2024 SE276225.020
Mercury	mg/kg	0.05	**0.72**	<0.05	**0.12**	<0.05	<0.05

PARAMETER	UOM	LOR	TP122 CLAY 2.0-2.3 19/12/2024 SE276225.021	TP123 CLAY 0.0-0.3 19/12/2024 SE276225.022	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 0.0-0.3 19/12/2024 SE276225.025
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.07**	<0.05

PARAMETER	UOM	LOR	TP124 CLAY 1.0-1.3 19/12/2024 SE276225.026	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP125 CLAY 1.0-1.3 19/12/2024 SE276225.029	TP125 CLAY 2.0-2.3 19/12/2024 SE276225.030
Mercury	mg/kg	0.05	**0.20**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP125 CLAY 3.0-3.3 19/12/2024 SE276225.031	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033	TP126 CLAY 2.0-2.3 19/12/2024 SE276225.034	TP127 CLAY 0.0-0.3 19/12/2024 SE276225.035
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP127 CLAY 2.0-2.3 19/12/2024 SE276225.037	TP128 CLAY 0.0-0.3 19/12/2024 SE276225.038	TP128 CLAY 1.0-1.3 19/12/2024 SE276225.039	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	0.09	0.06

PARAMETER	UOM	LOR	TP129 CLAY 0.0-0.3 19/12/2024 SE276225.041	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP129 CLAY 2.0-2.3 19/12/2024 SE276225.043	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	0.06

PARAMETER	UOM	LOR	TP130 CLAY 2.0-2.3 19/12/2024 SE276225.046	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP131 CLAY 1.0-1.3 19/12/2024 SE276225.048	TP131 CLAY 2.0-2.3 19/12/2024 SE276225.049	TP132 CLAY 0.0-0.3 19/12/2024 SE276225.050
Mercury	mg/kg	0.05	0.05	<0.05	0.15	0.13	<0.05

PARAMETER	UOM	LOR	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP132 CLAY 2.0-2.3 19/12/2024 SE276225.052	TP133 CLAY 0.0-0.3 19/12/2024 SE276225.053	TP133 CLAY 1.0-1.3 19/12/2024 SE276225.054	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055
Mercury	mg/kg	0.05	0.10	0.06	<0.05	0.14	0.07

PARAMETER	UOM	LOR	TP134 CLAY 0.0-0.3 19/12/2024 SE276225.056	TP134 CLAY 1.0-1.3 19/12/2024 SE276225.057	TP134 CLAY 2.0-2.3 19/12/2024 SE276225.058	TP135 CLAY 0.0-0.3 19/12/2024 SE276225.059	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060
Mercury	mg/kg	0.05	0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP135 CLAY 2.0-2.3 19/12/2024 SE276225.061	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	TP136 CLAY 1.0-1.3 19/12/2024 SE276225.063	TP136 CLAY 2.0-2.3 19/12/2024 SE276225.064	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
Mercury	mg/kg	0.05	<0.05	<0.05	0.10	0.08	<0.05

PARAMETER	UOM	LOR	J1 CLAY 0.5-0.8 19/12/2024 SE276225.066	J1 CLAY 1.0-1.3 19/12/2024 SE276225.067	DDS5 CLAY - 19/12/2024 SE276225.068	DDS6 CLAY - 19/12/2024 SE276225.069	DDS7 CLAY - 19/12/2024 SE276225.070
Mercury	mg/kg	0.05	0.11	<0.05	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	DDS8 CLAY - 19/12/2024 SE276225.071
Mercury	mg/kg	0.05	**0.10**

Moisture Content [AN002] Tested: 23/12/2024

PARAMETER	UOM	LOR	TP116 CLAY 0.0-0.3 19/12/2024 SE276225.001	TP116 CLAY 1.0-1.3 19/12/2024 SE276225.002	TP116 CLAY 2.0-2.3 19/12/2024 SE276225.003	TP117 CLAY 0.0-0.3 19/12/2024 SE276225.004	TP117 CLAY 1.0-1.3 19/12/2024 SE276225.005
% Moisture	%w/w	1	7.1	8.3	16.7	6.7	7.4

PARAMETER	UOM	LOR	TP117 CLAY 2.0-2.3 19/12/2024 SE276225.006	TP118 CLAY 0.0-0.3 19/12/2024 SE276225.007	TP118 CLAY 1.0-1.3 19/12/2024 SE276225.008	TP118 CLAY 2.0-2.3 19/12/2024 SE276225.009	TP119 CLAY 0.0-0.3 19/12/2024 SE276225.010
% Moisture	%w/w	1	7.0	10.4	6.3	9.4	7.2

PARAMETER	UOM	LOR	TP119 CLAY 1.0-1.3 19/12/2024 SE276225.011	TP119 CLAY 2.0-2.3 19/12/2024 SE276225.012	TP120 CLAY 0.0-0.3 19/12/2024 SE276225.013	TP120 SAND 1.0-1.3 19/12/2024 SE276225.014	TP120 CLAY 2.0-2.3 19/12/2024 SE276225.015
% Moisture	%w/w	1	9.7	12.7	9.1	10.0	11.1

PARAMETER	UOM	LOR	TP121 CLAY 0.0-0.3 19/12/2024 SE276225.016	TP121 CLAY 1.0-1.3 19/12/2024 SE276225.017	TP121 CLAY 2.0-2.3 19/12/2024 SE276225.018	TP122 CLAY 0.0-0.3 19/12/2024 SE276225.019	TP122 CLAY 1.0-1.3 19/12/2024 SE276225.020
% Moisture	%w/w	1	9.2	10.8	14.7	5.8	10.0

PARAMETER	UOM	LOR	TP122 CLAY 2.0-2.3 19/12/2024 SE276225.021	TP123 CLAY 0.0-0.3 19/12/2024 SE276225.022	TP123 CLAY 1.0-1.3 19/12/2024 SE276225.023	TP123 CLAY 2.0-2.3 19/12/2024 SE276225.024	TP124 CLAY 0.0-0.3 19/12/2024 SE276225.025
% Moisture	%w/w	1	13.2	8.5	9.9	9.6	16.0

PARAMETER	UOM	LOR	TP124 CLAY 1.0-1.3 19/12/2024 SE276225.026	TP124 CLAY 2.0-2.3 19/12/2024 SE276225.027	TP125 CLAY 0.0-0.3 19/12/2024 SE276225.028	TP125 CLAY 1.0-1.3 19/12/2024 SE276225.029	TP125 CLAY 2.0-2.3 19/12/2024 SE276225.030
% Moisture	%w/w	1	10.8	11.5	7.6	17.8	14.3

PARAMETER	UOM	LOR	TP125 CLAY 3.0-3.3 19/12/2024 SE276225.031	TP126 CLAY 0.0-0.3 19/12/2024 SE276225.032	TP126 CLAY 1.0-1.3 19/12/2024 SE276225.033	TP126 CLAY 2.0-2.3 19/12/2024 SE276225.034	TP127 CLAY 0.0-0.3 19/12/2024 SE276225.035
% Moisture	%w/w	1	14.6	9.5	8.9	9.2	10.3

Moisture Content [AN002] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	TP127 CLAY 1.0-1.3 19/12/2024 SE276225.036	TP127 CLAY 2.0-2.3 19/12/2024 SE276225.037	TP128 CLAY 0.0-0.3 19/12/2024 SE276225.038	TP128 CLAY 1.0-1.3 19/12/2024 SE276225.039	TP128 CLAY 2.0-2.3 19/12/2024 SE276225.040
% Moisture	%w/w	1	13.4	17.6	8.4	9.6	9.5

PARAMETER	UOM	LOR	TP129 CLAY 0.0-0.3 19/12/2024 SE276225.041	TP129 CLAY 1.0-1.3 19/12/2024 SE276225.042	TP129 CLAY 2.0-2.3 19/12/2024 SE276225.043	TP130 CLAY 0.0-0.3 19/12/2024 SE276225.044	TP130 CLAY 1.0-1.3 19/12/2024 SE276225.045
% Moisture	%w/w	1	5.9	8.9	10.1	9.7	12.6

PARAMETER	UOM	LOR	TP130 CLAY 2.0-2.3 19/12/2024 SE276225.046	TP131 CLAY 0.0-0.3 19/12/2024 SE276225.047	TP131 CLAY 1.0-1.3 19/12/2024 SE276225.048	TP131 CLAY 2.0-2.3 19/12/2024 SE276225.049	TP132 CLAY 0.0-0.3 19/12/2024 SE276225.050
% Moisture	%w/w	1	10.9	9.8	8.7	8.9	7.4

PARAMETER	UOM	LOR	TP132 CLAY 1.0-1.3 19/12/2024 SE276225.051	TP132 CLAY 2.0-2.3 19/12/2024 SE276225.052	TP133 CLAY 0.0-0.3 19/12/2024 SE276225.053	TP133 CLAY 1.0-1.3 19/12/2024 SE276225.054	TP133 CLAY 2.0-2.3 19/12/2024 SE276225.055
% Moisture	%w/w	1	7.2	9.3	5.1	7.9	8.2

PARAMETER	UOM	LOR	TP134 CLAY 0.0-0.3 19/12/2024 SE276225.056	TP134 CLAY 1.0-1.3 19/12/2024 SE276225.057	TP134 CLAY 2.0-2.3 19/12/2024 SE276225.058	TP135 CLAY 0.0-0.3 19/12/2024 SE276225.059	TP135 CLAY 1.0-1.3 19/12/2024 SE276225.060
% Moisture	%w/w	1	5.4	8.0	10.1	7.0	11.1

PARAMETER	UOM	LOR	TP135 CLAY 2.0-2.3 19/12/2024 SE276225.061	TP136 CLAY 0.0-0.3 19/12/2024 SE276225.062	TP136 CLAY 1.0-1.3 19/12/2024 SE276225.063	TP136 CLAY 2.0-2.3 19/12/2024 SE276225.064	J1 CLAY 0.0-0.3 19/12/2024 SE276225.065
% Moisture	%w/w	1	7.6	6.3	6.6	9.2	11.1

PARAMETER	UOM	LOR	J1 CLAY 0.5-0.8 19/12/2024 SE276225.066	J1 CLAY 1.0-1.3 19/12/2024 SE276225.067	DDS5 CLAY - 19/12/2024 SE276225.068	DDS6 CLAY - 19/12/2024 SE276225.069	DDS7 CLAY - 19/12/2024 SE276225.070
% Moisture	%w/w	1	11.0	13.4	9.9	12.0	8.4

Moisture Content [AN002] Tested: 23/12/2024 (continued)

PARAMETER	UOM	LOR	DDS8 CLAY - 19/12/2024 SE276225.071	DDS10 CLAY - 19/12/2024 SE276225.074	DDS11 CLAY - 19/12/2024 SE276225.075	DDS12 CLAY - 19/12/2024 SE276225.076	DDS13 CLAY - 19/12/2024 SE276225.077
% Moisture	%w/w	1	**11.5**	**14.2**	**9.7**	**11.1**	**10.2**

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [AN404] Tested: 23/12/2024

PARAMETER	UOM	LOR	DDS10 CLAY - 19/12/2024 SE276225.074	DDS11 CLAY - 19/12/2024 SE276225.075	DDS12 CLAY - 19/12/2024 SE276225.076	DDS13 CLAY - 19/12/2024 SE276225.077
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01
Sum PFOS and PFHxS	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Sum of US EPA PFAS (PFOS+PFOA)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005
Sum of Positive PFAS	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005

VOCs in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

OC Pesticides in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
Alpha BHC	µg/L	0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Aldrin	µg/L	0.1	<0.1
Beta BHC	µg/L	0.1	<0.1
Delta BHC	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Total OC	µg/L	1	-
Total OC	µg/L	1	-

OP Pesticides in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2

PCBs in Water [AN420] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Metals in Water (Dissolved) by ICPOES [AN320] Tested: 30/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Arsenic, As	mg/L	0.02	<0.020
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	<0.01

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 27/12/2024

PARAMETER	UOM	LOR	RS3 WATER - 19/12/2024 SE276225.072
Mercury	mg/L	0.00005	<0.00005

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.

AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE276225 R2

CLIENT DETAILS

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Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	77

LABORATORY DETAILS

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SGS Reference	**SE276225 R2**
Date Received	20 Dec 2024
Date Reported	13 Jan 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	OC Pesticides in Water	1 item
	OP Pesticides in Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	1 item
	PCBs in Water	1 item
	TRH (Total Recoverable Hydrocarbons) in Water	1 item
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	3 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	2 items

SAMPLE SUMMARY

Sample counts by matrix	76 Soil/Clay, 1 Wate	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Two Days/Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE276225 R2

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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP117	SE276225.005	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP120	SE276225.014	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP122	SE276225.019	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP123	SE276225.023	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP125	SE276225.028	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP126	SE276225.032	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP127	SE276225.036	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP130	SE276225.044	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
TP132	SE276225.051	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025
J1	SE276225.065	LB334446	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	02 Jan 2025

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334447	19 Dec 2024	20 Dec 2024	16 Jan 2025	27 Dec 2024	16 Jan 2025	27 Dec 2024

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP116	SE276225.002	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP116	SE276225.003	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP117	SE276225.004	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP117	SE276225.005	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP117	SE276225.006	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP118	SE276225.007	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP118	SE276225.008	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP118	SE276225.009	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP119	SE276225.010	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP119	SE276225.011	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP119	SE276225.012	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP120	SE276225.013	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP120	SE276225.014	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP120	SE276225.015	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP121	SE276225.016	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP121	SE276225.017	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP121	SE276225.018	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP122	SE276225.019	LB334361	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP122	SE276225.020	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP122	SE276225.021	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP123	SE276225.022	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP123	SE276225.023	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP123	SE276225.024	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP124	SE276225.025	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP124	SE276225.026	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP124	SE276225.027	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP125	SE276225.028	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP125	SE276225.029	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP125	SE276225.030	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP125	SE276225.031	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP126	SE276225.032	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP126	SE276225.033	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP126	SE276225.034	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP127	SE276225.035	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP127	SE276225.036	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP127	SE276225.037	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP128	SE276225.038	LB334362	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP128	SE276225.039	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP128	SE276225.040	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP129	SE276225.041	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP129	SE276225.042	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP129	SE276225.043	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP130	SE276225.044	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP130	SE276225.045	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP130	SE276225.046	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP131	SE276225.047	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP131	SE276225.048	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP131	SE276225.049	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP132	SE276225.050	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP132	SE276225.051	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP132	SE276225.052	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP133	SE276225.053	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP133	SE276225.054	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP133	SE276225.055	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP134	SE276225.056	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP134	SE276225.057	LB334363	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP134	SE276225.058	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP135	SE276225.059	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP135	SE276225.060	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP135	SE276225.061	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP136	SE276225.062	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP136	SE276225.063	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
TP136	SE276225.064	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
J1	SE276225.065	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
J1	SE276225.066	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
J1	SE276225.067	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
DDS5	SE276225.068	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
DDS6	SE276225.069	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
DDS7	SE276225.070	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025
DDS8	SE276225.071	LB334365	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	16 Jan 2025	03 Jan 2025

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334472	19 Dec 2024	20 Dec 2024	17 Jun 2025	30 Dec 2024	17 Jun 2025	30 Dec 2024

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP116	SE276225.002	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP116	SE276225.003	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP117	SE276225.004	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP117	SE276225.005	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP117	SE276225.006	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP118	SE276225.007	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP118	SE276225.008	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP118	SE276225.009	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP119	SE276225.010	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP119	SE276225.011	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP119	SE276225.012	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP120	SE276225.013	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP120	SE276225.014	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP120	SE276225.015	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP121	SE276225.016	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP121	SE276225.017	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP121	SE276225.018	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP122	SE276225.019	LB334343	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP122	SE276225.020	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP122	SE276225.021	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP123	SE276225.022	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP123	SE276225.023	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP123	SE276225.024	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024

HOLDING TIME SUMMARY

SE276225 R2

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP124	SE276225.025	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP124	SE276225.026	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP124	SE276225.027	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP125	SE276225.028	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP125	SE276225.029	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP125	SE276225.030	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP125	SE276225.031	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP126	SE276225.032	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP126	SE276225.033	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP126	SE276225.034	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP127	SE276225.035	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP127	SE276225.036	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP127	SE276225.037	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP128	SE276225.038	LB334344	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP128	SE276225.039	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP128	SE276225.040	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP129	SE276225.041	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP129	SE276225.042	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP129	SE276225.043	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP130	SE276225.044	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP130	SE276225.045	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP130	SE276225.046	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP131	SE276225.047	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP131	SE276225.048	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP131	SE276225.049	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP132	SE276225.050	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP132	SE276225.051	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP132	SE276225.052	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP133	SE276225.053	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP133	SE276225.054	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP133	SE276225.055	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP134	SE276225.056	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP134	SE276225.057	LB334345	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP134	SE276225.058	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP135	SE276225.059	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP135	SE276225.060	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP135	SE276225.061	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP136	SE276225.062	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP136	SE276225.063	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
TP136	SE276225.064	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
J1	SE276225.065	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
J1	SE276225.066	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
J1	SE276225.067	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS5	SE276225.068	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS6	SE276225.069	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS7	SE276225.070	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS8	SE276225.071	LB334373	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	27 Dec 2024
DDS10	SE276225.074	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024
DDS11	SE276225.075	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024
DDS12	SE276225.076	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024
DDS13	SE276225.077	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP116	SE276225.002	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP116	SE276225.003	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.004	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.005	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.006	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

HOLDING TIME SUMMARY

SE276225 R2

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP118	SE276225.007	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.008	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.009	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.010	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.011	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.012	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.013	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP120	SE276225.014	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.015	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.016	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.017	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.018	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.019	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP122	SE276225.020	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.021	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.022	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.023	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.024	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.025	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.026	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.027	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.028	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.029	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.030	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.031	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.032	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.033	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.034	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.035	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.036	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.037	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.038	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.039	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.040	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.041	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.042	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.043	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.044	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.045	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.046	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.047	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.048	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.049	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.050	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.051	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.052	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.053	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.054	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.055	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.056	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.057	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.058	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.059	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.060	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.061	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.062	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.063	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.064	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.065	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.066	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
J1	SE276225.067	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS5	SE276225.068	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS6	SE276225.069	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS7	SE276225.070	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS8	SE276225.071	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334429	19 Dec 2024	20 Dec 2024	26 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP116	SE276225.002	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP116	SE276225.003	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.004	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.005	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.006	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.007	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.008	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.009	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.010	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.011	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.012	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.013	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP120	SE276225.014	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.015	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.016	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.017	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.018	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.019	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP122	SE276225.020	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.021	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.022	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.023	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.024	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.025	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.026	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.027	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.028	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.029	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.030	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.031	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.032	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.033	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.034	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.035	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.036	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.037	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.038	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.039	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.040	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.041	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.042	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.043	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.044	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.045	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.046	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.047	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.048	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP131	SE276225.049	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.050	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.051	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.052	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.053	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.054	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.055	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.056	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.057	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.058	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.059	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.060	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.061	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.062	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.063	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.064	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.065	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.066	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.067	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS5	SE276225.068	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS6	SE276225.069	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS7	SE276225.070	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS8	SE276225.071	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334429	19 Dec 2024	20 Dec 2024	26 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP116	SE276225.002	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP116	SE276225.003	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.004	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.005	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.006	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP118	SE276225.007	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP118	SE276225.008	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP118	SE276225.009	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP119	SE276225.010	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP119	SE276225.011	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP119	SE276225.012	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.013	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.014	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.015	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP121	SE276225.016	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP121	SE276225.017	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP121	SE276225.018	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP122	SE276225.019	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP122	SE276225.020	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP122	SE276225.021	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP123	SE276225.022	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP123	SE276225.023	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP123	SE276225.024	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.025	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.026	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.027	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.028	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.029	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.030	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP125	SE276225.031	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.032	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.033	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.034	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.035	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.036	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.037	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP128	SE276225.038	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP128	SE276225.039	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP128	SE276225.040	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.041	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.042	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.043	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.044	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.045	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.046	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.047	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.048	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.049	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.050	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.051	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.052	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP133	SE276225.053	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP133	SE276225.054	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP133	SE276225.055	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.056	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.057	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.058	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.059	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.060	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.061	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.062	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.063	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.064	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.065	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.066	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.067	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
DDS5	SE276225.068	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
DDS6	SE276225.069	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
DDS7	SE276225.070	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
DDS8	SE276225.071	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334429	19 Dec 2024	20 Dec 2024	26 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP116	SE276225.002	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP116	SE276225.003	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.004	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.005	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.006	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.007	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.008	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.009	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.010	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.011	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
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Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP120	SE276225.013	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP120	SE276225.014	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP120	SE276225.015	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.016	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.017	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.018	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.019	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.020	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.021	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.022	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.023	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.024	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.025	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.026	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.027	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.028	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.029	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.030	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.031	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.032	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.033	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.034	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.035	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.036	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.037	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.038	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.039	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.040	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.041	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.042	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.043	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.044	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.045	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.046	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.047	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.048	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.049	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.050	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.051	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.052	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.053	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.054	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.055	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.056	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.057	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.058	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.059	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.060	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.061	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.062	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.063	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.064	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.065	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.066	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.067	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS5	SE276225.068	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS6	SE276225.069	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS7	SE276225.070	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS8	SE276225.071	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

HOLDING TIME SUMMARY

SE276225 R2

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334429	19 Dec 2024	20 Dec 2024	26 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DDS10	SE276225.074	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024
DDS11	SE276225.075	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024
DDS12	SE276225.076	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024
DDS13	SE276225.077	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP117	SE276225.005	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP120	SE276225.014	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP122	SE276225.019	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP123	SE276225.023	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP125	SE276225.028	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP126	SE276225.032	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP127	SE276225.036	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP130	SE276225.044	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
TP132	SE276225.051	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024
J1	SE276225.065	LB334305	19 Dec 2024	20 Dec 2024	26 Dec 2024	23 Dec 2024	24 Dec 2024	24 Dec 2024

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP116	SE276225.002	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP116	SE276225.003	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP117	SE276225.004	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP117	SE276225.005	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP117	SE276225.006	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP118	SE276225.007	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP118	SE276225.008	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP118	SE276225.009	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP119	SE276225.010	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP119	SE276225.011	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP119	SE276225.012	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP120	SE276225.013	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP120	SE276225.014	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP120	SE276225.015	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP121	SE276225.016	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP121	SE276225.017	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP121	SE276225.018	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP122	SE276225.019	LB334352	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP122	SE276225.020	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP122	SE276225.021	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP123	SE276225.022	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP123	SE276225.023	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP123	SE276225.024	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP124	SE276225.025	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP124	SE276225.026	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP124	SE276225.027	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP125	SE276225.028	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP125	SE276225.029	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP125	SE276225.030	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP125	SE276225.031	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP126	SE276225.032	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP126	SE276225.033	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP126	SE276225.034	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP127	SE276225.035	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued) — **Method: ME-(AU)-[ENV]AN040/AN320**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP127	SE276225.036	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP127	SE276225.037	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP128	SE276225.038	LB334354	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	30 Dec 2024
TP128	SE276225.039	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP128	SE276225.040	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP129	SE276225.041	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP129	SE276225.042	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP129	SE276225.043	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP130	SE276225.044	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP130	SE276225.045	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP130	SE276225.046	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP131	SE276225.047	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP131	SE276225.048	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP131	SE276225.049	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP132	SE276225.050	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP132	SE276225.051	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP132	SE276225.052	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP133	SE276225.053	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP133	SE276225.054	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP133	SE276225.055	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP134	SE276225.056	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP134	SE276225.057	LB334355	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP134	SE276225.058	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP135	SE276225.059	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP135	SE276225.060	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP135	SE276225.061	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP136	SE276225.062	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP136	SE276225.063	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
TP136	SE276225.064	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
J1	SE276225.065	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
J1	SE276225.066	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
J1	SE276225.067	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
DDS5	SE276225.068	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
DDS6	SE276225.069	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
DDS7	SE276225.070	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025
DDS8	SE276225.071	LB334357	19 Dec 2024	20 Dec 2024	17 Jun 2025	23 Dec 2024	17 Jun 2025	02 Jan 2025

TRH (Total Recoverable Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN403**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP116	SE276225.002	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP116	SE276225.003	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.004	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP117	SE276225.005	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP117	SE276225.006	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.007	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.008	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP118	SE276225.009	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.010	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.011	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP119	SE276225.012	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.013	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP120	SE276225.014	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP120	SE276225.015	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.016	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.017	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP121	SE276225.018	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.019	LB334329	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.020	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP122	SE276225.021	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP123	SE276225.022	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.023	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP123	SE276225.024	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP124	SE276225.025	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.026	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP124	SE276225.027	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.028	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP125	SE276225.029	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.030	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP125	SE276225.031	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP126	SE276225.032	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.033	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP126	SE276225.034	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.035	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP127	SE276225.036	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP127	SE276225.037	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.038	LB334330	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.039	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP128	SE276225.040	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.041	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP129	SE276225.042	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP129	SE276225.043	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP130	SE276225.044	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.045	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP130	SE276225.046	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.047	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP131	SE276225.048	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP131	SE276225.049	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.050	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP132	SE276225.051	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP132	SE276225.052	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.053	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.054	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP133	SE276225.055	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP134	SE276225.056	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.057	LB334331	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP134	SE276225.058	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.059	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP135	SE276225.060	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP135	SE276225.061	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.062	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
TP136	SE276225.063	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
TP136	SE276225.064	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.065	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	27 Dec 2024
J1	SE276225.066	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
J1	SE276225.067	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS5	SE276225.068	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS6	SE276225.069	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS7	SE276225.070	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024
DDS8	SE276225.071	LB334334	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	01 Feb 2025	30 Dec 2024

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334429	19 Dec 2024	20 Dec 2024	26 Dec 2024	27 Dec 2024†	05 Feb 2025	30 Dec 2024

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP117	SE276225.005	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP119	SE276225.012	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024

HOLDING TIME SUMMARY

SE276225 R2

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP120	SE276225.014	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP122	SE276225.019	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP123	SE276225.024	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP124	SE276225.027	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP125	SE276225.028	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP126	SE276225.032	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP126	SE276225.033	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP127	SE276225.036	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP128	SE276225.040	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP129	SE276225.042	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP130	SE276225.044	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP130	SE276225.045	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP131	SE276225.047	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP132	SE276225.051	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP133	SE276225.055	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP135	SE276225.060	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP136	SE276225.062	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
J1	SE276225.065	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TS3	SE276225.073	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	13 Jan 2025†

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334388	19 Dec 2024	20 Dec 2024	02 Jan 2025	24 Dec 2024	02 Jan 2025	27 Dec 2024

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP116	SE276225.001	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP117	SE276225.005	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP119	SE276225.012	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP120	SE276225.014	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP122	SE276225.019	LB334332	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP123	SE276225.024	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP124	SE276225.027	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP125	SE276225.028	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP126	SE276225.032	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP126	SE276225.033	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP127	SE276225.036	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP128	SE276225.040	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP129	SE276225.042	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP130	SE276225.044	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP130	SE276225.045	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP131	SE276225.047	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP132	SE276225.051	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP133	SE276225.055	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP135	SE276225.060	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TP136	SE276225.062	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
J1	SE276225.065	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	27 Dec 2024
TS3	SE276225.073	LB334333	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	02 Jan 2025	13 Jan 2025†

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RS3	SE276225.072	LB334388	19 Dec 2024	20 Dec 2024	02 Jan 2025	24 Dec 2024	02 Jan 2025	27 Dec 2024

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP116	SE276225.001	%	60 - 130%	91
	TP117	SE276225.005	%	60 - 130%	92
	TP119	SE276225.012	%	60 - 130%	92
	TP120	SE276225.014	%	60 - 130%	93
	TP122	SE276225.019	%	60 - 130%	96
	TP123	SE276225.024	%	60 - 130%	95
	TP124	SE276225.027	%	60 - 130%	100
	TP125	SE276225.028	%	60 - 130%	95
	TP126	SE276225.032	%	60 - 130%	96
	TP127	SE276225.036	%	60 - 130%	94
	TP128	SE276225.040	%	60 - 130%	92
	TP129	SE276225.042	%	60 - 130%	93
	TP130	SE276225.044	%	60 - 130%	91
	TP131	SE276225.047	%	60 - 130%	92
	TP132	SE276225.051	%	60 - 130%	94
	TP133	SE276225.055	%	60 - 130%	94
	TP135	SE276225.060	%	60 - 130%	92
	TP136	SE276225.062	%	60 - 130%	90
	J1	SE276225.065	%	60 - 130%	92

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	RS3	SE276225.072	%	40 - 130%	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP116	SE276225.001	%	60 - 130%	89
	TP117	SE276225.005	%	60 - 130%	88
	TP119	SE276225.012	%	60 - 130%	89
	TP120	SE276225.014	%	60 - 130%	89
	TP122	SE276225.019	%	60 - 130%	93
	TP123	SE276225.024	%	60 - 130%	92
	TP124	SE276225.027	%	60 - 130%	93
	TP125	SE276225.028	%	60 - 130%	91
	TP126	SE276225.032	%	60 - 130%	94
	TP127	SE276225.036	%	60 - 130%	90
	TP128	SE276225.040	%	60 - 130%	87
	TP129	SE276225.042	%	60 - 130%	88
	TP130	SE276225.044	%	60 - 130%	86
	TP131	SE276225.047	%	60 - 130%	85
	TP132	SE276225.051	%	60 - 130%	89
	TP133	SE276225.055	%	60 - 130%	88
	TP135	SE276225.060	%	60 - 130%	86
	TP136	SE276225.062	%	60 - 130%	83
	J1	SE276225.065	%	60 - 130%	86
d14-p-terphenyl (Surrogate)	TP116	SE276225.001	%	60 - 130%	90
	TP117	SE276225.005	%	60 - 130%	91
	TP119	SE276225.012	%	60 - 130%	88
	TP120	SE276225.014	%	60 - 130%	91
	TP122	SE276225.019	%	60 - 130%	89
	TP123	SE276225.024	%	60 - 130%	93
	TP124	SE276225.027	%	60 - 130%	95
	TP125	SE276225.028	%	60 - 130%	93
	TP126	SE276225.032	%	60 - 130%	93
	TP127	SE276225.036	%	60 - 130%	93
	TP128	SE276225.040	%	60 - 130%	87
	TP129	SE276225.042	%	60 - 130%	89
	TP130	SE276225.044	%	60 - 130%	87
	TP131	SE276225.047	%	60 - 130%	86
	TP132	SE276225.051	%	60 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP133	SE276225.055	%	60 - 130%	91
	TP135	SE276225.060	%	60 - 130%	86
	TP136	SE276225.062	%	60 - 130%	87
	J1	SE276225.065	%	60 - 130%	89

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS3	SE276225.072	%	40 - 130%	68
d14-p-terphenyl (Surrogate)	RS3	SE276225.072	%	40 - 130%	73

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP116	SE276225.001	%	70 - 130%	89
	TP116	SE276225.002	%	70 - 130%	92
	TP116	SE276225.003	%	70 - 130%	90
	TP117	SE276225.004	%	70 - 130%	101
	TP117	SE276225.005	%	70 - 130%	88
	TP117	SE276225.006	%	70 - 130%	88
	TP118	SE276225.007	%	70 - 130%	91
	TP118	SE276225.008	%	70 - 130%	92
	TP118	SE276225.009	%	70 - 130%	91
	TP119	SE276225.010	%	70 - 130%	85
	TP119	SE276225.011	%	70 - 130%	90
	TP119	SE276225.012	%	70 - 130%	89
	TP120	SE276225.013	%	70 - 130%	89
	TP120	SE276225.014	%	70 - 130%	89
	TP120	SE276225.015	%	70 - 130%	91
	TP121	SE276225.016	%	70 - 130%	90
	TP121	SE276225.017	%	70 - 130%	89
	TP121	SE276225.018	%	70 - 130%	92
	TP122	SE276225.019	%	70 - 130%	93
	TP122	SE276225.020	%	70 - 130%	94
	TP122	SE276225.021	%	70 - 130%	93
	TP123	SE276225.022	%	70 - 130%	93
	TP123	SE276225.023	%	70 - 130%	91
	TP123	SE276225.024	%	70 - 130%	92
	TP124	SE276225.025	%	70 - 130%	87
	TP124	SE276225.026	%	70 - 130%	88
	TP124	SE276225.027	%	70 - 130%	93
	TP125	SE276225.028	%	70 - 130%	91
	TP125	SE276225.029	%	70 - 130%	91
	TP125	SE276225.030	%	70 - 130%	91
	TP125	SE276225.031	%	70 - 130%	91
	TP126	SE276225.032	%	70 - 130%	94
	TP126	SE276225.033	%	70 - 130%	93
	TP126	SE276225.034	%	70 - 130%	93
	TP127	SE276225.035	%	70 - 130%	89
	TP127	SE276225.036	%	70 - 130%	90
	TP127	SE276225.037	%	70 - 130%	92
	TP128	SE276225.038	%	70 - 130%	91
	TP128	SE276225.039	%	70 - 130%	88
	TP128	SE276225.040	%	70 - 130%	87
	TP129	SE276225.041	%	70 - 130%	91
	TP129	SE276225.042	%	70 - 130%	88
	TP129	SE276225.043	%	70 - 130%	77
	TP130	SE276225.044	%	70 - 130%	86
	TP130	SE276225.045	%	70 - 130%	86
	TP130	SE276225.046	%	70 - 130%	85
	TP131	SE276225.047	%	70 - 130%	85
	TP131	SE276225.048	%	70 - 130%	88
	TP131	SE276225.049	%	70 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP132	SE276225.050	%	70 - 130%	88
	TP132	SE276225.051	%	70 - 130%	89
	TP132	SE276225.052	%	70 - 130%	85
	TP133	SE276225.053	%	70 - 130%	84
	TP133	SE276225.054	%	70 - 130%	97
	TP133	SE276225.055	%	70 - 130%	88
	TP134	SE276225.056	%	70 - 130%	86
	TP134	SE276225.057	%	70 - 130%	87
	TP134	SE276225.058	%	70 - 130%	89
	TP135	SE276225.059	%	70 - 130%	92
	TP135	SE276225.060	%	70 - 130%	86
	TP135	SE276225.061	%	70 - 130%	89
	TP136	SE276225.062	%	70 - 130%	83
	TP136	SE276225.063	%	70 - 130%	88
	TP136	SE276225.064	%	70 - 130%	90
	J1	SE276225.065	%	70 - 130%	86
	J1	SE276225.066	%	70 - 130%	99
	J1	SE276225.067	%	70 - 130%	89
	DDS5	SE276225.068	%	70 - 130%	83
	DDS6	SE276225.069	%	70 - 130%	88
	DDS7	SE276225.070	%	70 - 130%	92
	DDS8	SE276225.071	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	TP116	SE276225.001	%	70 - 130%	90
	TP116	SE276225.002	%	70 - 130%	93
	TP116	SE276225.003	%	70 - 130%	91
	TP117	SE276225.004	%	70 - 130%	101
	TP117	SE276225.005	%	70 - 130%	91
	TP117	SE276225.006	%	70 - 130%	91
	TP118	SE276225.007	%	70 - 130%	94
	TP118	SE276225.008	%	70 - 130%	95
	TP118	SE276225.009	%	70 - 130%	92
	TP119	SE276225.010	%	70 - 130%	86
	TP119	SE276225.011	%	70 - 130%	91
	TP119	SE276225.012	%	70 - 130%	88
	TP120	SE276225.013	%	70 - 130%	89
	TP120	SE276225.014	%	70 - 130%	91
	TP120	SE276225.015	%	70 - 130%	93
	TP121	SE276225.016	%	70 - 130%	92
	TP121	SE276225.017	%	70 - 130%	89
	TP121	SE276225.018	%	70 - 130%	96
	TP122	SE276225.019	%	70 - 130%	89
	TP122	SE276225.020	%	70 - 130%	95
	TP122	SE276225.021	%	70 - 130%	93
	TP123	SE276225.022	%	70 - 130%	96
	TP123	SE276225.023	%	70 - 130%	94
	TP123	SE276225.024	%	70 - 130%	93
	TP124	SE276225.025	%	70 - 130%	88
	TP124	SE276225.026	%	70 - 130%	91
	TP124	SE276225.027	%	70 - 130%	95
	TP125	SE276225.028	%	70 - 130%	93
	TP125	SE276225.029	%	70 - 130%	92
	TP125	SE276225.030	%	70 - 130%	94
	TP125	SE276225.031	%	70 - 130%	92
	TP126	SE276225.032	%	70 - 130%	93
	TP126	SE276225.033	%	70 - 130%	94
	TP126	SE276225.034	%	70 - 130%	95
	TP127	SE276225.035	%	70 - 130%	90
	TP127	SE276225.036	%	70 - 130%	93
	TP127	SE276225.037	%	70 - 130%	93
	TP128	SE276225.038	%	70 - 130%	91
	TP128	SE276225.039	%	70 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	TP128	SE276225.040	%	70 - 130%	87
	TP129	SE276225.041	%	70 - 130%	94
	TP129	SE276225.042	%	70 - 130%	89
	TP129	SE276225.043	%	70 - 130%	85
	TP130	SE276225.044	%	70 - 130%	87
	TP130	SE276225.045	%	70 - 130%	86
	TP130	SE276225.046	%	70 - 130%	89
	TP131	SE276225.047	%	70 - 130%	86
	TP131	SE276225.048	%	70 - 130%	91
	TP131	SE276225.049	%	70 - 130%	87
	TP132	SE276225.050	%	70 - 130%	91
	TP132	SE276225.051	%	70 - 130%	93
	TP132	SE276225.052	%	70 - 130%	90
	TP133	SE276225.053	%	70 - 130%	89
	TP133	SE276225.054	%	70 - 130%	101
	TP133	SE276225.055	%	70 - 130%	91
	TP134	SE276225.056	%	70 - 130%	90
	TP134	SE276225.057	%	70 - 130%	91
	TP134	SE276225.058	%	70 - 130%	87
	TP135	SE276225.059	%	70 - 130%	92
	TP135	SE276225.060	%	70 - 130%	86
	TP135	SE276225.061	%	70 - 130%	89
	TP136	SE276225.062	%	70 - 130%	87
	TP136	SE276225.063	%	70 - 130%	90
	TP136	SE276225.064	%	70 - 130%	91
	J1	SE276225.065	%	70 - 130%	89
	J1	SE276225.066	%	70 - 130%	100
	J1	SE276225.067	%	70 - 130%	91
	DDS5	SE276225.068	%	70 - 130%	85
	DDS6	SE276225.069	%	70 - 130%	90
	DDS7	SE276225.070	%	70 - 130%	93
	DDS8	SE276225.071	%	70 - 130%	94
d5-nitrobenzene (Surrogate)	TP116	SE276225.001	%	70 - 130%	87
	TP116	SE276225.002	%	70 - 130%	89
	TP116	SE276225.003	%	70 - 130%	90
	TP117	SE276225.004	%	70 - 130%	100
	TP117	SE276225.005	%	70 - 130%	87
	TP117	SE276225.006	%	70 - 130%	85
	TP118	SE276225.007	%	70 - 130%	89
	TP118	SE276225.008	%	70 - 130%	89
	TP118	SE276225.009	%	70 - 130%	92
	TP119	SE276225.010	%	70 - 130%	87
	TP119	SE276225.011	%	70 - 130%	90
	TP119	SE276225.012	%	70 - 130%	88
	TP120	SE276225.013	%	70 - 130%	89
	TP120	SE276225.014	%	70 - 130%	90
	TP120	SE276225.015	%	70 - 130%	92
	TP121	SE276225.016	%	70 - 130%	90
	TP121	SE276225.017	%	70 - 130%	88
	TP121	SE276225.018	%	70 - 130%	92
	TP122	SE276225.019	%	70 - 130%	91
	TP122	SE276225.020	%	70 - 130%	92
	TP122	SE276225.021	%	70 - 130%	91
	TP123	SE276225.022	%	70 - 130%	92
	TP123	SE276225.023	%	70 - 130%	91
	TP123	SE276225.024	%	70 - 130%	91
	TP124	SE276225.025	%	70 - 130%	88
	TP124	SE276225.026	%	70 - 130%	88
	TP124	SE276225.027	%	70 - 130%	92
	TP125	SE276225.028	%	70 - 130%	91
	TP125	SE276225.029	%	70 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	TP125	SE276225.030	%	70 - 130%	91
	TP125	SE276225.031	%	70 - 130%	90
	TP126	SE276225.032	%	70 - 130%	90
	TP126	SE276225.033	%	70 - 130%	92
	TP126	SE276225.034	%	70 - 130%	92
	TP127	SE276225.035	%	70 - 130%	89
	TP127	SE276225.036	%	70 - 130%	91
	TP127	SE276225.037	%	70 - 130%	91
	TP128	SE276225.038	%	70 - 130%	90
	TP128	SE276225.039	%	70 - 130%	89
	TP128	SE276225.040	%	70 - 130%	89
	TP129	SE276225.041	%	70 - 130%	92
	TP129	SE276225.042	%	70 - 130%	92
	TP129	SE276225.043	%	70 - 130%	80
	TP130	SE276225.044	%	70 - 130%	89
	TP130	SE276225.045	%	70 - 130%	88
	TP130	SE276225.046	%	70 - 130%	89
	TP131	SE276225.047	%	70 - 130%	88
	TP131	SE276225.048	%	70 - 130%	89
	TP131	SE276225.049	%	70 - 130%	87
	TP132	SE276225.050	%	70 - 130%	89
	TP132	SE276225.051	%	70 - 130%	89
	TP132	SE276225.052	%	70 - 130%	87
	TP133	SE276225.053	%	70 - 130%	87
	TP133	SE276225.054	%	70 - 130%	100
	TP133	SE276225.055	%	70 - 130%	91
	TP134	SE276225.056	%	70 - 130%	89
	TP134	SE276225.057	%	70 - 130%	91
	TP134	SE276225.058	%	70 - 130%	90
	TP135	SE276225.059	%	70 - 130%	95
	TP135	SE276225.060	%	70 - 130%	90
	TP135	SE276225.061	%	70 - 130%	92
	TP136	SE276225.062	%	70 - 130%	87
	TP136	SE276225.063	%	70 - 130%	90
	TP136	SE276225.064	%	70 - 130%	93
	J1	SE276225.065	%	70 - 130%	89
	J1	SE276225.066	%	70 - 130%	101
	J1	SE276225.067	%	70 - 130%	91
	DDS5	SE276225.068	%	70 - 130%	86
	DDS6	SE276225.069	%	70 - 130%	90
	DDS7	SE276225.070	%	70 - 130%	93
	DDS8	SE276225.071	%	70 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	RS3	SE276225.072	%	40 - 130%	68
d14-p-terphenyl (Surrogate)	RS3	SE276225.072	%	40 - 130%	73
d5-nitrobenzene (Surrogate)	RS3	SE276225.072	%	40 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP116	SE276225.001	%	60 - 130%	91
	TP117	SE276225.005	%	60 - 130%	92
	TP119	SE276225.012	%	60 - 130%	92
	TP120	SE276225.014	%	60 - 130%	93
	TP122	SE276225.019	%	60 - 130%	96
	TP123	SE276225.024	%	60 - 130%	95
	TP124	SE276225.027	%	60 - 130%	100
	TP125	SE276225.028	%	60 - 130%	95
	TP126	SE276225.032	%	60 - 130%	96
	TP127	SE276225.036	%	60 - 130%	94
	TP128	SE276225.040	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	TP129	SE276225.042	%	60 - 130%	93
	TP130	SE276225.044	%	60 - 130%	91
	TP131	SE276225.047	%	60 - 130%	92
	TP132	SE276225.051	%	60 - 130%	94
	TP133	SE276225.055	%	60 - 130%	94
	TP135	SE276225.060	%	60 - 130%	92
	TP136	SE276225.062	%	60 - 130%	90
	J1	SE276225.065	%	60 - 130%	92

