



Report on
BASELINE ENVIRONMENTAL
SITE INVESTIGATION
PROPOSED WORKERS CAMP
LOT 192 HYDEN-MOUNT WALKER ROAD
HYDEN, WA

Submitted to:

BBB Remote Site Services
55-58 Stebbing Road
MADDINGTON WA

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1. INTRODUCTION

This report presents the findings of Galt Environmental Pty Ltd's (Galt's) baseline environmental site assessment (BESA) for the proposed workers camp development located at Lot 192, Hyden-Mount Walker Road in Hyden WA ('the site').

The location of the site relative to the surrounding area is shown on Figure 1

2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

Based on site investigation and the supplied information, the site is rectangular in shape with the proposed camp covering approximately 4 Ha with a 1.25 Ha spray field and total 36.82 Ha operational area. The site is bound by Hyden-Mount Walker Road to the west and agricultural lots on the remaining sides.

Supplied information and historical aerial imagery indicates the site has only been used for agricultural purposes and has never been developed or significantly earth worked

Based on plans provided to us, we understand that the proposed camp development comprises:

- ❖ Main bus port
- ❖ Storage rooms
- ❖ Parking
- ❖ 7 wings of accommodation
- ❖ Several buildings for camp administration, fitness, recreation, training, storage and dining and;
- ❖ Public open spaces.

Site photographs are shown in Appendix A. Supplied drawings are provided in Appendix B

3. PROJECT OBJECTIVES

The objectives of this studies were as follows:

- ❖ assess the soil conditions at the site to establish an appropriate baseline;
- ❖ determine if contamination is present (if any) and if it represents an unacceptable health risk; and
- ❖ make recommendations for further environmental investigation and/or remedial works (if required).

4. SITE CONDITIONS

4.1 Geology

The Hyden map sheet of the 1:250,000 scale Environmental Geology series map indicates that the area is mapped as: Remnant sandplain: "*yellow and white sand containing locally abundant limonite pebbles, derived from laterite*". A small portion of the northwest corner of the site is mapped as Eolian and alluvial deposits: "*silt and sand, gypsiferous in part*".

The results of our investigation indicate the site contains a layer of topsoil (on average 0.1m thickness) overlying sand with fines and clayey sand/ sandy clay from around 1.0m

Geology mapping is presented in Figure 2.

4.2 Subsurface Conditions

The subsurface conditions across the site are generally consistent and can be summarised as:

- ❖ SAND (SC): fine to medium-grained, angular to sub-angular, brown, with low plasticity fines, trace gravels and trace organics (to 0.1m) depths of about 0.5 to 1.0; overlying
- ❖ Sandy CLAY/Clayey SAND (SC/CH): medium to high plasticity clays, fine to medium grain, sub-angular to subrounded sands, red/brown/grey in colour, at depths from 1.0m.

4.3 Other Environmental Aspects

Limited environmental mapping is available due to the location of the site. We note that acid sulfate soil, contaminated sites and groundwater mapping is not available for the site.

We note that groundwater was encountered in all test pits at a depth of 2.3 to 2.9 meters below ground level. Future uses of groundwater at the site is likely to be for non-potable or irrigation purposes. groundwater quality was not investigated as part of our study.

4.4 Historical Land Use

Historical aerial imagery shows the site has remained relatively unchanged and appears to have been used for agricultural farming since at least 1999. The site has remained relatively unchanged since this time.

5. FIELDWORK

Fieldwork was carried out from 13-16 January 2024 and comprised:

- ❖ a detailed site inspection by a senior environmental scientist;
- ❖ excavation of test pits (TP01-TP09) at nine locations to depths of 2.5 – 3.2m; and
- ❖ collection of soil samples at 0.5 m intervals from each of the test pits.

General

An environmental scientist from Galt co-ordinated the fieldwork including:

- ❖ positioning of the test pit locations;
- ❖ supervision of the test pit excavations;
- ❖ logging the materials encountered in the boreholes; and
- ❖ collection soil samples for inspection and laboratory testing.

The test locations are shown on Figure 1 and are summarised in Table 1 below.

Table 1: Summary of Tests

Test Names	Test Depth (m)	Test Location Justification	Groundwater Depth (mbgl) ^{1,2}
TP01	3.1	Site accommodation	2.5
TP02	3.0		2.7
TP03	3.1		2.9
TP04	3.1	Dining facilities	2.8
TP05	3.0	Administration facilities	2.3
TP06	3.2	Wellness centre	2.3
TP07	3.0	Proposed spray/disposal field	2.9
TP08	3.0		2.9
TP09	3.2		2.3
Notes:	1. Depth to groundwater measured during test pit excavation 2. Metres below ground level		

Test pits

Test pits were excavated using a Kobelco SK350 tooth bucket excavator supplied and operated by RJD Contracting.

Test pit reports are presented in Appendix C along with a method of soil description and a list of explanatory notes and abbreviations used in the reports. A photograph of the spoil recovered is included in each test pit report.

Soil Sampling

Soil samples were collected in accordance with the following Australian Standards (AS):

- ↳ AS 4482.1:2005 *Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil Part 1 Non-Volatile and Semi-Volatile Compounds;*
- ↳ AS 4482.2:1999 *Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil Part 2 Volatile Compounds; and*
- ↳ Department of Water and Environment Regulation (DWER) (2021) *Assessment and management of contaminated sites.*

Samples were collected at 0.5 m intervals using dedicated nitrile gloves and placed in laboratory-supplied glass jars and clip seal bags. The samples were placed in an ice-chilled cooler in the field and then transferred to a freezer until laboratory testing was undertaken. All samples scheduled for analysis were transported to the laboratory with sufficient packaging and ice to ensure preservation of sample integrity

6. LABORATORY ANALYSIS

We selected two soil sample from each test pit location for analysis by NATA accredited laboratories for a range of contaminants of potential concern (COPC) comprising the following:

- ↳ heavy metals;
- ↳ total recoverable hydrocarbons (TRH);
- ↳ benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN);
- ↳ polycyclic aromatic hydrocarbons (PAH);

- ❖ organochlorine/organophosphate (OC/OP) pesticides;
- ❖ carbamates;
- ❖ insecticides;
- ❖ nutrients (TN, TKN, NOx, NO2, NO3, NH3 and TP);
- ❖ PFAS (per and poly-28);
- ❖ microbiological pathogens (*E.coli* and *Enterococci*); and
- ❖ asbestos.

All laboratory analysis was undertaken using NATA-accredited methods of analysis. Laboratory test results are presented in the certificates of analysis in Appendix D and summarised in Section 8.

7. REGULATORY ASSESSMENT CRITERIA

Regulatory assessment criteria for soil were selected taking into account the current land use, proposed use as a mining workers camp, applicable soil uses and consistency with relevant published guidelines including National Environmental Protection Council (NEPC) (2013) *National Environmental Protection (Assessment of Site Contamination) Measure*.

Soil samples were specifically assessed against the following;

- ❖ health investigation levels - residential (HIL A);
- ❖ health investigation levels for PFAS - residential (HIL A); and
- ❖ health screening levels – residential (HSL A/B).

8. QUALITY ASSURANCE AND QUALITY CONTROL

8.1 General QA/QC Testing and Analysis

QA/QC measures were adopted in accordance with NEPM (2013) *National Environmental Protection (Assessment of Site Contamination) Measure* and are necessary to ensure the precision, accuracy, representativeness, comparability and completeness of the data.

The following QA/QC measures were implemented during this assessment:

- ❖ collection of field quality control samples including field duplicate and inter-lab duplicate samples at the recommended rate of 1 per 20 primary samples and 1 per 10 primary samples for PFAS analysis;
- ❖ assessment of relative percentage difference (RPD) calculated for field duplicate and inter-lab duplicate samples;
- ❖ collection of rinsate samples from equipment used during sampling;
- ❖ inclusion of transport blank samples for the duration of each sampling event and transportation to the laboratory; and
- ❖ all samples were submitted to NATA-accredited laboratories for selected analysis.

The QA/QC program also considered internal laboratory QA/QC results. These include laboratory duplicate and blank sample results, method blanks, surrogates and matrix spikes.

8.2 Field Sampling QA/QC

The purpose of taking field QA/QC samples is to ensure quality and reproducibility of all testing methods used. These samples provide information which eliminates any errors due to sources of cross-contamination, inconsistencies in sampling methods and checks on analytical techniques used.

The following measures were implemented during the sampling program at the site:

- ❖ all samples were collected using new disposable nitrile gloves;
- ❖ all sampling equipment was thoroughly decontaminated between sampling locations; and
- ❖ all samples collected for laboratory analysis were stored in laboratory-supplied containers with adequate ice and packaging to ensure preservation of sample integrity.

Field duplicate samples were taken in order to identify the variation in analyte concentration between samples collected from the same sampling point, and inter-laboratory duplicate samples were taken for the purpose of repeatability of the laboratory's analysis. Field duplicate samples were sent along with the primary sample to the primary testing laboratory Eurofins and inter-laboratory duplicate samples were sent to the secondary laboratory MPL laboratories for analysis.

Rinsate samples were collected to demonstrate samples were free from contamination introduced to samples through contact with sampling equipment or the sampler, and that decontamination measures undertaken between successive sampling location were adequate.

Transport blank samples were prepared using laboratory supplied de-ionised water and sample containers prior to sampling. These samples were used to demonstrate the presence or absence of cross-contamination of samples during transport and storage.

8.3 Laboratory QA/QC

Laboratory analysis was undertaken by NATA-accredited laboratories using NATA-accredited methods of analysis. Galt requires that laboratories have a QA/QC program that is endorsed by NATA. Both laboratories have a comprehensive QA/QC program to monitor and control every aspect of the laboratory process including:

- ❖ method blanks;
- ❖ matrix spikes;
- ❖ laboratory duplicates; and
- ❖ surrogates.

All internal laboratory QA/QC samples were undertaken at frequencies at or above that are detailed in the NEPM guidelines.

8.4 Evaluation of Quality Control Sample Results

The analytical results and quality control data were evaluated for accuracy, precision and representativeness of the data. Laboratory data were checked for any analytical errors which may indicate cross contamination of samples. A summary of QA/QC data is presented in Table 2 below.

Table 2: QA/QC Summary

Item	Objective	Outcome	Compliance
Calibration check of field instruments	Instruments calibrated within acceptable limits	Completed in full	N/A
Chain of custody documentation	Completed in full	Completed in full	Yes
Recovery and analysis of rinsate blanks	No contamination of blanks	No contamination of rinsate blanks	Yes

Item	Objective	Outcome	Compliance
Recovery and analysis of transport blanks	No contamination of blanks	No contamination of field blanks	Yes
Recovery and analysis of field and interlaboratory duplicate samples	Collect replicate samples at a minimum rate of 5% and assessment that RPDs are within acceptable limits	All replicate samples were within RPD limits	Yes
NATA-certified and approved analytical methods	Comply with reference standards	All complied	Yes
Sample preservation and holding times	Samples subjected to correct preservation procedures and analysed within holding times	All complied	Yes
Analysis of laboratory method blanks	No contamination of blanks	No contamination of method blanks	Yes
Analysis of laboratory duplicates	RPDs within acceptable limits	All RPDs within acceptable limits	Yes
Analysis of surrogate and spike recoveries	Recoveries within acceptable limits	All recoveries within acceptable limits	Yes
Frequency of laboratory duplicate samples	Frequency of duplicates ≥ 5%	All analyses met required frequency	Yes

Based on our review of the QA/QC data, we consider that the results are an accurate representation of conditions at the site. A QA/QC report is presented in Appendix E

9. RESULTS

A summary of the soil laboratory analytical results is shown in Table 3 below. The results table including relevant assessment criteria is provided in Appendix F.

Table 3: Soil Analytical Results

Analyte	Results Range	Exceedances
PFAS		
Perfluorohexane sulfonic acid (PFHxS)	< LOR ¹	Nil
Perfluorooctane sulfonic acid (PFOS)	< LOR	Nil
Sum of PFHxS and PFOS	< LOR	Nil
Sum of PFAS	< LOR	Nil
Metals²		
Arsenic	< LOR - 3.3mg/kg	Nil
Beryllium	< LOR - <2mg/kg	Nil
Boron	10 - 60mg/kg	Nil
Cadmium	< LOR - <0.1mg/kg	Nil
Chromium (VI)	< LOR - <1mg/kg	Nil
Cobalt	9.2 - 26mg/kg	Nil
Copper	< LOR - 29mg/kg	Nil
Lead	2.8 - 18mg/kg	Nil

Manganese	40 - 1,400mg/kg	Nil
Mercury	0.02 - 0.04mg/kg	Nil
Nickel	3.1 - 36mg/kg	Nil
Selenium	< LOR - 6mg/kg	Nil
Zinc	< LOR - 7.4mg/kg	Nil
<i>Pesticides</i>		
OC Pesticides	< LOR	Nil
OP Pesticides	< LOR	Nil
Carbamates ²	< LOR	Nil
Other pesticides	< LOR	Nil
Herbicides	< LOR	Nil
<i>Nutrients</i>		
Total nitrogen	37 – 600 mg/kg	Nil
Total phosphorus	< LOR – 4.8 mg/kg	Nil
Nitrate +nitrite	1 – 13 mg/kg	Nil
<i>Hydrocarbons</i>		
TRH ³	< LOR	Nil
BTEXN	< LOR	Nil
PAHs	< LOR	Nil
<i>Other</i>		
Asbestos	ND ⁴	Nil
Pathogens	< LOR	Nil

- Notes:
1. LOR indicates results were below the laboratory limits of reporting.
 2. Pending laboratory results
 3. Sum of all TRH fractions.
 4. ND – non detect

The laboratory analytical results indicate that concentrations of all COPC in soil were either below the laboratory LOR and conformed to the adopted assessment criteria at all locations. Asbestos was not detected in any of the samples analysed. Tabulated laboratory results are presented in Appendix F.

10. CONCLUSION

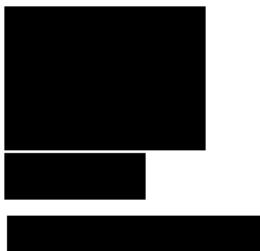
Based on the results of the study, we consider it unlikely that soil at the site presents a risk to human health or the environment in the context of the proposed land use and therefore consider the site suitable for the proposed use. Furthermore, we consider that data collected during this study is an adequate characterisation baseline soil conditions at the site.

11. CLOSURE

We draw your attention to Appendix G of this report, "Understanding your Report". The information provided within is intended to inform you as to what your realistic expectations of this report should be. This information is provided not to reduce the level of responsibility accepted by Galt, but to ensure that all parties who rely on this report are aware of the responsibilities each assumes in so doing.

Yours Faithfully,

GALT ENVIRONMENTAL PTY LTD



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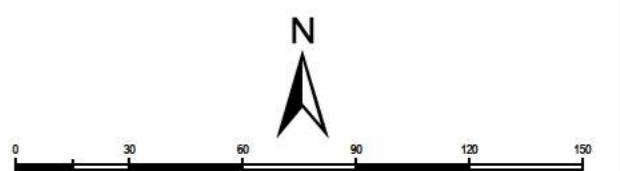
Figures

Galt Environmental Pty Ltd

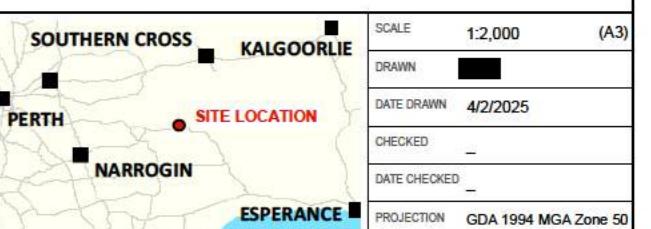


Legend

- Site Boundary
- * Test Pit



NOTES
 Aerial Imagery and Cadastre sourced from Landgate/SLIP



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 THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT.