PCBs in Water — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	RS3	SE276225.072	%	40 - 130%	94

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples — Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	84
	DDS11	SE276225.075	%	10 - 150%	84
	DDS12	SE276225.076	%	10 - 150%	97
	DDS13	SE276225.077	%	10 - 150%	85
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 300%	69
	DDS11	SE276225.075	%	40 - 300%	72
	DDS12	SE276225.076	%	40 - 300%	62
	DDS13	SE276225.077	%	40 - 300%	60
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 300%	87
	DDS11	SE276225.075	%	40 - 300%	95
	DDS12	SE276225.076	%	40 - 300%	81
	DDS13	SE276225.077	%	40 - 300%	91
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 300%	91
	DDS11	SE276225.075	%	40 - 300%	120
	DDS12	SE276225.076	%	40 - 300%	106
	DDS13	SE276225.077	%	40 - 300%	106
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	81
	DDS11	SE276225.075	%	10 - 150%	82
	DDS12	SE276225.076	%	10 - 150%	100
	DDS13	SE276225.077	%	10 - 150%	78
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	85
	DDS11	SE276225.075	%	40 - 150%	87
	DDS12	SE276225.076	%	40 - 150%	87
	DDS13	SE276225.077	%	40 - 150%	88
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	123
	DDS11	SE276225.075	%	40 - 150%	118
	DDS12	SE276225.076	%	40 - 150%	119
	DDS13	SE276225.077	%	40 - 150%	118
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	89
	DDS11	SE276225.075	%	40 - 150%	89
	DDS12	SE276225.076	%	40 - 150%	86
	DDS13	SE276225.077	%	40 - 150%	88
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	5 - 150%	91
	DDS11	SE276225.075	%	5 - 150%	96
	DDS12	SE276225.076	%	5 - 150%	89
	DDS13	SE276225.077	%	5 - 150%	90
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	91
	DDS11	SE276225.075	%	40 - 150%	92
	DDS12	SE276225.076	%	40 - 150%	94
	DDS13	SE276225.077	%	40 - 150%	92
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	89
	DDS11	SE276225.075	%	40 - 150%	88
	DDS12	SE276225.076	%	40 - 150%	91
	DDS13	SE276225.077	%	40 - 150%	91
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	35 - 150%	81

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	DDS11	SE276225.075	%	35 - 150%	81
	DDS12	SE276225.076	%	35 - 150%	84
	DDS13	SE276225.077	%	35 - 150%	80
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	90
	DDS11	SE276225.075	%	40 - 150%	90
	DDS12	SE276225.076	%	40 - 150%	90
	DDS13	SE276225.077	%	40 - 150%	90
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	30 - 150%	89
	DDS11	SE276225.075	%	30 - 150%	85
	DDS12	SE276225.076	%	30 - 150%	101
	DDS13	SE276225.077	%	30 - 150%	87
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	93
	DDS11	SE276225.075	%	40 - 150%	95
	DDS12	SE276225.076	%	40 - 150%	91
	DDS13	SE276225.077	%	40 - 150%	100
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	20 - 150%	85
	DDS11	SE276225.075	%	20 - 150%	83
	DDS12	SE276225.076	%	20 - 150%	86
	DDS13	SE276225.077	%	20 - 150%	90
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	40 - 150%	98
	DDS11	SE276225.075	%	40 - 150%	103
	DDS12	SE276225.076	%	40 - 150%	105
	DDS13	SE276225.077	%	40 - 150%	101
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	95
	DDS11	SE276225.075	%	10 - 150%	90
	DDS12	SE276225.076	%	10 - 150%	101
	DDS13	SE276225.077	%	10 - 150%	89
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	30 - 170%	70
	DDS11	SE276225.075	%	30 - 170%	69
	DDS12	SE276225.076	%	30 - 170%	59
	DDS13	SE276225.077	%	30 - 170%	60
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	96
	DDS11	SE276225.075	%	10 - 150%	91
	DDS12	SE276225.076	%	10 - 150%	99
	DDS13	SE276225.077	%	10 - 150%	98
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	20 - 150%	58
	DDS11	SE276225.075	%	20 - 150%	63
	DDS12	SE276225.076	%	20 - 150%	59
	DDS13	SE276225.077	%	20 - 150%	58
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	87
	DDS11	SE276225.075	%	10 - 150%	89
	DDS12	SE276225.076	%	10 - 150%	91
	DDS13	SE276225.077	%	10 - 150%	93
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	DDS10	SE276225.074	%	10 - 150%	91
	DDS11	SE276225.075	%	10 - 150%	93
	DDS12	SE276225.076	%	10 - 150%	96
	DDS13	SE276225.077	%	10 - 150%	104

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP116	SE276225.001	%	60 - 130%	87
	TP117	SE276225.005	%	60 - 130%	84
	TP119	SE276225.012	%	60 - 130%	81
	TP120	SE276225.014	%	60 - 130%	87
	TP122	SE276225.019	%	60 - 130%	103
	TP123	SE276225.024	%	60 - 130%	77
	TP124	SE276225.027	%	60 - 130%	80
	TP125	SE276225.028	%	60 - 130%	82
	TP126	SE276225.032	%	60 - 130%	86
	TP126	SE276225.033	%	60 - 130%	76
	TP127	SE276225.036	%	60 - 130%	80

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP128	SE276225.040	%	60 - 130%	83
	TP129	SE276225.042	%	60 - 130%	80
	TP130	SE276225.044	%	60 - 130%	86
	TP130	SE276225.045	%	60 - 130%	88
	TP131	SE276225.047	%	60 - 130%	84
	TP132	SE276225.051	%	60 - 130%	84
	TP133	SE276225.055	%	60 - 130%	71
	TP135	SE276225.060	%	60 - 130%	75
	TP136	SE276225.062	%	60 - 130%	86
	J1	SE276225.065	%	60 - 130%	88
	TS3	SE276225.073	%	60 - 130%	90
d4-1,2-dichloroethane (Surrogate)	TP116	SE276225.001	%	60 - 130%	86
	TP117	SE276225.005	%	60 - 130%	87
	TP119	SE276225.012	%	60 - 130%	87
	TP120	SE276225.014	%	60 - 130%	84
	TP122	SE276225.019	%	60 - 130%	94
	TP123	SE276225.024	%	60 - 130%	68
	TP124	SE276225.027	%	60 - 130%	69
	TP125	SE276225.028	%	60 - 130%	71
	TP126	SE276225.032	%	60 - 130%	83
	TP126	SE276225.033	%	60 - 130%	71
	TP127	SE276225.036	%	60 - 130%	84
	TP128	SE276225.040	%	60 - 130%	86
	TP129	SE276225.042	%	60 - 130%	73
	TP130	SE276225.044	%	60 - 130%	90
	TP130	SE276225.045	%	60 - 130%	81
	TP131	SE276225.047	%	60 - 130%	81
	TP132	SE276225.051	%	60 - 130%	82
	TP133	SE276225.055	%	60 - 130%	69
	TP135	SE276225.060	%	60 - 130%	77
	TP136	SE276225.062	%	60 - 130%	83
	J1	SE276225.065	%	60 - 130%	83
	TS3	SE276225.073	%	60 - 130%	90
d8-toluene (Surrogate)	TP116	SE276225.001	%	60 - 130%	93
	TP117	SE276225.005	%	60 - 130%	88
	TP119	SE276225.012	%	60 - 130%	87
	TP120	SE276225.014	%	60 - 130%	81
	TP122	SE276225.019	%	60 - 130%	103
	TP123	SE276225.024	%	60 - 130%	73
	TP124	SE276225.027	%	60 - 130%	85
	TP125	SE276225.028	%	60 - 130%	88
	TP126	SE276225.032	%	60 - 130%	91
	TP126	SE276225.033	%	60 - 130%	81
	TP127	SE276225.036	%	60 - 130%	87
	TP128	SE276225.040	%	60 - 130%	89
	TP129	SE276225.042	%	60 - 130%	87
	TP130	SE276225.044	%	60 - 130%	92
	TP130	SE276225.045	%	60 - 130%	95
	TP131	SE276225.047	%	60 - 130%	91
	TP132	SE276225.051	%	60 - 130%	92
	TP133	SE276225.055	%	60 - 130%	77
	TP135	SE276225.060	%	60 - 130%	81
	TP136	SE276225.062	%	60 - 130%	93
	J1	SE276225.065	%	60 - 130%	93
	TS3	SE276225.073	%	60 - 130%	101

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS3	SE276225.072	%	40 - 130%	91
d4-1,2-dichloroethane (Surrogate)	RS3	SE276225.072	%	40 - 130%	92
d8-toluene (Surrogate)	RS3	SE276225.072	%	40 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP116	SE276225.001	%	60 - 130%	87
	TP117	SE276225.005	%	60 - 130%	84
	TP119	SE276225.012	%	60 - 130%	81
	TP120	SE276225.014	%	60 - 130%	87
	TP122	SE276225.019	%	60 - 130%	103
	TP123	SE276225.024	%	60 - 130%	77
	TP124	SE276225.027	%	60 - 130%	80
	TP125	SE276225.028	%	60 - 130%	82
	TP126	SE276225.032	%	60 - 130%	86
	TP126	SE276225.033	%	60 - 130%	76
	TP127	SE276225.036	%	60 - 130%	80
	TP128	SE276225.040	%	60 - 130%	83
	TP129	SE276225.042	%	60 - 130%	80
	TP130	SE276225.044	%	60 - 130%	86
	TP130	SE276225.045	%	60 - 130%	88
	TP131	SE276225.047	%	60 - 130%	84
	TP132	SE276225.051	%	60 - 130%	84
	TP133	SE276225.055	%	60 - 130%	71
	TP135	SE276225.060	%	60 - 130%	75
	TP136	SE276225.062	%	60 - 130%	86
	J1	SE276225.065	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	TP116	SE276225.001	%	60 - 130%	86
	TP117	SE276225.005	%	60 - 130%	87
	TP119	SE276225.012	%	60 - 130%	87
	TP120	SE276225.014	%	60 - 130%	84
	TP122	SE276225.019	%	60 - 130%	94
	TP123	SE276225.024	%	60 - 130%	68
	TP124	SE276225.027	%	60 - 130%	69
	TP125	SE276225.028	%	60 - 130%	71
	TP126	SE276225.032	%	60 - 130%	83
	TP126	SE276225.033	%	60 - 130%	71
	TP127	SE276225.036	%	60 - 130%	84
	TP128	SE276225.040	%	60 - 130%	86
	TP129	SE276225.042	%	60 - 130%	73
	TP130	SE276225.044	%	60 - 130%	90
	TP130	SE276225.045	%	60 - 130%	81
	TP131	SE276225.047	%	60 - 130%	81
	TP132	SE276225.051	%	60 - 130%	82
	TP133	SE276225.055	%	60 - 130%	69
	TP135	SE276225.060	%	60 - 130%	77
	TP136	SE276225.062	%	60 - 130%	83
	J1	SE276225.065	%	60 - 130%	83
d8-toluene (Surrogate)	TP116	SE276225.001	%	60 - 130%	93
	TP117	SE276225.005	%	60 - 130%	88
	TP119	SE276225.012	%	60 - 130%	87
	TP120	SE276225.014	%	60 - 130%	81
	TP122	SE276225.019	%	60 - 130%	103
	TP123	SE276225.024	%	60 - 130%	73
	TP124	SE276225.027	%	60 - 130%	85
	TP125	SE276225.028	%	60 - 130%	88
	TP126	SE276225.032	%	60 - 130%	91
	TP126	SE276225.033	%	60 - 130%	81
	TP127	SE276225.036	%	60 - 130%	87
	TP128	SE276225.040	%	60 - 130%	89
	TP129	SE276225.042	%	60 - 130%	87
	TP130	SE276225.044	%	60 - 130%	92
	TP130	SE276225.045	%	60 - 130%	95
	TP131	SE276225.047	%	60 - 130%	91
	TP132	SE276225.051	%	60 - 130%	92
	TP133	SE276225.055	%	60 - 130%	77
	TP135	SE276225.060	%	60 - 130%	81

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	TP136	SE276225.062	%	60 - 130%	93
	J1	SE276225.065	%	60 - 130%	93

Volatile Petroleum Hydrocarbons in Water — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	RS3	SE276225.072	%	40 - 130%	91
d4-1,2-dichloroethane (Surrogate)	RS3	SE276225.072	%	60 - 130%	92
d8-toluene (Surrogate)	RS3	SE276225.072	%	40 - 130%	84

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB334447.001	Mercury	mg/L	0.00005	<0.00005

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB334361.001	Mercury	mg/kg	0.05	<0.05
LB334362.001	Mercury	mg/kg	0.05	<0.05
LB334363.001	Mercury	mg/kg	0.05	<0.05
LB334365.001	Mercury	mg/kg	0.05	<0.05

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result
LB334472.001	Arsenic, As	mg/L	0.02	<0.020
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334329.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94
LB334330.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334330.001		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB334331.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89
LB334334.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334329.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	91
LB334330.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	93
LB334331.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334331.001		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	85
LB334334.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	93

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Azinphos-methyl	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334329.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	91
LB334330.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334330.001		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	92
		2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	93
LB334331.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	86
		2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	85
LB334334.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	96
		2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334429.001	Naphthalene	µg/L	0.1	<0.1
	2-methylnaphthalene	µg/L	0.1	<0.1
	1-methylnaphthalene	µg/L	0.1	<0.1
	Acenaphthylene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334429.001		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(b&j&k)fluoranthene	µg/L	0.2	<0.2
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	82
		2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB334329.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	94
LB334330.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	95
LB334331.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	89
LB334334.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	97

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB334429.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB334316.001	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
	Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
	Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
	Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
	Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
	N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
	N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	mg/kg	0.01	<0.01
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	mg/kg	0.01	<0.01
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	mg/kg	0.01	<0.01

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB334352.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB334354.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB334355.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB334357.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334329.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB334330.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB334331.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB334334.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB334429.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334332.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	105
	Totals	Total BTEX*	mg/kg	0.6	<0.6
LB334333.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	92
		Bromofluorobenzene (Surrogate)	%	-	89
	Totals	Total BTEX*	mg/kg	0.6	<0.6

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334332.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
LB334333.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB334388.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	88

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276142.004	LB334365.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE276225.010	LB334361.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE276225.019	LB334361.024	Mercury	mg/kg	0.05	<0.05	<0.05	144	0
SE276225.029	LB334362.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE276225.038	LB334362.024	Mercury	mg/kg	0.05	<0.05	<0.05	165	0
SE276225.048	LB334363.014	Mercury	mg/kg	0.05	0.15	0.13	66	18
SE276225.057	LB334363.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE276225.067	LB334365.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276128.018	LB334472.014	Arsenic, As	mg/L	0.02	<0.02	<0.02	200	0
		Cadmium, Cd	mg/L	0.001	<0.001	<0.001	200	0
		Chromium, Cr	mg/L	0.005	<0.005	<0.005	200	0
		Copper, Cu	mg/L	0.005	<0.005	<0.005	200	0
		Lead, Pb	mg/L	0.02	<0.02	<0.02	200	0
		Nickel, Ni	mg/L	0.005	<0.005	<0.005	200	0
		Zinc, Zn	mg/L	0.01	<0.01	<0.01	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276142.004	LB334373.020	% Moisture	%w/w	1	14.5	14.6	37	1
SE276225.010	LB334343.011	% Moisture	%w/w	1	7.2	7.4	44	3
SE276225.019	LB334343.021	% Moisture	%w/w	1	5.8	6.7	46	14
SE276225.029	LB334344.011	% Moisture	%w/w	1	17.8	15.1	36	17
SE276225.038	LB334344.021	% Moisture	%w/w	1	8.4	8.1	42	4
SE276225.048	LB334345.011	% Moisture	%w/w	1	8.7	7.0	43	22
SE276225.057	LB334345.021	% Moisture	%w/w	1	8.0	9.0	42	12
SE276225.067	LB334373.011	% Moisture	%w/w	1	13.4	14.6	37	9
SE276225.077	LB334318.007	% Moisture	%w/w	1	10.2	9.3	40	10

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334329.024		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.48	0.47	30	1
SE276225.036	LB334330.027		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.036	LB334330.027		Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.47	30	1
SE276225.055	LB334331.026		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.45	30	4
SE276225.065	LB334334.021		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.065	LB334334.021		Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.46	0.47	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334329.024		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE276225.036	LB334330.027		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE276225.055	LB334331.026		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.055	LB334331.026	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	2
SE276225.065	LB334334.021		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.010	LB334329.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	169	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.1	130	33
			Pyrene	mg/kg	0.1	<0.1	0.1	137	28
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	190	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	104	92
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	7
SE276225.019	LB334329.024		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	187	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	191	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334329.024		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE276225.029	LB334330.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE276225.036	LB334330.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE276225.048	LB334331.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.048	LB334331.014		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	173	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.2	0.2	81	29
			Pyrene	mg/kg	0.1	0.4	0.3	61	27
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.1	97	23
			Chrysene	mg/kg	0.1	0.2	0.2	82	21
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.1	99	32
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.1	93	21
			Benzo(a)pyrene	mg/kg	0.1	0.2	0.2	83	27
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	144	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	126	17
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	0.3	0.2	95	27
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.3	0.3	79	22
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	0.4	0.3	97	18
			Total PAH (18)	mg/kg	0.8	1.7	1.2	37	33
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
SE276225.055	LB334331.026		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	187	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.1	0.1	102	5
			Pyrene	mg/kg	0.1	0.2	0.2	88	7
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	163	0
			Chrysene	mg/kg	0.1	0.1	<0.1	132	4
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	154	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	150	0
			Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	137	1
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	190	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	146	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	54	54 †
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	2
SE276225.065	LB334334.021		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.065	LB334334.021		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	1
SE276225.071	LB334334.019		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.2	0.4	64	67 ②
			Anthracene	mg/kg	0.1	<0.1	0.1	139	31
			Fluoranthene	mg/kg	0.1	0.4	0.7	49	57 ②
			Pyrene	mg/kg	0.1	0.5	0.7	47	45
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.3	68	36
			Chrysene	mg/kg	0.1	0.2	0.3	65	26
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.3	74	34
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.3	69	37
			Benzo(a)pyrene	mg/kg	0.1	0.3	0.4	60	22
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.2	96	23
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.2	0.2	80	6
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	0.4	0.5	57	24
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.4	0.5	52	22
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	0.5	0.6	67	20
			Total PAH (18)	mg/kg	0.8	2.5	3.9	33	43 ②
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	8
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	8

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334329.024		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.48	0.47	30	1
SE276225.036	LB334330.027		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.47	0.47	30	1
SE276225.055	LB334331.026		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.055	LB334331.026		Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.47	0.46	30	4
SE276225.065	LB334334.021		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.46	0.47	30	2

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE275259B.009	LB334316.004	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	84	84	200	0
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	82	82	200	0
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	86	87	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	85	87	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	86	83	200	3
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	117	115	200	2
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	107	97	200	10
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	76	84	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	101	113	200	12
SE276225.075	LB334316.015	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.075	LB334316.015	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	96	89	200	7
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	81	82	200	1
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	88	88	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	92	90	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	89	87	200	3
		(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	103	96	200	7
		(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	90	96	200	6
		(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	85	91	200	7
		(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	82	86	200	4
		(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	84	92	200	9
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	87	86	200	1
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	118	124	200	4
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	94	200	1
		(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	83	86	200	3
		(D3-N-MeFOSAA) Isotopically Labelled Internal	%	-	69	58	200	18
		(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	63	55	200	13
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	72	58	200	21
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	95	86	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	120	97	200	21
		(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	89	87	200	3
		(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	93	91	200	1
		(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	90	104	200	14
		(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	91	89	200	2

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334305.014	pH	pH Units	0.1	9.2	9.2	31	0
SE276225.065	LB334305.022	pH	pH Units	0.1	6.3	6.2	32	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.010	LB334352.014	Arsenic, As	mg/kg	1	6	6	47	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.0	9.7	35	7
		Copper, Cu	mg/kg	0.5	22	23	32	5
		Nickel, Ni	mg/kg	0.5	11	11	35	2
		Lead, Pb	mg/kg	1	21	23	35	10
		Zinc, Zn	mg/kg	2	49	51	34	4
SE276225.019	LB334352.024	Arsenic, As	mg/kg	1	5	4	54	20
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	8.0	6.2	37	25
		Copper, Cu	mg/kg	0.5	22	19	32	14
		Nickel, Ni	mg/kg	0.5	8.1	6.2	37	26
		Lead, Pb	mg/kg	1	22	18	35	18
		Zinc, Zn	mg/kg	2	54	46	34	15
SE276225.029	LB334354.014	Arsenic, As	mg/kg	1	5	5	50	1
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.3	8.1	36	14
		Copper, Cu	mg/kg	0.5	12	16	34	28
		Nickel, Ni	mg/kg	0.5	2.9	3.6	46	22
		Lead, Pb	mg/kg	1	15	17	36	12

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.029	LB334354.014	Zinc, Zn	mg/kg	2	14	19	42	29
SE276225.038	LB334354.024	Arsenic, As	mg/kg	1	6	6	46	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	8.7	11	35	21
		Copper, Cu	mg/kg	0.5	23	24	32	6
		Nickel, Ni	mg/kg	0.5	11	12	34	1
		Lead, Pb	mg/kg	1	21	21	35	1
		Zinc, Zn	mg/kg	2	51	46	34	9
SE276225.048	LB334355.014	Arsenic, As	mg/kg	1	6	5	48	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	6.8	5.2	38	26
		Copper, Cu	mg/kg	0.5	30	33	32	9
		Nickel, Ni	mg/kg	0.5	8.6	7.6	36	12
		Lead, Pb	mg/kg	1	22	20	35	9
		Zinc, Zn	mg/kg	2	38	41	35	8
SE276225.057	LB334355.024	Arsenic, As	mg/kg	1	7	8	44	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	4.9	6.4	39	27
		Copper, Cu	mg/kg	0.5	17	17	33	2
		Nickel, Ni	mg/kg	0.5	1.8	1.7	59	7
		Lead, Pb	mg/kg	1	14	15	37	3
		Zinc, Zn	mg/kg	2	15	15	44	0
SE276225.067	LB334357.014	Arsenic, As	mg/kg	1	8	6	44	21
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	13	34	4
		Copper, Cu	mg/kg	0.5	17	17	33	5
		Nickel, Ni	mg/kg	0.5	7.7	7.8	36	2
		Lead, Pb	mg/kg	1	14	13	37	8
		Zinc, Zn	mg/kg	2	31	26	37	16
SE276225.071	LB334357.019	Arsenic, As	mg/kg	1	5	5	51	2
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.9	8.9	36	12
		Copper, Cu	mg/kg	0.5	45	47	31	4
		Nickel, Ni	mg/kg	0.5	7.0	6.7	37	5
		Lead, Pb	mg/kg	1	59	57	32	3
		Zinc, Zn	mg/kg	2	100	99	32	6

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.019	LB334329.024		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	87	60	91	37
			TRH C29-C36	mg/kg	45	110	59	84	58
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	190	120	100	48
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	194	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	160	99	100	46
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE276225.036	LB334330.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE276225.055	LB334331.026		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.055	LB334331.026		TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE276225.065	LB334334.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276220.002	LB334332.028	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.7	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.8	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.8	50	3
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE276225.019	LB334332.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	7.0	50	29
			d8-toluene (Surrogate)	mg/kg	-	10.3	7.0	50	39
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.3	9.3	50	10
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE276225.045	LB334333.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.8	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.2	50	14
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	7.8	50	12
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE276225.065	LB334333.024	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.1	50	9

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.065	LB334333.024	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.3	9.0	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	8.5	50	3
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	12	30	22
			d8-toluene (Surrogate)	µg/L	-	9.3	9.4	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	9.2	11	30	19
		Totals	Total BTEX	µg/L	3	<3	<3	200	0
SE276203.031	LB334388.026	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	11	30	14
			d8-toluene (Surrogate)	µg/L	-	9.5	9.4	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	10	30	16
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276220.002	LB334332.026		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.7	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.8	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.8	50	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE276225.019	LB334332.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	7.0	50	29
			d8-toluene (Surrogate)	mg/kg	-	10.3	7.0	50	39
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.3	9.3	50	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE276225.045	LB334333.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.8	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.2	50	14
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	7.8	50	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE276225.065	LB334333.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.1	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.3	9.0	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	8.5	50	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276148.001	LB334388.027		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	12	30	22
			d8-toluene (Surrogate)	µg/L	-	9.3	9.4	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	9.2	11	30	19
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE276203.031	LB334388.026		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	11	30	14
			d8-toluene (Surrogate)	µg/L	-	9.5	9.4	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	8.6	10	30	16
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334361.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	106
LB334362.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103
LB334363.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	106
LB334365.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	103

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334472.002	Arsenic, As	mg/L	0.02	0.46	0.5	80 - 120	93
	Cadmium, Cd	mg/L	0.001	0.44	0.5	80 - 120	87
	Chromium, Cr	mg/L	0.005	0.45	0.5	80 - 120	90
	Copper, Cu	mg/L	0.005	0.44	0.5	80 - 120	88
	Lead, Pb	mg/L	0.02	0.45	0.5	80 - 120	89
	Nickel, Ni	mg/L	0.005	0.44	0.5	80 - 120	89
	Zinc, Zn	mg/L	0.01	0.45	0.5	80 - 120	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	96
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	105
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	109
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	120
		Endrin	mg/kg	0.1	0.2	0.2	60 - 140	113
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	84
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.5	40 - 130	93
LB334330.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	113
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	117
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	114
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	117
		Endrin	mg/kg	0.1	0.3	0.2	60 - 140	131
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	89
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.48	0.5	40 - 130	96
LB334331.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	103
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	105
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	113
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	116
		Endrin	mg/kg	0.1	0.2	0.2	60 - 140	103
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	90
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98
LB334334.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	114
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	112
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	120
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	124
		Endrin	mg/kg	0.1	0.2	0.2	60 - 140	111
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	71
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.51	0.5	40 - 130	102

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	118
		Heptachlor	µg/L	0.1	0.2	0.2	60 - 140	124
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	120
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	124
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	120
		p,p'-DDT	µg/L	0.1	0.2	0.2	60 - 140	105
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.13	0.15	40 - 130	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	93
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	95
		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	80
		Ethion	mg/kg	0.2	1.8	2	60 - 140	92
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	91

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	93
LB334330.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	104
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	107
		Dichlorvos	mg/kg	0.5	1.9	2	60 - 140	95
		Ethion	mg/kg	0.2	2.1	2	60 - 140	103
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	96
LB334331.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	107
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	97
		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Ethion	mg/kg	0.2	1.8	2	60 - 140	92
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
LB334334.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.3	2	60 - 140	113
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	102
		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	2.0	2	60 - 140	102
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	96
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	94

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	8.1	8	60 - 140	101
		Diazinon (Dimpylate)	µg/L	0.5	8.4	8	60 - 140	105
		Dichlorvos	µg/L	0.5	6.4	8	60 - 140	80
		Ethion	µg/L	0.2	8.6	8	60 - 140	107
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.46	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	µg/L	-	0.38	0.5	40 - 130	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002		Naphthalene	mg/kg	0.1	3.2	4	60 - 140	81
		Acenaphthylene	mg/kg	0.1	3.3	4	60 - 140	82
		Acenaphthene	mg/kg	0.1	3.3	4	60 - 140	81
		Phenanthrene	mg/kg	0.1	3.5	4	60 - 140	88
		Anthracene	mg/kg	0.1	3.3	4	60 - 140	82
		Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	86
		Pyrene	mg/kg	0.1	3.5	4	60 - 140	88
		Benzo(a)pyrene	mg/kg	0.1	4.0	4	60 - 140	99
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	70 - 130	90
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	93
LB334330.002		Naphthalene	mg/kg	0.1	3.4	4	60 - 140	85
		Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	87
		Acenaphthene	mg/kg	0.1	3.4	4	60 - 140	84
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	97
		Anthracene	mg/kg	0.1	3.7	4	60 - 140	92
		Fluoranthene	mg/kg	0.1	3.7	4	60 - 140	93
		Pyrene	mg/kg	0.1	3.9	4	60 - 140	97
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	93
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	96
LB334331.002		Naphthalene	mg/kg	0.1	3.3	4	60 - 140	83
		Acenaphthylene	mg/kg	0.1	3.5	4	60 - 140	87
		Acenaphthene	mg/kg	0.1	3.4	4	60 - 140	84
		Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	91
		Anthracene	mg/kg	0.1	3.7	4	60 - 140	94
		Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	84
		Pyrene	mg/kg	0.1	4.1	4	60 - 140	102
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	93

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334331.002	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	92
LB334334.002		Naphthalene	mg/kg	0.1	3.5	4	60 - 140	86
		Acenaphthylene	mg/kg	0.1	3.6	4	60 - 140	90
		Acenaphthene	mg/kg	0.1	3.4	4	60 - 140	86
		Phenanthrene	mg/kg	0.1	3.7	4	60 - 140	94
		Anthracene	mg/kg	0.1	3.9	4	60 - 140	97
		Fluoranthene	mg/kg	0.1	3.5	4	60 - 140	87
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	98
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	96
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	94

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		Naphthalene	µg/L	0.1	37	40	60 - 140	93
		Acenaphthylene	µg/L	0.1	40	40	60 - 140	101
		Acenaphthene	µg/L	0.1	40	40	60 - 140	99
		Phenanthrene	µg/L	0.1	38	40	60 - 140	96
		Anthracene	µg/L	0.1	37	40	60 - 140	91
		Fluoranthene	µg/L	0.1	38	40	60 - 140	94
		Pyrene	µg/L	0.1	36	40	60 - 140	90
		Benzo(a)pyrene	µg/L	0.1	37	40	60 - 140	94
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.42	0.5	40 - 130	85
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.46	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	µg/L	-	0.38	0.5	40 - 130	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002		Arochlor 1260	mg/kg	0.1	0.4	0.4	60 - 140	110
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.47	0.5	40 - 130	93
LB334330.002		Arochlor 1260	mg/kg	0.1	0.5	0.4	60 - 140	116
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.48	0.5	40 - 130	96
LB334331.002		Arochlor 1260	mg/kg	0.1	0.4	0.4	60 - 140	108
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.49	0.5	40 - 130	98
LB334334.002		Arochlor 1260	mg/kg	0.1	0.4	0.4	60 - 140	112
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.51	0.5	40 - 130	102

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	100

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334316.002	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	0.004	40 - 160	94
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	0.004	40 - 160	99
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	0.004	40 - 160	92
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	0.004	40 - 160	101
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	0.004	40 - 160	87
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	0.004	40 - 160	100

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334305.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334352.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	90
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	97
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98
LB334354.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	4.2	4.81	70 - 130	88
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	106
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98
LB334355.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.4	4.81	70 - 130	92
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB334357.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	90
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	108
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334329.002		TRH C10-C14	mg/kg	20	48	40	60 - 140	119
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	106
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	86
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	115
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	89
LB334330.002		TRH C10-C14	mg/kg	20	47	40	60 - 140	118
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	107
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	90
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	114
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	99
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	94
LB334331.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	92
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	87
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	96
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	90
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	88
LB334334.002		TRH C10-C14	mg/kg	20	48	40	60 - 140	121
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	106
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	93
	TRH F Bands	TRH >C10-C16	mg/kg	25	47	40	60 - 140	117
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	95

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002		TRH C10-C14	µg/L	50	1100	1200	60 - 140	92
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	102
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	106
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334429.002	TRH F Bands	TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	103
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334332.002	Monocyclic	Benzene	mg/kg	0.1	4.5	5	60 - 140	90
	Aromatic	Toluene	mg/kg	0.1	4.4	5	60 - 140	88
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	8.8	10	60 - 140	88
		o-xylene	mg/kg	0.1	4.6	5	60 - 140	93
LB334333.002	Monocyclic	Benzene	mg/kg	0.1	3.7	5	60 - 140	74
	Aromatic	Toluene	mg/kg	0.1	4.5	5	60 - 140	91
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	89
		m/p-xylene	mg/kg	0.2	9.0	10	60 - 140	90
		o-xylene	mg/kg	0.1	4.7	5	60 - 140	93

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002	Monocyclic	Benzene	µg/L	0.5	40	45.45	60 - 140	87
	Aromatic	Toluene	µg/L	0.5	39	45.45	60 - 140	85
		Ethylbenzene	µg/L	0.5	52	45.45	60 - 140	115
		m/p-xylene	µg/L	1	100	90.9	60 - 140	114
		o-xylene	µg/L	0.5	53	45.45	60 - 140	116
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334332.002		TRH C6-C10	mg/kg	25	91	92.5	60 - 140	98
		TRH C6-C9	mg/kg	20	80	80	60 - 140	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	64	62.5	60 - 140	102
LB334333.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	52	80	60 - 140	65
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	64