CLIENT	BBB REMOTE SITE SERVICES
PROJECT	BASELINE ENVIRONMENTAL SITE ASSESSMENT
LOCATION	LOT 192 HYDEN-MOUNT WALKER ROAD HYDEN
TITLE	SITE & LOCATION PLAN
Job No	WAE240126-01
Fig No	FIGURE 1
Rev	A



Appendix A: Site Photographs

Galt Environmental Pty Ltd



Photograph 1: Proposed workers camp site facing northeast



Photograph 2: Proposed workers camp site facing southwest



Photograph 3: Test pitting at TP01



Photograph 4: Test pitting at TP05

Appendix B: Supplied Information

BUILDINGS						TOTAL VILLAGE CAPACITY					
DESCRIPTION	DIMENSIONS	QTY	DESCRIPTION	DIMENSIONS	QTY	DESCRIPTION	DIMENSIONS	QTY	DESCRIPTION	DIMENSIONS	QTY
Accommodation - 3 Bed SPQ	12.2 x 3.3m	63	Guest Bath.	12.2 x 3.3m	1	189 QTY. SINGLE PERSON QUARTERS (SPQ)					
Accommodation - 3 Bed Exp.	12.2 x 3.3m	7	Recreation	12.2 x 3.2m	1	ADD 21 QTY. BEDROOM EXPANSION OPTION					
Dry Mess	12 x 26.0m	1	Multifunction	12 x 6.6m	1	210 TOTAL WITH EXPANSION					
Kitchen/Prep/Store	12 x 9.9m	1	Wellness Centre	12.2 x 15.5m	1						
Wet Mess	12.2 x 13.2m	1	Maintenance/Storage/Parts	40 x 6m	3						
Laundry	12 x 3m	4	Prayer Room	12 x 3m	1						
Refrigerated Storage Cont.	16.5 x 12.2m	1	Quiet Room	6m x 3.3m	1						
Admin/Luggage/Medical	20'	1	Communications/Security								
Board/Meeting/Training Room	12 x 6.6m	1									
Ice Room	6 x 3m	1									

EXPANSION OPTIONS TO 156 + 7 ACCESSIBLE AND 210 + 9 ACCESSIBLE

DRIFTER DISCO (DEPENDENT ON PERMIT) POTENTIAL LOCAL SERVICES

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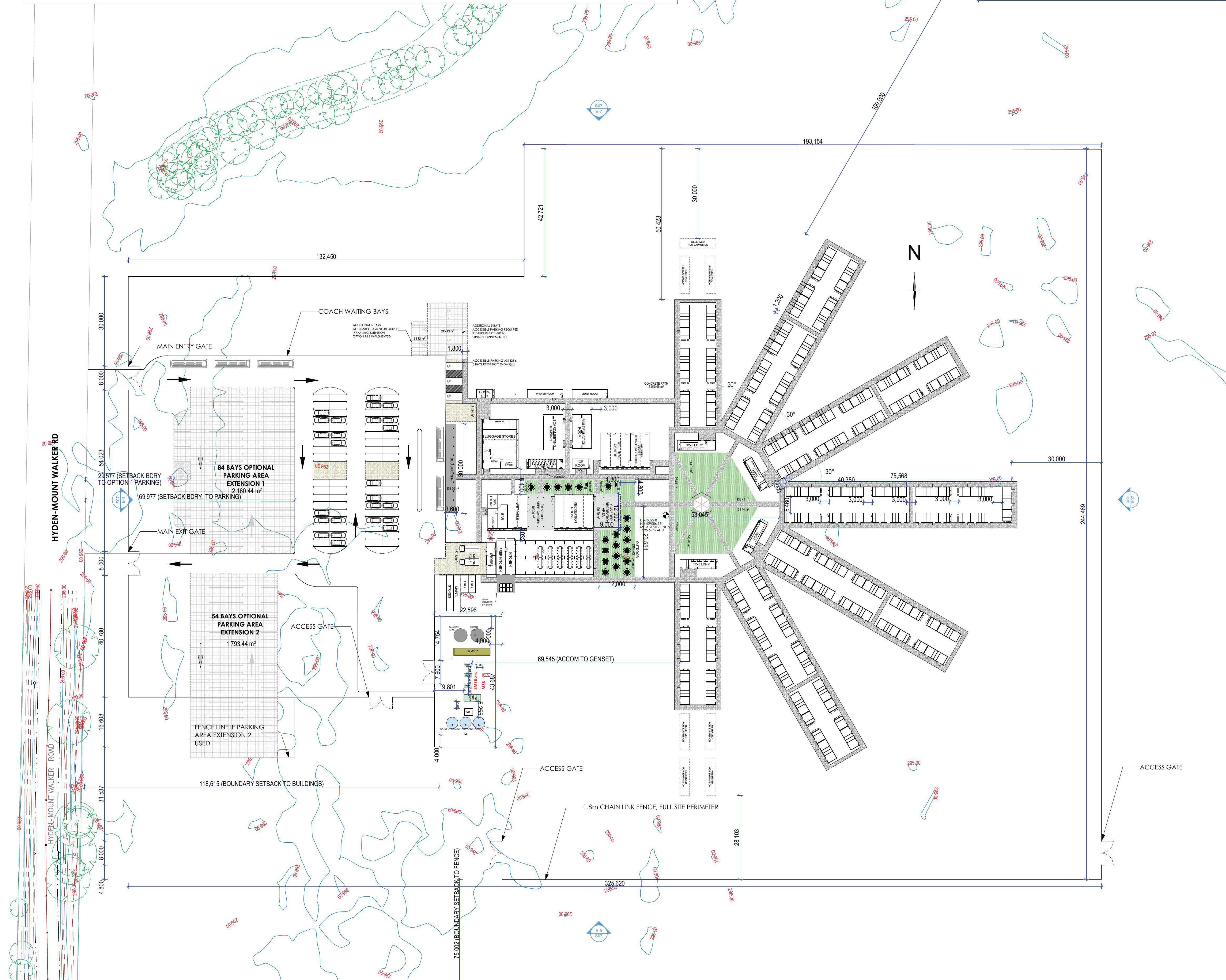
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PROJECT: [REDACTED]

SITE ADDRESS: LOT 192 HYDEN-MOUNT WALKER RD HYDEN WA 6359

DO NOT SCALE
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


RevID	ChID	Change Name	Date
01		INITIAL RELEASE	21/10/2024
02	02A	ADD PARKING OPTIONS	23/10/2024
03		ADJUST BUILDINGS TO FABRICATOR SPEC.	4/11/2024
04			12/11/2024

Sheet Name: GEN. ARRANGEMENT
Sheet: S03

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DRAFTSPERSON: [REDACTED]
UPDATED: 13/11/2024



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WALKER RD HYDEN WA 6359

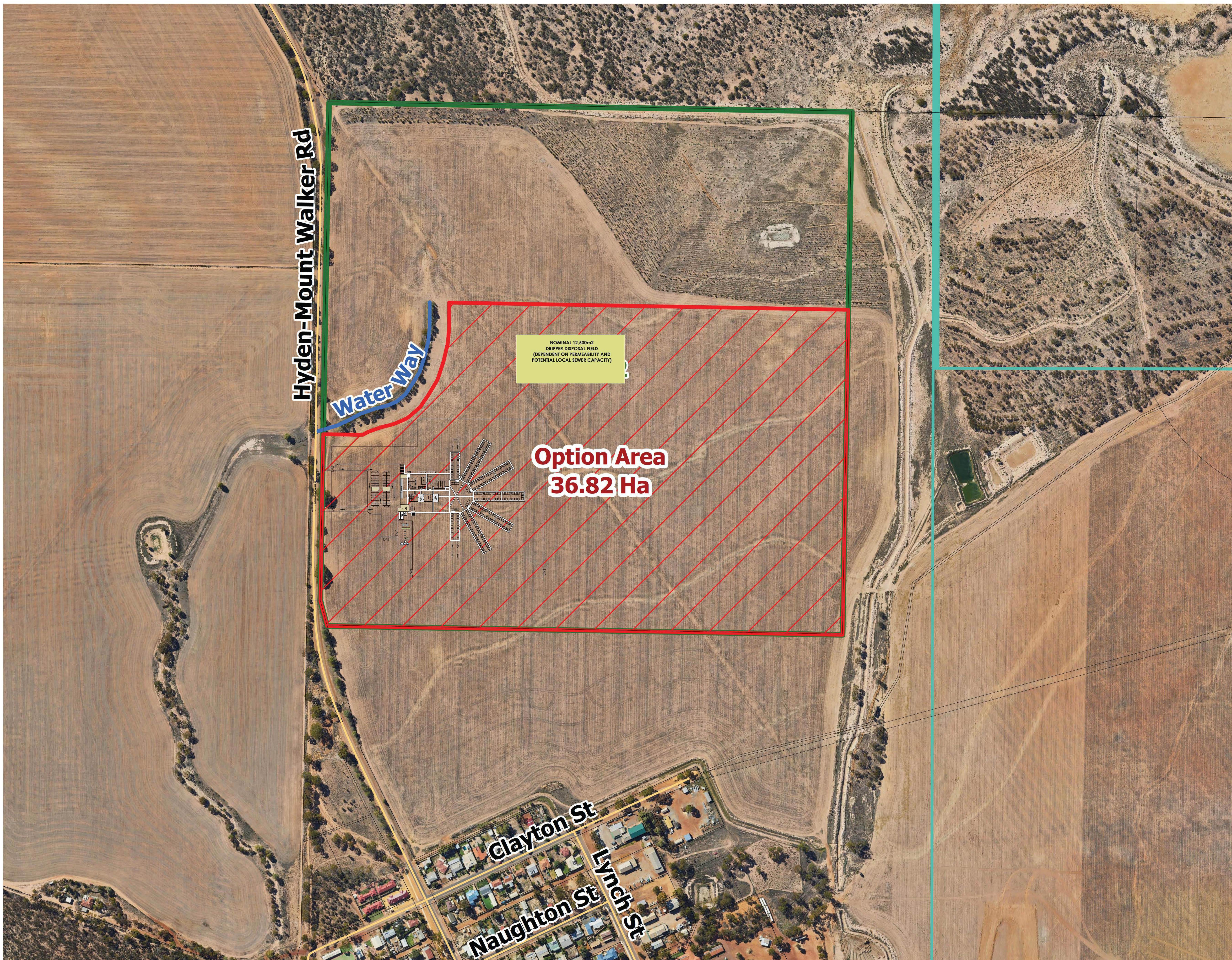
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RevID	ChID	Change Name	Date
01		INITIAL RELEASE	21/10/2024
02		ADD PARKING OPTIONS	23/10/2024
03		ADJUST BUILDINGS TO FABRICATOR SPEC.	4/11/2024
04		ADD GEOTECH TEST LOCATIONS	12/11/2024