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334388.002		TRH C6-C10	µg/L	50	810	946.63	60 - 140	86
		TRH C6-C9	µg/L	40	690	818.71	60 - 140	85
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	10	60 - 140	100
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	520	639.67	60 - 140	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276224.033	LB334447.004	Mercury	mg/L	0.00005	0.0019	<0.00005	0.008	100

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334361.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	97
SE276225.020	LB334362.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	96
SE276225.039	LB334363.004	Mercury	mg/kg	0.05	0.27	0.09	0.2	88
SE276225.058	LB334365.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	88

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.072	LB334472.004	Arsenic, As	mg/L	0.02	0.58	<0.020	0.5	116
		Cadmium, Cd	mg/L	0.001	0.54	<0.001	0.5	107
		Chromium, Cr	mg/L	0.005	0.56	<0.005	0.5	111
		Copper, Cu	mg/L	0.005	0.53	<0.005	0.5	107
		Lead, Pb	mg/L	0.02	0.54	<0.02	0.5	108
		Nickel, Ni	mg/L	0.005	0.55	<0.005	0.5	111
		Zinc, Zn	mg/L	0.01	0.56	<0.01	0.5	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	96
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	110
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	114
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.1	0.3	<0.1	0.2	122
			Endrin	mg/kg	0.1	0.2	<0.1	0.2	115
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.1	<0.1	0.2	75
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total OC Pesticides	mg/kg	0.1	1.3	<0.1	-	-
			Total OC VIC EPA IWRG621	mg/kg	0.1	1.3	<0.1	-	-
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	0.6	<0.1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.40	0.46	-	81
SE276225.024	LB334330.026		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	103
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	119
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	115
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.024	LB334330.026		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.1	0.2	<0.1	0.2	116
			Endrin	mg/kg	0.1	0.3	<0.1	0.2	127
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	96
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total OC Pesticides	mg/kg	0.1	1.4	<0.1	-	-
			Total OC VIC EPA IWRG621	mg/kg	0.1	1.4	<0.1	-	-
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	0.7	<0.1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.47	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	<0.2	2	90
			Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	90
			Dichlorvos	mg/kg	0.5	1.5	<0.5	2	77
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	90
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.9	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	79
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	77
SE276225.024	LB334330.026		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	105
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	107
			Dichlorvos	mg/kg	0.5	1.9	<0.5	2	93
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.1	<0.2	2	105
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.3	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004	Naphthalene	mg/kg	0.1	3.1	<0.1	4	77
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.1	<0.1	4	77
		Acenaphthene	mg/kg	0.1	3.1	<0.1	4	77
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.3	<0.1	4	81
		Anthracene	mg/kg	0.1	3.1	<0.1	4	77
		Fluoranthene	mg/kg	0.1	3.3	<0.1	4	80
		Pyrene	mg/kg	0.1	3.4	<0.1	4	83
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	3.7	<0.1	4	92
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.7	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.8	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.8	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	26	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	80
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	79
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	77
SE276225.024	LB334330.026		Naphthalene	mg/kg	0.1	3.2	<0.1	4	80
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.3	<0.1	4	81
			Acenaphthene	mg/kg	0.1	3.2	<0.1	4	79
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.7	0.1	4	90
			Anthracene	mg/kg	0.1	3.4	<0.1	4	85
			Fluoranthene	mg/kg	0.1	3.6	0.2	4	85
			Pyrene	mg/kg	0.1	3.8	0.2	4	89
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.1	-	-
			Chrysene	mg/kg	0.1	0.2	0.2	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.1	0.2	4	97
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.1	0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.1	0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.2	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.2	0.3	-	-
			Total PAH (18)	mg/kg	0.8	29	1.6	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	93
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	94
SE276225.039	LB334331.004		Naphthalene	mg/kg	0.1	3.3	<0.1	4	81
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.4	<0.1	4	85
			Acenaphthene	mg/kg	0.1	3.3	<0.1	4	83
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.6	0.2	4	83
			Anthracene	mg/kg	0.1	3.7	<0.1	4	90
			Fluoranthene	mg/kg	0.1	3.8	0.6	4	79
			Pyrene	mg/kg	0.1	4.5	0.7	4	94
			Benzo(a)anthracene	mg/kg	0.1	0.3	0.3	-	-
			Chrysene	mg/kg	0.1	0.3	0.3	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.3	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.3	0.3	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.4	0.4	4	100
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.2	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.2	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.5	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.6	0.6	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.6	0.6	-	-
			Total PAH (18)	mg/kg	0.8	31	3.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	-	92
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	92

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.039	LB334331.004	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	90
SE276225.058	LB334334.004		Naphthalene	mg/kg	0.1	3.3	<0.1	4	83
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.4	<0.1	4	84
			Acenaphthene	mg/kg	0.1	3.3	<0.1	4	82
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.3	<0.1	4	82
			Anthracene	mg/kg	0.1	3.2	<0.1	4	80
			Fluoranthene	mg/kg	0.1	3.3	<0.1	4	80
			Pyrene	mg/kg	0.1	4.0	<0.1	4	97
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.1	<0.1	4	102
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.1	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.2	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	28	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	-	89
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1260	mg/kg	0.1	0.5	<0.1	0.4	117
			Total PCBs	mg/kg	0.1	0.5	<0.1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.40	0.46	-	81
SE276225.024	LB334330.026		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1260	mg/kg	0.1	0.5	<0.1	0.4	117
			Total PCBs	mg/kg	0.1	0.5	<0.1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.47	0.47	-	95

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334352.004		Arsenic, As	mg/kg	1	47	6	50	82
			Cadmium, Cd	mg/kg	0.3	40	<0.3	50	80
			Chromium, Cr	mg/kg	0.5	49	9.4	50	80
			Copper, Cu	mg/kg	0.5	70	23	50	92
			Nickel, Ni	mg/kg	0.5	50	11	50	77
			Lead, Pb	mg/kg	1	58	20	50	77
			Zinc, Zn	mg/kg	2	87	54	50	67 ④
SE276225.020	LB334354.004		Arsenic, As	mg/kg	1	46	6	50	80
			Cadmium, Cd	mg/kg	0.3	40	<0.3	50	80
			Chromium, Cr	mg/kg	0.5	55	13	50	85
			Copper, Cu	mg/kg	0.5	60	24	50	71
			Nickel, Ni	mg/kg	0.5	50	11	50	77
			Lead, Pb	mg/kg	1	66	21	50	90
			Zinc, Zn	mg/kg	2	80	46	50	68 ④

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.039	LB334355.004	Arsenic, As	mg/kg	1	47	5	50	83
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	53	9.5	50	87
		Copper, Cu	mg/kg	0.5	66	23	50	87
		Nickel, Ni	mg/kg	0.5	51	15	50	71
		Lead, Pb	mg/kg	1	70	31	50	79
		Zinc, Zn	mg/kg	2	110	89	50	35 ④
SE276225.058	LB334357.004	Arsenic, As	mg/kg	1	53	13	50	82
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	50	9.3	50	82
		Copper, Cu	mg/kg	0.5	66	25	50	82
		Nickel, Ni	mg/kg	0.5	50	9.5	50	81
		Lead, Pb	mg/kg	1	67	26	50	83
		Zinc, Zn	mg/kg	2	94	56	50	76

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276225.001	LB334329.004		TRH C10-C14	mg/kg	20	46	<20	40	107
			TRH C15-C28	mg/kg	45	48	<45	40	41 ⑤
			TRH C29-C36	mg/kg	45	63	<45	40	84
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	160	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	44	<25	40	99
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	44	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	29 ⑤
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE276225.024	LB334330.026		TRH C10-C14	mg/kg	20	49	<20	-	-
			TRH C15-C28	mg/kg	45	53	<45	-	-
			TRH C29-C36	mg/kg	45	<45	<45	-	-
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	49	<25	-	-
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	49	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	-	-
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334332.004	Monocyclic	Benzene	mg/kg	0.1	4.8	<0.1	5	96
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	94
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	100
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	95
			o-xylene	mg/kg	0.1	5.1	<0.1	5	101
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	0.2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.2	-	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	-	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	-	94
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	15	<0.3	-	-
SE276225.024	LB334333.004	Monocyclic	Benzene	mg/kg	0.1	3.5	<0.1	5	69
		Aromatic	Toluene	mg/kg	0.1	4.3	<0.1	5	86
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	90
			m/p-xylene	mg/kg	0.2	9.1	<0.2	10	91
			o-xylene	mg/kg	0.1	4.8	<0.1	5	96
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	6.8	-	72
			d8-toluene (Surrogate)	mg/kg	-	8.4	7.3	-	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	7.7	-	85
		Totals	Total BTEX*	mg/kg	0.6	26	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276136.002	LB334388.028	Monocyclic	Benzene	µg/L	0.5	47	<0.5	45.45	102
		Aromatic	Toluene	µg/L	0.5	43	<0.5	45.45	95
			Ethylbenzene	µg/L	0.5	48	<0.5	45.45	106
			m/p-xylene	µg/L	1	97	<1	90.9	107
			o-xylene	µg/L	0.5	49	<0.5	45.45	108
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	56	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	11	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	10	9.5	-	103
			Bromofluorobenzene (Surrogate)	µg/L	-	11	9.6	-	109
		Totals	Total BTEX	µg/L	3	280	<3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276167.001	LB334332.004		TRH C6-C10	mg/kg	25	80	<25	92.5	87
			TRH C6-C9	mg/kg	20	71	<20	80	89
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.2	-	80
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	-	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	51	<25	62.5	82
SE276225.024	LB334333.004		TRH C6-C10	mg/kg	25	67	<25	92.5	73
			TRH C6-C9	mg/kg	20	52	<20	80	65
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	6.8	-	72
			d8-toluene (Surrogate)	mg/kg	-	8.4	7.3	-	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	7.7	-	85
		VPH F	Benzene (F0)	mg/kg	0.1	3.5	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	41	<25	62.5	66

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE276136.002	LB334388.028		TRH C6-C10	µg/L	50	840	<50	946.63	88
			TRH C6-C9	µg/L	40	720	<40	818.71	88
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	11	9.5	-	106
			d8-toluene (Surrogate)	µg/L	-	10	9.5	-	103
			Bromofluorobenzene (Surrogate)	µg/L	-	11	9.6	-	109
		VPH F	Benzene (F0)	µg/L	0.5		<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	550	<50	639.67	86

MATRIX SPIKE DUPLICATES

SE276225 R2

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 4 SGS Ref: SE276225_COC

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date: Tuesday, 31 December 2024**

Except pH Results Required By 2 days **Date: Tuesday, 24 December 2024**

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: **JOHN XU**

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC PCB OPP	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP & PCB	Cyanide	VOC	Phenol	PFAS	TCLP PAH	TCLP	Metals (Retest)
1	TP116	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
2	TP116	1.0-1.3	19/12/2024	G		Clay	✔										✔												
3	TP116	2.0-2.3	19/12/2024	G		Clay	✔										✔												
4	TP117	0.0-0.3	19/12/2024	G		Clay	✔										✔												
5	TP117	1.0-1.3	19/12/2024	G		Clay		✔	✔			✔																	
6	TP117	2.0-2.3	19/12/2024	G		Clay	✔										✔												
7	TP118	0.0-0.3	19/12/2024	G		Clay	✔										✔												
8	TP118	1.0-1.3	19/12/2024	G		Clay	✔										✔												
9	TP118	2.0-2.3	19/12/2024	G		Clay	✔										✔												
10	TP119	0.0-0.3	19/12/2024	G		Clay	✔										✔												
11	TP119	1.0-1.3	19/12/2024	G		Clay	✔										✔												
12	TP119	2.0-2.3	19/12/2024	G		Clay						✔																	
13	TP120	0.0-0.3	19/12/2024	G		Clay	✔										✔												
14	TP120	1.0-1.3	19/12/2024	G		Sand		✔	✔			✔																	
15	TP120	2.0-2.3	19/12/2024	G		Clay	✔										✔												
16	TP121	0.0-0.3	19/12/2024	G		Clay	✔										✔												
17	TP121	1.0-1.3	19/12/2024	G		Clay	✔										✔												
18	TP121	2.0-2.3	19/12/2024	G		Clay	✔										✔												
19	TP122	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
20	TP122	1.0-1.3	19/12/2024	G		Clay	✔										✔												
21	TP122	2.0-2.3	19/12/2024	G		Clay	✔										✔												
22	TP123	0.0-0.3	19/12/2024	G		Clay	✔										✔												
23	TP123	1.0-1.3	19/12/2024	G		Clay	✔	✔	✔								✔												

SGS EHS Sydney COC
SE276225

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date: Tuesday, 31 December 2024**

Except pH Results Required By 2 days **Date: Tuesday, 24 December 2024**

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: **JOHN XU**

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC PCB OPP	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP & PCB	Cyanide	VOC	Phenol	PFAS	TCLP PAH	TCLP	Metals (Retest)
24	TP123	2.0-2.3	19/12/2024	G		Clay						✔																	
25	TP124	0.0-0.3	19/12/2024	G		Clay	✔										✔												
26	TP124	1.0-1.3	19/12/2024	G		Clay	✔										✔												
27	TP124	2.0-2.3	19/12/2024	G		Clay						✔																	
28	TP125	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
29	TP125	1.0-1.3	19/12/2024	G		Clay	✔										✔												
30	TP125	2.0-2.3	19/12/2024	G		Clay	✔										✔												
31	TP125	3.0-3.3	19/12/2024	G		Clay	✔										✔												
32	TP126	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
33	TP126	1.0-1.3	19/12/2024	G		Clay					✔																		
34	TP126	2.0-2.3	19/12/2024	G		Clay	✔										✔												
35	TP127	0.0-0.3	19/12/2024	G		Clay	✔										✔												
36	TP127	1.0-1.3	19/12/2024	G		Clay		✔	✔			✔																	
37	TP127	2.0-2.3	19/12/2024	G		Clay	✔										✔												
38	TP128	0.0-0.3	19/12/2024	G		Clay	✔										✔												
39	TP128	1.0-1.3	19/12/2024	G		Clay	✔										✔												
40	TP128	2.0-2.3	19/12/2024	G		Clay						✔																	
41	TP129	0.0-0.3	19/12/2024	G		Clay	✔										✔												
42	TP129	1.0-1.3	19/12/2024	G		Clay						✔																	
43	TP129	2.0-2.3	19/12/2024	G		Clay	✔										✔												
44	TP130	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
45	TP130	1.0-1.3	19/12/2024	G		Clay					✔																		
46	TP130	2.0-2.3	19/12/2024	G		Clay	✔										✔												

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

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ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: **JOHN XU**

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC PCB OPP	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP & PCB	Cyanide	VOC	Phenol	PFAS	TCLP PAH	TCLP	Metals (Retest)
47	TP131	0.0-0.3	19/12/2024	G		Clay						✔																	
48	TP131	1.0-1.3	19/12/2024	G		Clay	✔										✔												
49	TP131	2.0-2.3	19/12/2024	G		Clay	✔										✔												
50	TP132	0.0-0.3	19/12/2024	G		Clay	✔										✔												
51	TP132	1.0-1.3	19/12/2024	G		Clay		✔	✔			✔																	
52	TP132	2.0-2.3	19/12/2024	G		Clay	✔										✔												
53	TP133	0.0-0.3	19/12/2024	G		Clay	✔										✔												
54	TP133	1.0-1.3	19/12/2024	G		Clay	✔										✔												
55	TP133	2.0-2.3	19/12/2024	G		Clay						✔																	
56	TP134	0.0-0.3	19/12/2024	G		Clay	✔										✔												
57	TP134	1.0-1.3	19/12/2024	G		Clay	✔										✔												
58	TP134	2.0-2.3	19/12/2024	G		Clay	✔										✔												
59	TP135	0.0-0.3	19/12/2024	G		Clay	✔										✔												
60	TP135	1.0-1.3	19/12/2024	G		Clay						✔																	
61	TP135	2.0-2.3	19/12/2024	G		Clay	✔										✔												
62	TP136	0.0-0.3	19/12/2024	G		Clay						✔																	
63	TP136	1.0-1.3	19/12/2024	G		Clay	✔										✔												
64	TP136	2.0-2.3	19/12/2024	G		Clay	✔										✔												
65	J1	0.0-0.3	19/12/2024	G		Clay		✔	✔			✔																	
66	J1	0.5-0.8	19/12/2024	G		Clay	✔										✔												
67	J1	1.0-1.3	19/12/2024	G		Clay	✔										✔												
68	DDS5		19/12/2024	G		Clay	✔										✔												
69	DDS6		19/12/2024	G		Clay	✔										✔												

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

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UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: **JOHN XU**

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL17 Metals* TRH BTEX PAH OC PCB OPP	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP & PCB	Cyanide	VOC	Phenol	PFAS	TCLP PAH	TCLP	Metals (Retest)
70	DDS7		19/12/2024	G		Clay	✔										✔												
71	DDS8		19/12/2024	G		Clay	✔										✔												
72	RS3		19/12/2024		Vial+WG							✔																	
73	TS3		19/12/2024	Vial											✔														
74	DSS10		19/12/2024	PFASC		Clay																				✔			
75	DSS11		19/12/2024	PFASC		Clay																				✔			
76	DSS12		19/12/2024	PFASC		Clay																				✔			
77	DSS13		19/12/2024	PFASC		Clay																				✔			

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	20/12/2024	Joel K		20.12.24 @ 2pm

WG: Water sample (glass bottle) G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag)
WP: Water sample (plastic bottle) PFASC PFAS (plastic jar) ✔ Test required

SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	77

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 20/12/2024
Report Due	Tue 31/12/2024
SGS Reference	**SE276225**

SUBMISSION DETAILS

This is to confirm that 77 samples were received on Friday 20/12/2024. Results are expected to be ready by COB Tuesday 31/12/2024. Please quote SGS reference SE276225 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	76 Soil/Clay, 1 Water	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Two Days/Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP116 0.0-0.3	27	14	26	8	1	10	11	7
002	TP116 1.0-1.3	-	-	26	-	-	-	-	-
003	TP116 2.0-2.3	-	-	26	-	-	-	-	-
004	TP117 0.0-0.3	-	-	26	-	-	-	-	-
005	TP117 1.0-1.3	27	14	26	8	1	10	11	7
006	TP117 2.0-2.3	-	-	26	-	-	-	-	-
007	TP118 0.0-0.3	-	-	26	-	-	-	-	-
008	TP118 1.0-1.3	-	-	26	-	-	-	-	-
009	TP118 2.0-2.3	-	-	26	-	-	-	-	-
010	TP119 0.0-0.3	-	-	26	-	-	-	-	-
011	TP119 1.0-1.3	-	-	26	-	-	-	-	-
012	TP119 2.0-2.3	27	14	26	8	-	10	11	7
013	TP120 0.0-0.3	-	-	26	-	-	-	-	-
014	TP120 1.0-1.3	27	14	26	8	1	10	11	7
015	TP120 2.0-2.3	-	-	26	-	-	-	-	-
016	TP121 0.0-0.3	-	-	26	-	-	-	-	-
017	TP121 1.0-1.3	-	-	26	-	-	-	-	-
018	TP121 2.0-2.3	-	-	26	-	-	-	-	-
019	TP122 0.0-0.3	27	14	26	8	1	10	11	7
020	TP122 1.0-1.3	-	-	26	-	-	-	-	-
021	TP122 2.0-2.3	-	-	26	-	-	-	-	-
022	TP123 0.0-0.3	-	-	26	-	-	-	-	-
023	TP123 1.0-1.3	-	-	26	-	1	-	-	-
024	TP123 2.0-2.3	27	14	26	8	-	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	TP124 0.0-0.3	-	-	26	-	-	-	-	-
026	TP124 1.0-1.3	-	-	26	-	-	-	-	-
027	TP124 2.0-2.3	27	14	26	8	-	10	11	7
028	TP125 0.0-0.3	27	14	26	8	1	10	11	7
029	TP125 1.0-1.3	-	-	26	-	-	-	-	-
030	TP125 2.0-2.3	-	-	26	-	-	-	-	-
031	TP125 3.0-3.3	-	-	26	-	-	-	-	-
032	TP126 0.0-0.3	27	14	26	8	1	10	11	7
033	TP126 1.0-1.3	-	-	26	-	-	10	11	7
034	TP126 2.0-2.3	-	-	26	-	-	-	-	-
035	TP127 0.0-0.3	-	-	26	-	-	-	-	-
036	TP127 1.0-1.3	27	14	26	8	1	10	11	7
037	TP127 2.0-2.3	-	-	26	-	-	-	-	-
038	TP128 0.0-0.3	-	-	26	-	-	-	-	-
039	TP128 1.0-1.3	-	-	26	-	-	-	-	-
040	TP128 2.0-2.3	27	14	26	8	-	10	11	7
041	TP129 0.0-0.3	-	-	26	-	-	-	-	-
042	TP129 1.0-1.3	27	14	26	8	-	10	11	7
043	TP129 2.0-2.3	-	-	26	-	-	-	-	-
044	TP130 0.0-0.3	27	14	26	8	1	10	11	7
045	TP130 1.0-1.3	-	-	26	-	-	10	11	7
046	TP130 2.0-2.3	-	-	26	-	-	-	-	-
047	TP131 0.0-0.3	27	14	26	8	-	10	11	7
048	TP131 1.0-1.3	-	-	26	-	-	-	-	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

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CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
049	TP131 2.0-2.3	-	-	26	-	-	-	-	-
050	TP132 0.0-0.3	-	-	26	-	-	-	-	-
051	TP132 1.0-1.3	27	14	26	8	1	10	11	7
052	TP132 2.0-2.3	-	-	26	-	-	-	-	-
053	TP133 0.0-0.3	-	-	26	-	-	-	-	-
054	TP133 1.0-1.3	-	-	26	-	-	-	-	-
055	TP133 2.0-2.3	27	14	26	8	-	10	11	7
056	TP134 0.0-0.3	-	-	26	-	-	-	-	-
057	TP134 1.0-1.3	-	-	26	-	-	-	-	-
058	TP134 2.0-2.3	-	-	26	-	-	-	-	-
059	TP135 0.0-0.3	-	-	26	-	-	-	-	-
060	TP135 1.0-1.3	27	14	26	8	-	10	11	7
061	TP135 2.0-2.3	-	-	26	-	-	-	-	-
062	TP136 0.0-0.3	27	14	26	8	-	10	11	7
063	TP136 1.0-1.3	-	-	26	-	-	-	-	-
064	TP136 2.0-2.3	-	-	26	-	-	-	-	-
065	J1 0.0-0.3	27	14	26	8	1	10	11	7
066	J1 0.5-0.8	-	-	26	-	-	-	-	-
067	J1 1.0-1.3	-	-	26	-	-	-	-	-
068	DDS5	-	-	26	-	-	-	-	-
069	DDS6	-	-	26	-	-	-	-	-
070	DDS7	-	-	26	-	-	-	-	-
071	DDS8	-	-	26	-	-	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	VOC's in Soil
073	TS3	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	TP116 0.0-0.3	9	1	1	7
002	TP116 1.0-1.3	-	1	1	7
003	TP116 2.0-2.3	-	1	1	7
004	TP117 0.0-0.3	-	1	1	7
005	TP117 1.0-1.3	9	1	1	7
006	TP117 2.0-2.3	-	1	1	7
007	TP118 0.0-0.3	-	1	1	7
008	TP118 1.0-1.3	-	1	1	7
009	TP118 2.0-2.3	-	1	1	7
010	TP119 0.0-0.3	-	1	1	7
011	TP119 1.0-1.3	-	1	1	7
012	TP119 2.0-2.3	-	1	1	7
013	TP120 0.0-0.3	-	1	1	7
014	TP120 1.0-1.3	9	1	1	7
015	TP120 2.0-2.3	-	1	1	7
016	TP121 0.0-0.3	-	1	1	7
017	TP121 1.0-1.3	-	1	1	7
018	TP121 2.0-2.3	-	1	1	7
019	TP122 0.0-0.3	9	1	1	7
020	TP122 1.0-1.3	-	1	1	7
021	TP122 2.0-2.3	-	1	1	7
022	TP123 0.0-0.3	-	1	1	7
023	TP123 1.0-1.3	9	1	1	7
024	TP123 2.0-2.3	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	TP124 0.0-0.3	-	1	1	7
026	TP124 1.0-1.3	-	1	1	7
027	TP124 2.0-2.3	-	1	1	7
028	TP125 0.0-0.3	9	1	1	7
029	TP125 1.0-1.3	-	1	1	7
030	TP125 2.0-2.3	-	1	1	7
031	TP125 3.0-3.3	-	1	1	7
032	TP126 0.0-0.3	9	1	1	7
033	TP126 1.0-1.3	-	1	1	7
034	TP126 2.0-2.3	-	1	1	7
035	TP127 0.0-0.3	-	1	1	7
036	TP127 1.0-1.3	9	1	1	7
037	TP127 2.0-2.3	-	1	1	7
038	TP128 0.0-0.3	-	1	1	7
039	TP128 1.0-1.3	-	1	1	7
040	TP128 2.0-2.3	-	1	1	7
041	TP129 0.0-0.3	-	1	1	7
042	TP129 1.0-1.3	-	1	1	7
043	TP129 2.0-2.3	-	1	1	7
044	TP130 0.0-0.3	9	1	1	7
045	TP130 1.0-1.3	-	1	1	7
046	TP130 2.0-2.3	-	1	1	7
047	TP131 0.0-0.3	-	1	1	7
048	TP131 1.0-1.3	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
049	TP131 2.0-2.3	-	1	1	7
050	TP132 0.0-0.3	-	1	1	7
051	TP132 1.0-1.3	9	1	1	7
052	TP132 2.0-2.3	-	1	1	7
053	TP133 0.0-0.3	-	1	1	7
054	TP133 1.0-1.3	-	1	1	7
055	TP133 2.0-2.3	-	1	1	7
056	TP134 0.0-0.3	-	1	1	7
057	TP134 1.0-1.3	-	1	1	7
058	TP134 2.0-2.3	-	1	1	7
059	TP135 0.0-0.3	-	1	1	7
060	TP135 1.0-1.3	-	1	1	7
061	TP135 2.0-2.3	-	1	1	7
062	TP136 0.0-0.3	-	1	1	7
063	TP136 1.0-1.3	-	1	1	7
064	TP136 2.0-2.3	-	1	1	7
065	J1 0.0-0.3	9	1	1	7
066	J1 0.5-0.8	-	1	1	7
067	J1 1.0-1.3	-	1	1	7
068	DDS5	-	1	1	7
069	DDS6	-	1	1	7
070	DDS7	-	1	1	7
071	DDS8	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Per- and Polyfluoroalkyl Substances (PFAS) in
074	DDS10	57
075	DDS11	57
076	DDS12	57
077	DDS13	57

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
072	RS3	23	13	23	9	11	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE276225

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	PCBs in Water
072	RS3	1	7	9

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Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	1

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE276226 R0**
Date Received	20/12/2024
Date Reported	24/12/2024

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Ly Kim HA
Organic Section Head

Shane MCDERMOTT
Laboratory Manager

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [AN404] Tested: 23/12/2024

PARAMETER	UOM	LOR	DSS14 CLAY - 19/12/2024 SE276226.001
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01
Sum PFOS and PFHxS	mg/kg	0.005	<0.005
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of US EPA PFAS (PFOS+PFOA)	mg/kg	0.005	<0.005
Sum of Positive PFAS	mg/kg	0.005	<0.005

Moisture Content [AN002] Tested: 23/12/2024

PARAMETER	UOM	LOR	DSS14 CLAY - 19/12/2024 SE276226.001
% Moisture	%w/w	1	**7.8**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE276226 R0

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
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Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	1

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE276226 R0**
Date Received	20 Dec 2024
Date Reported	24 Dec 2024

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	1 Soil/Clay	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE276226 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DSS14	SE276226.001	LB334318	19 Dec 2024	20 Dec 2024	02 Jan 2025	23 Dec 2024	28 Dec 2024	24 Dec 2024

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
DSS14	SE276226.001	LB334316	19 Dec 2024	20 Dec 2024	16 Jan 2025	23 Dec 2024	20 Jan 2025	24 Dec 2024

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples — **Method: ME-(AU)-[ENV]AN404**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	90
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 300%	61
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 300%	87
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 300%	91
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	87
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	86
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	124
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	92
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	5 - 150%	114
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	95
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	91
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	35 - 150%	83
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	96
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	30 - 150%	93
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	86
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	20 - 150%	84
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	40 - 150%	106
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	102
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	30 - 170%	59
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	95
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	20 - 150%	60
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	89
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	DSS14	SE276226.001	%	10 - 150%	94

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples — **Method: ME-(AU)-[ENV]AN404**

Sample Number	Parameter	Units	LOR	Result
LB334316.001	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
	Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
	Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
	Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
	Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	mg/kg	0.01	<0.01
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	mg/kg	0.01	<0.01
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	mg/kg	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.077	LB334318.007	% Moisture	%w/w	1	10.1941747572	9.25	40	10

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE275259B.009	LB334316.004	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	84	84	200	0
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	82	82	200	0
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	86	87	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	85	87	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	86	83	200	3
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	117	115	200	2
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	88	83	200	6
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	107	97	200	10
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	76	84	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	101	113	200	12
SE276225.075	LB334316.015	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononanoic acid (PFNA)	mg/kg	0.005	8.85679904	2.21419976	200	0
		Perfluorodecanoic acid (PFDA)	mg/kg	0.005	0	0	200	0
		Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	0	0	200	0
		Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	0	0	200	0
		Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	0	0	200	0
		Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	0	0	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	0	0	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	0	0	200	0
		N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	0	0	200	0
		N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	0	0	200	0
		N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	0	0	200	0
		N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: ME-(AU)-[ENV]AN404**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE276225.075	LB334316.015	2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	0	0	200	0
		2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	0	0	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	96	89	200	7
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	81	82	200	1
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	88	88	200	0
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	92	90	200	2
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	89	87	200	3
		(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	103.42	96.387	200	7
		(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	90.126	95.81	200	6
		(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	84.552	91.121	200	7
		(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	82.481	85.727	200	4
		(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	84.321	92.201	200	9
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	87	86	200	1
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	118	124	200	4
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	95	94	200	1
		(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	83.429	86.032	200	3
		(D3-N-MeFOSAA) Isotopically Labelled Internal	%	-	69.378	58.043	200	18
		(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	63.05	55.189	200	13
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	72	58	200	21
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	95	86	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	120	97	200	21
		(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	88.8	86.529	200	3
		(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	92.552	91.193	200	1
		(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	90.465	103.836	200	14
		(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	90.776	89.2	200	2

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples — **Method: ME-(AU)-[ENV]AN404**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB334316.002	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	0.004	40 - 160	94
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	0.004	40 - 160	99
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	0.004	40 - 160	96
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	0.004	40 - 160	92
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	0.004	40 - 160	101
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	0.004	40 - 160	87
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	0.004	40 - 160	100

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE276226 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 6 SGS Ref: SE276226_COC

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date: Tuesday, 31 December 2024**

Except pH Results Required By - **Date:**

Your Reference No.:

TO: SGS
UNIT 16, 33 MADDOX STREET
ALEXANDRIA NSW 2015

Sampled By: KB Ref No: 20465/8 Project Manager: **JOHN XU**

Location: Gledswood Hills

Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	CL8 TRH BTEX PAH	CL10 Metals* TRH BTEX PAH	CL16 Metals* TRH BTEX PAH OC PCB	Be B Co Mn Se	Mn	BTEX	TRH & BTEX	PAH	OCP	PCB	OCP & PCB	OPP&PCB	OCP,OPP & PCB	Cyanide	VOC	Phenol	PFAS	TCLP PAH	TCLP	Metals (Retest)
1 - DSS14	-	19/12/2024	PFASC		Clay																				✔			

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	20/12/2024	Joel		20.12.24 @ 2pm

WG: Water sample (glass bottle) G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag)
WP: Water sample (plastic bottle) PFASC PFAS (plastic container) ✔ Test required

SGS EHS Sydney COC
SE276226

SAMPLE RECEIPT ADVICE

SE276226

CLIENT DETAILS

Contact	John Xu
Client	Geotechnique
Address	P.O. Box 880 NSW 2751
Telephone	02 4722 2700
Facsimile	02 4722 6161
Email	john.xu@geotech.com.au
Project	**20465/8 Gledswood Hills**
Order Number	**20465/8**
Samples	1

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 20/12/2024
Report Due	Tue 31/12/2024
SGS Reference	**SE276226**

SUBMISSION DETAILS

This is to confirm that 1 sample was received on Friday 20/12/2024. Results are expected to be ready by COB Tuesday 31/12/2024. Please quote SGS reference SE276226 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	1 Soil/Clay	Type of documentation received	COC
Date documentation received	20/12/2024	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.5°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE276226

CLIENT DETAILS

Client Geotechnique

Project 20465/8 Gledswood Hills

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in
001	DSS14	1	57

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 369521

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	**20465/8 Gledswood Hills**
Number of Samples	30 Soil, 1 Water
Date samples received	19/12/2024
Date completed instructions received	19/12/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	03/01/2025
Date of Issue	31/12/2024

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Liam Timmins, Organics Supervisor
Sean McAlary, Senior Chemist
Tabitha Roberts, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	23/12/2024
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	95

svTRH (C10-C40) in Soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	22/12/2024
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	92

PAHs in Soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	20/12/2024
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d14	%	107

Organochlorine Pesticides in soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	20/12/2024
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Mirex	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1
Surrogate 4-Chloro-3-NBTF	%	102

Organophosphorus Pesticides in Soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	20/12/2024
Dichlorvos	mg/kg	<0.1
Mevinphos	mg/kg	<0.1
Phorate	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Disulfoton	mg/kg	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1
Parathion-Methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Fenthion	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Methidathion	mg/kg	<0.1
Fenamiphos	mg/kg	<0.1
Ethion	mg/kg	<0.1
Phosalone	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Coumaphos	mg/kg	<0.1
Surrogate 4-Chloro-3-NBTF	%	102

PCBs in Soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date extracted	-	20/12/2024
Date analysed	-	20/12/2024
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate 2-Fluorobiphenyl	%	103

Acid Extractable metals in soil		
Our Reference		369521-1
Your Reference	UNITS	DSS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date prepared	-	19/12/2024
Date analysed	-	23/12/2024
Arsenic	mg/kg	6
Cadmium	mg/kg	<0.4
Chromium	mg/kg	10
Copper	mg/kg	22
Lead	mg/kg	21
Mercury	mg/kg	<0.1
Nickel	mg/kg	10
Zinc	mg/kg	41

Moisture						
Our Reference		369521-1	369521-3	369521-4	369521-6	369521-8
Your Reference	UNITS	DSS1	TP101	TP101	TP101	TP102
Depth		-	0.0-0.3	0.5-0.8	1.5-1.8	0.0-0.3
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/12/2024	20/12/2024	20/12/2024	20/12/2024	20/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Moisture	%	8.8	8.9	8.7	10	4.2

Moisture						
Our Reference		369521-9	369521-12	369521-13	369521-15	369521-17
Your Reference	UNITS	TP102	TP102	TP103	TP103	TP103
Depth		0.4-0.7	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/12/2024	20/12/2024	20/12/2024	20/12/2024	20/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Moisture	%	11	13	8.0	7.2	15

Moisture						
Our Reference		369521-19	369521-20	369521-23	369521-24	369521-26
Your Reference	UNITS	TP114	TP114	TP114	TP115	TP115
Depth		0.5-0.8	1.0-1.3	2.3-2.5	0.0-0.3	1.0-1.3
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/12/2024	20/12/2024	20/12/2024	20/12/2024	20/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Moisture	%	9.9	9.5	9.9	5.1	9.6

Moisture				
Our Reference		369521-28	369521-30	369521-31
Your Reference	UNITS	TP115	TB1	FB1
Depth		2.0-2.2	-	-
Date Sampled		16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Water
Date prepared	-	20/12/2024	20/12/2024	20/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024
Moisture	%	12	0.2	0.9

PFAS in Soils Extended						
Our Reference		369521-3	369521-4	369521-6	369521-8	369521-9
Your Reference	UNITS	TP101	TP101	TP101	TP102	TP102
Depth		0.0-0.3	0.5-0.8	1.5-1.8	0.0-0.3	0.4-0.7
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.6	0.5	0.5	0.1	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	100	101	96	101
Surrogate $^{13}C_2$ *PFOA*	%	105	89	97	100	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	114	118	106	111	106
Extracted ISTD $^{18}O_2$ *PFHxS*	%	128	127	134	131	121
Extracted ISTD $^{13}C_4$ *PFOS*	%	120	119	115	121	112

PFAS in Soils Extended						
Our Reference		369521-3	369521-4	369521-6	369521-8	369521-9
Your Reference	UNITS	TP101	TP101	TP101	TP102	TP102
Depth		0.0-0.3	0.5-0.8	1.5-1.8	0.0-0.3	0.4-0.7
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	109	108	108	108	104
Extracted ISTD $^{13}C_3$ *PFPeA*	%	131	125	127	129	124
Extracted ISTD $^{13}C_2$ *PFHxA*	%	110	107	107	108	104
Extracted ISTD $^{13}C_4$ *PFHpA*	%	118	120	117	119	117
Extracted ISTD $^{13}C_4$ *PFOA*	%	107	110	101	107	104
Extracted ISTD $^{13}C_5$ *PFNA*	%	115	114	113	114	110
Extracted ISTD $^{13}C_2$ *PFDA*	%	127	120	121	123	122
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	122	126	119	133	128
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	125	118	121	119	115
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	132	128	128	134	126
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	108	114	106	114	109
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	132	128	126	131	125
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	137	138	134	137	130
Extracted ISTD $^{13}C_8$ *FOSA*	%	143	145	141	137	139
Extracted ISTD d_3 *N MeFOSA*	%	127	124	122	125	123
Extracted ISTD d_5 *N EtFOSA*	%	123	121	118	126	123
Extracted ISTD d_7 *N MeFOSE*	%	134	131	127	123	131
Extracted ISTD d_9 *N EtFOSE*	%	107	111	112	110	110
Extracted ISTD d_3 *N MeFOSAA*	%	93	98	95	100	96
Extracted ISTD d_5 *N EtFOSAA*	%	136	127	123	128	120
Total Positive PFHxS & PFOS	µg/kg	0.6	0.5	0.5	0.1	0.3
Total Positive PFOS & PFOA	µg/kg	0.6	0.5	0.5	0.1	0.3
Total Positive PFAS	µg/kg	0.6	0.5	0.5	0.1	0.3