Sheet Name: VILLAGE GA
Sheet: S05

SCALE: 1:250 @ A0
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FILE NAME: APAC-00011-20241112.pln

DRAFTSPERSON: [REDACTED]
UPDATED: 13/11/2024



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WALKER RD HYDEN WA 6359**

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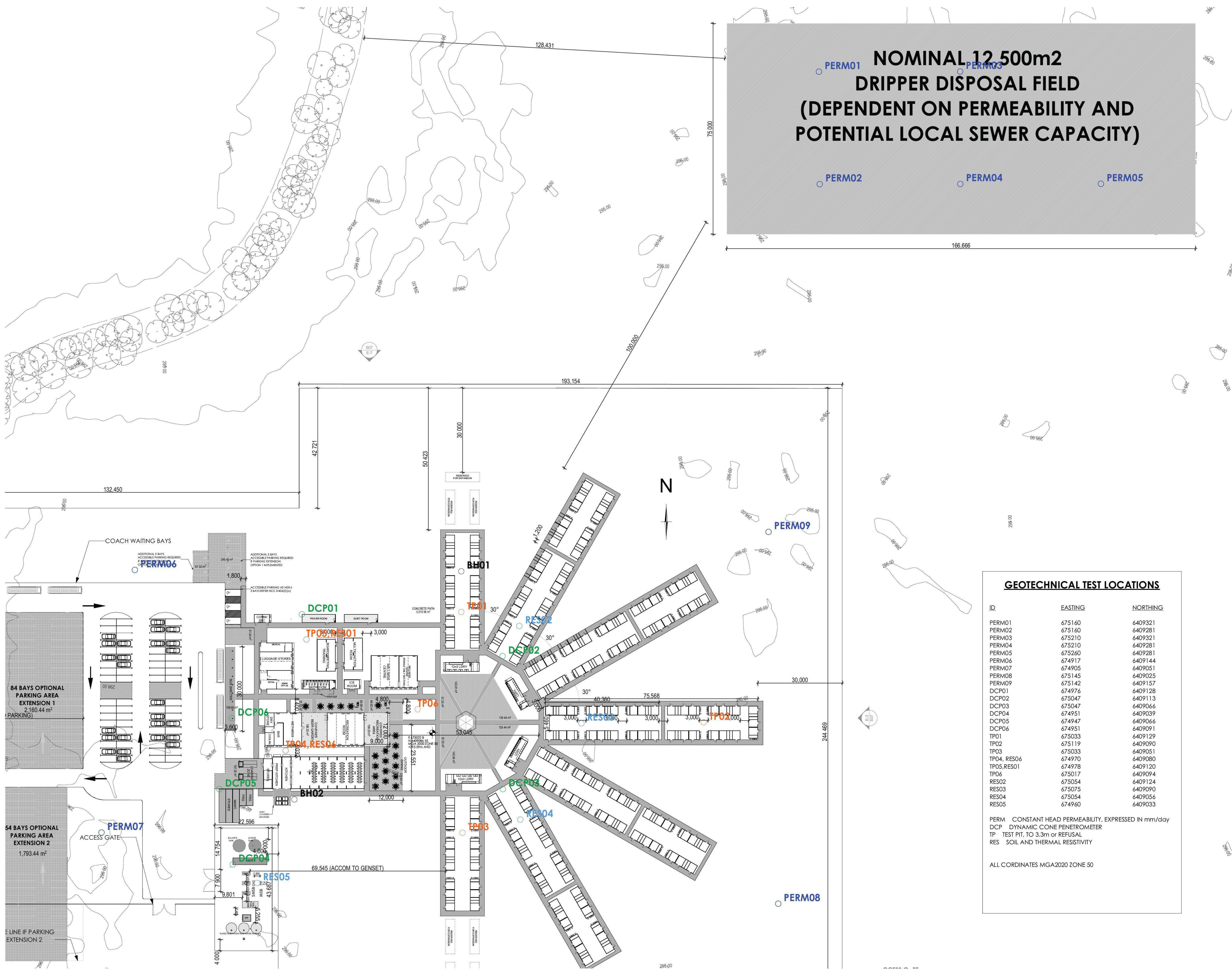
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RevID	ChID	Change Name	Date
01		INITIAL RELEASE	21/10/2024
02		ADD PARKING OPTIONS	23/10/2024
03		ADJUST BUILDINGS TO FABRICATOR SPEC.	4/11/2024
04		ADD GEOTECH. TEST LOCATIONS	12/11/2024

Sheet Name: AERIAL OVERLAY
Sheet: S06

SCALE: 1:2000 @ A0
REF: APAC-[REDACTED] 00011
FILE NAME: APAC-00011-20241112.pln

DRAFTSPERSON: [REDACTED]
UPDATED: 13/11/2024



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CLIENT: [REDACTED]

PROJECT:

SITE ADDRESS: LOT 192 HYDEN-MOUNT
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Sheet Name: GEOTECH. TESTING
Sheet: S12

SCALE: 1:500 @ A0
REF: APAC-[REDACTED]-00011
FILE NAME: APAC-00011-20241112.pln

DRAFTSPERSON: [REDACTED]
UPDATED: 13/11/2024

Appendix C: Test Pit Reports

EXPLANATORY NOTES TO BE READ WITH BOREHOLE AND TEST PIT REPORTS



METHOD OF DRILLING OR EXCAVATION

AC	Air Core	E	Excavator	PQ3	PQ3 Core Barrel
AD/T	Auger Drilling with TC-Bit	EH	Excavator with Hammer	PT	Push Tube
AD/V	Auger Drilling with V-Bit	HA	Hand Auger	R	Ripper
AT	Air Track	HE	Hand Excavation	RR	Rock Roller
B	Bulldozer Blade	HQ3	HQ3 Core Barrel	SON	Sonic Rig
BH	Backhoe Bucket	N	Natural Exposure	SPT	Driven SPT
CT	Cable Tool	NMLC	NMLC Core Barrel	WB	Washbore
DT	Diatube	PP	Push Probe	X	Existing Excavation

SUPPORT

T	Timbering
---	-----------

PENETRATION EFFORT (RELATIVE TO THE EQUIPMENT USED)

VE	Very Easy	E	Easy	F	Firm
H	Hard	VH	Very Hard		

WATER

►	Water Inflow	▼	Water Level
◀	Water Loss (complete)		
◁	Water Loss (partial)		

SAMPLING AND TESTING

B	Bulk Disturbed Sample	P	Piston Sample
BLK	Block Sample	PBT	Plate Bearing Test
C	Core Sample	U	Undisturbed Push-in Sample
CBR	CBR Mould Sample	U50: 50 mm diameter	
D	Small Disturbed Sample	SPT	Standard Penetration Test
ES	Environmental Soil Sample		Example: 3, 4, 5 N=9
EW	Environmental Water Sample		3,4,5: Blows per 150 mm
G	Gas Sample		N=9: Blows per 300 mm after
HP	Hand Penetrometer		150 mm seating interval
LB	Large Bulk Disturbed Sample	VS	Vane Shear; P = Peak
M	Mazier Type Sample		R = Remoulded (kPa)
MC	Moisture Content Sample	W	Water Sample

ROCK CORE RECOVERY

$$TCR = \text{Total Core Recovery (\%)} = \frac{CRL}{TCL} \times 100$$

$$RQD = \text{Rock Quality Designation (\%)} = \frac{ALC > 100}{TCL} \times 100$$

TCL Length of Core Run

CRL Length of Core Recovered

ALC>100 Total Length of Axial Lengths of Core Greater than 100 mm Long

METHOD OF SOIL DESCRIPTION

BOREHOLE AND TEST PIT REPORTS



GRAPHIC LOG & SOIL CLASSIFICATION SYMBOLS

Graphic	USCS	Soil Name
		FILL (various types)
		COBBLES / BOULDERS
	GP	GRAVEL (poorly graded)
	GW	GRAVEL (well graded)
	GC	Clayey GRAVEL
	GM	Silty GRAVEL
	SP	SAND (poorly graded)
	SW	SAND (well graded)
	SC	Clayey SAND

Graphic	USCS	Soil Name
	SM	Silty SAND
	ML	SILT (low liquid limit)
	MH	SILT (high liquid limit)
	CL	CLAY (low plasticity)
	CI	CLAY (medium plasticity)
	CH	CLAY (high plasticity)
	OL	Organic SILT (low liquid limit)
	OH	Organic SILT (high liquid limit)
	Pt	PEAT

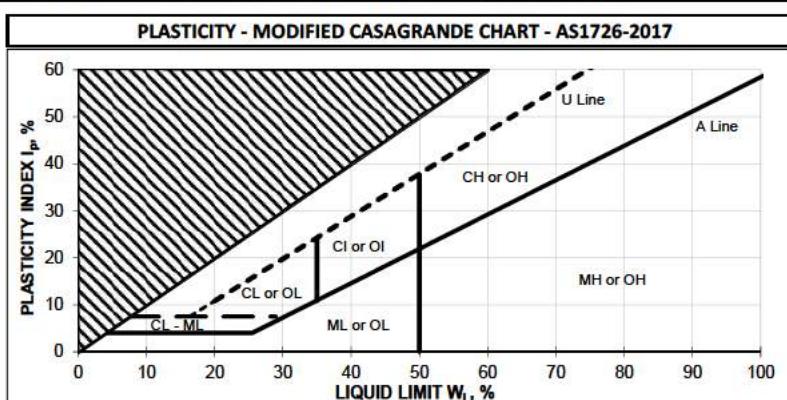
NOTE: Dual classification given for soils with a fines content between 5% and 12%.

SOIL CLASSIFICATION AND INFERRED STRATIGRAPHY

Soil descriptions are based on AS1726-2017. Material properties are assessed in the field by visual/tactile methods in combination with field and laboratory testing techniques (where used).

NOTE: AS 1726-2017 defines a fine grained soil where the total dry mass of fine fractions (<0.075 mm particle size) exceeds 35%.

PARTICLE SIZE		
Soil Name	Particle Size (mm)	
BOULDERS	>200	
COBBLES	63 to 200	
GRAVEL	Coarse	19 to 63
	Medium	6.7 to 19
	Fine	2.3 to 6.7
SAND	Coarse	0.6 to 2.36
	Medium	0.21 to 0.6
	Fine	0.075 to 0.21
FINES	SILT	0.002 to 0.075
	CLAY	<0.002



RESISTANCE TO EXCAVATION		
Symbol	Term	Description
VE	Very easy	All resistances are relative to the selected method of excavation
E	Easy	
F	Firm	
H	Hard	
VH	Very hard	

MOISTURE CONDITION	
Symbol	Term
D	Dry
M	Moist
W	Wet

CEMENTATION	
Cementation	Description
Weakly cemented	Soil may be easily disaggregated by hand in air or water
Moderately cemented	Effort is required to disaggregate the soil by hand in air or water

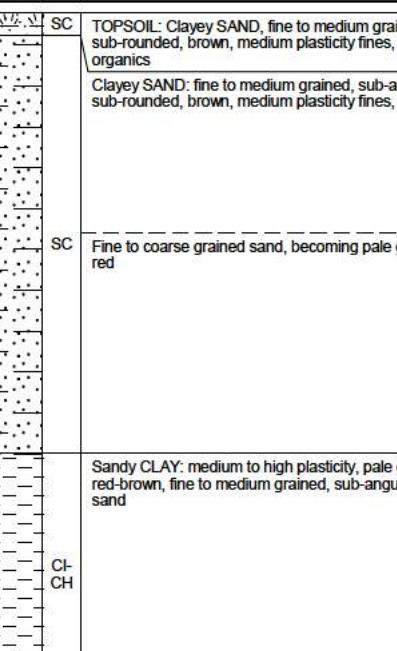
CONSISTENCY		
Symbol	Term	Undrained Shear Strength (kPa)
VS	Very Soft	0 to 12
S	Soft	12 to 25
F	Firm	25 to 50
St	Stiff	50 to 100
VSt	Very Stiff	100 to 200
H	Hard	>200

ORGANIC SOILS	
Material	Organic Content % of dry mass
Inorganic soil	<2%
Organic soil	2% to 25%
Peat	>25%

DENSITY		
Symbol	Term	Density Index (%)
VL	Very Loose	<15
L	Loose	15 to 35
MD	Medium Dense	35 to 65
D	Dense	65 to 85
VD	Very Dense	>85

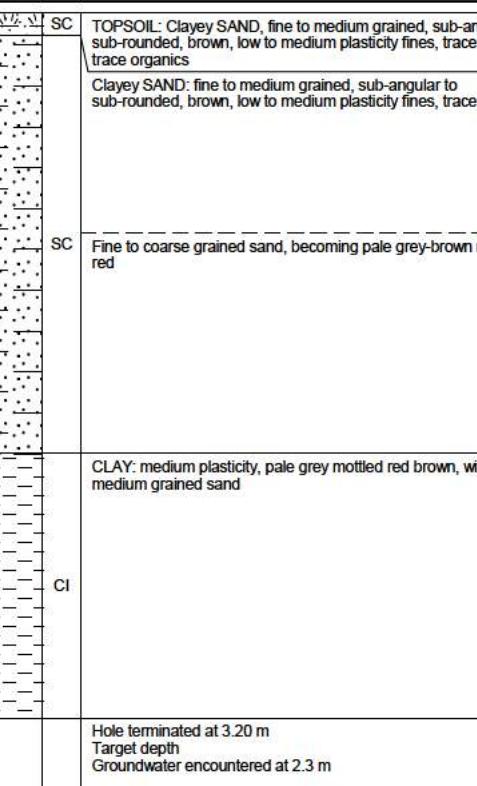
Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ██████████ Checked Date: 04/02/2024 Checked By: ██████████			
Excavation			Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
E	E		0.0		B(TP01-01)	SP	SC	TOPSOIL: SAND, fine to medium grained, sub-angular to sub-rounded, brown, with low plasticity fines, trace gravel, trace organics Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, low plasticity fines, trace gravel	D	Wheat crops
									VD	
			0.5						D - M	D
			1.0						M	
			1.5							
			2.0							
			2.5							
			3.0							
			3.5					Hole terminated at 3.10 m Target depth Groundwater encountered at 2.5 m		
Sketch & Other Observations										
										
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions				

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ██████████ Checked Date: 04/02/2024 Checked By: ██████████			
Excavation			Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
E	E		0.0			SC	CL-CH	TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel, trace organics Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel	D	Wheat crops
									VD	
			0.5		B(TP02-01)					
			1.0		B(TP02-02)					
			1.5							
			2.0							
			2.5							
			3.0					Hole terminated at 3.00 m Target depth Groundwater encountered at 2.7 m		
			3.5							
Sketch & Other Observations										
										
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions				

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ████ Checked Date: 04/02/2024 Checked By: ██████████					
Excavation			Sampling		Field Material Description							
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS		
E	E	█	0.0				D D - M M W	VD VD 	Thin layer of black soil			
											SC	TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel, trace organics Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel
											SC	Fine to coarse grained sand, becoming pale grey-brown mottled red
											CI-CH	Sandy CLAY: medium to high plasticity, pale grey mottled red-brown, fine to medium grained, sub-angular to sub-rounded sand
												Hole terminated at 3.10 m Target depth Groundwater encountered at 2.9 m
Sketch & Other Observations												
												