PFAS in Soils Extended						
Our Reference		369521-12	369521-13	369521-15	369521-17	369521-19
Your Reference	UNITS	TP102	TP103	TP103	TP103	TP114
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.5-0.8
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.9	0.2	0.3	<0.1	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	108	96	102	94	99
Surrogate $^{13}C_2$ *PFOA*	%	96	97	100	95	104
Extracted ISTD $^{13}C_3$ *PFBS*	%	108	115	117	106	115
Extracted ISTD $^{18}O_2$ *PFHxS*	%	119	123	127	122	122
Extracted ISTD $^{13}C_4$ *PFOS*	%	114	119	113	123	120

PFAS in Soils Extended						
Our Reference		369521-12	369521-13	369521-15	369521-17	369521-19
Your Reference	UNITS	TP102	TP103	TP103	TP103	TP114
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.5-0.8
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	107	109	107	106	109
Extracted ISTD $^{13}C_3$ *PFPeA*	%	125	121	123	124	126
Extracted ISTD $^{13}C_2$ *PFHxA*	%	105	108	105	108	113
Extracted ISTD $^{13}C_4$ *PFHpA*	%	117	115	117	113	115
Extracted ISTD $^{13}C_4$ *PFOA*	%	115	102	103	111	106
Extracted ISTD $^{13}C_5$ *PFNA*	%	113	113	115	112	109
Extracted ISTD $^{13}C_2$ *PFDA*	%	117	121	121	123	122
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	123	122	126	128	124
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	117	121	124	121	124
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	130	135	136	126	133
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	116	115	116	106	113
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	143	133	131	125	132
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	143	140	142	133	134
Extracted ISTD $^{13}C_8$ *FOSA*	%	136	138	137	137	139
Extracted ISTD d_3 *N MeFOSA*	%	126	122	123	117	123
Extracted ISTD d_5 *N EtFOSA*	%	122	123	122	117	121
Extracted ISTD d_7 *N MeFOSE*	%	129	128	135	123	137
Extracted ISTD d_9 *N EtFOSE*	%	112	112	111	106	119
Extracted ISTD d_3 *N MeFOSAA*	%	104	106	101	78	100
Extracted ISTD d_5 *N EtFOSAA*	%	139	127	125	100	123
Total Positive PFHxS & PFOS	µg/kg	0.9	0.2	0.3	<0.1	0.2
Total Positive PFOS & PFOA	µg/kg	0.9	0.2	0.3	<0.1	0.2
Total Positive PFAS	µg/kg	0.9	0.2	0.3	<0.1	0.2

PFAS in Soils Extended						
Our Reference		369521-20	369521-23	369521-24	369521-26	369521-28
Your Reference	UNITS	TP114	TP114	TP115	TP115	TP115
Depth		1.0-1.3	2.3-2.5	0.0-0.3	1.0-1.3	2.0-2.2
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.1	0.1	0.3	0.4
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	106	105	103	99	105
Surrogate $^{13}C_2$ *PFOA*	%	88	100	97	110	104
Extracted ISTD $^{13}C_3$ *PFBS*	%	121	105	118	105	103
Extracted ISTD $^{18}O_2$ *PFHxS*	%	118	127	122	124	119
Extracted ISTD $^{13}C_4$ *PFOS*	%	112	116	117	117	107

PFAS in Soils Extended						
Our Reference		369521-20	369521-23	369521-24	369521-26	369521-28
Your Reference	UNITS	TP114	TP114	TP115	TP115	TP115
Depth		1.0-1.3	2.3-2.5	0.0-0.3	1.0-1.3	2.0-2.2
Date Sampled		16/12/2024	16/12/2024	16/12/2024	16/12/2024	16/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	106	103	107	107	105
Extracted ISTD $^{13}C_3$ *PFPeA*	%	120	126	119	123	121
Extracted ISTD $^{13}C_2$ *PFHxA*	%	106	105	107	106	108
Extracted ISTD $^{13}C_4$ *PFHpA*	%	116	113	113	116	112
Extracted ISTD $^{13}C_4$ *PFOA*	%	109	108	107	103	104
Extracted ISTD $^{13}C_5$ *PFNA*	%	114	111	118	119	114
Extracted ISTD $^{13}C_2$ *PFDA*	%	114	122	126	121	118
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	122	129	128	122	114
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	116	115	128	123	130
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	131	126	139	136	126
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	113	116	112	116	109
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	130	126	123	126	120
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	138	133	126	125	112
Extracted ISTD $^{13}C_8$ *FOSA*	%	133	137	135	131	129
Extracted ISTD d_3 *N MeFOSA*	%	124	124	123	122	119
Extracted ISTD d_5 *N EtFOSA*	%	122	122	123	125	122
Extracted ISTD d_7 *N MeFOSE*	%	133	126	131	126	129
Extracted ISTD d_9 *N EtFOSE*	%	113	109	116	112	111
Extracted ISTD d_3 *N MeFOSAA*	%	104	100	103	101	92
Extracted ISTD d_5 *N EtFOSAA*	%	120	117	123	127	119
Total Positive PFHxS & PFOS	µg/kg	0.2	0.1	0.1	0.3	0.4
Total Positive PFOS & PFOA	µg/kg	0.2	0.1	0.1	0.3	0.4
Total Positive PFAS	µg/kg	0.2	0.1	0.1	0.3	0.4

PFAS in Soils Extended			
Our Reference		369521-30	369521-31
Your Reference	UNITS	TB1	FB1
Depth		-	-
Date Sampled		16/12/2024	16/12/2024
Type of sample		Soil	Water
Date prepared	-	23/12/2024	23/12/2024
Date analysed	-	23/12/2024	23/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	99
Surrogate $^{13}C_2$ *PFOA*	%	102	104
Extracted ISTD $^{13}C_3$ *PFBS*	%	118	116
Extracted ISTD $^{18}O_2$ *PFHxS*	%	133	133
Extracted ISTD $^{13}C_4$ *PFOS*	%	116	121

PFAS in Soils Extended			
Our Reference		369521-30	369521-31
Your Reference	UNITS	TB1	FB1
Depth		-	-
Date Sampled		16/12/2024	16/12/2024
Type of sample		Soil	Water
Extracted ISTD $^{13}C_4$ *PFBA*	%	118	117
Extracted ISTD $^{13}C_3$ *PFPeA*	%	135	134
Extracted ISTD $^{13}C_2$ *PFHxA*	%	118	115
Extracted ISTD $^{13}C_4$ *PFHpA*	%	122	125
Extracted ISTD $^{13}C_4$ *PFOA*	%	111	112
Extracted ISTD $^{13}C_5$ *PFNA*	%	123	123
Extracted ISTD $^{13}C_2$ *PFDA*	%	132	127
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	132	130
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	128	121
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	140	133
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	123	125
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	138	137
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	134	136
Extracted ISTD $^{13}C_8$ *FOSA*	%	149	146
Extracted ISTD d_3 *N MeFOSA*	%	134	131
Extracted ISTD d_5 *N EtFOSA*	%	137	135
Extracted ISTD d_7 *N MeFOSE*	%	142	143
Extracted ISTD d_9 *N EtFOSE*	%	124	122
Extracted ISTD d_3 *N MeFOSAA*	%	111	112
Extracted ISTD d_5 *N EtFOSAA*	%	143	138
Total Positive PFHxS & PFOS	µg/kg	<0.1	<0.1
Total Positive PFOS & PFOA	µg/kg	<0.1	<0.1
Total Positive PFAS	µg/kg	<0.1	<0.1

PFAS in Waters Extended		
Our Reference		369521-29
Your Reference	UNITS	RS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Date prepared	-	30/12/2024
Date analysed	-	30/12/2024
Perfluorobutanesulfonic acid	µg/L	<0.01
Perfluoropentanesulfonic acid	µg/L	<0.01
Perfluorohexanesulfonic acid - PFHxS	µg/L	<0.01
Perfluoroheptanesulfonic acid	µg/L	<0.01
Perfluorooctanesulfonic acid PFOS	µg/L	<0.01
Perfluorodecanesulfonic acid	µg/L	<0.02
Perfluorobutanoic acid	µg/L	<0.02
Perfluoropentanoic acid	µg/L	<0.02
Perfluorohexanoic acid	µg/L	<0.01
Perfluoroheptanoic acid	µg/L	<0.01
Perfluorooctanoic acid PFOA	µg/L	<0.01
Perfluorononanoic acid	µg/L	<0.01
Perfluorodecanoic acid	µg/L	<0.02
Perfluoroundecanoic acid	µg/L	<0.02
Perfluorododecanoic acid	µg/L	<0.05
Perfluorotridecanoic acid	µg/L	<0.1
Perfluorotetradecanoic acid	µg/L	<0.5
4:2 FTS	µg/L	<0.01
6:2 FTS	µg/L	0.04
8:2 FTS	µg/L	<0.02
10:2 FTS	µg/L	<0.02
Perfluorooctane sulfonamide	µg/L	<0.1
N-Methyl perfluorooctane sulfonamide	µg/L	<0.05
N-Ethyl perfluorooctanesulfon amide	µg/L	<0.1
N-Me perfluorooctanesulfonamid oethanol	µg/L	<0.05
N-Et perfluorooctanesulfonamid oethanol	µg/L	<0.5
MePerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
EtPerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
Surrogate $^{13}C_8$ *PFOS*	%	99
Surrogate $^{13}C_2$ *PFOA*	%	81
Extracted ISTD $^{13}C_3$ *PFBS*	%	92
Extracted ISTD $^{18}O_2$ *PFHxS*	%	102
Extracted ISTD $^{13}C_4$ *PFOS*	%	140

PFAS in Waters Extended		
Our Reference		369521-29
Your Reference	UNITS	RS1
Depth		-
Date Sampled		16/12/2024
Type of sample		Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	94
Extracted ISTD $^{13}C_3$ *PFPeA*	%	98
Extracted ISTD $^{13}C_2$ *PFHxA*	%	90
Extracted ISTD $^{13}C_4$ *PFHpA*	%	116
Extracted ISTD $^{13}C_4$ *PFOA*	%	100
Extracted ISTD $^{13}C_5$ *PFNA*	%	105
Extracted ISTD $^{13}C_2$ *PFDA*	%	145
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	137
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	128
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	100
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	82
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	71
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	113
Extracted ISTD $^{13}C_8$ *FOSA*	%	94
Extracted ISTD d_3 *N MeFOSA*	%	116
Extracted ISTD d_5 *N EtFOSA*	%	103
Extracted ISTD d_7 *N MeFOSE*	%	84
Extracted ISTD d_9 *N EtFOSE*	%	106
Extracted ISTD d_3 *N MeFOSAA*	%	159
Extracted ISTD d_5 *N EtFOSAA*	%	155
Total Positive PFHxS & PFOS	µg/L	<0.01
Total Positive PFOA & PFOS	µg/L	<0.01
Total Positive PFAS	µg/L	0.04

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	90	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	90	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	85	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	95	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	92	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	90	[NT]
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	90	[NT]
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	92	1	95	96	1	92	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			22/12/2024	1	22/12/2024	22/12/2024		22/12/2024	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	83	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	<100	<100	0	71	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	<100	<100	0	82	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	83	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	<100	<100	0	71	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	82	[NT]
Surrogate o-Terphenyl	%		Org-020	85	1	92	91	1	87	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	104	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	106	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	112	1	107	104	3	106	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	104	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	114	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	118	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	110	1	102	100	2	102	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	[NT]
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	114	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	120	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	[NT]
Fenthion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	[NT]
Phosalone	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	110	1	102	100	2	102	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date extracted	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Date analysed	-			20/12/2024	1	20/12/2024	20/12/2024		20/12/2024	[NT]
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	112	[NT]
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	106	1	103	101	2	101	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date prepared	-			19/12/2024	1	19/12/2024	19/12/2024		19/12/2024	[NT]
Date analysed	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	[NT]
Arsenic	mg/kg	4	Metals-020	<4	1	6	7	15	105	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	92	[NT]
Chromium	mg/kg	1	Metals-020	<1	1	10	11	10	101	[NT]
Copper	mg/kg	1	Metals-020	<1	1	22	27	20	109	[NT]
Lead	mg/kg	1	Metals-020	<1	1	21	25	17	99	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	117	[NT]
Nickel	mg/kg	1	Metals-020	<1	1	10	11	10	101	[NT]
Zinc	mg/kg	1	Metals-020	<1	1	41	46	11	94	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	369521-6
Date prepared	-			23/12/2024	4	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Date analysed	-			23/12/2024	4	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	102	107
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	96	92
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	4	<0.1	0.1	0	91	92
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	107	107
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	4	0.5	1.2	82	99	102
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	100	102
Perfluorobutanoic acid	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	101	99
Perfluoropentanoic acid	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	90	90
Perfluorohexanoic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	104	96
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	90	88
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	93	92
Perfluorononanoic acid	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	103	93
Perfluorodecanoic acid	µg/kg	0.5	Org-029	<0.5	4	<0.5	<0.5	0	91	92
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	<0.5	4	<0.5	<0.5	0	84	77
Perfluorododecanoic acid	µg/kg	0.5	Org-029	<0.5	4	<0.5	<0.5	0	99	97
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	<0.5	4	<0.5	<0.5	0	92	101
Perfluorotetradecanoic acid	µg/kg	5	Org-029	<5	4	<5	<5	0	100	97
4:2 FTS	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	93	90
6:2 FTS	µg/kg	0.1	Org-029	<0.1	4	<0.1	<0.1	0	105	103
8:2 FTS	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	85	86
10:2 FTS	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	109	117
Perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	4	<1	<1	0	95	95
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	4	<1	<1	0	101	99
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	<1	4	<1	<1	0	100	96
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	<1	4	<1	<1	0	93	92
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	<5	4	<5	<5	0	103	99
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	111	107
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	<0.2	4	<0.2	<0.2	0	84	83
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	104	4	100	104	4	95	101
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	95	4	89	97	9	94	101

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	369521-6
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	118	4	118	116	2	112	110
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	132	4	127	126	1	121	125
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	116	4	119	118	1	116	115
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	113	4	108	109	1	109	111
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	127	4	125	128	2	127	127
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	111	4	107	107	0	106	112
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	116	4	120	116	3	119	119
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	108	4	110	111	1	109	107
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	119	4	114	112	2	109	114
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	122	4	120	106	12	126	125
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	131	4	126	118	7	127	133
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	119	4	118	113	4	123	124
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	133	4	128	128	0	133	131
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	120	4	114	113	1	114	112
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	133	4	128	125	2	126	132
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	135	4	138	123	11	127	134
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	133	4	145	133	9	131	131
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	122	4	124	46	92	125	122
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	121	4	121	110	10	120	121
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	126	4	131	74	56	130	128

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	369521-6
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	115	4	111	108	3	109	117
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	106	4	98	96	2	104	103
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	131	4	127	122	4	127	133

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	23	23/12/2024	23/12/2024		[NT]	[NT]
Date analysed	-			[NT]	23	23/12/2024	23/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	23	0.1	<0.1	0	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	23	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	23	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	23	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	23	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	23	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	23	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	23	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	23	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	23	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	23	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	23	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	23	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	23	105	104	1	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	23	100	90	11	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	23	105	114	8	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	23	127	117	8	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	23	116	116	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	23	103	104	1	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	23	126	121	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	23	105	103	2	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	23	113	115	2	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	23	108	115	6	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	23	111	113	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	23	122	124	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	23	129	115	11	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	23	115	120	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	23	126	132	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	23	116	116	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	23	126	125	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	23	133	127	5	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	23	137	134	2	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	23	124	121	2	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	23	122	118	3	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	23	126	125	1	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	23	109	108	1	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	23	100	98	2	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	23	117	116	1	[NT]	[NT]

QUALITY CONTROL: PFAS in Waters Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			30/12/2024	[NT]	[NT]	[NT]	[NT]	30/12/2024	[NT]
Date analysed	-			30/12/2024	[NT]	[NT]	[NT]	[NT]	30/12/2024	[NT]
Perfluorobutanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	107	[NT]
Perfluoropentanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	109	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	[NT]
Perfluoroheptanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	115	[NT]
Perfluorooctanesulfonic acid PFOS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	98	[NT]
Perfluorodecanesulfonic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	95	[NT]
Perfluorobutanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	106	[NT]
Perfluoropentanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	105	[NT]
Perfluorohexanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	[NT]
Perfluoroheptanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	102	[NT]
Perfluorooctanoic acid PFOA	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	[NT]
Perfluorononanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	[NT]
Perfluorodecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	100	[NT]
Perfluoroundecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	105	[NT]
Perfluorododecanoic acid	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	106	[NT]
Perfluorotridecanoic acid	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Perfluorotetradecanoic acid	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	105	[NT]
4:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	108	[NT]
6:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	108	[NT]
8:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	110	[NT]
10:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	130	[NT]
Perfluorooctane sulfonamide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
N-Methyl perfluorooctane sulfonamide	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	115	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	104	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	112	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	103	[NT]
EtPerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	104	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	106	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	93	[NT]	[NT]	[NT]	[NT]	94	[NT]

QUALITY CONTROL: PFAS in Waters Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	94	[NT]	[NT]	[NT]	[NT]	92	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	94	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	105	[NT]	[NT]	[NT]	[NT]	112	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	96	[NT]	[NT]	[NT]	[NT]	98	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	100	[NT]	[NT]	[NT]	[NT]	99	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	94	[NT]	[NT]	[NT]	[NT]	93	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	102	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	101	[NT]	[NT]	[NT]	[NT]	97	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	97	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	114	[NT]	[NT]	[NT]	[NT]	104	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	103	[NT]	[NT]	[NT]	[NT]	101	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	110	[NT]	[NT]	[NT]	[NT]	100	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	84	[NT]	[NT]	[NT]	[NT]	85	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	78	[NT]	[NT]	[NT]	[NT]	89	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	80	[NT]	[NT]	[NT]	[NT]	85	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	100	[NT]	[NT]	[NT]	[NT]	101	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	97	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	99	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	96	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	91	[NT]	[NT]	[NT]	[NT]	89	[NT]

QUALITY CONTROL: PFAS in Waters Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	98	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	120	[NT]	[NT]	[NT]	[NT]	117	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	120	[NT]	[NT]	[NT]	[NT]	120	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

For PFAS Extracted Internal Standards denoted with # or outside the 50-150% acceptance range, the respective target analyte results may be unaffected, in other circumstances the PQL has been raised to accommodate the outlier(s).

COC 19/12/24, 1701

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 369521

Date Received: 19/12/24
Time Received: 1700
Received By: KC
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:** 19/12/24, 1700
Except pH Results Required By - **Date:**
Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU
Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
1	DSS1		16/12/2024	G		✓	✓	✓	✓	✓	✓			6			
2	DSS2		16/12/2024	G													
3	TP101	0.0-0.3	16/12/2024	PFASC											✓		
4	TP101	0.5-0.8	16/12/2024	PFASC											✓		
5	TP101	1.0-1.2	16/12/2024	PFASC													
6	TP101	1.5-1.8	16/12/2024	PFASC											✓		
7	TP101	2.0-2.3	16/12/2024	PFASC													
8	TP102	0.0-0.3	16/12/2024	PFASC											✓		
9	TP102	0.4-0.7	16/12/2024	PFASC											✓		
10	TP102	1.0-1.3	16/12/2024	PFASC													
11	TP102	1.5-1.8	16/12/2024	PFASC													
12	TP102	2.0-2.3	16/12/2024	PFASC											✓		
13	TP103	0.0-0.3	16/12/2024	PFASC											✓		
14	TP103	0.5-0.8	16/12/2024	PFASC													
15	TP103	1.0-1.3	16/12/2024	PFASC											✓		

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

#369521
19/12/24
MC

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By - **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**

Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
16	TP103	1.5-1.8	16/12/2024	PFASC													
17	TP103	2.0-2.3	16/12/2024	PFASC											✓		
18	TP114	0.0-0.3	16/12/2024	PFASC													
19	TP114	0.5-0.8	16/12/2024	PFASC											✓		
20	TP114	1.0-1.3	16/12/2024	PFASC											✓		
21	TP114	1.5-1.8	16/12/2024	PFASC													
22	TP114	2.0-2.3	16/12/2024	PFASC													
23	TP114	2.3-2.5	16/12/2024	PFASC											✓		
24	TP115	0.0-0.3	16/12/2024	PFASC											✓		
25	TP115	0.5-0.8	16/12/2024	PFASC													
26	TP115	1.0-1.3	16/12/2024	PFASC											✓		
27	TP115	1.5-1.8	16/12/2024	PFASC													
28	TP115	2.0-2.2	16/12/2024	PFASC											✓		
29	RS1		16/12/2024		PFASC										✓		
30	TB1		16/12/2024	PFASC											✓		

#369521
19/12/24
KC

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By - **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**
Location: **Gledswood Hills**

Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
31 FB1		16/12/2024	PFASC											✓		

Relinquished by			Received by			
Name	Signature	Date	Name	Signature	Date	
JOHN XU	JX	19/10/2024				

G	Soil sample (glass jar)	FCP	Fibro Cement Piece (plastic bag)	PFASC	PFAS Container	*: As,Cd,Cr,Cu,Pb,Hg,Ni & Zn (8 metals)
P	Soil sample (plastic bag)	✓	Test required			

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu

Sample Login Details

Your reference	20465/8 Gledswood Hills
Envirolab Reference	369521
Date Sample Received	19/12/2024
Date Instructions Received	19/12/2024
Date Results Expected to be Reported	03/01/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	30 Soil, 1 Water
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended	On Hold
DSS1	✓	✓	✓	✓	✓	✓	✓			
DSS2										✓
TP101-0.0-0.3								✓		
TP101-0.5-0.8								✓		
TP101-1.0-1.2										✓
TP101-1.5-1.8								✓		
TP101-2.0-2.3										✓
TP102-0.0-0.3								✓		
TP102-0.4-0.7								✓		
TP102-1.0-1.3										✓
TP102-1.5-1.8										✓
TP102-2.0-2.3								✓		
TP103-0.0-0.3								✓		
TP103-0.5-0.8										✓
TP103-1.0-1.3								✓		
TP103-1.5-1.8										✓
TP103-2.0-2.3								✓		
TP114-0.0-0.3										✓
TP114-0.5-0.8								✓		
TP114-1.0-1.3								✓		
TP114-1.5-1.8										✓
TP114-2.0-2.3										✓
TP114-2.3-2.5								✓		
TP115-0.0-0.3								✓		
TP115-0.5-0.8										✓
TP115-1.0-1.3								✓		
TP115-1.5-1.8										✓
TP115-2.0-2.2								✓		
RS1									✓	
TB1								✓		
FB1								✓		

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 369643

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	**20465/8 Gledswood Hills**
Number of Samples	62 Soil, 1 Water
Date samples received	20/12/2024
Date completed instructions received	20/12/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	07/01/2025
Date of Issue	06/01/2025

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Liam Timmins, Organics Supervisor
Sean McAlary, Senior Chemist
Tabitha Roberts, Senior Chemist
Timothy Toll, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

PAHs in Soil		
Our Reference		369643-1
Your Reference	UNITS	DSS4
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	23/12/2024
Date analysed	-	23/12/2024
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d14	%	104

Acid Extractable metals in soil		
Our Reference		369643-1
Your Reference	UNITS	DSS4
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date prepared	-	23/12/2024
Date analysed	-	31/12/2024
Arsenic	mg/kg	8
Cadmium	mg/kg	<0.4
Chromium	mg/kg	20
Copper	mg/kg	22
Lead	mg/kg	28
Mercury	mg/kg	<0.1
Nickel	mg/kg	11
Zinc	mg/kg	40

PFAS in Soils Extended						
Our Reference		369643-3	369643-5	369643-6	369643-7	369643-9
Your Reference	UNITS	TP104	TP104	TP104	TP105	TP105
Depth		0.5-0.8	1.5-1.8	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.6	0.5	0.4	0.2	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	0.4	0.5	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	0.2	0.5	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	0.2	0.2	0.3	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	101	100	97	100	100
Surrogate $^{13}C_2$ *PFOA*	%	104	100	102	103	101
Extracted ISTD $^{13}C_3$ *PFBS*	%	104	93	97	97	93
Extracted ISTD $^{18}O_2$ *PFHxS*	%	106	91	99	97	94
Extracted ISTD $^{13}C_4$ *PFOS*	%	103	95	97	96	92

PFAS in Soils Extended						
Our Reference		369643-3	369643-5	369643-6	369643-7	369643-9
Your Reference	UNITS	TP104	TP104	TP104	TP105	TP105
Depth		0.5-0.8	1.5-1.8	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	103	96	95	98	91
Extracted ISTD $^{13}C_3$ *PFPeA*	%	106	95	98	97	95
Extracted ISTD $^{13}C_2$ *PFHxA*	%	107	97	96	97	91
Extracted ISTD $^{13}C_4$ *PFHpA*	%	105	95	97	93	92
Extracted ISTD $^{13}C_4$ *PFOA*	%	102	98	95	95	93
Extracted ISTD $^{13}C_5$ *PFNA*	%	106	99	98	97	95
Extracted ISTD $^{13}C_2$ *PFDA*	%	110	93	96	99	90
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	115	103	105	99	93
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	117	103	99	102	95
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	123	113	109	109	104
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	106	97	99	99	97
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	110	103	102	107	97
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	126	111	105	112	102
Extracted ISTD $^{13}C_8$ *FOSA*	%	125	111	112	115	104
Extracted ISTD d_3 *N MeFOSA*	%	103	96	96	97	98
Extracted ISTD d_5 *N EtFOSA*	%	103	95	96	95	95
Extracted ISTD d_7 *N MeFOSE*	%	115	100	96	99	94
Extracted ISTD d_9 *N EtFOSE*	%	107	94	97	98	94
Extracted ISTD d_3 *N MeFOSAA*	%	122	108	105	106	91
Extracted ISTD d_5 *N EtFOSAA*	%	111	101	99	100	88
Total Positive PFHxS & PFOS	µg/kg	0.6	0.5	0.4	0.2	<0.1
Total Positive PFOS & PFOA	µg/kg	0.7	0.7	0.7	0.2	<0.1
Total Positive PFAS	µg/kg	0.7	1.3	1.8	0.2	<0.1

PFAS in Soils Extended						
Our Reference		369643-10	369643-12	369643-14	369643-16	369643-17
Your Reference	UNITS	TP105	TP106	TP106	TP106	TP107
Depth		1.5-1.8	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	18/12/2024	18/12/2024	18/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.7	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	2.8	0.3	<0.1	<0.1	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	99	107	98	99	99
Surrogate $^{13}C_2$ *PFOA*	%	104	83	97	100	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	94	99	96	94	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	89	96	99	95	99
Extracted ISTD $^{13}C_4$ *PFOS*	%	89	133	100	98	99

PFAS in Soils Extended						
Our Reference		369643-10	369643-12	369643-14	369643-16	369643-17
Your Reference	UNITS	TP105	TP106	TP106	TP106	TP107
Depth		1.5-1.8	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	18/12/2024	18/12/2024	18/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	92	95	94	98	98
Extracted ISTD $^{13}C_3$ *PFPeA*	%	91	96	98	99	98
Extracted ISTD $^{13}C_2$ *PFHxA*	%	92	91	95	97	97
Extracted ISTD $^{13}C_4$ *PFHpA*	%	91	111	94	97	96
Extracted ISTD $^{13}C_4$ *PFOA*	%	91	104	95	96	100
Extracted ISTD $^{13}C_5$ *PFNA*	%	93	104	99	98	98
Extracted ISTD $^{13}C_2$ *PFDA*	%	88	149	95	96	96
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	91	142	101	102	105
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	92	135	100	101	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	99	125	109	110	113
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	92	88	94	100	104
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	94	76	97	103	107
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	95	105	107	115	114
Extracted ISTD $^{13}C_8$ *FOSA*	%	100	105	114	114	113
Extracted ISTD d_3 *N MeFOSA*	%	92	121	98	100	104
Extracted ISTD d_5 *N EtFOSA*	%	87	102	95	97	102
Extracted ISTD d_7 *N MeFOSE*	%	92	97	96	99	95
Extracted ISTD d_9 *N EtFOSE*	%	91	108	96	95	101
Extracted ISTD d_3 *N MeFOSAA*	%	93	132	101	109	106
Extracted ISTD d_5 *N EtFOSAA*	%	82	132	92	100	100
Total Positive PFHxS & PFOS	µg/kg	3.6	0.3	<0.1	<0.1	0.3
Total Positive PFOS & PFOA	µg/kg	2.8	0.3	<0.1	<0.1	0.3
Total Positive PFAS	µg/kg	3.6	0.3	<0.1	<0.1	0.3

PFAS in Soils Extended						
Our Reference		369643-19	369643-21	369643-22	369643-23	369643-25
Your Reference	UNITS	TP107	TP107	TP108	TP108	TP108
Depth		1.0-1.3	2.0-2.3	0.0-0.3	0.5-0.8	1.5-1.8
Date Sampled		19/12/2024	19/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.4	0.2	0.3	0.3	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	0.3	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	0.1	<0.1	<0.1	0.3	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	100	106	102	97
Surrogate $^{13}C_2$ *PFOA*	%	100	98	98	96	102
Extracted ISTD $^{13}C_3$ *PFBS*	%	100	98	95	98	96
Extracted ISTD $^{18}O_2$ *PFHxS*	%	92	92	100	94	92
Extracted ISTD $^{13}C_4$ *PFOS*	%	95	96	92	94	96

PFAS in Soils Extended						
Our Reference		369643-19	369643-21	369643-22	369643-23	369643-25
Your Reference	UNITS	TP107	TP107	TP108	TP108	TP108
Depth		1.0-1.3	2.0-2.3	0.0-0.3	0.5-0.8	1.5-1.8
Date Sampled		19/12/2024	19/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	102	96	97	98	97
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	98	97	99	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%	102	99	97	99	98
Extracted ISTD $^{13}C_4$ *PFHpA*	%	97	96	95	94	94
Extracted ISTD $^{13}C_4$ *PFOA*	%	99	95	98	103	96
Extracted ISTD $^{13}C_5$ *PFNA*	%	98	98	99	99	96
Extracted ISTD $^{13}C_2$ *PFDA*	%	94	94	97	97	95
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	102	103	104	99	97
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	103	98	102	98	98
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	111	108	110	114	109
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	105	98	100	99	97
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	106	100	106	106	101
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	118	100	108	113	109
Extracted ISTD $^{13}C_8$ *FOSA*	%	113	110	113	111	109
Extracted ISTD d_3 *N MeFOSA*	%	102	97	103	101	94
Extracted ISTD d_5 *N EtFOSA*	%	100	96	101	99	94
Extracted ISTD d_7 *N MeFOSE*	%	100	97	96	97	99
Extracted ISTD d_9 *N EtFOSE*	%	99	95	100	100	94
Extracted ISTD d_3 *N MeFOSAA*	%	112	102	107	115	106
Extracted ISTD d_5 *N EtFOSAA*	%	101	96	102	100	99
Total Positive PFHxS & PFOS	µg/kg	0.5	0.2	0.3	0.3	0.2
Total Positive PFOS & PFOA	µg/kg	0.5	0.2	0.3	0.6	0.2
Total Positive PFAS	µg/kg	0.6	0.2	0.3	1.2	0.2

PFAS in Soils Extended						
Our Reference		369643-27	369643-29	369643-31	369643-32	369643-34
Your Reference	UNITS	TP109	TP109	TP109	TP110	TP110
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		18/12/2024	18/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	0.1	0.1	0.2	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	100	101	102	94	100
Surrogate $^{13}C_2$ *PFOA*	%	100	101	105	105	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	98	92	95	95	105
Extracted ISTD $^{18}O_2$ *PFHxS*	%	94	90	95	95	99
Extracted ISTD $^{13}C_4$ *PFOS*	%	98	92	94	100	97

PFAS in Soils Extended						
Our Reference		369643-27	369643-29	369643-31	369643-32	369643-34
Your Reference	UNITS	TP109	TP109	TP109	TP110	TP110
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		18/12/2024	18/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	98	96	94	96	100
Extracted ISTD $^{13}C_3$ *PFPeA*	%	99	96	98	98	101
Extracted ISTD $^{13}C_2$ *PFHxA*	%	99	96	94	95	99
Extracted ISTD $^{13}C_4$ *PFHpA*	%	96	94	93	96	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	99	96	93	99	100
Extracted ISTD $^{13}C_5$ *PFNA*	%	100	92	97	96	101
Extracted ISTD $^{13}C_2$ *PFDA*	%	96	92	93	95	96
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	102	97	101	96	98
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	94	98	100	100	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	114	102	111	118	114
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	99	99	94	98	98
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	101	100	100	103	103
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	112	105	103	109	106
Extracted ISTD $^{13}C_8$ *FOSA*	%	113	106	114	118	119
Extracted ISTD d_3 *N MeFOSA*	%	100	102	91	102	100
Extracted ISTD d_5 *N EtFOSA*	%	101	95	92	97	95
Extracted ISTD d_7 *N MeFOSE*	%	99	93	93	94	103
Extracted ISTD d_9 *N EtFOSE*	%	98	93	93	98	93
Extracted ISTD d_3 *N MeFOSAA*	%	108	100	91	101	94
Extracted ISTD d_5 *N EtFOSAA*	%	96	89	87	101	88
Total Positive PFHxS & PFOS	µg/kg	<0.1	0.1	0.1	0.2	<0.1
Total Positive PFOS & PFOA	µg/kg	<0.1	0.1	0.1	0.2	<0.1
Total Positive PFAS	µg/kg	<0.1	0.1	0.1	0.2	<0.1

PFAS in Soils Extended						
Our Reference		369643-36	369643-37	369643-39	369643-41	369643-42
Your Reference	UNITS	TP110	TP111	TP111	TP111	TP112
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		18/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	0.4	0.2	0.3	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	102	101	97	97	102
Surrogate $^{13}C_2$ *PFOA*	%	100	100	98	104	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	100	98	97	94	100
Extracted ISTD $^{18}O_2$ *PFHxS*	%	101	92	100	96	95
Extracted ISTD $^{13}C_4$ *PFOS*	%	99	96	99	98	99

PFAS in Soils Extended						
Our Reference		369643-36	369643-37	369643-39	369643-41	369643-42
Your Reference	UNITS	TP110	TP111	TP111	TP111	TP112
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		18/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	101	99	98	96	101
Extracted ISTD $^{13}C_3$ *PFPeA*	%	101	98	97	98	100
Extracted ISTD $^{13}C_2$ *PFHxA*	%	101	98	99	97	99
Extracted ISTD $^{13}C_4$ *PFHpA*	%	99	94	96	94	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	101	98	102	94	100
Extracted ISTD $^{13}C_5$ *PFNA*	%	101	95	99	96	98
Extracted ISTD $^{13}C_2$ *PFDA*	%	103	92	97	96	95
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	110	100	105	104	98
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	102	103	104	101	109
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	119	113	113	110	121
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	95	99	95	97	103
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	103	105	105	102	109
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	111	108	121	109	119
Extracted ISTD $^{13}C_8$ *FOSA*	%	120	112	118	118	118
Extracted ISTD d_3 *N MeFOSA*	%	103	101	102	97	99
Extracted ISTD d_5 *N EtFOSA*	%	102	96	98	93	100
Extracted ISTD d_7 *N MeFOSE*	%	102	98	107	100	103
Extracted ISTD d_9 *N EtFOSE*	%	100	97	97	93	98
Extracted ISTD d_3 *N MeFOSAA*	%	99	89	103	98	105
Extracted ISTD d_5 *N EtFOSAA*	%	96	92	103	94	97
Total Positive PFHxS & PFOS	µg/kg	<0.1	0.4	0.2	0.3	0.2
Total Positive PFOS & PFOA	µg/kg	<0.1	0.4	0.2	0.3	0.2
Total Positive PFAS	µg/kg	<0.1	0.4	0.2	0.4	0.2

PFAS in Soils Extended						
Our Reference		369643-44	369643-46	369643-47	369643-49	369643-51
Your Reference	UNITS	TP112	TP112	TP113	TP113	TP113
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.3	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	1.0	0.2	0.2	0.2	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	101	105	96	99	99
Surrogate $^{13}C_2$ *PFOA*	%	99	101	101	103	102
Extracted ISTD $^{13}C_3$ *PFBS*	%	100	100	96	99	95
Extracted ISTD $^{18}O_2$ *PFHxS*	%	97	96	95	94	92
Extracted ISTD $^{13}C_4$ *PFOS*	%	95	93	100	99	92

PFAS in Soils Extended						
Our Reference		369643-44	369643-46	369643-47	369643-49	369643-51
Your Reference	UNITS	TP112	TP112	TP113	TP113	TP113
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	97	100	103	98	95
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	96	100	98	105
Extracted ISTD $^{13}C_2$ *PFHxA*	%	99	98	100	95	94
Extracted ISTD $^{13}C_4$ *PFHpA*	%	95	98	95	92	93
Extracted ISTD $^{13}C_4$ *PFOA*	%	100	101	100	98	98
Extracted ISTD $^{13}C_5$ *PFNA*	%	94	96	98	93	96
Extracted ISTD $^{13}C_2$ *PFDA*	%	99	96	97	98	89
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	104	101	103	103	97
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	98	99	104	99	102
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	109	113	117	116	113
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	101	99	100	95	95
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	101	104	107	100	101
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	108	114	109	110	112
Extracted ISTD $^{13}C_8$ *FOSA*	%	116	116	117	116	113
Extracted ISTD d_3 *N MeFOSA*	%	103	101	102	100	100
Extracted ISTD d_5 *N EtFOSA*	%	101	98	101	96	98
Extracted ISTD d_7 *N MeFOSE*	%	97	94	98	103	94
Extracted ISTD d_9 *N EtFOSE*	%	98	101	98	95	101
Extracted ISTD d_3 *N MeFOSAA*	%	88	103	100	97	100
Extracted ISTD d_5 *N EtFOSAA*	%	85	99	97	88	93
Total Positive PFHxS & PFOS	µg/kg	1.3	0.2	0.2	0.2	0.2
Total Positive PFOS & PFOA	µg/kg	1.0	0.2	0.2	0.2	0.2
Total Positive PFAS	µg/kg	1.3	0.2	0.2	0.2	0.2

PFAS in Soils Extended						
Our Reference		369643-52	369643-54	369643-60	369643-62	369643-63
Your Reference	UNITS	DDS1	DDS3	DDS9	TB2	FB2
Depth		-	-	-	-	-
Date Sampled		18/12/2024	18/12/2024	19/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.1	0.2	<0.1	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	99	97	101	103	98
Surrogate $^{13}C_2$ *PFOA*	%	99	107	98	102	103
Extracted ISTD $^{13}C_3$ *PFBS*	%	100	103	98	101	102
Extracted ISTD $^{18}O_2$ *PFHxS*	%	93	99	96	93	97
Extracted ISTD $^{13}C_4$ *PFOS*	%	98	102	96	97	102

PFAS in Soils Extended						
Our Reference		369643-52	369643-54	369643-60	369643-62	369643-63
Your Reference	UNITS	DDS1	DDS3	DDS9	TB2	FB2
Depth		-	-	-	-	-
Date Sampled		18/12/2024	18/12/2024	19/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	102	99	101	105	104
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	102	98	100	102
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100	104	97	100	101
Extracted ISTD $^{13}C_4$ *PFHpA*	%	99	100	97	98	100
Extracted ISTD $^{13}C_4$ *PFOA*	%	103	98	103	101	99
Extracted ISTD $^{13}C_5$ *PFNA*	%	98	101	99	101	101
Extracted ISTD $^{13}C_2$ *PFDA*	%	98	99	94	96	99
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	97	106	108	105	109
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	105	109	104	104	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	116	117	113	118	113
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	107	107	104	101	102
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	110	111	106	106	104
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	117	119	106	110	107
Extracted ISTD $^{13}C_8$ *FOSA*	%	116	123	120	121	118
Extracted ISTD d_3 *N MeFOSA*	%	106	109	99	104	103
Extracted ISTD d_5 *N EtFOSA*	%	102	109	102	100	101
Extracted ISTD d_7 *N MeFOSE*	%	100	103	98	104	104
Extracted ISTD d_9 *N EtFOSE*	%	102	109	101	102	102
Extracted ISTD d_3 *N MeFOSAA*	%	103	108	106	108	115
Extracted ISTD d_5 *N EtFOSAA*	%	99	106	103	103	104
Total Positive PFHxS & PFOS	µg/kg	0.2	0.1	0.2	<0.1	<0.1
Total Positive PFOS & PFOA	µg/kg	0.2	0.1	0.4	<0.1	<0.1
Total Positive PFAS	µg/kg	0.2	0.1	0.4	<0.1	<0.1

Moisture						
Our Reference		369643-1	369643-3	369643-5	369643-6	369643-7
Your Reference	UNITS	DSS4	TP104	TP104	TP104	TP105
Depth		-	0.5-0.8	1.5-1.8	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	16	8.0	11	14	11

Moisture						
Our Reference		369643-9	369643-10	369643-12	369643-14	369643-16
Your Reference	UNITS	TP105	TP105	TP106	TP106	TP106
Depth		1.0-1.3	1.5-1.8	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	16	18	5.7	11	12

Moisture						
Our Reference		369643-17	369643-19	369643-21	369643-22	369643-23
Your Reference	UNITS	TP107	TP107	TP107	TP108	TP108
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	0.5-0.8
Date Sampled		19/12/2024	19/12/2024	19/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	7.8	7.4	9.8	6.5	7.4

Moisture						
Our Reference		369643-25	369643-27	369643-29	369643-31	369643-32
Your Reference	UNITS	TP108	TP109	TP109	TP109	TP110
Depth		1.5-1.8	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		18/12/2024	18/12/2024	18/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	10	4.2	8.9	11	7.0

Moisture						
Our Reference		369643-34	369643-36	369643-37	369643-39	369643-41
Your Reference	UNITS	TP110	TP110	TP111	TP111	TP111
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		18/12/2024	18/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	7.7	8.4	8.4	10	11

Moisture						
Our Reference		369643-42	369643-44	369643-46	369643-47	369643-49
Your Reference	UNITS	TP112	TP112	TP112	TP113	TP113
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	18/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	7.1	10	12	7.4	11

Moisture						
Our Reference		369643-51	369643-52	369643-54	369643-60	369643-62
Your Reference	UNITS	TP113	DDS1	DDS3	DDS9	TB2
Depth		2.0-2.3	-	-	-	-
Date Sampled		18/12/2024	18/12/2024	18/12/2024	19/12/2024	18/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	13	5.7	6.8	7.6	0.1

Moisture		
Our Reference		369643-63
Your Reference	UNITS	FB2
Depth		-
Date Sampled		18/12/2024
Type of sample		Soil
Date prepared	-	23/12/2024
Date analysed	-	24/12/2024
Moisture	%	0.3

PFAS in Waters Extended		
Our Reference		369643-61
Your Reference	UNITS	RS2
Depth		-
Date Sampled		18/12/2024
Type of sample		Water
Date prepared	-	24/12/2024
Date analysed	-	24/12/2024
Perfluorobutanesulfonic acid	µg/L	<0.01
Perfluoropentanesulfonic acid	µg/L	<0.01
Perfluorohexanesulfonic acid - PFHxS	µg/L	<0.01
Perfluoroheptanesulfonic acid	µg/L	<0.01
Perfluorooctanesulfonic acid PFOS	µg/L	<0.01
Perfluorodecanesulfonic acid	µg/L	<0.02
Perfluorobutanoic acid	µg/L	<0.02
Perfluoropentanoic acid	µg/L	<0.02
Perfluorohexanoic acid	µg/L	<0.01
Perfluoroheptanoic acid	µg/L	<0.01
Perfluorooctanoic acid PFOA	µg/L	<0.01
Perfluorononanoic acid	µg/L	<0.01
Perfluorodecanoic acid	µg/L	<0.02
Perfluoroundecanoic acid	µg/L	<0.02
Perfluorododecanoic acid	µg/L	<0.05
Perfluorotridecanoic acid	µg/L	<0.1
Perfluorotetradecanoic acid	µg/L	<0.5
4:2 FTS	µg/L	<0.01
6:2 FTS	µg/L	0.04
8:2 FTS	µg/L	<0.02
10:2 FTS	µg/L	<0.02
Perfluorooctane sulfonamide	µg/L	<0.1
N-Methyl perfluorooctane sulfonamide	µg/L	<0.05
N-Ethyl perfluorooctanesulfon amide	µg/L	<0.1
N-Me perfluorooctanesulfonamid oethanol	µg/L	<0.05
N-Et perfluorooctanesulfonamid oethanol	µg/L	<0.5
MePerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
EtPerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
Surrogate $^{13}C_8$ *PFOS*	%	98
Surrogate $^{13}C_2$ *PFOA*	%	86
Extracted ISTD $^{13}C_3$ *PFBS*	%	93
Extracted ISTD $^{18}O_2$ *PFHxS*	%	98
Extracted ISTD $^{13}C_4$ *PFOS*	%	139

PFAS in Waters Extended		
Our Reference		369643-61
Your Reference	UNITS	RS2
Depth		-
Date Sampled		18/12/2024
Type of sample		Water
Extracted ISTD $^{13}C_4$ *PFBA*	%	96
Extracted ISTD $^{13}C_3$ *PFPeA*	%	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%	91
Extracted ISTD $^{13}C_4$ *PFHpA*	%	112
Extracted ISTD $^{13}C_4$ *PFOA*	%	99
Extracted ISTD $^{13}C_5$ *PFNA*	%	103
Extracted ISTD $^{13}C_2$ *PFDA*	%	136
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	136
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	130
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	106
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	85
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	74
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	112
Extracted ISTD $^{13}C_8$ *FOSA*	%	100
Extracted ISTD d_3 *N MeFOSA*	%	114
Extracted ISTD d_5 *N EtFOSA*	%	104
Extracted ISTD d_7 *N MeFOSE*	%	93
Extracted ISTD d_9 *N EtFOSE*	%	108
Extracted ISTD d_3 *N MeFOSAA*	%	157
Extracted ISTD d_5 *N EtFOSAA*	%	152
Total Positive PFHxS & PFOS	µg/L	<0.01
Total Positive PFOA & PFOS	µg/L	<0.01
Total Positive PFAS	µg/L	0.04

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-12	369643-1
Date extracted	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Date analysed	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	106
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	110
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	104
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	110
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	118
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	120	121
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	110
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	106	102
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	104	1	104	106	2	98	97

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369643-1
Date prepared	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Date analysed	-			31/12/2024	1	31/12/2024	31/12/2024		31/12/2024	31/12/2024
Arsenic	mg/kg	4	Metals-020	<4	1	8	10	22	115	99
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	103	85
Chromium	mg/kg	1	Metals-020	<1	1	20	22	10	107	94
Copper	mg/kg	1	Metals-020	<1	1	22	24	9	110	107
Lead	mg/kg	1	Metals-020	<1	1	28	31	10	111	93
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	107	99
Nickel	mg/kg	1	Metals-020	<1	1	11	11	0	109	93
Zinc	mg/kg	1	Metals-020	<1	1	40	37	8	103	82

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369643-5
Date prepared	-			24/12/2024	3	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			24/12/2024	3	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	102	100
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	101	101
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	101	103
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	102	103
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	3	0.6	0.4	40	103	105
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	105	104
Perfluorobutanoic acid	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	96	100
Perfluoropentanoic acid	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	97	99
Perfluorohexanoic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	101	104
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	104	98
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	3	0.2	0.1	67	98	97
Perfluorononanoic acid	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	100	101
Perfluorodecanoic acid	µg/kg	0.5	Org-029	<0.5	3	<0.5	<0.5	0	102	99
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	<0.5	3	<0.5	<0.5	0	94	95
Perfluorododecanoic acid	µg/kg	0.5	Org-029	<0.5	3	<0.5	<0.5	0	102	102
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	<0.5	3	<0.5	<0.5	0	106	100
Perfluorotetradecanoic acid	µg/kg	5	Org-029	<5	3	<5	<5	0	101	96
4:2 FTS	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	103	99
6:2 FTS	µg/kg	0.1	Org-029	<0.1	3	<0.1	<0.1	0	102	101
8:2 FTS	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	107	103
10:2 FTS	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	112	114
Perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	3	<1	<1	0	105	101
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	3	<1	<1	0	103	100
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	<1	3	<1	<1	0	101	97
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	<1	3	<1	<1	0	101	107
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	<5	3	<5	<5	0	103	108
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	108	106
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	<0.2	3	<0.2	<0.2	0	99	101
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	97	3	101	97	4	103	104
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	97	3	104	102	2	99	102

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369643-5
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	99	3	104	96	8	95	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	100	3	106	101	5	99	98
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	102	3	103	97	6	94	94
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	99	3	103	99	4	102	95
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	101	3	106	102	4	100	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	103	3	107	97	10	103	101
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	103	3	105	100	5	97	99
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	100	3	102	97	5	98	98
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	102	3	106	99	7	102	99
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	100	3	110	101	9	98	100
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	109	3	115	107	7	103	104
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	104	3	117	109	7	104	102
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	116	3	123	119	3	116	115
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	102	3	106	103	3	104	98
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	107	3	110	105	5	103	100
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	111	3	126	116	8	103	113
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	118	3	125	120	4	114	114
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	103	3	103	101	2	100	98
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	102	3	103	101	2	97	96
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	100	3	115	99	15	109	102

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369643-5
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	100	3	107	101	6	100	93
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	113	3	122	111	9	113	109
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	110	3	111	109	2	99	107

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-12	369643-36
Date prepared	-			[NT]	19	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			[NT]	19	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	100	104
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	101	103
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	19	0.1	<0.1	0	103	104
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	103	106
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	19	0.4	0.4	0	105	102
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	104	103
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	100	101
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	99	99
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	104	98
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	98	100
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	19	0.1	<0.1	0	97	94
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	101	100
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	19	<0.5	<0.5	0	99	105
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	19	<0.5	<0.5	0	95	98
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	19	<0.5	<0.5	0	102	104
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	19	<0.5	<0.5	0	100	107
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	19	<5	<5	0	96	99
4:2 FTS	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	99	98
6:2 FTS	µg/kg	0.1	Org-029	[NT]	19	<0.1	<0.1	0	101	98
8:2 FTS	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	103	98
10:2 FTS	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	114	110
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	19	<1	<1	0	101	100
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	19	<1	<1	0	100	104
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	19	<1	<1	0	97	102
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	19	<1	<1	0	107	111
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	19	<5	<5	0	108	104
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	106	108
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	19	<0.2	<0.2	0	101	101
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	19	103	101	2	104	102
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	19	100	101	1	102	101

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-12	369643-36
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	19	100	98	2	97	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	19	92	96	4	98	97
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	19	95	96	1	94	97
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	19	102	99	3	95	97
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	19	100	100	0	97	99
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	19	102	101	1	101	98
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	19	97	99	2	99	95
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	19	99	97	2	98	100
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	19	98	98	0	99	97
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	19	94	94	0	100	94
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	19	102	108	6	104	101
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	19	103	101	2	102	101
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	19	111	114	3	115	116
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	19	105	102	3	98	97
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	19	106	108	2	100	103
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	19	118	115	3	113	107
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	19	113	113	0	114	117
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	19	102	100	2	98	99
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	19	100	99	1	96	96
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	19	100	101	1	102	95

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-12	369643-36
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	19	99	98	1	93	96
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	19	112	107	5	109	86
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	19	101	100	1	107	84

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	34	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	34	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	34	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	34	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	34	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	34	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	34	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	34	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	34	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	34	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	34	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	34	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	34	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	34	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	34	100	100	0	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	34	100	102	2	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ PFBS	%		Org-029	[NT]	34	105	99	6	[NT]	[NT]
Extracted ISTD $^{18}O_2$ PFHxS	%		Org-029	[NT]	34	99	103	4	[NT]	[NT]
Extracted ISTD $^{13}C_4$ PFOS	%		Org-029	[NT]	34	97	98	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ PFBA	%		Org-029	[NT]	34	100	99	1	[NT]	[NT]
Extracted ISTD $^{13}C_3$ PFPeA	%		Org-029	[NT]	34	101	100	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ PFHxA	%		Org-029	[NT]	34	99	100	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ PFHpA	%		Org-029	[NT]	34	98	99	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ PFOA	%		Org-029	[NT]	34	100	98	2	[NT]	[NT]
Extracted ISTD $^{13}C_5$ PFNA	%		Org-029	[NT]	34	101	99	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ PFDA	%		Org-029	[NT]	34	96	100	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ PFUnDA	%		Org-029	[NT]	34	98	107	9	[NT]	[NT]
Extracted ISTD $^{13}C_2$ PFDoDA	%		Org-029	[NT]	34	104	104	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ PFTeDA	%		Org-029	[NT]	34	114	113	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ 4:2FTS	%		Org-029	[NT]	34	98	100	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ 6:2FTS	%		Org-029	[NT]	34	103	100	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ 8:2FTS	%		Org-029	[NT]	34	106	107	1	[NT]	[NT]
Extracted ISTD $^{13}C_8$ FOSA	%		Org-029	[NT]	34	119	118	1	[NT]	[NT]
Extracted ISTD d_3 N MeFOSA	%		Org-029	[NT]	34	100	100	0	[NT]	[NT]
Extracted ISTD d_5 N EtFOSA	%		Org-029	[NT]	34	95	96	1	[NT]	[NT]
Extracted ISTD d_7 N MeFOSE	%		Org-029	[NT]	34	103	101	2	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	34	93	99	6	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	34	94	93	1	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	34	88	88	0	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	49	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	49	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	49	0.2	0.1	67	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	49	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	49	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	49	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	49	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	49	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	49	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	49	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	49	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	49	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	49	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	49	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	49	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	49	99	100	1	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	49	103	102	1	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	49	99	97	2	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	49	94	91	3	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	49	99	95	4	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	49	98	96	2	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	49	98	97	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	49	95	95	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	49	92	94	2	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	49	98	99	1	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	49	93	94	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	49	98	92	6	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	49	103	103	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	49	99	100	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	49	116	110	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	49	95	94	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	49	100	101	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	49	110	98	12	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	49	116	115	1	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	49	100	92	8	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	49	96	96	0	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	49	103	93	10	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	49	95	94	1	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	49	97	96	1	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	49	88	94	7	[NT]	[NT]

QUALITY CONTROL: PFAS in Waters Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	369643-61
Date prepared	-			24/12/2024	[NT]	[NT]	[NT]	[NT]	24/12/2024	24/12/2024
Date analysed	-			24/12/2024	[NT]	[NT]	[NT]	[NT]	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	106	100
Perfluoropentanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	105
Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	94	92
Perfluoroheptanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	106	109
Perfluorooctanesulfonic acid PFOS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	104	104
Perfluorodecanesulfonic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	98	96
Perfluorobutanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	100	99
Perfluoropentanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	93	94
Perfluorohexanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	94	93
Perfluoroheptanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	96	94
Perfluorooctanoic acid PFOA	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	107	106
Perfluorononanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	109	100
Perfluorodecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	88	99
Perfluoroundecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	81	93
Perfluorododecanoic acid	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	113	91
Perfluorotridecanoic acid	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	117	119
Perfluorotetradecanoic acid	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	90	88
4:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	90	92
6:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	98	98
8:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	86	89
10:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	105	110
Perfluorooctane sulfonamide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	99	97
N-Methyl perfluorooctane sulfonamide	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	103	106
N-Ethyl perfluorooctanesulfon amide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	102	104
N-Me perfluorooctanesulfonamid oethanol	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	94	88
N-Et perfluorooctanesulfonamid oethanol	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	99	99
MePerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	115	113
EtPerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	94	94
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	103	[NT]	[NT]	[NT]	[NT]	102	105
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	104	95

QUALITY CONTROL: PFAS in Waters Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	369643-61
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	89	96
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	97	[NT]	[NT]	[NT]	[NT]	100	100
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	95	[NT]	[NT]	[NT]	[NT]	90	93
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	94	95
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	106	[NT]	[NT]	[NT]	[NT]	104	104
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	91	95
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	98	100
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	87	[NT]	[NT]	[NT]	[NT]	85	87
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	96	[NT]	[NT]	[NT]	[NT]	92	96
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	112	106
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	100	97
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	100	[NT]	[NT]	[NT]	[NT]	84	99
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	90	[NT]	[NT]	[NT]	[NT]	83	89
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	109	[NT]	[NT]	[NT]	[NT]	108	101
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	116	[NT]	[NT]	[NT]	[NT]	114	118
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	139	[NT]	[NT]	[NT]	[NT]	131	127
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	121	[NT]	[NT]	[NT]	[NT]	113	117
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	117	[NT]	[NT]	[NT]	[NT]	114	113
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	101	[NT]	[NT]	[NT]	[NT]	100	100
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	126	[NT]	[NT]	[NT]	[NT]	121	129

QUALITY CONTROL: PFAS in Waters Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	369643-61
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	101	102
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	104	108
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	128	[NT]	[NT]	[NT]	[NT]	127	128

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

For PFAS Extracted Internal Standards denoted with # or outside the 50-150% acceptance range, the respective target analyte results may be unaffected, in other circumstances the PQL has been raised to accommodate the outlier(s).

CoC: 20/12/2024 1732

ENVIROLAB Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 369643

Date Received: 20.12.24
Time Received: 1610
Received By: TTr
Temp: Cool/Ambient 12°C
Cooling: Ice/Icepack
Security: Intact/Broken/None

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**
Except pH Results Required By - **Date:**
Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU
Ref No: **20465/8**
Location: **Gledswood Hills**

TTr

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
NR	DSS3		16/12/2024	G		✔		✔									
1	DSS4		19/12/2024	G		✔		✔									
2	TP104	0.0-0.3	19/12/2024	PFASC													
3	TP104	0.5-0.8	19/12/2024	PFASC											✔		
4	TP104	1.0-1.3	19/12/2024	PFASC													
5	TP104	1.5-1.8	19/12/2024	PFASC											✔		
6	TP104	2.0-2.3	19/12/2024	PFASC											✔		
7	TP105	0.0-0.3	19/12/2024	PFASC											✔		
8	TP105	0.4-0.7	19/12/2024	PFASC													
9	TP105	1.0-1.3	19/12/2024	PFASC											✔		
10	TP105	1.5-1.8	19/12/2024	PFASC											✔		
11	TP105	2.0-2.3	19/12/2024	PFASC													
12	TP106	0.0-0.3	18/12/2024	PFASC											✔		
13	TP106	0.5-0.8	18/12/2024	PFASC													
14	TP106	1.0-1.3	18/12/2024	PFASC											✔		

#369643
TTv 20.12.24

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**
Except pH Results Required By - **Date:**
Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU
Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
15	TP106	1.5-1.8	18/12/2024	PFASC													
16	TP106	2.0-2.3	18/12/2024	PFASC											✔		
17	TP107	0.0-0.3	19/12/2024	PFASC											✔		
18	TP107	0.5-0.8	19/12/2024	PFASC													
19	TP107	1.0-1.3	19/12/2024	PFASC											✔		
20	TP107	1.5-1.8	19/12/2024	PFASC													
21	TP107	2.0-2.3	19/12/2024	PFASC											✔		
22	TP108	0.0-0.3	18/12/2024	PFASC											✔		
23	TP108	0.5-0.8	18/12/2024	PFASC											✔		
24	TP108	1.0-1.2	18/12/2024	PFASC													
25	TP108	1.5-1.8	18/12/2024	PFASC											✔		
26	TP108	2.0-2.3	18/12/2024	PFASC													
27	TP109	0.0-0.3	18/12/2024	PFASC											✔		
28	TP109	0.5-0.8	18/12/2024	PFASC													
29	TP109	1.0-1.3	18/12/2024	PFASC											✔		

#369643
20.12.24 TT.

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**
Except pH Results Required By - **Date:**
Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
30	TP109	1.5-1.8	18/12/2024	PFASC													
31	TP109	2.0-2.3	18/12/2024	PFASC											✔		
32	TP110	0.0-0.3	18/12/2024	PFASC											✔		
33	TP110	0.5-0.8	18/12/2024	PFASC													
34	TP110	1.0-1.3	18/12/2024	PFASC											✔		
35	TP110	1.6-1.9	18/12/2024	PFASC													
36	TP110	2.0-2.3	18/12/2024	PFASC											✔		
37	TP111	0.0-0.3	19/12/2024	PFASC											✔		
38	TP111	0.6-0.9	19/12/2024	PFASC													
39	TP111	1.0-1.3	19/12/2024	PFASC											✔		
40	TP111	1.5-1.8	19/12/2024	PFASC													
41	TP111	2.0-2.3	19/12/2024	PFASC											✔		
42	TP112	0.0-0.3	19/12/2024	PFASC											✔		
43	TP112	0.5-0.8	19/12/2024	PFASC													
44	TP112	1.0-1.3	19/12/2024	PFASC											✔		

H369643
20.12.24 TTr

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By - **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
45	TP112	1.5-1.8	19/12/2024	PFASC													
46	TP112	2.0-2.3	19/12/2024	PFASC											✔		
47	TP113	0.0-0.3	18/12/2024	PFASC											✔		
48	TP113	0.5-0.8	18/12/2024	PFASC													
49	TP113	1.0-1.3	18/12/2024	PFASC											✔		
50	TP113	1.5-1.8	18/12/2024	PFASC													
51	TP113	2.0-2.3	18/12/2024	PFASC											✔		
52	DDS1		18/12/2024	PFASC											✔		
53	DDS2		18/12/2024	PFASC													
54	DDS3		18/12/2024	PFASC											✔		
55	DDS4		18/12/2024	PFASC													
56	DDS5		18/12/2024	PFASC													
57	DDS6		18/12/2024	PFASC													
58	DDS7		18/12/2024	PFASC													
59	DDS8		18/12/2024	PFASC													

#369643
20.12.24
TH

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**
Except pH Results Required By - **Date:**
Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
60	DDS9		19/12/2024	PFASC											✔		
61	RS2		18/12/2024		PFASC										✔		
62	TB2		18/12/2024	PFASC											✔		
63	FB2		18/12/2024	PFASC											✔		

Relinquished by			Received by			
Name	Signature	Date	Name	Signature	Date	
JOHN XU	JX	20/10/2024				

G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag) PFASC PFAS Container *: As,Cd,Cr,Cu,Pb,Hg,Ni & Zn (8 metals)
P Soil sample (plastic bag) ✔ Test required

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu

Sample Login Details

Your reference	20465/8 Gledswood Hills
Envirolab Reference	369643
Date Sample Received	20/12/2024
Date Instructions Received	20/12/2024
Date Results Expected to be Reported	07/01/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	62 Soil, 1 Water
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

#56-60: Lid has ID DDS5-9, jar had TP109. Used ID of lid
#8 - Depth on jar 0.5-0.8
NR: DSS3

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	PAHs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended	On Hold
DSS4	✓	✓			
TP104-0.0-0.3					✓
TP104-0.5-0.8			✓		
TP104-1.0-1.3					✓
TP104-1.5-1.8			✓		
TP104-2.0-2.3			✓		
TP105-0.0-0.3			✓		
TP105-0.4-0.7					✓
TP105-1.0-1.3			✓		
TP105-1.5-1.8			✓		
TP105-2.0-2.3					✓
TP106-0.0-0.3			✓		
TP106-0.5-0.8					✓
TP106-1.0-1.3			✓		
TP106-1.5-1.8					✓
TP106-2.0-2.3			✓		
TP107-0.0-0.3			✓		
TP107-0.5-0.8					✓
TP107-1.0-1.3			✓		
TP107-1.5-1.8					✓
TP107-2.0-2.3			✓		
TP108-0.0-0.3			✓		
TP108-0.5-0.8			✓		
TP108-1.0-1.2					✓
TP108-1.5-1.8			✓		
TP108-2.0-2.3					✓
TP109-0.0-0.3			✓		
TP109-0.5-0.8					✓
TP109-1.0-1.3			✓		
TP109-1.5-1.8					✓
TP109-2.0-2.3			✓		
TP110-0.0-0.3			✓		

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Sample ID	PAHs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended	On Hold
TP110-0.5-0.8					✓
TP110-1.0-1.3			✓		
TP110-1.6-1.9					✓
TP110-2.0-2.3			✓		
TP111-0.0-0.3			✓		
TP111-0.6-0.9					✓
TP111-1.0-1.3			✓		
TP111-1.5-1.8					✓
TP111-2.0-2.3			✓		
TP112-0.0-0.3			✓		
TP112-0.5-0.8					✓
TP112-1.0-1.3			✓		
TP112-1.5-1.8					✓
TP112-2.0-2.3			✓		
TP113-0.0-0.3			✓		
TP113-0.5-0.8					✓
TP113-1.0-1.3			✓		
TP113-1.5-1.8					✓
TP113-2.0-2.3			✓		
DDS1			✓		
DDS2					✓
DDS3			✓		
DDS4					✓
DDS5					✓
DDS6					✓
DDS7					✓
DDS8					✓
DDS9			✓		
RS2				✓	
TB2			✓		
FB2			✓		

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 369642

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	**20465/8 Gledswood Hills**
Number of Samples	77 Soil, 1 Water
Date samples received	20/12/2024
Date completed instructions received	20/12/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	07/01/2025
Date of Issue	06/01/2025

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Liam Timmins, Organics Supervisor
Sean McAlary, Senior Chemist
Tabitha Roberts, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

PAHs in Soil					
Our Reference		369642-1	369642-2	369642-3	369642-4
Your Reference	UNITS	DSS5	DSS6	DSS7	DSS8
Depth		-	-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	94	96	94	93

Acid Extractable metals in soil						
Our Reference		369642-1	369642-2	369642-3	369642-4	369642-79
Your Reference	UNITS	DSS5	DSS6	DSS7	DSS8	DSS5 - [TRIPLICATE]
Depth		-	-	-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	31/12/2024	31/12/2024	31/12/2024	31/12/2024	31/12/2024
Arsenic	mg/kg	7	8	9	8	9
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	12	13	14	10
Copper	mg/kg	33	24	36	17	37
Lead	mg/kg	23	21	27	24	28
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	20	8	14	4	17
Zinc	mg/kg	93	25	48	51	64

Moisture						
Our Reference		369642-1	369642-2	369642-3	369642-4	369642-5
Your Reference	UNITS	DSS5	DSS6	DSS7	DSS8	TP116
Depth		-	-	-	-	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	13	15	9.9	15	7.4

Moisture						
Our Reference		369642-6	369642-7	369642-8	369642-9	369642-10
Your Reference	UNITS	TP116	TP116	TP117	TP117	TP117
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	8.6	15	6.5	7.6	10

Moisture						
Our Reference		369642-11	369642-12	369642-13	369642-14	369642-15
Your Reference	UNITS	TP118	TP118	TP118	TP119	TP119
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	7.3	9.6	8.9	8.0	8.2

Moisture						
Our Reference		369642-16	369642-17	369642-18	369642-19	369642-20
Your Reference	UNITS	TP119	TP120	TP120	TP120	TP121
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	11	7.8	9.4	11	10

Moisture						
Our Reference		369642-21	369642-22	369642-23	369642-24	369642-25
Your Reference	UNITS	TP121	TP121	TP122	TP122	TP122
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	9.1	10	2.8	10	12

Moisture						
Our Reference		369642-26	369642-27	369642-28	369642-29	369642-30
Your Reference	UNITS	TP123	TP123	TP123	TP124	TP124
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	6.9	10	8.3	15	9.8

Moisture						
Our Reference		369642-31	369642-32	369642-33	369642-34	369642-35
Your Reference	UNITS	TP124	TP125	TP125	TP125	TP125
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	3.0-3.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	16	11	13	15	14

Moisture						
Our Reference		369642-36	369642-37	369642-38	369642-39	369642-40
Your Reference	UNITS	TP126	TP126	TP126	TP127	TP127
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	9.8	9.1	9.4	11	13

Moisture						
Our Reference		369642-41	369642-42	369642-43	369642-44	369642-45
Your Reference	UNITS	TP127	TP128	TP128	TP128	TP129
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	11	9.0	11	9.9	7.0

Moisture						
Our Reference		369642-46	369642-47	369642-48	369642-49	369642-50
Your Reference	UNITS	TP129	TP129	TP130	TP130	TP130
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	8.5	11	9.9	14	11

Moisture						
Our Reference		369642-51	369642-52	369642-53	369642-54	369642-55
Your Reference	UNITS	TP131	TP131	TP131	TP132	TP132
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	9.5	8.4	7.9	7.8	7.5

Moisture						
Our Reference		369642-56	369642-57	369642-58	369642-59	369642-60
Your Reference	UNITS	TP132	TP133	TP133	TP133	TP134
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	9.5	6.1	8.6	7.6	6.2

Moisture						
Our Reference		369642-61	369642-62	369642-63	369642-64	369642-65
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	3.4	12	7.5	12	8.4

Moisture						
Our Reference		369642-66	369642-67	369642-68	369642-69	369642-70
Your Reference	UNITS	TP136	TP136	TP136	J1	J1
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	0.5-0.8
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	5.4	11	8.5	12	10

Moisture						
Our Reference		369642-71	369642-73	369642-74	369642-75	369642-76
Your Reference	UNITS	J1	TB3	FB3	DDS10	DDS11
Depth		1.0-1.3	-	-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	12	0.6	0.8	12	11

Moisture			
Our Reference		369642-77	369642-78
Your Reference	UNITS	DDS12	DDS13
Depth		-	-
Date Sampled		19/12/2024	19/12/2024
Type of sample		Soil	Soil
Date prepared	-	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024
Moisture	%	10	6.8

PFAS in Soils Extended						
Our Reference		369642-5	369642-6	369642-7	369642-8	369642-9
Your Reference	UNITS	TP116	TP116	TP116	TP117	TP117
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.3	0.2	<0.1	0.3	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	95	96	100	99
Surrogate $^{13}C_2$ *PFOA*	%	97	95	99	95	95
Extracted ISTD $^{13}C_3$ *PFBS*	%	101	99	95	100	102
Extracted ISTD $^{18}O_2$ *PFHxS*	%	102	100	91	92	100
Extracted ISTD $^{13}C_4$ *PFOS*	%	96	89	92	93	98

PFAS in Soils Extended						
Our Reference		369642-5	369642-6	369642-7	369642-8	369642-9
Your Reference	UNITS	TP116	TP116	TP116	TP117	TP117
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	103	101	97	102	100
Extracted ISTD $^{13}C_3$ *PFPeA*	%	104	107	100	105	112
Extracted ISTD $^{13}C_2$ *PFHxA*	%	108	104	96	100	102
Extracted ISTD $^{13}C_4$ *PFHpA*	%	104	100	98	102	104
Extracted ISTD $^{13}C_4$ *PFOA*	%	107	110	101	111	109
Extracted ISTD $^{13}C_5$ *PFNA*	%	101	96	91	100	100
Extracted ISTD $^{13}C_2$ *PFDA*	%	106	95	95	98	99
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	102	93	96	95	101
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	112	107	101	106	105
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	118	117	104	114	115
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	81	83	76	81	80
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	90	88	74	89	90
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	85	79	80	89	88
Extracted ISTD $^{13}C_8$ *FOSA*	%	112	114	107	108	107
Extracted ISTD d_3 *N MeFOSA*	%	103	93	93	96	101
Extracted ISTD d_5 *N EtFOSA*	%	101	100	95	102	107
Extracted ISTD d_7 *N MeFOSE*	%	99	101	98	99	97
Extracted ISTD d_9 *N EtFOSE*	%	112	112	105	113	111
Extracted ISTD d_3 *N MeFOSAA*	%	97	90	88	95	94
Extracted ISTD d_5 *N EtFOSAA*	%	95	96	96	90	100
Total Positive PFHxS & PFOS	µg/kg	0.3	0.2	<0.1	0.3	<0.1
Total Positive PFOS & PFOA	µg/kg	0.3	0.2	<0.1	0.3	<0.1
Total Positive PFAS	µg/kg	0.3	0.2	<0.1	0.3	<0.1

PFAS in Soils Extended						
Our Reference		369642-10	369642-11	369642-12	369642-13	369642-14
Your Reference	UNITS	TP117	TP118	TP118	TP118	TP119
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.3	0.2	0.2	0.2	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<2	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	100	96	102	103	102
Surrogate $^{13}C_2$ *PFOA*	%	92	102	98	97	96
Extracted ISTD $^{13}C_3$ *PFBS*	%	97	99	102	102	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	103	103	98	101	96
Extracted ISTD $^{13}C_4$ *PFOS*	%	93	95	89	95	97

PFAS in Soils Extended						
Our Reference		369642-10	369642-11	369642-12	369642-13	369642-14
Your Reference	UNITS	TP117	TP118	TP118	TP118	TP119
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	98	100	100	99	99
Extracted ISTD $^{13}C_3$ *PFPeA*	%	105	108	107	104	104
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100	103	105	103	104
Extracted ISTD $^{13}C_4$ *PFHpA*	%	98	100	99	102	102
Extracted ISTD $^{13}C_4$ *PFOA*	%	107	106	107	103	106
Extracted ISTD $^{13}C_5$ *PFNA*	%	98	97	96	100	95
Extracted ISTD $^{13}C_2$ *PFDA*	%	93	99	96	99	101
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	27	98	99	100	99
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	50	108	107	111	108
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	104	112	108	117	113
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	76	82	80	82	79
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	84	84	86	89	89
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	83	86	85	89	95
Extracted ISTD $^{13}C_8$ *FOSA*	%	94	110	109	114	110
Extracted ISTD d_3 *N MeFOSA*	%	84	96	94	101	101
Extracted ISTD d_5 *N EtFOSA*	%	96	96	100	103	99
Extracted ISTD d_7 *N MeFOSE*	%	93	98	100	99	97
Extracted ISTD d_9 *N EtFOSE*	%	106	110	114	104	112
Extracted ISTD d_3 *N MeFOSAA*	%	79	95	89	93	93
Extracted ISTD d_5 *N EtFOSAA*	%	81	99	97	103	99
Total Positive PFHxS & PFOS	µg/kg	0.3	0.2	0.2	0.2	0.3
Total Positive PFOS & PFOA	µg/kg	0.3	0.2	0.2	0.2	0.3
Total Positive PFAS	µg/kg	0.3	0.2	0.2	0.2	0.3

PFAS in Soils Extended						
Our Reference		369642-15	369642-16	369642-17	369642-18	369642-19
Your Reference	UNITS	TP119	TP119	TP120	TP120	TP120
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.4	0.4	0.5	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	97	105	103	92
Surrogate $^{13}C_2$ *PFOA*	%	99	99	96	93	93
Extracted ISTD $^{13}C_3$ *PFBS*	%	99	97	98	103	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	96	92	102	94	94
Extracted ISTD $^{13}C_4$ *PFOS*	%	92	93	89	90	92

PFAS in Soils Extended						
Our Reference		369642-15	369642-16	369642-17	369642-18	369642-19
Your Reference	UNITS	TP119	TP119	TP120	TP120	TP120
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	97	97	98	101	98
Extracted ISTD $^{13}C_3$ *PFPeA*	%	101	100	102	102	109
Extracted ISTD $^{13}C_2$ *PFHxA*	%	99	103	101	105	97
Extracted ISTD $^{13}C_4$ *PFHpA*	%	96	99	100	103	96
Extracted ISTD $^{13}C_4$ *PFOA*	%	102	103	105	109	106
Extracted ISTD $^{13}C_5$ *PFNA*	%	97	97	92	97	95
Extracted ISTD $^{13}C_2$ *PFDA*	%	95	93	101	98	94
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	100	97	93	98	85
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	106	103	105	106	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	111	109	111	111	101
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	76	78	80	79	78
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	83	85	87	86	88
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	84	87	85	89	81
Extracted ISTD $^{13}C_8$ *FOSA*	%	108	107	105	108	101
Extracted ISTD d_3 *N MeFOSA*	%	103	96	101	100	91
Extracted ISTD d_5 *N EtFOSA*	%	102	101	100	108	96
Extracted ISTD d_7 *N MeFOSE*	%	98	97	104	100	94
Extracted ISTD d_9 *N EtFOSE*	%	111	114	108	111	110
Extracted ISTD d_3 *N MeFOSAA*	%	100	91	92	96	88
Extracted ISTD d_5 *N EtFOSAA*	%	103	98	94	101	93
Total Positive PFHxS & PFOS	µg/kg	0.2	0.4	0.4	0.5	0.2
Total Positive PFOS & PFOA	µg/kg	0.2	0.4	0.4	0.7	0.2
Total Positive PFAS	µg/kg	0.2	0.4	0.4	0.7	0.2