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions						

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ████ Checked Date: 04/02/2024 Checked By: ██████████			
Excavation				Sampling		Field Material Description				
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS	
E	E		0.0			SC	<p>TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel, trace organics</p> <p>Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel</p>	D	VD	
										D
			0.5			SC				
			1.0							
			1.5				Thin layer of black soils			
			2.0				Fine to coarse grained sand, becoming pale grey-brown mottled red			
			2.5							
			3.0				Sandy CLAY: medium to high plasticity, pale grey mottled red-brown, fine to medium grained, sub-angular to sub-rounded sand	M		
			3.5							
							Hole terminated at 3.10 m Target depth Groundwater encountered at 2.8 m			
Sketch & Other Observations										
										
Comments:					See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions					

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: [REDACTED] Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: [REDACTED] Checked Date: 04/02/2024 Checked By: [REDACTED]			
Excavation			Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
E	E		0.0		B(TP05-01)	SC	SC	TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel, trace organics Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel	D	Wheat crops
			0.5		B(TP05-02)	CI- CH	Thin layer of black soils	D - M	D	
			1.0						M	
			1.5						W	
			2.0							
			2.5							
			3.0				Hole terminated at 3.00 m Target depth Groundwater encountered at 2.3 m			
Sketch & Other Observations										
										
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions				

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ██████████ Checked Date: 04/02/2024 Checked By: ██████████			
Excavation			Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
E	E	██████████	0.0	B(TP06-01)			SC	TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel, trace organics	D	Wheat crops
								Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, low to medium plasticity fines, trace gravel		
								Fine to coarse grained sand, becoming pale grey-brown mottled red		
								CLAY: medium plasticity, pale grey mottled red brown, with fine to medium grained sand		
								Hole terminated at 3.20 m Target depth Groundwater encountered at 2.3 m		
Sketch & Other Observations										
										
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions				

Job Number: WAE240126-01 **Contractor:** RJD Contracting **Date:** 13/01/2025
Client: BBB Remote Services **Machine:** Kobelco SK350 LC **Logged:**
Project: Proposed Workers Camp **Operator:** **Checked Date:** 04/02/2024
Location: Hyden **Bucket:** Toothed **Checked By:**
Width: 1.6 m Length: 5 m

Excavation			Sampling			Field Material Description									
Method	Excavation Resistance	Water	Depth (metres)	Depth RL	Sample or Field Test	Recovered	Graphic Log	Soil Class	Soil/Rock Material Description			Moisture Condition	Consistency	Density	Structure and Additional Observations
E	E		0.0		B(TP07-01)		SC		TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel, trace organics			D	VD		Wheat crops
			0.5				CL		Clayey SAND/Sandy CLAY, medium plasticity, brown, sand is fine to medium grained, trace gravel			D - M	D		
			1.0						Sandy CLAY: medium to high plasticity, pale grey mottled red-brown, fine to medium grained, sub-angular to sub-rounded sand						
			1.5						Thin layer of black soils						
			2.0		B(TP07-02)		CL-CH						M		
			2.5												
			3.0						Hole terminated at 3.00 m Target depth Groundwater encountered at 2.9 m				W		
			3.5												

Sketch & Other Observations



Comments:

See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden							Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: ██████████ Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: ██████████ Checked Date: 04/02/2024 Checked By: ██████████			
Excavation				Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION		MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS	
E	E		0.0	B(TP08-01)		SC TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel SC Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace organics, trace gravel	Clayey GRAVEL: medium to coarse grained, sub-angular to sub-rounded, white and brown, medium plasticity fines, fine to medium grained, sub-angular to sub-rounded sand		D	VD	Wheat crops
											D - M
			0.5								
			1.0								
			1.5								
			2.0								
			2.5								
			3.0				Hole terminated at 3.00 m Target depth Groundwater encountered at 2.9 m		M		
			3.5						W		
Sketch & Other Observations											
											
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions					

Job Number: WAE240126-01 Client: BBB Remote Services Project: Proposed Workers Camp Location: Hyden						Contractor: RJD Contracting Machine: Kobelco SK350 LC Operator: [REDACTED] Bucket: Toothed Width: 1.6 m Length: 5 m	Date: 13/01/2025 Logged: [REDACTED] Checked Date: 04/02/2024 Checked By: [REDACTED]			
Excavation			Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL CLASS	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
E	E		0.0			SC	TOPSOIL: Clayey SAND, fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel, trace organics		D	Wheat crops
			0.5			SC	Clayey SAND: fine to medium grained, sub-angular to sub-rounded, brown, medium plasticity fines, trace gravel		D	
			1.0						D - M	
			1.5				Thin layer of black soils		M	
			2.0				Sandy CLAY: medium to high plasticity, pale grey mottled red-brown, fine to coarse grained, sub-angular to sub-rounded sand		W	
			2.5				Hole terminated at 2.50 m Target depth Groundwater encountered at 2.3 m			
			3.0							
			3.5							
Sketch & Other Observations										
										
Comments:						See Explanatory Notes and Method of Soil Description sheets for details of abbreviations and basis of descriptions				

Appendix D: Laboratory Certificates of Analysis

Galt Environment P/L
50 Edward Street
Osborne Park
WA 6017



NATA Accredited
Accreditation Number 2377
Site Number 2370 & 2554

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

Attention: - ALL SRA/Results
Report 1178807-AIS
Project Name MT WALKER RD HYDEN
Project ID WAE240126
Received Date Jan 17, 2025
Date Reported Feb 05, 2025

Methodology:

Asbestos Fibre Identification

Conducted in accordance with the Australian Standard AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004 and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.

Man-made vitreous fibre (MMVF)

Fibres exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and biosoluble fibres. NOTE: previously known as "synthetic mineral fibre" (SMF). Simple analytical procedures such as polarised light microscopy cannot detect or reliably identify asbestos in some types of commercial products containing asbestos, either because the fibres are below the resolution of optical microscopy or because the matrix material adheres too strongly to the fibres. For these types of products, electron microscopy may be necessary.

Subsampling Soil Samples

The sample submitted is dried and passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm and greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 g to 60 g, then a subsampling routine based on ISO 3082:2017(E) is employed.

NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis, in accordance with AS 5370:2024.*

Bonded asbestos-containing material (ACM)

The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 5370:2024*.

NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Limit of Reporting (LOR)

The performance limitation of the AS 5370:2024* method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory limit of reporting, per se. Examination of large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 5370:2024*, and hence, NATA Accreditation does not cover the performance of this service (non-NATA results are shown with an asterisk).

NOTE: NATA News March 2014, p.7, states in relation to AS 4964-2004: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.

Client Sample ID			TP01/0.0 Soil 25-Ja0026173 Jan 13, 2025	TP01/0.5 Soil 25-Ja0026174 Jan 13, 2025	TP02/0.0 Soil 25-Ja0026175 Jan 13, 2025	TP02/0.5 Soil 25-Ja0026176 Jan 13, 2025
Sample Matrix	LOR	Unit				
Asbestos in Soils (AS 4964-2004)						
Sample Description	-	Comment	Coarse brown soil	Coarse brown soil	Coarse brown soil	Coarse brown soil
Total Dry Mass	0.1	g	240	259	380	360
Total Analytical Fraction	0.1	g	83	97	110	140
Asbestos Detected	-	Yes/No	No	No	No	No
Materials Identified	-	Comment	N/A	N/A	N/A	N/A
Fibres Identified	-	Comment	Organic	Organic	Organic	Organic
Asbestos Content (as asbestos)	0.01	% w/w	< 0.01	< 0.01	< 0.01	< 0.01
Trace Analysis	0.1	g/kg	No trace asbestos detected.			

Client Sample ID			TP03/0.0 Soil 25-Ja0026177 Jan 13, 2025	TP03/0.5 Soil 25-Ja0026178 Jan 13, 2025	TP04/0.0 Soil 25-Ja0026179 Jan 13, 2025	TP04/0.5 Soil 25-Ja0026180 Jan 13, 2025
Sample Matrix	LOR	Unit				
Asbestos in Soils (AS 4964-2004)						
Sample Description	-	Comment	Coarse brown soil	Coarse brown soil	Coarse brown soil	Coarse brown soil
Total Dry Mass	0.1	g	240	116	170	115
Total Analytical Fraction	0.1	g	70	69	61	78
Asbestos Detected	-	Yes/No	No	No	No	No
Materials Identified	-	Comment	N/A	N/A	N/A	N/A
Fibres Identified	-	Comment	Organic	Organic	Organic	Organic
Asbestos Content (as asbestos)	0.01	% w/w	< 0.01	< 0.01	< 0.01	< 0.01
Trace Analysis	0.1	g/kg	No trace asbestos detected.			