PFAS in Soils Extended						
Our Reference		369642-20	369642-21	369642-22	369642-23	369642-24
Your Reference	UNITS	TP121	TP121	TP121	TP122	TP122
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	0.1	0.1	0.1	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	0.9	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	0.4	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	1.2	0.2
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	0.9	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	97	98	97	94	89
Surrogate $^{13}C_2$ *PFOA*	%	95	95	92	98	97
Extracted ISTD $^{13}C_3$ *PFBS*	%	94	95	95	100	102
Extracted ISTD $^{18}O_2$ *PFHxS*	%	98	95	101	107	95
Extracted ISTD $^{13}C_4$ *PFOS*	%	96	95	95	102	101

PFAS in Soils Extended						
Our Reference		369642-20	369642-21	369642-22	369642-23	369642-24
Your Reference	UNITS	TP121	TP121	TP121	TP122	TP122
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	98	96	97	103	100
Extracted ISTD $^{13}C_3$ *PFPeA*	%	106	103	108	107	102
Extracted ISTD $^{13}C_2$ *PFHxA*	%	99	98	100	103	98
Extracted ISTD $^{13}C_4$ *PFHpA*	%	98	100	98	100	99
Extracted ISTD $^{13}C_4$ *PFOA*	%	106	105	103	107	105
Extracted ISTD $^{13}C_5$ *PFNA*	%	97	96	98	100	98
Extracted ISTD $^{13}C_2$ *PFDA*	%	100	96	99	102	97
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	97	101	100	107	99
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	103	103	106	112	107
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	105	109	106	110	109
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	78	79	80	81	79
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	81	88	83	93	88
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	85	90	86	85	82
Extracted ISTD $^{13}C_8$ *FOSA*	%	108	110	111	110	112
Extracted ISTD d_3 *N MeFOSA*	%	95	96	99	101	98
Extracted ISTD d_5 *N EtFOSA*	%	101	99	98	100	102
Extracted ISTD d_7 *N MeFOSE*	%	99	97	98	104	97
Extracted ISTD d_9 *N EtFOSE*	%	113	109	104	117	106
Extracted ISTD d_3 *N MeFOSAA*	%	90	86	91	97	89
Extracted ISTD d_5 *N EtFOSAA*	%	98	86	92	109	96
Total Positive PFHxS & PFOS	µg/kg	0.1	0.1	0.1	0.1	<0.1
Total Positive PFOS & PFOA	µg/kg	0.1	0.1	0.1	0.4	<0.1
Total Positive PFAS	µg/kg	0.1	0.1	0.1	4.0	0.2

PFAS in Soils Extended						
Our Reference		369642-25	369642-26	369642-27	369642-28	369642-29
Your Reference	UNITS	TP122	TP123	TP123	TP123	TP124
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.4	0.1	0.9	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	96	98	103	92	95
Surrogate $^{13}C_2$ *PFOA*	%	96	100	97	101	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	97	98	95	97	100
Extracted ISTD $^{18}O_2$ *PFHxS*	%	92	105	105	98	97
Extracted ISTD $^{13}C_4$ *PFOS*	%	100	101	91	101	97

PFAS in Soils Extended						
Our Reference		369642-25	369642-26	369642-27	369642-28	369642-29
Your Reference	UNITS	TP122	TP123	TP123	TP123	TP124
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	95	102	96	99	97
Extracted ISTD $^{13}C_3$ *PFPeA*	%	95	107	98	107	118
Extracted ISTD $^{13}C_2$ *PFHxA*	%	96	101	98	102	94
Extracted ISTD $^{13}C_4$ *PFHpA*	%	96	106	101	102	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	104	108	104	106	99
Extracted ISTD $^{13}C_5$ *PFNA*	%	101	102	97	102	97
Extracted ISTD $^{13}C_2$ *PFDA*	%	94	96	98	98	94
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	101	100	95	103	101
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	102	107	102	109	101
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	99	109	104	108	81
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	79	78	76	81	81
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	81	85	82	85	86
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	79	87	86	84	80
Extracted ISTD $^{13}C_8$ *FOSA*	%	107	110	108	111	111
Extracted ISTD d_3 *N MeFOSA*	%	99	93	98	102	98
Extracted ISTD d_5 *N EtFOSA*	%	95	102	101	107	97
Extracted ISTD d_7 *N MeFOSE*	%	91	99	96	100	100
Extracted ISTD d_9 *N EtFOSE*	%	105	115	108	117	103
Extracted ISTD d_3 *N MeFOSAA*	%	87	92	94	92	74
Extracted ISTD d_5 *N EtFOSAA*	%	95	96	96	101	70
Total Positive PFHxS & PFOS	µg/kg	0.2	0.4	0.1	1.1	<0.1
Total Positive PFOS & PFOA	µg/kg	0.2	0.4	0.1	1	<0.1
Total Positive PFAS	µg/kg	0.2	0.4	0.1	1.2	<0.1

PFAS in Soils Extended						
Our Reference		369642-30	369642-31	369642-32	369642-33	369642-34
Your Reference	UNITS	TP124	TP124	TP125	TP125	TP125
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	0.1	0.2	0.2	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	95	97	95	90	98
Surrogate $^{13}C_2$ *PFOA*	%	102	98	91	97	100
Extracted ISTD $^{13}C_3$ *PFBS*	%	98	93	95	97	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	103	89	96	91	93
Extracted ISTD $^{13}C_4$ *PFOS*	%	99	94	98	97	94

PFAS in Soils Extended						
Our Reference		369642-30	369642-31	369642-32	369642-33	369642-34
Your Reference	UNITS	TP124	TP124	TP125	TP125	TP125
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	97	90	97	95	92
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	109	100	104	99
Extracted ISTD $^{13}C_2$ *PFHxA*	%	97	94	99	98	92
Extracted ISTD $^{13}C_4$ *PFHpA*	%	98	91	103	98	94
Extracted ISTD $^{13}C_4$ *PFOA*	%	102	97	110	101	96
Extracted ISTD $^{13}C_5$ *PFNA*	%	101	92	97	97	98
Extracted ISTD $^{13}C_2$ *PFDA*	%	99	90	98	98	92
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	105	97	103	96	95
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	104	100	106	106	105
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	104	92	108	99	100
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	77	72	80	74	75
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	86	78	92	83	84
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	87	79	85	80	83
Extracted ISTD $^{13}C_8$ *FOSA*	%	112	103	109	107	108
Extracted ISTD d_3 *N MeFOSA*	%	102	94	98	94	91
Extracted ISTD d_5 *N EtFOSA*	%	100	95	99	99	94
Extracted ISTD d_7 *N MeFOSE*	%	97	93	97	93	96
Extracted ISTD d_9 *N EtFOSE*	%	102	103	104	107	110
Extracted ISTD d_3 *N MeFOSAA*	%	90	72	93	88	87
Extracted ISTD d_5 *N EtFOSAA*	%	102	80	90	85	80
Total Positive PFHxS & PFOS	µg/kg	<0.1	0.1	0.2	0.2	0.2
Total Positive PFOS & PFOA	µg/kg	<0.1	0.1	0.2	0.2	0.2
Total Positive PFAS	µg/kg	<0.1	0.1	0.2	0.2	0.2

PFAS in Soils Extended						
Our Reference		369642-35	369642-36	369642-37	369642-38	369642-39
Your Reference	UNITS	TP125	TP126	TP126	TP126	TP127
Depth		3.0-3.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.1	0.5	0.5	0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	95	99	94	97	100
Surrogate $^{13}C_2$ *PFOA*	%	103	94	92	100	99
Extracted ISTD $^{13}C_3$ *PFBS*	%	96	97	96	97	98
Extracted ISTD $^{18}O_2$ *PFHxS*	%	93	96	92	96	93
Extracted ISTD $^{13}C_4$ *PFOS*	%	97	96	98	92	94

PFAS in Soils Extended						
Our Reference		369642-35	369642-36	369642-37	369642-38	369642-39
Your Reference	UNITS	TP125	TP126	TP126	TP126	TP127
Depth		3.0-3.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	94	99	94	97	99
Extracted ISTD $^{13}C_3$ *PFPeA*	%	96	100	94	102	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%	94	101	97	97	99
Extracted ISTD $^{13}C_4$ *PFHpA*	%	93	95	98	97	95
Extracted ISTD $^{13}C_4$ *PFOA*	%	99	105	102	103	101
Extracted ISTD $^{13}C_5$ *PFNA*	%	96	99	97	98	97
Extracted ISTD $^{13}C_2$ *PFDA*	%	95	95	97	92	94
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	93	98	99	97	96
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	105	107	107	107	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	96	107	102	109	117
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	75	77	77	75	100
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	76	83	83	83	107
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	80	79	81	82	116
Extracted ISTD $^{13}C_8$ *FOSA*	%	107	109	104	105	112
Extracted ISTD d_3 *N MeFOSA*	%	87	98	98	90	104
Extracted ISTD d_5 *N EtFOSA*	%	99	101	101	100	99
Extracted ISTD d_7 *N MeFOSE*	%	93	96	92	99	99
Extracted ISTD d_9 *N EtFOSE*	%	108	109	103	106	101
Extracted ISTD d_3 *N MeFOSAA*	%	88	88	94	85	97
Extracted ISTD d_5 *N EtFOSAA*	%	88	92	92	88	93
Total Positive PFHxS & PFOS	µg/kg	0.2	0.1	0.5	0.5	0.1
Total Positive PFOS & PFOA	µg/kg	0.2	0.1	0.6	0.5	0.1
Total Positive PFAS	µg/kg	0.2	0.1	0.6	0.5	0.1

PFAS in Soils Extended						
Our Reference		369642-40	369642-41	369642-42	369642-43	369642-44
Your Reference	UNITS	TP127	TP127	TP128	TP128	TP128
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	1.4	0.3	<0.1	0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	101	95	94	98	101
Surrogate $^{13}C_2$ *PFOA*	%	101	102	101	99	103
Extracted ISTD $^{13}C_3$ *PFBS*	%	95	98	101	95	102
Extracted ISTD $^{18}O_2$ *PFHxS*	%	88	96	98	99	95
Extracted ISTD $^{13}C_4$ *PFOS*	%	94	97	95	102	99

PFAS in Soils Extended						
Our Reference		369642-40	369642-41	369642-42	369642-43	369642-44
Your Reference	UNITS	TP127	TP127	TP128	TP128	TP128
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	98	100	99	99	103
Extracted ISTD $^{13}C_3$ *PFPeA*	%	97	99	102	98	99
Extracted ISTD $^{13}C_2$ *PFHxA*	%	98	99	100	99	101
Extracted ISTD $^{13}C_4$ *PFHpA*	%	94	92	93	99	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	94	95	90	99	100
Extracted ISTD $^{13}C_5$ *PFNA*	%	92	97	71	98	100
Extracted ISTD $^{13}C_2$ *PFDA*	%	93	95	43	98	98
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	99	83	46	102	98
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	99	96	64	107	107
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	110	114	81	117	118
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	95	98	100	101	104
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	102	100	72	109	109
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	104	105	84	126	119
Extracted ISTD $^{13}C_8$ *FOSA*	%	115	107	70	119	116
Extracted ISTD d_3 *N MeFOSA*	%	97	97	78	107	105
Extracted ISTD d_5 *N EtFOSA*	%	93	93	80	102	100
Extracted ISTD d_7 *N MeFOSE*	%	97	101	95	103	103
Extracted ISTD d_9 *N EtFOSE*	%	97	95	91	99	107
Extracted ISTD d_3 *N MeFOSAA*	%	93	91	48	98	100
Extracted ISTD d_5 *N EtFOSAA*	%	89	79	39	102	96
Total Positive PFHxS & PFOS	µg/kg	<0.1	1.6	0.3	<0.1	0.1
Total Positive PFOS & PFOA	µg/kg	<0.1	1.4	0.3	<0.1	0.1
Total Positive PFAS	µg/kg	<0.1	1.6	0.4	<0.1	0.1

PFAS in Soils Extended						
Our Reference		369642-45	369642-46	369642-47	369642-48	369642-49
Your Reference	UNITS	TP129	TP129	TP129	TP130	TP130
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.4	0.2	0.3	0.1	0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	0.4	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	102	105	97	96	102
Surrogate $^{13}C_2$ *PFOA*	%	103	99	98	101	99
Extracted ISTD $^{13}C_3$ *PFBS*	%	96	101	99	97	93
Extracted ISTD $^{18}O_2$ *PFHxS*	%	91	94	93	95	91
Extracted ISTD $^{13}C_4$ *PFOS*	%	92	93	95	98	90

PFAS in Soils Extended						
Our Reference		369642-45	369642-46	369642-47	369642-48	369642-49
Your Reference	UNITS	TP129	TP129	TP129	TP130	TP130
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	100	104	101	101	93
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	100	98	97	96
Extracted ISTD $^{13}C_2$ *PFHxA*	%	97	100	99	101	96
Extracted ISTD $^{13}C_4$ *PFHpA*	%	95	95	95	94	88
Extracted ISTD $^{13}C_4$ *PFOA*	%	96	102	100	99	95
Extracted ISTD $^{13}C_5$ *PFNA*	%	93	101	95	97	94
Extracted ISTD $^{13}C_2$ *PFDA*	%	91	96	92	96	89
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	101	112	88	108	96
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	98	108	99	103	103
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	112	120	117	125	109
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	97	102	99	103	91
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	103	104	104	107	90
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	116	118	109	111	94
Extracted ISTD $^{13}C_8$ *FOSA*	%	111	123	109	117	115
Extracted ISTD d_3 *N MeFOSA*	%	100	102	97	100	97
Extracted ISTD d_5 *N EtFOSA*	%	97	96	96	95	91
Extracted ISTD d_7 *N MeFOSE*	%	96	101	96	105	101
Extracted ISTD d_9 *N EtFOSE*	%	92	98	98	96	94
Extracted ISTD d_3 *N MeFOSAA*	%	97	103	94	99	90
Extracted ISTD d_5 *N EtFOSAA*	%	98	102	84	92	89
Total Positive PFHxS & PFOS	µg/kg	0.4	0.2	0.3	0.1	0.1
Total Positive PFOS & PFOA	µg/kg	0.7	0.2	0.3	0.1	0.1
Total Positive PFAS	µg/kg	0.7	0.2	0.8	0.1	0.1

PFAS in Soils Extended						
Our Reference		369642-50	369642-51	369642-52	369642-53	369642-54
Your Reference	UNITS	TP130	TP131	TP131	TP131	TP132
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	0.3	0.1	<0.1	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	102	98	101	102	102
Surrogate $^{13}C_2$ *PFOA*	%	99	101	98	99	102
Extracted ISTD $^{13}C_3$ *PFBS*	%	96	96	101	100	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	97	98	94	97	91
Extracted ISTD $^{13}C_4$ *PFOS*	%	94	101	94	94	93

PFAS in Soils Extended						
Our Reference		369642-50	369642-51	369642-52	369642-53	369642-54
Your Reference	UNITS	TP130	TP131	TP131	TP131	TP132
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	96	101	99	98	100
Extracted ISTD $^{13}C_3$ *PFPeA*	%	98	99	98	97	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%	97	101	100	97	100
Extracted ISTD $^{13}C_4$ *PFHpA*	%	92	96	96	93	95
Extracted ISTD $^{13}C_4$ *PFOA*	%	99	102	100	99	99
Extracted ISTD $^{13}C_5$ *PFNA*	%	93	97	93	95	96
Extracted ISTD $^{13}C_2$ *PFDA*	%	91	96	94	93	92
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	93	105	101	101	103
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	98	103	104	103	101
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	110	118	111	116	117
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	93	104	96	94	105
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	99	108	100	95	105
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	106	113	107	106	114
Extracted ISTD $^{13}C_8$ *FOSA*	%	115	116	114	117	115
Extracted ISTD d_3 *N MeFOSA*	%	98	105	101	99	101
Extracted ISTD d_5 *N EtFOSA*	%	95	102	94	94	97
Extracted ISTD d_7 *N MeFOSE*	%	98	99	103	102	95
Extracted ISTD d_9 *N EtFOSE*	%	98	100	93	93	97
Extracted ISTD d_3 *N MeFOSAA*	%	99	98	94	97	99
Extracted ISTD d_5 *N EtFOSAA*	%	92	93	90	90	97
Total Positive PFHxS & PFOS	µg/kg	<0.1	0.3	0.1	<0.1	0.2
Total Positive PFOS & PFOA	µg/kg	<0.1	0.3	0.1	<0.1	0.2
Total Positive PFAS	µg/kg	<0.1	0.3	0.1	<0.1	0.2

PFAS in Soils Extended						
Our Reference		369642-55	369642-56	369642-57	369642-58	369642-59
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP133
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	0.2	0.4	0.5	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	0.2	0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	0.2	0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	102	97	99	99	101
Surrogate $^{13}C_2$ *PFOA*	%	98	102	98	99	98
Extracted ISTD $^{13}C_3$ *PFBS*	%	98	98	100	99	96
Extracted ISTD $^{18}O_2$ *PFHxS*	%	91	93	94	94	93
Extracted ISTD $^{13}C_4$ *PFOS*	%	94	97	96	96	93

PFAS in Soils Extended						
Our Reference		369642-55	369642-56	369642-57	369642-58	369642-59
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP133
Depth		1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	102	100	102	100	98
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	99	100	99	99
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100	100	102	103	100
Extracted ISTD $^{13}C_4$ *PFHpA*	%	94	97	96	96	93
Extracted ISTD $^{13}C_4$ *PFOA*	%	102	98	101	99	98
Extracted ISTD $^{13}C_5$ *PFNA*	%	96	94	99	96	96
Extracted ISTD $^{13}C_2$ *PFDA*	%	95	93	99	99	89
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	101	100	106	100	102
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	100	104	104	105	102
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	116	115	114	116	109
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	103	101	102	99	98
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	110	101	107	105	100
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	115	109	108	110	107
Extracted ISTD $^{13}C_8$ *FOSA*	%	114	110	118	118	112
Extracted ISTD d_3 *N MeFOSA*	%	103	99	101	99	103
Extracted ISTD d_5 *N EtFOSA*	%	99	95	97	96	97
Extracted ISTD d_7 *N MeFOSE*	%	96	105	107	102	97
Extracted ISTD d_9 *N EtFOSE*	%	100	97	96	96	99
Extracted ISTD d_3 *N MeFOSAA*	%	101	97	101	99	107
Extracted ISTD d_5 *N EtFOSAA*	%	96	89	92	96	92
Total Positive PFHxS & PFOS	µg/kg	0.1	0.2	0.4	0.6	0.3
Total Positive PFOS & PFOA	µg/kg	0.1	0.2	0.4	0.7	0.4
Total Positive PFAS	µg/kg	0.1	0.2	0.4	1.4	0.5

PFAS in Soils Extended						
Our Reference		369642-60	369642-61	369642-62	369642-63	369642-64
Your Reference	UNITS	TP134	TP134	TP134	TP135	TP135
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.3	<0.1	<0.1	0.2	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	96	100	98	99	100
Surrogate $^{13}C_2$ *PFOA*	%	98	102	103	96	95
Extracted ISTD $^{13}C_3$ *PFBS*	%	100	96	102	98	99
Extracted ISTD $^{18}O_2$ *PFHxS*	%	96	96	97	100	98
Extracted ISTD $^{13}C_4$ *PFOS*	%	101	96	98	97	96

PFAS in Soils Extended						
Our Reference		369642-60	369642-61	369642-62	369642-63	369642-64
Your Reference	UNITS	TP134	TP134	TP134	TP135	TP135
Depth		0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3	1.0-1.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	103	97	95	99	101
Extracted ISTD $^{13}C_3$ *PFPeA*	%	103	96	98	102	101
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100	98	92	100	100
Extracted ISTD $^{13}C_4$ *PFHpA*	%	101	97	96	98	100
Extracted ISTD $^{13}C_4$ *PFOA*	%	104	94	95	100	103
Extracted ISTD $^{13}C_5$ *PFNA*	%	103	97	95	96	101
Extracted ISTD $^{13}C_2$ *PFDA*	%	99	93	98	97	93
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	98	99	104	102	103
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	108	98	99	102	102
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	116	106	112	113	115
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	106	99	99	102	99
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	107	98	96	108	101
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	112	104	100	116	112
Extracted ISTD $^{13}C_8$ *FOSA*	%	113	114	111	116	115
Extracted ISTD d_3 *N MeFOSA*	%	105	100	102	105	104
Extracted ISTD d_5 *N EtFOSA*	%	102	94	94	98	101
Extracted ISTD d_7 *N MeFOSE*	%	105	102	96	99	99
Extracted ISTD d_9 *N EtFOSE*	%	101	97	99	101	100
Extracted ISTD d_3 *N MeFOSAA*	%	101	103	100	106	110
Extracted ISTD d_5 *N EtFOSAA*	%	97	91	97	95	103
Total Positive PFHxS & PFOS	µg/kg	0.3	<0.1	<0.1	0.2	0.3
Total Positive PFOS & PFOA	µg/kg	0.3	<0.1	<0.1	0.2	0.7
Total Positive PFAS	µg/kg	0.3	<0.1	<0.1	0.2	0.7

PFAS in Soils Extended						
Our Reference		369642-65	369642-66	369642-67	369642-68	369642-69
Your Reference	UNITS	TP135	TP136	TP136	TP136	J1
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	0.2	0.4	0.4	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	98	96	98	97	98
Surrogate $^{13}C_2$ *PFOA*	%	98	100	96	100	95
Extracted ISTD $^{13}C_3$ *PFBS*	%	96	93	101	97	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	96	93	97	96	99
Extracted ISTD $^{13}C_4$ *PFOS*	%	97	99	100	100	100

PFAS in Soils Extended						
Our Reference		369642-65	369642-66	369642-67	369642-68	369642-69
Your Reference	UNITS	TP135	TP136	TP136	TP136	J1
Depth		2.0-2.3	0.0-0.3	1.0-1.3	2.0-2.3	0.0-0.3
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	101	100	102	98	98
Extracted ISTD $^{13}C_3$ *PFPeA*	%	100	100	102	100	100
Extracted ISTD $^{13}C_2$ *PFHxA*	%	97	101	104	97	100
Extracted ISTD $^{13}C_4$ *PFHpA*	%	98	97	97	97	97
Extracted ISTD $^{13}C_4$ *PFOA*	%	100	99	104	96	98
Extracted ISTD $^{13}C_5$ *PFNA*	%	99	97	102	97	97
Extracted ISTD $^{13}C_2$ *PFDA*	%	93	97	101	94	94
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	101	106	103	101	104
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	105	101	99	102	96
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	109	113	111	110	112
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	102	105	102	100	101
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	102	102	104	99	105
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	109	111	114	109	119
Extracted ISTD $^{13}C_8$ *FOSA*	%	115	116	116	115	114
Extracted ISTD d_3 *N MeFOSA*	%	103	101	101	101	101
Extracted ISTD d_5 *N EtFOSA*	%	100	97	100	97	98
Extracted ISTD d_7 *N MeFOSE*	%	101	101	105	100	96
Extracted ISTD d_9 *N EtFOSE*	%	96	97	99	92	96
Extracted ISTD d_3 *N MeFOSAA*	%	108	109	108	101	103
Extracted ISTD d_5 *N EtFOSAA*	%	100	95	97	98	94
Total Positive PFHxS & PFOS	µg/kg	<0.1	0.2	0.4	0.4	0.2
Total Positive PFOS & PFOA	µg/kg	<0.1	0.2	0.4	0.5	0.2
Total Positive PFAS	µg/kg	<0.1	0.2	0.4	0.5	0.2

PFAS in Soils Extended						
Our Reference		369642-70	369642-71	369642-73	369642-74	369642-75
Your Reference	UNITS	J1	J1	TB3	FB3	DDS10
Depth		0.5-0.8	1.0-1.3	-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.6	0.2	<0.1	<0.1	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	107	95	95	100	94
Surrogate $^{13}C_2$ *PFOA*	%	96	97	101	102	103
Extracted ISTD $^{13}C_3$ *PFBS*	%	92	96	101	98	96
Extracted ISTD $^{18}O_2$ *PFHxS*	%	92	91	101	96	94
Extracted ISTD $^{13}C_4$ *PFOS*	%	87	97	99	98	97

PFAS in Soils Extended						
Our Reference		369642-70	369642-71	369642-73	369642-74	369642-75
Your Reference	UNITS	J1	J1	TB3	FB3	DDS10
Depth		0.5-0.8	1.0-1.3	-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	96	95	103	103	97
Extracted ISTD $^{13}C_3$ *PFPeA*	%	97	94	101	102	97
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100	97	105	105	96
Extracted ISTD $^{13}C_4$ *PFHpA*	%	90	93	98	99	95
Extracted ISTD $^{13}C_4$ *PFOA*	%	96	98	99	98	93
Extracted ISTD $^{13}C_5$ *PFNA*	%	93	93	102	101	93
Extracted ISTD $^{13}C_2$ *PFDA*	%	94	88	97	95	90
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	102	98	104	103	96
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	98	101	108	103	103
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	109	102	115	110	111
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	94	96	105	105	101
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	99	97	106	104	107
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	107	98	107	109	108
Extracted ISTD $^{13}C_8$ *FOSA*	%	108	111	118	115	108
Extracted ISTD d_3 *N MeFOSA*	%	99	100	104	103	101
Extracted ISTD d_5 *N EtFOSA*	%	93	93	99	101	96
Extracted ISTD d_7 *N MeFOSE*	%	97	98	108	100	96
Extracted ISTD d_9 *N EtFOSE*	%	92	93	97	102	98
Extracted ISTD d_3 *N MeFOSAA*	%	103	99	115	113	103
Extracted ISTD d_5 *N EtFOSAA*	%	95	90	105	100	96
Total Positive PFHxS & PFOS	µg/kg	0.6	0.2	<0.1	<0.1	0.2
Total Positive PFOS & PFOA	µg/kg	0.6	0.2	<0.1	<0.1	0.2
Total Positive PFAS	µg/kg	0.6	0.2	<0.1	<0.1	0.2

PFAS in Soils Extended				
Our Reference		369642-76	369642-77	369642-78
Your Reference	UNITS	DDS11	DDS12	DDS13
Depth		-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	0.2
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	0.1	0.7
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	101	96	97
Surrogate $^{13}C_2$ *PFOA*	%	106	97	99
Extracted ISTD $^{13}C_3$ *PFBS*	%	99	96	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	98	97	97
Extracted ISTD $^{13}C_4$ *PFOS*	%	96	97	97

PFAS in Soils Extended				
Our Reference		369642-76	369642-77	369642-78
Your Reference	UNITS	DDS11	DDS12	DDS13
Depth		-	-	-
Date Sampled		19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	103	100	100
Extracted ISTD $^{13}C_3$ *PFPeA*	%	99	98	100
Extracted ISTD $^{13}C_2$ *PFHxA*	%	103	99	105
Extracted ISTD $^{13}C_4$ *PFHpA*	%	96	95	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	97	99	101
Extracted ISTD $^{13}C_5$ *PFNA*	%	101	95	100
Extracted ISTD $^{13}C_2$ *PFDA*	%	94	92	96
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	103	102	107
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	102	98	107
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	114	114	114
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	107	100	103
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	104	102	102
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	110	106	112
Extracted ISTD $^{13}C_8$ *FOSA*	%	114	113	115
Extracted ISTD d_3 *N MeFOSA*	%	102	96	100
Extracted ISTD d_5 *N EtFOSA*	%	96	94	98
Extracted ISTD d_7 *N MeFOSE*	%	100	100	106
Extracted ISTD d_9 *N EtFOSE*	%	98	97	97
Extracted ISTD d_3 *N MeFOSAA*	%	106	99	107
Extracted ISTD d_5 *N EtFOSAA*	%	100	97	96
Total Positive PFHxS & PFOS	µg/kg	0.1	0.1	0.9
Total Positive PFOS & PFOA	µg/kg	0.1	0.1	0.7
Total Positive PFAS	µg/kg	0.1	0.1	0.9

PFAS in Waters Extended		
Our Reference		369642-72
Your Reference	UNITS	RS3
Depth		-
Date Sampled		19/12/2024
Type of sample		Water
Date prepared	-	24/12/2024
Date analysed	-	24/12/2024
Perfluorobutanesulfonic acid	µg/L	<0.01
Perfluoropentanesulfonic acid	µg/L	<0.01
Perfluorohexanesulfonic acid - PFHxS	µg/L	<0.01
Perfluoroheptanesulfonic acid	µg/L	<0.01
Perfluorooctanesulfonic acid PFOS	µg/L	<0.01
Perfluorodecanesulfonic acid	µg/L	<0.02
Perfluorobutanoic acid	µg/L	<0.02
Perfluoropentanoic acid	µg/L	<0.02
Perfluorohexanoic acid	µg/L	<0.01
Perfluoroheptanoic acid	µg/L	<0.01
Perfluorooctanoic acid PFOA	µg/L	<0.01
Perfluorononanoic acid	µg/L	<0.01
Perfluorodecanoic acid	µg/L	<0.02
Perfluoroundecanoic acid	µg/L	<0.02
Perfluorododecanoic acid	µg/L	<0.05
Perfluorotridecanoic acid	µg/L	<0.1
Perfluorotetradecanoic acid	µg/L	<0.5
4:2 FTS	µg/L	<0.01
6:2 FTS	µg/L	0.04
8:2 FTS	µg/L	<0.02
10:2 FTS	µg/L	<0.02
Perfluorooctane sulfonamide	µg/L	<0.1
N-Methyl perfluorooctane sulfonamide	µg/L	<0.05
N-Ethyl perfluorooctanesulfon amide	µg/L	<0.1
N-Me perfluorooctanesulfonamid oethanol	µg/L	<0.05
N-Et perfluorooctanesulfonamid oethanol	µg/L	<0.5
MePerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
EtPerfluorooctanesulf- amid oacetic acid	µg/L	<0.02
Surrogate $^{13}C_8$ *PFOS*	%	112
Surrogate $^{13}C_2$ *PFOA*	%	83
Extracted ISTD $^{13}C_3$ *PFBS*	%	92
Extracted ISTD $^{18}O_2$ *PFHxS*	%	101
Extracted ISTD $^{13}C_4$ *PFOS*	%	123

PFAS in Waters Extended		
Our Reference		369642-72
Your Reference	UNITS	RS3
Depth		-
Date Sampled		19/12/2024
Type of sample		Water
Extracted ISTD $^{13}C_4$ *PFBA*	%	92
Extracted ISTD $^{13}C_3$ *PFPeA*	%	96
Extracted ISTD $^{13}C_2$ *PFHxA*	%	94
Extracted ISTD $^{13}C_4$ *PFHpA*	%	108
Extracted ISTD $^{13}C_4$ *PFOA*	%	97
Extracted ISTD $^{13}C_5$ *PFNA*	%	99
Extracted ISTD $^{13}C_2$ *PFDA*	%	140
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	135
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	125
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	100
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	83
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	75
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	110
Extracted ISTD $^{13}C_8$ *FOSA*	%	100
Extracted ISTD d_3 *N MeFOSA*	%	115
Extracted ISTD d_5 *N EtFOSA*	%	100
Extracted ISTD d_7 *N MeFOSE*	%	96
Extracted ISTD d_9 *N EtFOSE*	%	106
Extracted ISTD d_3 *N MeFOSAA*	%	143
Extracted ISTD d_5 *N EtFOSAA*	%	152
Total Positive PFHxS & PFOS	µg/L	<0.01
Total Positive PFOA & PFOS	µg/L	<0.01
Total Positive PFAS	µg/L	0.04

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369642-2
Date extracted	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Date analysed	-			24/12/2024	1	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	102
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	122
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	110
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	122
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	116
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	116
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	126	115
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	102	100
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	97	1	94	89	5	88	99

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369642-2
Date prepared	-			23/12/2024	1	23/12/2024	23/12/2024		23/12/2024	23/12/2024
Date analysed	-			31/12/2024	1	31/12/2024	31/12/2024		31/12/2024	31/12/2024
Arsenic	mg/kg	4	Metals-020	<4	1	7	10	35	115	102
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	103	93
Chromium	mg/kg	1	Metals-020	<1	1	10	11	10	107	96
Copper	mg/kg	1	Metals-020	<1	1	33	35	6	110	108
Lead	mg/kg	1	Metals-020	<1	1	23	32	33	111	99
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	107	102
Nickel	mg/kg	1	Metals-020	<1	1	20	15	29	109	99
Zinc	mg/kg	1	Metals-020	<1	1	93	58	46	103	95

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369642-6
Date prepared	-			24/12/2024	5	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			24/12/2024	5	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	106	97
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	102	95
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	98	91
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	101	92
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	5	0.3	0.3	0	98	100
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	100	100
Perfluorobutanoic acid	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	103	99
Perfluoropentanoic acid	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	98	96
Perfluorohexanoic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	103	96
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	103	94
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	93	92
Perfluorononanoic acid	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	110	100
Perfluorodecanoic acid	µg/kg	0.5	Org-029	<0.5	5	<0.5	<0.5	0	106	95
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	<0.5	5	<0.5	<0.5	0	104	89
Perfluorododecanoic acid	µg/kg	0.5	Org-029	<0.5	5	<0.5	<0.5	0	93	92
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	<0.5	5	<0.5	<0.5	0	96	97
Perfluorotetradecanoic acid	µg/kg	5	Org-029	<5	5	<5	<5	0	105	97
4:2 FTS	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	114	105
6:2 FTS	µg/kg	0.1	Org-029	<0.1	5	<0.1	<0.1	0	110	103
8:2 FTS	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	107	96
10:2 FTS	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	120	113
Perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	5	<1	<1	0	104	96
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	5	<1	<1	0	105	100
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	<1	5	<1	<1	0	94	98
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	<1	5	<1	<1	0	131	115
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	<5	5	<5	<5	0	85	89
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	107	102
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	<0.2	5	<0.2	<0.2	0	99	92
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	95	5	103	92	11	94	95
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	97	5	97	99	2	97	97

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369642-6
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	101	5	101	101	0	96	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	104	5	102	98	4	102	101
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	98	5	96	100	4	99	94
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	106	5	103	100	3	104	98
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	105	5	104	109	5	109	100
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	105	5	108	100	8	101	99
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	104	5	104	104	0	101	99
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	106	5	107	107	0	108	100
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	98	5	101	98	3	99	96
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	101	5	106	97	9	96	99
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	104	5	102	99	3	98	97
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	111	5	112	107	5	108	103
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	120	5	118	113	4	115	111
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	83	5	81	81	0	91	92
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	90	5	90	88	2	96	96
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	94	5	85	85	0	95	103
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	108	5	112	109	3	108	105
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	100	5	103	103	0	101	94
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	106	5	101	106	5	102	93
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	104	5	99	102	3	102	97

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369642-6
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	116	5	112	115	3	115	106
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	101	5	97	99	2	96	89
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	102	5	95	97	2	99	96

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	369642-26
Date prepared	-			[NT]	15	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			[NT]	15	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	91	109
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	87	92
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	81	90
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	81	93
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	15	0.2	0.2	0	80	93
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	79	93
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	88	104
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	85	99
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	81	99
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	87	99
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	85	94
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	88	103
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	15	<0.5	<0.5	0	85	98
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	15	<0.5	<0.5	0	83	95
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	15	<0.5	<0.5	0	84	97
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	15	<0.5	<0.5	0	81	95
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	15	<5	<5	0	90	101
4:2 FTS	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	89	103
6:2 FTS	µg/kg	0.1	Org-029	[NT]	15	<0.1	<0.1	0	99	107
8:2 FTS	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	88	101
10:2 FTS	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	93	116
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	15	<1	<1	0	90	102
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	15	<1	<1	0	87	93
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	15	<1	<1	0	81	92
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	15	<1	<1	0	96	122
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	15	<5	<5	0	77	84
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	82	102
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	15	<0.2	<0.2	0	81	89
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	15	103	101	2	94	90
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	15	99	96	3	98	94

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	369642-26
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	15	99	97	2	99	95
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	15	96	92	4	107	105
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	15	92	92	0	103	101
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	15	97	97	0	103	99
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	15	101	102	1	106	101
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	15	99	98	1	109	97
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	15	96	99	3	103	100
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	15	102	104	2	107	107
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	15	97	95	2	101	97
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	15	95	94	1	99	97
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	15	100	95	5	103	96
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	15	106	101	5	112	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	15	111	106	5	111	107
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	15	76	78	3	92	87
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	15	83	81	2	92	95
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	15	84	87	4	95	93
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	15	108	107	1	108	105
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	15	103	96	7	100	102
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	15	102	104	2	100	99
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	15	98	93	5	103	97

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	369642-26
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	15	111	112	1	110	112
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	15	100	90	11	97	88
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	15	103	93	10	100	94

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	369642-46
Date prepared	-			[NT]	25	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			[NT]	25	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	101	103
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	104	98
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	107	100
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	107	134
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	25	0.2	0.2	0	99	95
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	99	91
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	95	99
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	99	101
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	98	98
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	99	94
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	94	96
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	103	91
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	25	<0.5	<0.5	0	101	83
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	25	<0.5	<0.5	0	100	84
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	25	<0.5	<0.5	0	92	103
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	25	<0.5	<0.5	0	103	107
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	25	<5	<5	0	98	101
4:2 FTS	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	102	100
6:2 FTS	µg/kg	0.1	Org-029	[NT]	25	<0.1	<0.1	0	103	112
8:2 FTS	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	101	114
10:2 FTS	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	104	116
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	25	<1	<1	0	99	115
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	25	<1	<1	0	100	104
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	25	<1	<1	0	102	113
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	25	<1	<1	0	101	75
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	25	<5	<5	0	99	124
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	101	97
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	25	<0.2	<0.2	0	96	103
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	25	96	97	1	100	100
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	25	96	97	1	103	88

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	369642-46
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	25	97	97	0	99	90
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	25	92	94	2	96	96
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	25	100	91	9	100	139
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	25	95	95	0	103	87
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	25	95	100	5	100	90
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	25	96	99	3	99	86
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	25	96	100	4	99	108
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	25	104	106	2	102	95
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	25	101	93	8	100	99
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	25	94	90	4	100	137
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	25	101	97	4	100	136
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	25	102	107	5	109	129
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	25	99	101	2	123	125
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	25	79	77	3	103	89
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	25	81	87	7	107	75
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	25	79	82	4	111	119
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	25	107	111	4	118	92
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	25	99	94	5	105	116
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	25	95	100	5	101	104
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	25	91	97	6	101	88

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	369642-46
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	25	105	114	8	102	108
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	25	87	86	1	112	137
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	25	95	96	1	105	129

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369642-66
Date prepared	-			[NT]	35	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			[NT]	35	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	99	107
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	101	101
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	103	100
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	99	132
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	35	0.2	0.2	0	99	105
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	104	96
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	98	99
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	96	102
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	103	96
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	98	96
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	94	98
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	100	93
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	35	<0.5	<0.5	0	102	81
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	35	<0.5	<0.5	0	95	90
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	35	<0.5	<0.5	0	92	96
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	35	<0.5	<0.5	0	106	104
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	35	<5	<5	0	100	102
4:2 FTS	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	100	102
6:2 FTS	µg/kg	0.1	Org-029	[NT]	35	<0.1	<0.1	0	96	115
8:2 FTS	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	100	112
10:2 FTS	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	101	127
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	35	<1	<1	0	104	114
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	35	<1	<1	0	102	118
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	35	<1	<1	0	99	127
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	35	<1	<1	0	106	73
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	35	<5	<5	0	96	134
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	104	92
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	35	<0.2	<0.2	0	98	95
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	35	95	96	1	99	108
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	35	103	91	12	99	84

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369642-66
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	35	96	92	4	100	88
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	35	93	95	2	101	96
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	35	97	92	5	99	131
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	35	94	95	1	102	87
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	35	96	102	6	103	91
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	35	94	98	4	98	87
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	35	93	101	8	101	110
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	35	99	106	7	103	94
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	35	96	96	0	103	101
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	35	95	94	1	98	144
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	35	93	91	2	103	137
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	35	105	106	1	106	133
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	35	96	102	6	118	125
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	35	75	77	3	108	88
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	35	76	82	8	110	77
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	35	80	83	4	115	112
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	35	107	98	9	114	95
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	35	87	94	8	105	110
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	35	99	94	5	104	98
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	35	93	95	2	102	88

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	369642-66
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	35	108	109	1	107	100
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	35	88	85	3	119	143
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	35	88	86	2	105	136

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	45	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	45	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	45	0.4	0.2	67	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	45	0.2	<0.1	67	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	45	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	45	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	45	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	45	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	45	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	45	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	45	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	45	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	45	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	45	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	45	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	45	102	99	3	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	45	103	98	5	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	45	96	103	7	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	45	91	95	4	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	45	92	100	8	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	45	100	101	1	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	45	100	100	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	45	97	101	4	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	45	95	96	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	45	96	103	7	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	45	93	100	7	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	45	91	99	8	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	45	101	100	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	45	98	104	6	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	45	112	120	7	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	45	97	98	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	45	103	108	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	45	116	111	4	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	45	111	121	9	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	45	100	102	2	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	45	97	99	2	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	45	96	105	9	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	45	92	99	7	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	45	97	99	2	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	45	98	93	5	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	55	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	55	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	55	0.1	0.2	67	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	55	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	55	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	55	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	55	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	55	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	55	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	55	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	55	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	55	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	55	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	55	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	55	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	55	102	101	1	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	55	98	102	4	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	55	98	97	1	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	55	91	94	3	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	55	94	92	2	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	55	102	100	2	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	55	100	100	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	55	100	100	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	55	94	94	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	55	102	100	2	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	55	96	95	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	55	95	90	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	55	101	106	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	55	100	104	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	55	116	119	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	55	103	99	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	55	110	103	7	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	55	115	109	5	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	55	114	115	1	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	55	103	101	2	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	55	99	94	5	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	55	96	100	4	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	55	100	96	4	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	55	101	101	0	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	55	96	98	2	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	65	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	65	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	65	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	65	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	65	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	65	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	65	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	65	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	65	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	65	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	65	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	65	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	65	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	65	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	65	98	97	1	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	65	98	99	1	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	65	96	98	2	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	65	96	99	3	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	65	97	97	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	65	101	98	3	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	65	100	99	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	65	97	101	4	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	65	98	99	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	65	100	96	4	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	65	99	97	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	65	93	97	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	65	101	105	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	65	105	102	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	65	109	100	9	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	65	102	103	1	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	65	102	109	7	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	65	109	124	13	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	65	115	112	3	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	65	103	99	4	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	65	100	91	9	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	65	101	99	2	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	65	96	93	3	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	65	108	114	5	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	65	100	110	10	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	75	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	75	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	75	0.2	0.1	67	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	75	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	75	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	75	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	75	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	75	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	75	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	75	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	75	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	75	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	75	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	75	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	75	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	75	94	101	7	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	75	103	97	6	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	75	96	98	2	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	75	94	93	1	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	75	97	97	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	75	97	99	2	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	75	97	100	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	75	96	99	3	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	75	95	95	0	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	75	93	100	7	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	75	93	95	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	75	90	93	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	75	96	102	6	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	75	103	100	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	75	111	108	3	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	75	101	106	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	75	107	107	0	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	75	108	116	7	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	75	108	115	6	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	75	101	104	3	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	75	96	96	0	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	75	96	100	4	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	75	98	97	1	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	75	103	100	3	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	75	96	102	6	[NT]	[NT]

QUALITY CONTROL: PFAS in Waters Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			24/12/2024	[NT]	[NT]	[NT]	[NT]	24/12/2024	[NT]
Date analysed	-			24/12/2024	[NT]	[NT]	[NT]	[NT]	24/12/2024	[NT]
Perfluorobutanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	106	[NT]
Perfluoropentanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	103	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	94	[NT]
Perfluoroheptanesulfonic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	106	[NT]
Perfluorooctanesulfonic acid PFOS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	104	[NT]
Perfluorodecanesulfonic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	98	[NT]
Perfluorobutanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	100	[NT]
Perfluoropentanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	93	[NT]
Perfluorohexanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	94	[NT]
Perfluoroheptanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	96	[NT]
Perfluorooctanoic acid PFOA	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	107	[NT]
Perfluorononanoic acid	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	109	[NT]
Perfluorodecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	88	[NT]
Perfluoroundecanoic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	81	[NT]
Perfluorododecanoic acid	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	113	[NT]
Perfluorotridecanoic acid	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Perfluorotetradecanoic acid	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	90	[NT]
4:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	90	[NT]
6:2 FTS	µg/L	0.01	Org-029	<0.01	[NT]	[NT]	[NT]	[NT]	98	[NT]
8:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	86	[NT]
10:2 FTS	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	105	[NT]
Perfluorooctane sulfonamide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
N-Methyl perfluorooctane sulfonamide	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	103	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/L	0.1	Org-029	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/L	0.05	Org-029	<0.05	[NT]	[NT]	[NT]	[NT]	94	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/L	0.5	Org-029	<0.5	[NT]	[NT]	[NT]	[NT]	99	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	115	[NT]
EtPerfluorooctanesulf- amid oacetic acid	µg/L	0.02	Org-029	<0.02	[NT]	[NT]	[NT]	[NT]	94	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	103	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	104	[NT]

QUALITY CONTROL: PFAS in Waters Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	89	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	97	[NT]	[NT]	[NT]	[NT]	100	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	95	[NT]	[NT]	[NT]	[NT]	90	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	94	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	106	[NT]	[NT]	[NT]	[NT]	104	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	98	[NT]	[NT]	[NT]	[NT]	91	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	98	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	87	[NT]	[NT]	[NT]	[NT]	85	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	96	[NT]	[NT]	[NT]	[NT]	92	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	112	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	100	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	100	[NT]	[NT]	[NT]	[NT]	84	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	90	[NT]	[NT]	[NT]	[NT]	83	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	109	[NT]	[NT]	[NT]	[NT]	108	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	116	[NT]	[NT]	[NT]	[NT]	114	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	139	[NT]	[NT]	[NT]	[NT]	131	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	121	[NT]	[NT]	[NT]	[NT]	113	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	117	[NT]	[NT]	[NT]	[NT]	114	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	101	[NT]	[NT]	[NT]	[NT]	100	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	126	[NT]	[NT]	[NT]	[NT]	121	[NT]

QUALITY CONTROL: PFAS in Waters Extended					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	104	[NT]	[NT]	[NT]	[NT]	101	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	99	[NT]	[NT]	[NT]	[NT]	104	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	128	[NT]	[NT]	[NT]	[NT]	127	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

For PFAS Extracted Internal Standards denoted with # or outside the 50-150% acceptance range, the respective target analyte results may be unaffected, in other circumstances the PQL has been raised to accommodate the outlier(s).

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 369642-1 for Zn. Therefore a triplicate result has been issued as laboratory sample number 369642-79.

COC: 20/12/2024 1732.

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 369642

Date Received: 20/12/24
Time Received: 1610
Received By: ST
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8
Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
1	DSS5		19/12/2024	G		✓		✓									
2	DSS6		19/12/2024	G		✓		✓									
3	DSS7		19/12/2024	G		✓		✓									
4	DSS8		19/12/2024	G		✓		✓									
5	TP116	0.0-0.3	19/12/2024	PFASC											✓		
6	TP116	1.0-1.3	19/12/2024	PFASC											✓		
7	TP116	2.0-2.3	19/12/2024	PFASC											✓		
8	TP117	0.0-0.3	19/12/2024	PFASC											✓		
9	TP117	1.0-1.3	19/12/2024	PFASC											✓		
10	TP117	2.0-2.3	19/12/2024	PFASC											✓		
11	TP118	0.0-0.3	19/12/2024	PFASC											✓		
12	TP118	1.0-1.3	19/12/2024	PFASC											✓		
13	TP118	2.0-2.3	19/12/2024	PFASC											✓		
14	TP119	0.0-0.3	19/12/2024	PFASC											✓		
15	TP119	1.0-1.3	19/12/2024	PFASC											✓		
16	TP119	2.0-2.3	19/12/2024	PFASC											✓		
17	TP120	0.0-0.3	19/12/2024	PFASC											✓		
18	TP120	1.0-1.3	19/12/2024	PFASC											✓		

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

#369642
ST
20/12/24

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8
Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
19	TP120	2.0-2.3	19/12/2024	PFASC											✓		
20	TP121	0.0-0.3	19/12/2024	PFASC											✓		
21	TP121	1.0-1.3	19/12/2024	PFASC											✓		
22	TP121	2.0-2.3	19/12/2024	PFASC											✓		
23	TP122	0.0-0.3	19/12/2024	PFASC											✓		
24	TP122	1.0-1.3	19/12/2024	PFASC											✓		
25	TP122	2.0-2.3	19/12/2024	PFASC											✓		
26	TP123	0.0-0.3	19/12/2024	PFASC											✓		
27	TP123	1.0-1.3	19/12/2024	PFASC											✓		
28	TP123	2.0-2.3	19/12/2024	PFASC											✓		
29	TP124	0.0-0.3	19/12/2024	PFASC											✓		
30	TP124	1.0-1.3	19/12/2024	PFASC											✓		
31	TP124	2.0-2.3	19/12/2024	PFASC											✓		
32	TP125	0.0-0.3	19/12/2024	PFASC											✓		
33	TP125	1.0-1.3	19/12/2024	PFASC											✓		
34	TP125	2.0-2.3	19/12/2024	PFASC											✓		
35	TP125	3.0-3.3	19/12/2024	PFASC											✓		
36	TP126	0.0-0.3	19/12/2024	PFASC											✓		

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

#369642
ST
20112124

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: **20465/8**
Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
37	TP126	1.0-1.3	19/12/2024	PFASC											✓		
38	TP126	2.0-2.3	19/12/2024	PFASC											✓		
39	TP127	0.0-0.3	19/12/2024	PFASC											✓		
40	TP127	1.0-1.3	19/12/2024	PFASC											✓		
41	TP127	2.0-2.3	19/12/2024	PFASC											✓		
42	TP128	0.0-0.3	19/12/2024	PFASC											✓		
43	TP128	1.0-1.3	19/12/2024	PFASC											✓		
44	TP128	2.0-2.3	19/12/2024	PFASC											✓		
45	TP129	0.0-0.3	19/12/2024	PFASC											✓		
46	TP129	1.0-1.3	19/12/2024	PFASC											✓		
47	TP129	2.0-2.3	19/12/2024	PFASC											✓		
48	TP130	0.0-0.3	19/12/2024	PFASC											✓		
49	TP130	1.0-1.3	19/12/2024	PFASC											✓		
50	TP130	2.0-2.3	19/12/2024	PFASC											✓		
51	TP131	0.0-0.3	19/12/2024	PFASC											✓		
52	TP131	1.0-1.3	19/12/2024	PFASC											✓		
53	TP131	2.0-2.3	19/12/2024	PFASC											✓		
54	TP132	0.0-0.3	19/12/2024	PFASC											✓		

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

#369642
ST
20/12/24

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
55	TP132	1.0-1.3	19/12/2024	PFASC											✓		
56	TP132	2.0-2.3	19/12/2024	PFASC											✓		
57	TP133	0.0-0.3	19/12/2024	PFASC											✓		
58	TP133	1.0-1.3	19/12/2024	PFASC											✓		
59	TP133	2.0-2.3	19/12/2024	PFASC											✓		
60	TP134	0.0-0.3	19/12/2024	PFASC											✓		
61	TP134	1.0-1.3	19/12/2024	PFASC											✓		
62	TP134	2.0-2.3	19/12/2024	PFASC											✓		
63	TP135	0.0-0.3	19/12/2024	PFASC											✓		
64	TP135	1.0-1.3	19/12/2024	PFASC											✓		
65	TP135	2.0-2.3	19/12/2024	PFASC											✓		
66	TP136	0.0-0.3	19/12/2024	PFASC											✓		
67	TP136	1.0-1.3	19/12/2024	PFASC											✓		
68	TP136	2.0-2.3	19/12/2024	PFASC											✓		
69	J1	0.0-0.3	19/12/2024	PFASC											✓		
70	J1	0.5-0.8	19/12/2024	PFASC											✓		
71	J1	1.0-1.3	19/12/2024	PFASC											✓		
72	RS3		19/12/2024		PFASC										✓		

#369642
54
20121224

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8

Location: **Gledswood Hills**

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
73	TB3		19/12/2024	PFASC											✓		
74	FB3		19/12/2024	PFASC											✓		
75	DDS10		19/12/2024	PFASC											✓		
76	DDS11		19/12/2024	PFASC											✓		
77	DDS12		19/12/2024	PFASC											✓		
78	DDS13		19/12/2024	PFASC											✓		

Relinquished by			Received by			
Name	Signature	Date	Name	Signature	20 Date	
JOHN XU	JX	20/12/2024	Shann Tok	ST	23-12-24	

G	Soil sample (glass jar)	FCP	Fibro Cement Piece (plastic bag)	PFASC	PFAS Container	*: As,Cd,Cr,Cu,Pb,Hg,Ni & Zn (8 metals)
P	Soil sample (plastic bag)	✓	Test required			

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu

Sample Login Details

Your reference	20465/8 Gledswood Hills
Envirolab Reference	369642
Date Sample Received	20/12/2024
Date Instructions Received	20/12/2024
Date Results Expected to be Reported	07/01/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	77 Soil, 1 Water
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	PAHs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended
DSS5	✓	✓		
DSS6	✓	✓		
DSS7	✓	✓		
DSS8	✓	✓		
TP116-0.0-0.3			✓	
TP116-1.0-1.3			✓	
TP116-2.0-2.3			✓	
TP117-0.0-0.3			✓	
TP117-1.0-1.3			✓	
TP117-2.0-2.3			✓	
TP118-0.0-0.3			✓	
TP118-1.0-1.3			✓	
TP118-2.0-2.3			✓	
TP119-0.0-0.3			✓	
TP119-1.0-1.3			✓	
TP119-2.0-2.3			✓	
TP120-0.0-0.3			✓	
TP120-1.0-1.3			✓	
TP120-2.0-2.3			✓	
TP121-0.0-0.3			✓	
TP121-1.0-1.3			✓	
TP121-2.0-2.3			✓	
TP122-0.0-0.3			✓	
TP122-1.0-1.3			✓	
TP122-2.0-2.3			✓	
TP123-0.0-0.3			✓	
TP123-1.0-1.3			✓	
TP123-2.0-2.3			✓	
TP124-0.0-0.3			✓	
TP124-1.0-1.3			✓	
TP124-2.0-2.3			✓	
TP125-0.0-0.3			✓	

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	PAHs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended
TP125-1.0-1.3			✓	
TP125-2.0-2.3			✓	
TP125-3.0-3.3			✓	
TP126-0.0-0.3			✓	
TP126-1.0-1.3			✓	
TP126-2.0-2.3			✓	
TP127-0.0-0.3			✓	
TP127-1.0-1.3			✓	
TP127-2.0-2.3			✓	
TP128-0.0-0.3			✓	
TP128-1.0-1.3			✓	
TP128-2.0-2.3			✓	
TP129-0.0-0.3			✓	
TP129-1.0-1.3			✓	
TP129-2.0-2.3			✓	
TP130-0.0-0.3			✓	
TP130-1.0-1.3			✓	
TP130-2.0-2.3			✓	
TP131-0.0-0.3			✓	
TP131-1.0-1.3			✓	
TP131-2.0-2.3			✓	
TP132-0.0-0.3			✓	
TP132-1.0-1.3			✓	
TP132-2.0-2.3			✓	
TP133-0.0-0.3			✓	
TP133-1.0-1.3			✓	
TP133-2.0-2.3			✓	
TP134-0.0-0.3			✓	
TP134-1.0-1.3			✓	
TP134-2.0-2.3			✓	
TP135-0.0-0.3			✓	
TP135-1.0-1.3			✓	

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ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	PAHs in Soil	Acid Extractable metalsin soil	PFAS in Soils Extended	PFAS in Waters Extended
TP135-2.0-2.3			✓	
TP136-0.0-0.3			✓	
TP136-1.0-1.3			✓	
TP136-2.0-2.3			✓	
J1-0.0-0.3			✓	
J1-0.5-0.8			✓	
J1-1.0-1.3			✓	
RS3				✓
TB3			✓	
FB3			✓	
DDS10			✓	
DDS11			✓	
DDS12			✓	
DDS13			✓	

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Envirolab Services Pty Ltd
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12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 369642-A

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	**20465/8 Gledswood Hills**
Number of Samples	Additional testing
Date samples received	20/12/2024
Date completed instructions received	06/01/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	07/01/2025
Date of Issue	07/01/2025

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Jack Wallis, Senior Chemist
Steven Luong, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		369642-A-2
Your Reference	UNITS	DSS6
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	06/01/2025
Date analysed	-	06/01/2025
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	110

svTRH (C10-C40) in Soil		
Our Reference		369642-A-2
Your Reference	UNITS	DSS6
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	06/01/2025
Date analysed	-	07/01/2025
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	118

Organochlorine Pesticides in soil		
Our Reference		369642-A-2
Your Reference	UNITS	DSS6
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	06/01/2025
Date analysed	-	06/01/2025
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Mirex	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1
Surrogate 4-Chloro-3-NBTF	%	95

Organophosphorus Pesticides in Soil		
Our Reference		369642-A-2
Your Reference	UNITS	DSS6
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	06/01/2025
Date analysed	-	06/01/2025
Dichlorvos	mg/kg	<0.1
Mevinphos	mg/kg	<0.1
Phorate	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Disulfoton	mg/kg	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1
Parathion-Methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Fenthion	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Methidathion	mg/kg	<0.1
Fenamiphos	mg/kg	<0.1
Ethion	mg/kg	<0.1
Phosalone	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Coumaphos	mg/kg	<0.1
Surrogate 4-Chloro-3-NBTF	%	95

PCBs in Soil		
Our Reference		369642-A-2
Your Reference	UNITS	DSS6
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date extracted	-	06/01/2025
Date analysed	-	06/01/2025
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate 2-Fluorobiphenyl	%	95

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Date analysed	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	114	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	115	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	113	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	122	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	109	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	111	[NT]	[NT]	[NT]	[NT]	113	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Date analysed	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	128	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	121	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	128	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	121	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-020	117	[NT]	[NT]	[NT]	[NT]	140	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Date analysed	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	70	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	66	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	74	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	72	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	68	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	87	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Date analysed	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	85	[NT]
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	66	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Fenthion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	72	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Phosalone	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	87	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Date analysed	-			06/01/2025	[NT]	[NT]	[NT]	[NT]	06/01/2025	[NT]
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	99	[NT]	[NT]	[NT]	[NT]	104	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

ELS Reference #: 369642-A
TAT Requested: 24HR
Due : 07/01/2025 SP.

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: 24 hrs Date: Tuesday, 7 January 2025
Except pH Results Required By Date:
Your Reference No.: 369642

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8
Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Water	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
#2	DSS6		19/12/2024	G			✓		✓	✓	✓						

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	6/01/2025	ELS SYD, Sarah P	Sal	06/01/25

G	Soil sample (glass jar)	FCP	Fibro Cement Piece (plastic bag)	PFASC	PFAS Container	*: As,Cd,Cr,Cu,Pb,Hg,Ni & Zn (8 metals)
P	Soil sample (plastic bag)	✓	Test required			

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu

Sample Login Details

Your reference	20465/8 Gledswood Hills
Envirolab Reference	369642-A
Date Sample Received	20/12/2024
Date Instructions Received	06/01/2025
Date Results Expected to be Reported	07/01/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	Additional testing
Turnaround Time Requested	1 day
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	On Hold
DSS5						✓
DSS6	✓	✓	✓	✓	✓	
DSS7						✓
DSS8						✓
TP116-0.0-0.3						✓
TP116-1.0-1.3						✓
TP116-2.0-2.3						✓
TP117-0.0-0.3						✓
TP117-1.0-1.3						✓
TP117-2.0-2.3						✓
TP118-0.0-0.3						✓
TP118-1.0-1.3						✓
TP118-2.0-2.3						✓
TP119-0.0-0.3						✓
TP119-1.0-1.3						✓
TP119-2.0-2.3						✓
TP120-0.0-0.3						✓
TP120-1.0-1.3						✓
TP120-2.0-2.3						✓
TP121-0.0-0.3						✓
TP121-1.0-1.3						✓
TP121-2.0-2.3						✓
TP122-0.0-0.3						✓
TP122-1.0-1.3						✓
TP122-2.0-2.3						✓
TP123-0.0-0.3						✓
TP123-1.0-1.3						✓
TP123-2.0-2.3						✓
TP124-0.0-0.3						✓
TP124-1.0-1.3						✓
TP124-2.0-2.3						✓
TP125-0.0-0.3						✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	On Hold
TP125-1.0-1.3						✓
TP125-2.0-2.3						✓
TP125-3.0-3.3						✓
TP126-0.0-0.3						✓
TP126-1.0-1.3						✓
TP126-2.0-2.3						✓
TP127-0.0-0.3						✓
TP127-1.0-1.3						✓
TP127-2.0-2.3						✓
TP128-0.0-0.3						✓
TP128-1.0-1.3						✓
TP128-2.0-2.3						✓
TP129-0.0-0.3						✓
TP129-1.0-1.3						✓
TP129-2.0-2.3						✓
TP130-0.0-0.3						✓
TP130-1.0-1.3						✓
TP130-2.0-2.3						✓
TP131-0.0-0.3						✓
TP131-1.0-1.3						✓
TP131-2.0-2.3						✓
TP132-0.0-0.3						✓
TP132-1.0-1.3						✓
TP132-2.0-2.3						✓
TP133-0.0-0.3						✓
TP133-1.0-1.3						✓
TP133-2.0-2.3						✓
TP134-0.0-0.3						✓
TP134-1.0-1.3						✓
TP134-2.0-2.3						✓
TP135-0.0-0.3						✓
TP135-1.0-1.3						✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	On Hold
TP135-2.0-2.3						✓
TP136-0.0-0.3						✓
TP136-1.0-1.3						✓
TP136-2.0-2.3						✓
J1-0.0-0.3						✓
J1-0.5-0.8						✓
J1-1.0-1.3						✓
RS3						✓
TB3						✓
FB3						✓
DDS10						✓
DDS11						✓
DDS12						✓
DDS13						✓
DSS5 - [TRIPLICATE]						✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 369648

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	**20465/8 Gledswood Hills**
Number of Samples	16 Soil
Date samples received	20/12/2024
Date completed instructions received	20/12/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	07/01/2025
Date of Issue	30/12/2024

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Sean McAlary, Senior Chemist
Timothy Toll, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

PFAS in Soils Extended						
Our Reference		369648-1	369648-2	369648-3	369648-4	369648-5
Your Reference	UNITS	TP1b	TP2a	TP3a	TP4b	TP5b
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.1	0.2	0.2	0.3
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	95	103	104	101	100
Surrogate $^{13}C_2$ *PFOA*	%	99	98	98	96	98
Extracted ISTD $^{13}C_3$ *PFBS*	%	95	96	90	91	95
Extracted ISTD $^{18}O_2$ *PFHxS*	%	105	97	101	87	101
Extracted ISTD $^{13}C_4$ *PFOS*	%	104	101	97	86	95

PFAS in Soils Extended						
Our Reference		369648-1	369648-2	369648-3	369648-4	369648-5
Your Reference	UNITS	TP1b	TP2a	TP3a	TP4b	TP5b
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	94	93	95	89	101
Extracted ISTD $^{13}C_3$ *PFPeA*	%	99	96	99	92	103
Extracted ISTD $^{13}C_2$ *PFHxA*	%	102	99	101	91	102
Extracted ISTD $^{13}C_4$ *PFHpA*	%	103	103	102	92	106
Extracted ISTD $^{13}C_4$ *PFOA*	%	104	104	103	100	109
Extracted ISTD $^{13}C_5$ *PFNA*	%	99	103	99	94	100
Extracted ISTD $^{13}C_2$ *PFDA*	%	104	98	97	86	104
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	104	106	97	84	95
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	109	107	102	95	107
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	111	104	109	99	109
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	83	86	81	74	80
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	99	89	92	80	93
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	103	88	94	75	87
Extracted ISTD $^{13}C_8$ *FOSA*	%	108	103	106	96	110
Extracted ISTD d_3 *N MeFOSA*	%	98	99	97	82	96
Extracted ISTD d_5 *N EtFOSA*	%	102	96	100	87	99
Extracted ISTD d_7 *N MeFOSE*	%	96	97	92	85	97
Extracted ISTD d_9 *N EtFOSE*	%	102	109	105	101	112
Extracted ISTD d_3 *N MeFOSAA*	%	98	108	101	88	91
Extracted ISTD d_5 *N EtFOSAA*	%	107	94	100	83	97
Total Positive PFHxS & PFOS	µg/kg	0.2	0.1	0.2	0.2	0.3
Total Positive PFOS & PFOA	µg/kg	0.2	0.1	0.2	0.2	0.3
Total Positive PFAS	µg/kg	0.2	0.1	0.2	0.2	0.3

PFAS in Soils Extended						
Our Reference		369648-6	369648-7	369648-8	369648-9	369648-10
Your Reference	UNITS	TP6b	TP7a	TP8b	TP9a	TP10a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.4	<0.1	0.3	0.4	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	101	97	98	96	98
Surrogate $^{13}C_2$ *PFOA*	%	96	96	101	97	97
Extracted ISTD $^{13}C_3$ *PFBS*	%	97	102	101	100	106
Extracted ISTD $^{18}O_2$ *PFHxS*	%	101	99	106	104	114
Extracted ISTD $^{13}C_4$ *PFOS*	%	93	99	100	101	106

PFAS in Soils Extended						
Our Reference		369648-6	369648-7	369648-8	369648-9	369648-10
Your Reference	UNITS	TP6b	TP7a	TP8b	TP9a	TP10a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	101	103	100	100	66
Extracted ISTD $^{13}C_3$ *PFPeA*	%	104	108	105	105	95
Extracted ISTD $^{13}C_2$ *PFHxA*	%	98	106	102	103	102
Extracted ISTD $^{13}C_4$ *PFHpA*	%	100	103	102	105	105
Extracted ISTD $^{13}C_4$ *PFOA*	%	109	112	107	111	110
Extracted ISTD $^{13}C_5$ *PFNA*	%	99	101	104	104	107
Extracted ISTD $^{13}C_2$ *PFDA*	%	96	98	98	100	106
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	99	99	105	101	108
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	105	111	113	113	115
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	107	111	109	110	111
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	83	84	82	83	93
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	93	95	90	89	106
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	83	85	94	91	111
Extracted ISTD $^{13}C_8$ *FOSA*	%	110	113	111	111	111
Extracted ISTD d_3 *N MeFOSA*	%	94	95	106	95	105
Extracted ISTD d_5 *N EtFOSA*	%	93	97	100	100	105
Extracted ISTD d_7 *N MeFOSE*	%	100	98	96	100	97
Extracted ISTD d_9 *N EtFOSE*	%	110	116	110	117	113
Extracted ISTD d_3 *N MeFOSAA*	%	98	93	92	107	117
Extracted ISTD d_5 *N EtFOSAA*	%	94	101	99	106	137
Total Positive PFHxS & PFOS	µg/kg	0.4	<0.1	0.3	0.4	0.2
Total Positive PFOS & PFOA	µg/kg	0.4	<0.1	0.3	0.4	0.2
Total Positive PFAS	µg/kg	0.4	<0.1	0.3	0.4	0.2

PFAS in Soils Extended						
Our Reference		369648-11	369648-12	369648-13	369648-14	369648-15
Your Reference	UNITS	TP11a	TP12a	TP13a	TP14a	TP15a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2	0.2	0.2	<0.1	<0.1
Perfluorodecanesulfonic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorobutanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluoropentanoic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorohexanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorononanoic acid	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorododecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Perfluorotetradecanoic acid	µg/kg	<5	<5	<5	<5	<5
4:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
10:2 FTS	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1	<1	<1	<1	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1	<1	<1	<1	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1	<1	<1	<1	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5	<5	<5	<5	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	103	97	95	96	91
Surrogate $^{13}C_2$ *PFOA*	%	95	97	97	95	95
Extracted ISTD $^{13}C_3$ *PFBS*	%	101	101	100	95	97
Extracted ISTD $^{18}O_2$ *PFHxS*	%	104	102	112	100	103
Extracted ISTD $^{13}C_4$ *PFOS*	%	104	102	107	103	105

PFAS in Soils Extended						
Our Reference		369648-11	369648-12	369648-13	369648-14	369648-15
Your Reference	UNITS	TP11a	TP12a	TP13a	TP14a	TP15a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	94	93	101	96	101
Extracted ISTD $^{13}C_3$ *PFPeA*	%	105	99	104	99	103
Extracted ISTD $^{13}C_2$ *PFHxA*	%	104	100	106	102	106
Extracted ISTD $^{13}C_4$ *PFHpA*	%	107	97	106	100	105
Extracted ISTD $^{13}C_4$ *PFOA*	%	110	105	110	108	110
Extracted ISTD $^{13}C_5$ *PFNA*	%	102	100	104	100	103
Extracted ISTD $^{13}C_2$ *PFDA*	%	96	102	103	99	101
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	103	101	107	105	105
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	107	110	112	107	105
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	108	106	113	107	112
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	79	81	84	83	83
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	90	88	94	85	88
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	91	92	94	88	84
Extracted ISTD $^{13}C_8$ *FOSA*	%	102	108	111	108	115
Extracted ISTD d_3 *N MeFOSA*	%	103	98	96	95	95
Extracted ISTD d_5 *N EtFOSA*	%	104	100	102	101	100
Extracted ISTD d_7 *N MeFOSE*	%	94	92	98	87	104
Extracted ISTD d_9 *N EtFOSE*	%	110	111	110	103	108
Extracted ISTD d_3 *N MeFOSAA*	%	103	96	96	102	97
Extracted ISTD d_5 *N EtFOSAA*	%	100	94	100	101	101
Total Positive PFHxS & PFOS	µg/kg	0.2	0.2	0.2	<0.1	<0.1
Total Positive PFOS & PFOA	µg/kg	0.2	0.2	0.2	<0.1	<0.1
Total Positive PFAS	µg/kg	0.2	0.2	0.2	<0.1	<0.1

PFAS in Soils Extended		
Our Reference		369648-16
Your Reference	UNITS	DDS14
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date prepared	-	24/12/2024
Date analysed	-	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	<0.1
Perfluoropentanesulfonic acid	µg/kg	<0.1
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1
Perfluoroheptanesulfonic acid	µg/kg	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	0.2
Perfluorodecanesulfonic acid	µg/kg	<0.2
Perfluorobutanoic acid	µg/kg	<0.2
Perfluoropentanoic acid	µg/kg	<0.2
Perfluorohexanoic acid	µg/kg	<0.1
Perfluoroheptanoic acid	µg/kg	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1
Perfluorononanoic acid	µg/kg	<0.1
Perfluorodecanoic acid	µg/kg	<0.5
Perfluoroundecanoic acid	µg/kg	<0.5
Perfluorododecanoic acid	µg/kg	<0.5
Perfluorotridecanoic acid	µg/kg	<0.5
Perfluorotetradecanoic acid	µg/kg	<5
4:2 FTS	µg/kg	<0.1
6:2 FTS	µg/kg	<0.1
8:2 FTS	µg/kg	<0.2
10:2 FTS	µg/kg	<0.2
Perfluorooctane sulfonamide	µg/kg	<1
N-Methyl perfluorooctane sulfonamide	µg/kg	<1
N-Ethyl perfluorooctanesulfon amide	µg/kg	<1
N-Me perfluorooctanesulfonamid oethanol	µg/kg	<1
N-Et perfluorooctanesulfonamid oethanol	µg/kg	<5
MePerfluorooctanesulf- amid oacetic acid	µg/kg	<0.2
EtPerfluorooctanesulf amid oacetic acid	µg/kg	<0.2
Surrogate $^{13}C_8$ *PFOS*	%	97
Surrogate $^{13}C_2$ *PFOA*	%	90
Extracted ISTD $^{13}C_3$ *PFBS*	%	94
Extracted ISTD $^{18}O_2$ *PFHxS*	%	102
Extracted ISTD $^{13}C_4$ *PFOS*	%	93

PFAS in Soils Extended		
Our Reference		369648-16
Your Reference	UNITS	DDS14
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Extracted ISTD $^{13}C_4$ *PFBA*	%	89
Extracted ISTD $^{13}C_3$ *PFPeA*	%	98
Extracted ISTD $^{13}C_2$ *PFHxA*	%	100
Extracted ISTD $^{13}C_4$ *PFHpA*	%	98
Extracted ISTD $^{13}C_4$ *PFOA*	%	107
Extracted ISTD $^{13}C_5$ *PFNA*	%	98
Extracted ISTD $^{13}C_2$ *PFDA*	%	95
Extracted ISTD $^{13}C_2$ *PFUnDA*	%	98
Extracted ISTD $^{13}C_2$ *PFDoDA*	%	106
Extracted ISTD $^{13}C_2$ *PFTeDA*	%	105
Extracted ISTD $^{13}C_2$ *4:2FTS*	%	77
Extracted ISTD $^{13}C_2$ *6:2FTS*	%	85
Extracted ISTD $^{13}C_2$ *8:2FTS*	%	84
Extracted ISTD $^{13}C_8$ *FOSA*	%	100
Extracted ISTD d_3 *N MeFOSA*	%	91
Extracted ISTD d_5 *N EtFOSA*	%	96
Extracted ISTD d_7 *N MeFOSE*	%	89
Extracted ISTD d_9 *N EtFOSE*	%	106
Extracted ISTD d_3 *N MeFOSAA*	%	95
Extracted ISTD d_5 *N EtFOSAA*	%	98
Total Positive PFHxS & PFOS	µg/kg	0.2
Total Positive PFOS & PFOA	µg/kg	0.2
Total Positive PFAS	µg/kg	0.2

Moisture						
Our Reference		369648-1	369648-2	369648-3	369648-4	369648-5
Your Reference	UNITS	TP1b	TP2a	TP3a	TP4b	TP5b
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	7.5	9.4	12	10	7.7

Moisture						
Our Reference		369648-6	369648-7	369648-8	369648-9	369648-10
Your Reference	UNITS	TP6b	TP7a	TP8b	TP9a	TP10a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	11	3.9	6.0	7.8	8.5

Moisture						
Our Reference		369648-11	369648-12	369648-13	369648-14	369648-15
Your Reference	UNITS	TP11a	TP12a	TP13a	TP14a	TP15a
Depth		0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
Date Sampled		19/12/2024	19/12/2024	19/12/2024	19/12/2024	19/12/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2024	23/12/2024	23/12/2024	23/12/2024	23/12/2024
Date analysed	-	24/12/2024	24/12/2024	24/12/2024	24/12/2024	24/12/2024
Moisture	%	5.6	7.4	11	7.1	4.9

Moisture		
Our Reference		369648-16
Your Reference	UNITS	DDS14
Depth		-
Date Sampled		19/12/2024
Type of sample		Soil
Date prepared	-	23/12/2024
Date analysed	-	24/12/2024
Moisture	%	12

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369648-2
Date prepared	-			24/12/2024	1	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Date analysed	-			24/12/2024	1	24/12/2024	24/12/2024		24/12/2024	24/12/2024
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	107	103
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	117	103
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	111	99
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	110	99
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	1	0.2	0.2	0	100	96
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	95	96
Perfluorobutanoic acid	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	105	103
Perfluoropentanoic acid	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	100	96
Perfluorohexanoic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	102	97
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	96	95
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	93	92
Perfluorononanoic acid	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	104	103
Perfluorodecanoic acid	µg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	101	89
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	96	93
Perfluorododecanoic acid	µg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	97	94
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	<0.5	1	<0.5	<0.5	0	95	100
Perfluorotetradecanoic acid	µg/kg	5	Org-029	<5	1	<5	<5	0	107	98
4:2 FTS	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	104	101
6:2 FTS	µg/kg	0.1	Org-029	<0.1	1	<0.1	<0.1	0	115	100
8:2 FTS	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	99	98
10:2 FTS	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	108	110
Perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	1	<1	<1	0	106	98
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	<1	1	<1	<1	0	105	104
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	<1	1	<1	<1	0	96	94
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	<1	1	<1	<1	0	128	125
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	<5	1	<5	<5	0	85	87
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	98	94
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	<0.2	1	<0.2	<0.2	0	103	86
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	102	1	95	101	6	100	101
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	101	1	99	95	4	98	99