Client Sample ID			TP05/0.0 Soil 25-Ja0026181 Jan 14, 2025	TP05/0.5 Soil 25-Ja0026182 Jan 14, 2025	TP06/0.0 Soil 25-Ja0026183 Jan 14, 2025	TP06/0.5 Soil 25-Ja0026184 Jan 14, 2025
Sample Matrix	LOR	Unit				
Asbestos in Soils (AS 4964-2004)						
Sample Description	-	Comment	Coarse brown soil	Coarse brown soil	Coarse brown soil	Coarse brown soil
Total Dry Mass	0.1	g	241	248	232	265
Total Analytical Fraction	0.1	g	75	100	91	92
Asbestos Detected	-	Yes/No	No	No	No	No
Materials Identified	-	Comment	N/A	N/A	N/A	N/A
Fibres Identified	-	Comment	Organic	Organic	Organic	Organic
Asbestos Content (as asbestos)	0.01	% w/w	< 0.01	< 0.01	< 0.01	< 0.01
Trace Analysis	0.1	g/kg	No trace asbestos detected.			

Client Sample ID			TP07/0.0 Soil 25-Ja0026185 Jan 14, 2025	TP07/0.5 Soil 25-Ja0026186 Jan 14, 2025	TP08/0.0 Soil 25-Ja0026187 Jan 14, 2025	TP08/0.5 Soil 25-Ja0026188 Jan 14, 2025
Sample Matrix	LOR	Unit				
Asbestos in Soils (AS 4964-2004)						
Sample Description	-	Comment	Coarse brown soil	Coarse brown soil	Coarse brown soil	Coarse brown soil
Total Dry Mass	0.1	g	234	222	348	235
Total Analytical Fraction	0.1	g	66	81	122	146
Asbestos Detected	-	Yes/No	No	No	No	No
Materials Identified	-	Comment	N/A	N/A	N/A	N/A
Fibres Identified	-	Comment	Organic	Organic	Organic	Organic
Asbestos Content (as asbestos)	0.01	% w/w	< 0.01	< 0.01	< 0.01	< 0.01
Trace Analysis	0.1	g/kg	No trace asbestos detected.			

Client Sample ID			TP09/0.0	QC106
Sample Matrix			Soil	Soil
Eurofins Sample No.			25-Ja0026189	25-Ja0026194
Date Sampled			Jan 14, 2025	Jan 14, 2025
LOR		Unit		
Asbestos in Soils (AS 4964-2004)				
Sample Description	-	Comment	Coarse brown soil	Coarse brown soil
Total Dry Mass	0.1	g	110	150
Total Analytical Fraction	0.1	g	65	67
Asbestos Detected	-	Yes/No	No	No
Materials Identified	-	Comment	N/A	N/A
Fibres Identified	-	Comment	Organic	Organic
Asbestos Content (as asbestos)	0.01	% w/w	< 0.01	< 0.01
Trace Analysis	0.1	g/kg	No trace asbestos detected.	No trace asbestos detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
LTM-ASB-8020 Method for the Qualitative Identification of Asbestos in Bulk Samples (AS 4964-2004)	Welshpool	Jan 20, 2025	Indefinite



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Eurofins ARL Pty Ltd

Eurofins Environment Testing Australia Pty Ltd

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NATA# 1261
Site# 1254

Company Name: Galt Environment P/L
Address: 50 Edward Street
Osborne Park

Project Name: MT WALKER RD HYDEN
Project ID: WAF240126

Order No.: WAE240126
Report #: 1178807
Phone: 08 6272 020
Fax: 08 9285 844

Received:
Due:
Priority:
Contact Name:

Jan 17, 2025 4:15 PM
Jan 24, 2025
5 Day

Eurofins Analytical Services Manager :

Sample Detail													Per- and Polyfluoroalkyl Substances (PFASs)
													Eurofins Suite B19E
													Carbamates
													Total Nitrogen
													Carbamates in Soil
													OCOP in Water
													OCOP in Soil
													NEPM 2013 Metals without Cr6+ (As, Be, B, Cd, Co, Cr, Cu, Hg, Pb, Ni, Mn, Se, Zn)
													Eurofins Suite B4
													Moisture Set
													Phosphorus - Reactive (1:10 aqueous extract)
													Phosphorus
													Nitrite-N
													Nitrate-N
													Enterococci*
													E. Coli
													Chromium (VI)
													Asbestos in Soils (AS 4964-2004)
													Ammonia-N
													Perth Laboratory - NATA # 2377 Site # 2370 & 2554
													External Laboratory
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	X	X	X	X	X	X	X	X
1	TP01/0.0	Jan 13, 2025		Soil	L25-Ja0026173	X	X	X	X	X	X	X	X
2	TP01/0.5	Jan 13, 2025		Soil	L25-Ja0026174	X	X	X		X	X	X	X
3	TP02/0.0	Jan 13, 2025		Soil	L25-Ja0026175	X	X	X	X	X	X	X	X
4	TP02/0.5	Jan 13, 2025		Soil	L25-Ja0026176		X		X	X			X
5	TP03/0.0	Jan 13, 2025		Soil	L25-Ja0026177	X	X	X	X	X	X	X	X
6	TP03/0.5	Jan 13, 2025		Soil	L25-Ja0026178		X		X	X			X
7	TP04/0.0	Jan 13, 2025		Soil	L25-Ja0026179	X	X	X	X	X	X	X	X
8	TP04/0.5	Jan 13, 2025		Soil	L25-Ja0026180		X		X	X			X
9	TP05/0.0	Jan 14, 2025		Soil	L25-Ja0026181	X	X	X	X	X	X	X	X
10	TP05/0.5	Jan 14, 2025		Soil	L25-Ja0026182	X	X	X	X	X	X	X	X
11	TP06/0.0	Jan 14, 2025		Soil	L25-Ja0026183	X	X	X	X	X	X	X	X
12	TP06/0.5	Jan 14, 2025		Soil	L25-Ja0026184		X		X	X			X
13	TP07/0.0	Jan 14, 2025		Soil	L25-Ja0026185	X	X	X	X	X	X	X	X
14	TP07/0.5	Jan 14, 2025		Soil	L25-Ja0026186		X		X	X			X

Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour blue indicates data provided by customer that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

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

Units

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

Calculations

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

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

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

Terms

%asbestos

Estimated percentage of asbestos in a given matrix may be derived from knowledge or experience of the material, informed by HSG264 Appendix 2, else assumed to be 15% in accordance with WA DOH Appendix 2 (P_A). This estimate is not NATA-accredited.

ACM

Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.

AF

Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".

AFM

Airborne Fibre Monitoring, e.g., by the MFM.

Amosite

Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.

AS

Australian Standard.

Asbestos Content (as asbestos)

Total %w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).

Chrysotile

Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..

COC

Chain of Custody.

Crocidolite

Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..

Dry

Sample is dried by heating prior to analysis.

DS

Dispersion Staining. Technique required for unequivocal Identification of asbestos fibres by PLM.

FA

Fibrous Asbestos. Asbestos-containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to distinguish visibly and may be assessed as AF.

Fibre Count

Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003

Fibre ID

Fibre Identification. Unequivocal identification of asbestos fibres according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.

Friable

Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess the degree of friability.

HSG248

UK HSE HSG248, Asbestos: *The Analysts Guide*, 2nd Edition (2021), ISBN: 9780616667079.

HSG264

UK HSE HSG264, Asbestos: *The Survey Guide* (2012) . ISBN: 9780717665020

ISO (also ISO/IEC)

International Organization for Standardization / International Electrotechnical Commission.

K Factor

Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).

LOR

Limit of Reporting.

MFM (also NOHSC:3003)

Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC:3003(2005)].

MMVF

Man-Made Vitreous Fibre - exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and "bio-soluble fibres". NOTE: previously known as "synthetic mineral fibre" (SMF).

NEPM (also ASC NEPM)

National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).

Organic

Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..

PCM

Phase Contrast Microscopy. This is used for fibre counting according to the MFM.

PLM

Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..

Sampling

Unless otherwise stated, Eurofins are not responsible for sampling equipment or the sampling process.

SRA

Sample Receipt Advice.