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369648-2
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	98	1	95	99	4	98	93
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	104	1	105	111	6	92	98
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	101	1	104	98	6	97	98
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	106	1	94	92	2	103	96
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	106	1	99	102	3	105	101
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	104	1	102	103	1	98	99
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	106	1	103	104	1	109	102
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	108	1	104	109	5	110	105
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	105	1	99	100	1	102	96
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	103	1	104	106	2	98	102
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	103	1	104	103	1	98	97
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	115	1	109	109	0	106	104
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	115	1	111	107	4	104	107
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	87	1	83	80	4	92	88
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	89	1	99	83	18	93	101
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	86	1	103	95	8	93	94
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	114	1	108	105	3	106	102
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	98	1	98	95	3	93	96
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	103	1	102	104	2	97	96
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	106	1	96	93	3	97	100

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	369648-2
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	113	1	102	111	8	113	109
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	98	1	98	104	6	99	93
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	99	1	107	100	7	87	93

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	11	24/12/2024	24/12/2024		[NT]	[NT]
Date analysed	-			[NT]	11	24/12/2024	24/12/2024		[NT]	[NT]
Perfluorobutanesulfonic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluoropentanesulfonic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanesulfonic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	[NT]	11	0.2	0.2	0	[NT]	[NT]
Perfluorodecanesulfonic acid	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Perfluorobutanoic acid	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Perfluoropentanoic acid	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Perfluorohexanoic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluoroheptanoic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluorononanoic acid	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Perfluorodecanoic acid	µg/kg	0.5	Org-029	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Perfluoroundecanoic acid	µg/kg	0.5	Org-029	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Perfluorododecanoic acid	µg/kg	0.5	Org-029	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Perfluorotridecanoic acid	µg/kg	0.5	Org-029	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Perfluorotetradecanoic acid	µg/kg	5	Org-029	[NT]	11	<5	<5	0	[NT]	[NT]
4:2 FTS	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
6:2 FTS	µg/kg	0.1	Org-029	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
8:2 FTS	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
10:2 FTS	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	11	<1	<1	0	[NT]	[NT]
N-Methyl perfluorooctane sulfonamide	µg/kg	1	Org-029	[NT]	11	<1	<1	0	[NT]	[NT]
N-Ethyl perfluorooctanesulfon amide	µg/kg	1	Org-029	[NT]	11	<1	<1	0	[NT]	[NT]
N-Me perfluorooctanesulfonamid oethanol	µg/kg	1	Org-029	[NT]	11	<1	<1	0	[NT]	[NT]
N-Et perfluorooctanesulfonamid oethanol	µg/kg	5	Org-029	[NT]	11	<5	<5	0	[NT]	[NT]
MePerfluorooctanesulf- amid oacetic acid	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
EtPerfluorooctanesulf amid oacetic acid	µg/kg	0.2	Org-029	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Surrogate $^{13}C_8$ *PFOS*	%		Org-029	[NT]	11	103	97	6	[NT]	[NT]
Surrogate $^{13}C_2$ *PFOA*	%		Org-029	[NT]	11	95	103	8	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFBS*	%		Org-029	[NT]	11	101	91	10	[NT]	[NT]
Extracted ISTD $^{18}O_2$ *PFHxS*	%		Org-029	[NT]	11	104	95	9	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOS*	%		Org-029	[NT]	11	104	90	14	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFBA*	%		Org-029	[NT]	11	94	90	4	[NT]	[NT]
Extracted ISTD $^{13}C_3$ *PFPeA*	%		Org-029	[NT]	11	105	96	9	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFHxA*	%		Org-029	[NT]	11	104	98	6	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFHpA*	%		Org-029	[NT]	11	107	98	9	[NT]	[NT]
Extracted ISTD $^{13}C_4$ *PFOA*	%		Org-029	[NT]	11	110	97	13	[NT]	[NT]
Extracted ISTD $^{13}C_5$ *PFNA*	%		Org-029	[NT]	11	102	98	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDA*	%		Org-029	[NT]	11	96	94	2	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFUnDA*	%		Org-029	[NT]	11	103	93	10	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFDoDA*	%		Org-029	[NT]	11	107	102	5	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *PFTeDA*	%		Org-029	[NT]	11	108	98	10	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *4:2FTS*	%		Org-029	[NT]	11	79	76	4	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *6:2FTS*	%		Org-029	[NT]	11	90	81	11	[NT]	[NT]
Extracted ISTD $^{13}C_2$ *8:2FTS*	%		Org-029	[NT]	11	91	86	6	[NT]	[NT]
Extracted ISTD $^{13}C_8$ *FOSA*	%		Org-029	[NT]	11	102	100	2	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSA*	%		Org-029	[NT]	11	103	84	20	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSA*	%		Org-029	[NT]	11	104	88	17	[NT]	[NT]
Extracted ISTD d_7 *N MeFOSE*	%		Org-029	[NT]	11	94	91	3	[NT]	[NT]

QUALITY CONTROL: PFAS in Soils Extended						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Extracted ISTD d_9 *N EtFOSE*	%		Org-029	[NT]	11	110	102	8	[NT]	[NT]
Extracted ISTD d_3 *N MeFOSAA*	%		Org-029	[NT]	11	103	84	20	[NT]	[NT]
Extracted ISTD d_5 *N EtFOSAA*	%		Org-029	[NT]	11	100	92	8	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Loc: 20/12/2024 1732

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

CHAIN OF CUSTODY

Results Required By: Normal Turnaround **Date:**

Except pH Results Required By **Date:**

Your Reference No.:

TO: ENVIROLAB SERVICES PTY LTD
12 ASHLEY STREET
CHATSWOOD NSW 2067

Sampled By: KB
Project Manager: JOHN XU

Ref No: 20465/8

Location: Gledswood Hills

	Location	Depth (m)	Date	Soil	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	TRH & BTEX	PAH	OCP	OP	PCB	PHENOL	CYANIDE	COMBO NO	PFAS (extended)	TCLP PFAS (water–routine level, short) (PFOS+PFHxS, PFOA)	COAL TAR (RTA Test Method T542)2
1 NR	TP1b	0.0-0.15	19/12/2024	PFASC											✓		
2 1	TP2a	0.0-0.15	19/12/2024	PFASC											✓		
3 2	TP3a	0.0-0.15	19/12/2024	PFASC											✓		
4 3	TP4b	0.0-0.15	19/12/2024	PFASC											✓		
5 4	TP5b	0.0-0.15	19/12/2024	PFASC											✓		
6 5	TP6b	0.0-0.15	19/12/2024	PFASC											✓		
7 6	TP7a	0.0-0.15	19/12/2024	PFASC											✓		
8 7	TP8b	0.0-0.15	19/12/2024	PFASC											✓		
9 8	TP9a	0.0-0.15	19/12/2024	PFASC											✓		
10 9	TP10a	0.0-0.15	19/12/2024	PFASC											✓		
11 10	TP11a	0.0-0.15	19/12/2024	PFASC											✓		
12 11	TP12a	0.0-0.15	19/12/2024	PFASC											✓		
13 12	TP13a	0.0-0.15	19/12/2024	PFASC											✓		
14 13	TP14a	0.0-0.15	19/12/2024	PFASC											✓		
15 14	TP15a	0.0-0.15	19/12/2024	PFASC											✓		
16 15	DDS14		19/12/2024	PFASC											✓		

ST

Relinquished by			Received by		
Name	Signature	Date	Name	Signature	Date
JOHN XU	JX	20/19/24	Shanni Tok	ST	20/12/24

G Soil sample (glass jar) FCP Fibro Cement Piece (plastic bag) PFASC PFAS Container *: As,Cd,Cr,Cu,Pb,Hg,Ni & Zn (8 metals)

P Soil sample (plastic bag) ✓ Test required

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 369648

Date Received: 20/12/24

Time Received: 1610

Received By: ST

Temp: Cool/Ambient 10°C.

Cooling: Ice/Icepack

Security: Intact/Broken/None

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	John Xu

Sample Login Details

Your reference	20465/8 Gledswood Hills
Envirolab Reference	369648
Date Sample Received	20/12/2024
Date Instructions Received	20/12/2024
Date Results Expected to be Reported	07/01/2025

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	16 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	10
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	PFAS in Soils Extended
TP1b-0.0-0.15	✓
TP2a-0.0-0.15	✓
TP3a-0.0-0.15	✓
TP4b-0.0-0.15	✓
TP5b-0.0-0.15	✓
TP6b-0.0-0.15	✓
TP7a-0.0-0.15	✓
TP8b-0.0-0.15	✓
TP9a-0.0-0.15	✓
TP10a-0.0-0.15	✓
TP11a-0.0-0.15	✓
TP12a-0.0-0.15	✓
TP13a-0.0-0.15	✓
TP14a-0.0-0.15	✓
TP15a-0.0-0.15	✓
DDS14	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET123535 / 126715 / 1 – 11
Your ref : 20465/8 – 9 Gregory Hills Drive Gledswood Hills
NATA Accreditation No: 14484

23 December 2024

Geotechnique Pty Ltd
1 Lemko Place
Penrith NSW 2750

Attn: Mr John Xu

Accredited for compliance with ISO/IEC 17025 - Testing.

Dear John

Asbestos Identification
This report presents the results of eleven samples, forwarded by Geotechnique Pty Ltd on 19 December 2024, for analysis for asbestos.

1.Introduction: Eleven samples forwarded were examined and analysed for the presence of asbestos on 23 December 2024.

2. Methods: The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).**

The report also provides approximate weights and percentages, categories of asbestos forms appearing in the sample, such as **AF** (Asbestos Fines), **FA** (Friable Asbestos) and **ACM** (Asbestos Containing Material), also satisfying the requirements of the NEPM Guidelines.

3. Results : **Sample No. 1. ASET123535 / 126715 / 1. TP101 - 0.0 - 0.3.**
Approx dimensions 10.0 cm x 10.0 cm x 9.5 cm
Approximate total dry weight of soil = 1361.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 2. ASET123535 / 126715 / 2. TP101 - 0.5 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 9.3 cm
Approximate total dry weight of soil = 1326.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 3. ASET123535 / 126715 / 3. TP101 - 1.5 - 1.8.
Approx dimensions 10.0 cm x 10.0 cm x 9.6 cm
Approximate total dry weight of soil = 1370.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 4. ASET123535 / 126715 / 4. TP101 - 2.0 - 2.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.3 cm
Approximate total dry weight of soil = 1320.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, matter and organic fibres.
No asbestos detected.

Sample No. 5. ASET123535 / 126715 / 5. TP102 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.0 cm
Approximate total dry weight of soil = 1280.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 6. ASET123535 / 126715 / 6. TP102 - 0.4 - 0.7.
Approx dimensions 10.0 cm x 10.0 cm x 8.3 cm
Approximate total dry weight of soil = 1064.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 7. ASET123535 / 126715 / 7. TP103 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 1147.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 8. ASET123535 / 126715 / 8. TP114 - 0.5 - 0.8.
Approx dimensions 10.0 cm x 10.0 cm x 8.6 cm
Approximate total dry weight of soil = 1207.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 9. ASET123535 / 126715 / 9. TP114 - 1.0 - 1.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 1148.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 10. ASET123535 / 126715 / 10. TP115 - 1.0 - 1.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.0 cm
Approximate total dry weight of soil = 1278.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 11. ASET123535 / 126715 / 11. TP115 - 2.0 - 2.2.
Approx dimensions 10.0 cm x 10.0 cm x 8.0 cm
Approximate total dry weight of soil = 923.0 g.
The sample consisted of a mixture of clayish sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Reported by,

Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Identifier.
Approved Signatory

Accredited for compliance with ISO/IEC 17025 - Testing.

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia and it also satisfies the requirements of the current NEPM Guidelines. NATA Accreditation does not cover the performance of this service.

Disclaimers;

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos, as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation only covers the qualitative part of the results reported. This weight disclaimer also covers weight / weight percentages if given.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.

FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.
*** denotes asbestos detected in ACM in bonded form.**
 # denotes friable asbestos as soft fibro plaster, fragments of ACM smaller than 7mm which are considered as friable and / or highly weathered ACM that will easily crumble.
λ denotes samples that have been analysed only in accordance to AS 4964 – 2004.
Ω Sample volume criteria of 500mL have not been satisfied.

The results contained in this report relate only to the sample/s submitted for testing. Australian Safer Environment & Technology accepts no responsibility for whether or not the submitted sample/s is/are representative. Results indicating "No asbestos detected" indicates a reporting limit specified in AS4964 -2004 which is 0.1g/ Kg (0.01%). Any amounts detected at assumed lower level than that would be reported, however those assumed lower levels may be treated as "No asbestos detected" as specified and recommended by A4964-2004. Trace / respirable level asbestos will be reported only when detected and trace analysis have been performed on each sample as required by AS4964-2004. When loose asbestos fibres/ fibre bundles are detected and reported that means they are larger handpicked fibres/ fibre bundles, and they do not represent respirable fibres. Dust/soil samples are always subjected to trace analysis except where the amounts involved are extremely minute and trace analysis is not possible to be carried out. When trace analysis is not performed on dust samples it will be indicated in the report that trace analysis has not been carried out due to the volume of the sample being extremely minute.

Estimation of asbestos weights involves the use of following assumptions;
Volume of each kind of Asbestos present in broken edges have been visually estimated and its been assumed that volumes remain similar throughout the binding matrix and those volumes are only approximate and not exact. Material densities have been assumed to be similar to commonly found similar materials and may not be exact.

All samples indicating "No asbestos detected" are assumed to be less than 0.001% for friable AF and FA portions detected and 0.01 % for ACM detected unless the approximate weight is given.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1835
PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: info@ausset.com.au

CHAIN OF CUSTODY RECORD

ASET JOB NO: ASET123535/126715				Contact Name:	JOHN XU	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
Name/ Company Name: Geotechnique 1-11				Job No:	20465/8							
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive Gledswood Hills							
				Purchase Order:								
Contact Ph: 0247222700				Email Results to:								
	Sample ID	Date	Type	Container	Sample Depth (m)							
1	TP101	16/12/2024	Soil	P	0.0-0.3			√				
2	TP101	16/12/2024	Soil	P	0.5-0.8			√				
3	TP101	16/12/2024	Soil	P	1.5-1.8			√				
4	TP101	16/12/2024	Soil	P	2.0-2.3			√				
5	TP102	16/12/2024	Soil	P	0.0-0.3			√				
6	TP102	16/12/2024	Soil	P	0.4-0.7			√				
7	TP103	16/12/2024	Soil	P	0.0-0.3			√				
8	TP114	16/12/2024	Soil	P	0.5-0.8			√				
9	TP114	16/12/2024	Soil	P	1.0-1.3			√				
10	TP115	16/12/2024	Soil	P	1.0-1.3			√				

RECEIVED
19 DEC 2024
BY: VS

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635
PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: info@ausset.com.au

CHAIN OF CUSTODY RECORD

ASET JOB NO:				Contact Name:	JOHN XU								
Name/ Company Name: Geotechnique				Job No:	20465/8								
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive Gledswood Hills								
				Purchase Order:									
Contact Ph: 0247222700				Email Results to:									
	Sample ID	Date	Type	Container	Sample Depth (m)	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis	
11	TP115	16/12/2024	Soil	P	2.0-2.2			√					
Relinquished By:		JOHN XU		Received By:	VQ	Turn around time					Shipment Method		
Date:		19/12/2024		Date & Time:	3.18 pm	Same Day	24 hrs	48 hrs	3 Days	5 days			
Signature: John Xu				Signature:					✔				

RECEIVED
19 DEC 2024
BY: VQ

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET123576 / 126756 / 1 - 15
Your ref : 20465/8 - 9 Gregory Hills Drive, Gledswood Hills
NATA Accreditation No: 14484

23 December 2024

Geotechnique Pty Ltd
1 Lemko Place
Penrith NSW 2751

Accredited for compliance with ISO/IEC 17025 - Testing.

Attn: Mr John Xu

Dear John

Asbestos Identification
This report presents the results of fifteen samples, forwarded by Geotechnique Pty Ltd on 20 December 2024, for analysis for asbestos.

1.Introduction: Fifteen samples forwarded were examined and analysed for the presence of asbestos on 23 December 2024.

2. Methods : The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).**

The report also provides approximate weights and percentages, categories of asbestos forms appearing in the sample, such as **AF**(Asbestos Fines), **FA**(Friable Asbestos) and **ACM** (Asbestos Containing Material), also satisfying the requirements of the NEPM Guidelines).

3. Results :

Sample No. 1. ASET123576 / 123756 / 1. 20465/8 - TP104 - 0.5-0.8.
Approx dimensions 10.0 cm x 10.0 cm x 11.3 cm
Approximate total dry weight of soil = 1130.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 2. ASET123576 / 123756 / 2. 20465/8 - TP104 - 1.5-1.8.
Approx dimensions 10.0 cm x 10.0 cm x 11.5 cm
Approximate total dry weight of soil = 1145.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of bitumen, cement, glass, sandstone, shale, soft fibrous material containing organic fibres, wood chips, animal and plant matter.
No asbestos detected.

Sample No. 3. ASET123576 / 123756 / 3. 20465/8 - TP105 - 0.0-0.3.
Approx dimensions 10.0 cm x 10.0 cm x 11.7 cm
Approximate total dry weight of soil = 1166.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of glass and plant matter.
No asbestos detected.

Sample No. 4. ASET123576 / 123756 / 4. 20465/8 - TP105 - 0.4-0.7.
Approx dimensions 10.0 cm x 10.0 cm x 13.1 cm
Approximate total dry weight of soil = 1311.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of cement, glass, sandstone, shale, soft plaster containing synthetic mineral fibres, animal and plant matter.
No asbestos detected.

Sample No. 5. ASET123576 / 123756 / 5. 20465/8 - TP106 - 0.0-0.3.
Approx dimensions 10.0 cm x 10.0 cm x 13.3 cm
Approximate total dry weight of soil = 1332.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 6. ASET123576 / 123756 / 6. 20465/8 - TP107 - 0.5-0.8.
Approx dimensions 10.0 cm x 10.0 cm x 13.2 cm
Approximate total dry weight of soil = 1316.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of cement, glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 7. ASET123576 / 123756 / 7. 20465/8 - TP107 - 1.5-1.8.
Approx dimensions 10.0 cm x 10.0 cm x 14.1 cm
Approximate total dry weight of soil = 1407.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, sandstone, shale, wood chips and plant matter.
No asbestos detected.

Sample No. 8. ASET123576 / 123756 / 8. 20465/8 - TP108 - 0.0-0.3.
Approx dimensions 10.0 cm x 10.0 cm x 14.6 cm
Approximate total dry weight of soil = 1460.0g.
The sample consisted of a mixture of clayish sandy soil, stones, fragments of glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 9. ASET123576 / 123756 / 9. 20465/8 - TP109 - 0.0-0.3.
Approx dimensions 10.0 cm x 10.0 cm x 13.9 cm
Approximate total dry weight of soil = 1385.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 10. ASET123576 / 123756 / 10. 20465/8 - TP110 - 0.5-0.8.
Approx dimensions 10.0 cm x 10.0 cm x 14.0 cm
Approximate total dry weight of soil = 1401.0g.
The sample consisted of a mixture of clayish sandy soil, stones, fragments of glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 11. ASET123576 / 123756 / 11. 20465/8 - TP110 - 2.0-2.3.
Approx dimensions 10.0 cm x 10.0 cm x 14.2 cm
Approximate total dry weight of soil = 1424.0g.
The sample consisted of a mixture of clayish sandy soil, stones, fragments of glass, plastic, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 12. ASET123576 / 123756 / 12. 20465/8 - TP111 - 1.5-1.8.
Approx dimensions 10.0 cm x 10.0 cm x 11.4 cm
Approximate total dry weight of soil = 1144.0g.
The sample consisted of a mixture of clayish sandy soil, stones, fragments of glass, sandstone, shale, wood chips and plant matter.
No asbestos detected.

Sample No. 13. ASET123576 / 123756 / 13. 20465/8 - TP112 - 1.0-1.3.
Approx dimensions 10.0 cm x 10.0 cm x 14.0 cm
Approximate total dry weight of soil = 1395.0g.
The sample consisted of a mixture of clayish sandy soil, stones, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 14. ASET123576 / 123756 / 14. 20465/8 - TP113 - 1.0-1.3.
Approx dimensions 10.0 cm x 10.0 cm x 12.1 cm
Approximate total dry weight of soil = 1211.0g.
The sample consisted of a mixture of clayish sandy soil, organic fibres, stones, fragments of cement, glass, sandstone, shale and plant matter.
No asbestos detected.

Sample No. 15. ASET123576 / 123756 / 15. 20465/8 - TP113 - 2.0-2.3.
Approx dimensions 10.0 cm x 10.0 cm x 10.9 cm
Approximate total dry weight of soil = 1085.0g.
The sample consisted of a mixture of clayish sandy soil, stones, fragments of brick, sandstone, shale, wood chips and plant matter.
No asbestos detected.

Reported by,

Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Identifier.
Approved Signatory

WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing.

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia and it also satisfies the requirements of the current NEPM Guidelines. NATA Accreditation does not cover the performance of this service.

Disclaimers;

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos, as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA

Accreditation only covers the qualitative part of the results reported. This weight disclaimer also covers weight / weight percentages if given.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.

FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.
*** denotes asbestos detected in ACM in bonded form.**
 # denotes friable asbestos as soft fibro plaster, fragments of ACM smaller than 7mm which are considered as friable and / or highly weathered ACM that will easily crumble.
λ denotes samples that have been analysed only in accordance to AS 4964 – 2004.
Ω Sample volume criteria of 500mL have not been satisfied.

The results contained in this report relate only to the sample/s submitted for testing. Australian Safer Environment & Technology accepts no responsibility for whether or not the submitted sample/s is/are representative. Results indicating "No asbestos detected" indicates a reporting limit specified in AS4964 -2004 which is 0.1g/ Kg (0.01%). Any amounts detected at assumed lower level than that would be reported, however those assumed lower levels may be treated as "No asbestos detected" as specified and recommended by A4964-2004. Trace / respirable level asbestos will be reported only when detected and trace analysis have been performed on each sample as required by AS4964-2004. When loose asbestos fibres/ fibre bundles are detected and reported that means they are larger handpicked fibres/ fibre bundles, and they do not represent respirable fibres. Dust/soil samples are always subjected to trace analysis except where the amounts involved are extremely minute and trace analysis is not possible to be carried out. When trace analysis is not performed on dust samples it will be indicated in the report that trace analysis has not been carried out due to the volume of the sample being extremely minute.

Estimation of asbestos weights involves the use of following assumptions;
Volume of each kind of Asbestos present in broken edges have been visually estimated and its been assumed that volumes remain similar throughout the binding matrix and those volumes are only approximate and not exact. Material densities have been assumed to be similar to commonly found similar materials and may not be exact.

All samples indicating "No asbestos detected" are assumed to be less than 0.001% for friable AF and FA portions detected and 0.01 % for ACM detected unless the approximate weight is given.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635
PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: info@ausset.com.au

CHAIN OF CUSTODY RECORD

ASET JOB NO: ASET123576/126756/1-15				Contact Name:	JOHN XU	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
Name/ Company Name: Geotechnique				Job No:	20465/8							
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive Gledswood Hills							
				Purchase Order:								
Contact Ph: 0247222700				Email Results to:								
	Sample ID	Date	Type	Container	Sample Depth (m)							
1	TP104	19/12/2024	Soil	P	0.5-0.8			√				
2	TP104	19/12/2024	Soil	P	1.5-1.8			√				
3	TP105	19/12/2024	Soil	P	0.0-0.3			√				
4	TP105	19/12/2024	Soil	P	0.4-0.7			√				
5	TP106	18/12/2024	Soil	P	0.0-0.3			√				
6	TP107	19/12/2024	Soil	P	0.5-0.8			√				
7	TP107	19/12/2024	Soil	P	1.5-1.8			√				
8	TP108	18/12/2024	Soil	P	0.0-0.3			√				
9	TP109	18/12/2024	Soil	P	0.0-0.3			√				

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CHAIN OF CUSTODY RECORD

ASET JOB NO:				Contact Name:	JOHN XU	Asbestos in Material	Asbestos in Soil (+/-)	Asbestos WA/ NEPM 500mL	Asbestos Fibre Count	Asbestos in Water	Asbestos in Dust	Lead Analysis
Name/ Company Name: Geotechnique				Job No:	20465/8							
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive Gledswood Hills							
				Purchase Order:								
Contact Ph: 0247222700				Email Results to:								
	Sample ID	Date	Type	Container	Sample Depth (m)							
10	TP110	18/12/2024	Soil	P	0.5-0.8			√				
11	TP110	18/12/2024	Soil	P	2.0-2.3			√				
12	TP111	19/12/2024	Soil	P	1.5-1.8			√				
13	TP112	19/12/2024	Soil	P	1.0-1.3			√				
14	TP113	18/12/2024	Soil	P	1.0-1.3			√				
15	TP113	18/12/2024	Soil	P	2.0-2.3			√				

Relinquished By:	JOHN XU	Received By:		Turn around time					Shipment Method
Date:	20/12/2024	Date & Time	5:30pm	Same Day	24 hrs	48 hrs	3 Days	5 days	
Signature:		Signature:					✔		

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20 DEC 2024
BY:

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET123577 / 126757 / 1 – 11
Your ref : 20465/8 – 9 Gregory Hills Gledswood Hills
NATA Accreditation No: 14484

24 December 2024

Geotechnique Pty Ltd
1 Lemko Place
Penrith NSW 2750

Attn: Mr John Xu

Accredited for compliance with ISO/IEC 17025 - Testing.

Dear John

Asbestos Identification
This report presents the results of eleven samples, forwarded by Geotechnique Pty Ltd on 20 December 2024, for analysis for asbestos.

1.Introduction: Eleven samples forwarded were examined and analysed for the presence of asbestos on 24 December 2024.

2. Methods: The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).**

The report also provides approximate weights and percentages, categories of asbestos forms appearing in the sample, such as **AF** (Asbestos Fines), **FA** (Friable Asbestos) and **ACM** (Asbestos Containing Material), also satisfying the requirements of the NEPM Guidelines.

3. Results : **Sample No. 1. ASET123577 / 126757 / 1. TP119 - 1.0 - 1.3.**
Approx dimensions 10.0 cm x 10.0 cm x 9.5 cm
Approximate total dry weight of soil = 1193.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 2. ASET123577 / 126757 / 2. TP120 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.5 cm
Approximate total dry weight of soil = 959.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 3. ASET123577 / 126757 / 3. TP120 - 1.0 - 1.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.8 cm
Approximate total dry weight of soil = 1259.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, a piece of rubber-like material, plant matter and organic fibres.
No asbestos detected.

Sample No. 4. ASET123577 / 126757 / 4. TP122 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.4 cm
Approximate total dry weight of soil = 1175.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 5. ASET123577 / 126757 / 5. TP125 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.5 cm
Approximate total dry weight of soil = 1191.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 6. ASET123577 / 126757 / 6. TP125 - 1.0 - 1.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.1 cm
Approximate total dry weight of soil = 889.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 7. ASET123577 / 126757 / 7. TP126 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.3 cm
Approximate total dry weight of soil = 1160.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 8. ASET123577 / 126757 / 8. TP127 - 1.0 - 1.3.
Approx dimensions 10.0 cm x 10.0 cm x 7.2 cm
Approximate total dry weight of soil = 803.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Sample No. 9. ASET123577 / 126757 / 9. TP130 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.0 cm
Approximate total dry weight of soil = 1074.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, plant matter and organic fibres.
No asbestos detected.

Sample No. 10. ASET123577 / 126757 / 10. TP136 - 2.0 - 2.3.
Approx dimensions 10.0 cm x 10.0 cm x 9.9 cm
Approximate total dry weight of soil = 1332.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, glass pieces, plant matter, animal matter and organic fibres.
No asbestos detected.

Sample No. 11. ASET123577 / 126757 / 11. J1 - 0.0 - 0.3.
Approx dimensions 10.0 cm x 10.0 cm x 8.8 cm
Approximate total dry weight of soil = 1007.0 g.
The sample consisted of a mixture of sandy soil, stone, sandstone, plant matter and organic fibres.
No asbestos detected.

Reported by,

Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Identifier.
Approved Signatory

WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing.

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia and it also satisfies the requirements of the current NEPM Guidelines. NATA Accreditation does not cover the performance of this service.

Disclaimers;

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos, as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation only covers the qualitative part of the results reported. This weight disclaimer also covers weight / weight percentages if given.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.

FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.
*** denotes asbestos detected in ACM in bonded form.**
 # denotes friable asbestos as soft fibro plaster, fragments of ACM smaller than 7mm which are considered as friable and / or highly weathered ACM that will easily crumble.
λ denotes samples that have been analysed only in accordance to AS 4964 – 2004.
Ω Sample volume criteria of 500mL have not been satisfied.

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Estimation of asbestos weights involves the use of following assumptions;
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Name/ Company Name: Geotechnique				Job No:	20465/8							
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive, Gledswood Hills							
				Purchase Order:								
Contact Ph: 0247222700				Email Results to:								
	Sample ID	Date	Type	Container	Sample Depth (m)							
1	TP119	19/12/2024	Soil	P	1.0-1.3			√				
2	TP120	19/12/2024	Soil	P	0.0-0.3			√				
3	TP120	19/12/2024	Soil	P	1.0-1.3			√				
4	TP122	19/12/2024	Soil	P	0.0-0.3			√				
5	TP125	19/12/2024	Soil	P	0.0-0.3			√				
6	TP125	19/12/2024	Soil	P	1.0-1.3			√				
7	TP126	19/12/2024	Soil	P	0.0-0.3			√				
8	TP127	19/12/2024	Soil	P	1.0-1.3			√				
9	TP130	19/12/2024	Soil	P	0.0-0.3			√				

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Name/ Company Name: Geotechnique				Job No:	20465/8							
Address: 1 Lemko Place Penrith				Project Address:	9 Gregory Hills Drive, Gledswood Hills							
				Purchase Order:								
Contact Ph: 0247222700				Email Results to:								
	Sample ID	Date	Type	Container	Sample Depth (m)							
10	TP136	19/12/2024	Soil	P	2.0-2.3			√				
11	J1	19/12/2024	Soil	P	0.0-0.3			√				
Relinquished By:		JOHN XU		Received By:		Turn around time					Shipment Method	
Date:		20/12/2024		Date & Time:	5:30pm	Same Day	24 hrs	48 hrs	3 Days	5 days		
Signature:		JX		Signature:						✓		

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APPENDIX E

UNEXPECTED FINDS MANAGEMENT PROTOCOL

GEOTECHNIQUE® PTY LTD
ABN 64 002 841 063
An eiaustralia company

Unexpected Finds Management Protocol
Proposed New Gledswood Hills High School
Lot 2 in DP1262720 – 9 Gregory Hills Drive, Gledswood Hills

In the event that unexpected finds and / or suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets / pieces / pipes, ash material, imported fill materials (which are different to those encountered during this and previous assessments), etc.) are encountered during future earthworks / site preparation, the following actions are to be undertaken.

Management of unexpected finds and / or suspect materials
If unexpected finds and / or suspect materials are encountered:

- Works are to be ceased.
- An Environmental Consultant is to be engaged to take appropriate action.
- If contamination is identified, the contaminated materials must be disposed of at an EPA licensed landfill facility with an appropriate waste classification.

Management of bonded asbestos containing material (ACM)
If bonded ACM is encountered, the following measures are implemented:

- Engage a SafeWork accredited Class B asbestos contractor.
- Removal of the asbestos waste must be carried out in accordance with the requirements of the regulators, such as SafeWork NSW and NSW EPA.
- A SafeWork Licensed Asbestos Assessor should be engaged to provide a clearance certificate.

Management of friable asbestos within the soil
It is recommended that the following measures are implemented if friable asbestos is encountered:

- Engage a SafeWork accredited Class A Asbestos contractor.
- Removal of the asbestos waste must be carried out in accordance with the requirements of the regulators, such as SafeWork NSW and NSW EPA
- A SafeWork Licensed Asbestos Assessor must be engaged to provide a clearance certificate.

APPENDIX F

ENVIRONMENTAL NOTES

IMPORTANT INFORMATION REGARDING YOUR ENVIRONMENTAL SITE ASSESSMENT

These notes have been prepared by Geotechnique Pty Ltd, using guidelines prepared by the ASFE (Associated Soil and Foundation Engineers). The notes are offered to assist in the interpretation of your environmental site assessment report.

REASONS FOR AN ENVIRONMENTAL ASSESSMENT

Environmental site assessments are typically, though not exclusively, performed in the following circumstances:

- As a pre-acquisition assessment on behalf of either a purchaser or a vendor, when a property is to be sold
- As a pre-development assessment, when a property or area of land is to be redeveloped, or the land use has changed e.g. from a factory to a residential subdivision
- As a pre-development assessment of greenfield sites, to establish baseline conditions and assess environmental, geological and hydrological constraints to the development of e.g. a landfill
- As an audit of the environmental effects of previous and present site usage

Each circumstance requires a specific approach to the assessment of soil and groundwater contamination. In all cases the objective is to identify and if possible, quantify the risks that unrecognised contamination poses to the ongoing proposed activity. Such risks may be both financial (clean-up costs or limitations in site use) and physical (health risks to site users or the public).

ENVIRONMENTAL SITE ASSESSMENT LIMITATIONS

Although information provided by an environmental site assessment can reduce exposure to the risk of the presence of contamination, no environmental site assessment can eliminate the risk. Even a rigorous professional assessment may not detect all contamination within a site. Contaminants may be present in areas that were not surveyed or sampled, or may migrate to areas which did not show signs of contamination when sampled. Contaminant analysis cannot possibly cover every type of contaminant that may occur; only the most likely contaminants are screened.

AN ENVIRONMENTAL SITE ASSESSMENT REPORT IS BASED ON A UNIQUE SET OF PROJECT SPECIFIC FACTORS

In the following events and in order to avoid cost problems, you should ask your consultant to assess any changes in the conclusion and recommendations made in the assessment:

- When the nature of the proposed development is changed e.g. if a residential development is proposed, rather than a commercial development
- When the size or configuration of the proposed development is altered e.g. if a basement is added
- When the location or orientation of the proposed structure is modified
- When there is a change of land ownership, or
- For application to an adjacent site

ENVIRONMENTAL SITE ASSESSMENT FINDINGS ARE PROFESSIONAL ESTIMATES

Site assessment identifies actual sub-surface conditions only at those points where samples are taken, when they are taken. Data obtained from the sampling and subsequent laboratory analyses are interpreted by geologists, engineers or scientists and opinions are drawn about the overall sub-surface conditions, the nature and extent of contamination, the likely impact on any proposed development and appropriate remediation measures. Actual conditions may differ from those inferred, because no professional, no matter how qualified and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from predictions. Nothing can be done to prevent the unanticipated, however, steps can be taken to help minimise the impact. For this reason site owners should retain the services of their consultants throughout the development stages of the project in order to identify variances, conduct additional tests that may be necessary and to recommend solutions to problems encountered on site.

Soil and groundwater contamination is a field in which legislation and interpretation of legislation by government departments is changing rapidly. Whilst every attempt is made by Geotechnique Pty Ltd to be familiar with current policy, our interpretation of the investigation findings should not be taken to be that of the relevant authority. When approval from a statutory authority is required for a project, approval should be directly sought.

STABILITY OF SUB-SURFACE CONDITIONS
Sub-surface conditions can change by natural processes and site activities. As an environmental site assessment is based on conditions existing at the time of the investigation, project decisions should not be based on environmental site assessment data that may have been affected by time. The consultant should be requested to advise if additional tests are required.

ENVIRONMENTAL SITE ASSESSMENTS ARE PERFORMED FOR SPECIFIC PURPOSES AND CLIENTS
Environmental site assessments are prepared in response to a specific scope of work required to meet the specific needs of specific individuals e.g. an assessment prepared for a consulting civil engineer may not be adequate to a construction contractor or another consulting civil engineer.

An assessment should not be used by other persons for any purpose or by the client for a different purpose. No individual, other than the client, should apply an assessment, even for its intended purpose, without first conferring with the consultant. No person should apply an assessment for any purpose other than that originally contemplated, without first conferring with the consultant.

MISINTERPRETATION OF ENVIRONMENTAL SITE ASSESSMENTS
Costly problems can occur when design professionals develop plans based on misinterpretation of an environmental site assessment. In order to minimise problems, the environmental consultant should be retained to work with appropriate design professionals, to explain relevant findings and to review the adequacy of plans and specifications relative to contamination issues.

LOGS SHOULD NOT BE SEPARATED FROM THE REPORT
Borehole and test pit logs are prepared by environmental scientists, engineers or geologists, based upon interpretation of field conditions and laboratory evaluation of field samples. Logs are normally provided in our reports and these would not be redrawn for inclusion in site remediation or other design drawings, as subtle but significant drafting errors or omissions may occur in the transfer process. Photographic reproduction can eliminate this problem, however, contractors can still misinterpret the logs during bid preparation if separated from the text of the assessment. Should this occur, delays and disputes, or unanticipated costs may result.

To reduce the likelihood of borehole and test pit log misinterpretation, the complete assessment should be available to persons or organisations involved in the project, such as contractors, for their use. Denial of such access and disclaiming responsibility for the accuracy of sub-surface information does not insulate an owner from the attendant liability. It is critical that the site owner provides all available site information to persons and organisations, such as contractors.

READ RESPONSIBILITY CLAUSES CLOSELY
An environmental site assessment is based extensively on judgement and opinion; therefore, it is necessarily less exact than other disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. In order to aid in prevention of this problem, model clauses have been developed for use in written transmittals. These are definitive clauses, designed to indicate consultant responsibility. Their use helps all parties involved recognise individual responsibilities and formulate appropriate action. Some of these definitive clauses are likely to appear in the environmental site assessment and you are encouraged to read them closely. Your consultant will be happy to give full and frank answers to any questions you may have.