Trace Analysis

An analytical procedure is used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.

UK HSE HSG

United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.

UMF

Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. It may include (but is not limited to) actinolite, anthophyllite, or tremolite asbestos.

WA DOH

Reference document for the NEPM. Government of Western Australia, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia* (updated 2021), including Appendix Four: *Laboratory analysis*

Weighted Average

Combined average %w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

Comments

Sample Integrity

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

Asbestos Counter/Identifier:

[REDACTED] [REDACTED]

Authorised by:

[REDACTED] [REDACTED]



Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Galt Environment P/L
50 Edward Street
Osborne Park
WA 6017



NATA Accredited
Accreditation Number 2377
Site Number 2370 & 2554

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

Attention: - ALL SRA/Results

Report 1178807-S
Project name MT WALKER RD HYDEN
Project ID WAE240126
Received Date Jan 17, 2025

Client Sample ID			TP01/0.0 Soil L25-Ja0026173	TP01/0.5 Soil L25-Ja0026174	TP02/0.0 Soil L25-Ja0026175	TP02/0.5 Soil L25-Ja0026176
Date Sampled	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	-
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	-
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	-
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	-
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	-
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	-
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	-
TRH >C10-C16 less Naphthalene (F2)* ^{N01}	50	mg/kg	< 50	< 50	< 50	-
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	-
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	-
BTEX						
4-Bromofluorobenzene (surr.)	1	%	139	110	145	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-

Client Sample ID			TP01/0.0 Soil L25-Ja0026173	TP01/0.5 Soil L25-Ja0026174	TP02/0.0 Soil L25-Ja0026175	TP02/0.5 Soil L25-Ja0026176
Sample Matrix	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Polycyclic Aromatic Hydrocarbons						
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	121	124	127	-
p-Terphenyl-d14 (surr.)	1	%	104	119	129	-
OCOP in Soil						
Aldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
alpha-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
beta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
delta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Bifenthrin	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Bromophos Ethyl	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Chlorpyrifos	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
o,p-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endosulfan Sulfate	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Heptachlor Epoxide	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Hexachlorobenzene (HCB)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Lindane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Oxychlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethion	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Fenitrothion	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Malathion	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Trifluralin	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Carbamates in Soil						
Aminocarb	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Aldicarb Sulfoxide	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Carbendazim	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Oxamyl	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Aldicarb Sulfone	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Methomyl	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Fenuron/Fenuron TCA	0.005	mg/kg	< 0.005	< 0.005	< 0.005	-
Thidiazuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-

Client Sample ID			TP01/0.0 Soil L25-Ja0026173	TP01/0.5 Soil L25-Ja0026174	TP02/0.0 Soil L25-Ja0026175	TP02/0.5 Soil L25-Ja0026176
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Carbamates in Soil						
Aldicarb	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Bromacil	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Mexacarbate	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Monuron/Monuron TCA	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Propoxur	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Carbofuran	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Fluometuron	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Carbaryl	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Diuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Propachlor	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Siduron	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Methiocarb	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Linuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Neburon	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Ammonia-N	10	mg/kg	< 10	< 10	< 10	-
Chromium (VI)	1	mg/kg	< 1	< 1	< 1	-
Nitrate-N	1	mg/kg	1.5	1.1	5.1	-
Nitrite-N	1	mg/kg	< 1	< 1	< 1	-
NOx-N	1	mg/kg	1.7	1.4	5.5	-
Phosphorus - Reactive (1:10 aqueous extract)	1	mg/kg	< 1	< 1	4.2	-
Total Kjeldahl Nitrogen	10	mg/kg	150	36	590	-
Total Nitrogen	10	mg/kg	150	37	600	-
Phosphorus	1	mg/kg	29	4.7	110	-
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	-
Beryllium	2	mg/kg	< 2	< 2	< 2	-
Boron	10	mg/kg	< 10	< 10	< 10	-
Cadmium	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Chromium	1	mg/kg	9.2	11	15	-
Cobalt	5	mg/kg	< 5	< 5	10	-
Copper	1	mg/kg	2.8	3.5	5.7	-
Lead	1	mg/kg	14	11	21	-
Manganese	5	mg/kg	190	40	610	-
Mercury	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Nickel	1	mg/kg	3.1	3.7	5.7	-
Selenium	2	mg/kg	< 2	< 2	< 2	-
Zinc	5	mg/kg	< 5	< 5	5.1	-
Microbiology						
E. Coli	1	CFU/g	< 10	-	< 10	< 10
Enterococci*		CFU/g	< 10	-	< 10	< 10
Sample Properties						
% Moisture	1	%	1.6	3.2	3.0	1.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	-	< 5	-

Client Sample ID			TP01/0.0 Soil L25-Ja0026173 Jan 13, 2025	TP01/0.5 Soil L25-Ja0026174 Jan 13, 2025	TP02/0.0 Soil L25-Ja0026175 Jan 13, 2025	TP02/0.5 Soil L25-Ja0026176 Jan 13, 2025
Sample Matrix	LOR	Unit				
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C4-PFBA (surr.)	1	%	69	-	69	-
13C5-PFPeA (surr.)	1	%	89	-	88	-
13C5-PFHxA (surr.)	1	%	78	-	77	-
13C4-PFHpA (surr.)	1	%	77	-	83	-
13C8-PFOA (surr.)	1	%	77	-	78	-
13C5-PFNA (surr.)	1	%	99	-	99	-
13C6-PFDA (surr.)	1	%	77	-	86	-
13C2-PFUnDA (surr.)	1	%	95	-	82	-
13C2-PFDoDA (surr.)	1	%	83	-	88	-
13C2-PFTeDA (surr.)	1	%	117	-	128	-
Perfluoroalkyl sulfonamido substances						
Perfluoroctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
13C8-FOSA (surr.)	1	%	78	-	82	-
D3-N-MeFOSA (surr.)	1	%	158	-	149	-
D5-N-EtFOSA (surr.)	1	%	INT	-	INT	-
D7-N-MeFOSE (surr.)	1	%	103	-	93	-
D9-N-EtFOSE (surr.)	1	%	82	-	79	-
D5-N-EtFOSAA (surr.)	1	%	83	-	89	-
D3-N-MeFOSAA (surr.)	1	%	71	-	77	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10	-	< 10	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C2-4:2 FTSA (surr.)	1	%	102	-	88	-
13C2-6:2 FTSA (surr.)	1	%	99	-	103	-
13C2-8:2 FTSA (surr.)	1	%	95	-	79	-
13C2-10:2 FTSA (surr.)	1	%	76	-	88	-

Client Sample ID			TP01/0.0 Soil L25-Ja0026173	TP01/0.5 Soil L25-Ja0026174	TP02/0.0 Soil L25-Ja0026175	TP02/0.5 Soil L25-Ja0026176
Sample Matrix	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoroctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	-	< 5	-
13C3-PFBS (surr.)	1	%	91	-	97	-
18O2-PFHxS (surr.)	1	%	78	-	83	-
13C8-PFOS (surr.)	1	%	84	-	85	-
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	-	< 5	-
Sum of PFASs (n=30)*	50	ug/kg	< 50	-	< 50	-
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	-	< 10	-

Client Sample ID			TP03/0.0 Soil L25-Ja0026177	TP03/0.5 Soil L25-Ja0026178	TP04/0.0 Soil L25-Ja0026179	TP04/0.5 Soil L25-Ja0026180
Sample Matrix	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	-	< 20	-
TRH C10-C14	20	mg/kg	< 20	-	< 20	-
TRH C15-C28	50	mg/kg	< 50	-	< 50	-
TRH C29-C36	50	mg/kg	< 50	-	< 50	-
TRH C10-C36 (Total)	50	mg/kg	< 50	-	< 50	-
TRH C6-C10	20	mg/kg	< 20	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	-
TRH >C10-C16	50	mg/kg	< 50	-	< 50	-
TRH >C10-C16 less Naphthalene (F2)* ^{N01}	50	mg/kg	< 50	-	< 50	-
TRH >C16-C34	100	mg/kg	< 100	-	< 100	-
TRH >C34-C40	100	mg/kg	< 100	-	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	-	< 100	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	-
BTEX						
4-Bromofluorobenzene (surr.)	1	%	105	-	145	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			TP03/0.0 Soil L25-Ja0026177	TP03/0.5 Soil L25-Ja0026178	TP04/0.0 Soil L25-Ja0026179	TP04/0.5 Soil L25-Ja0026180
Sample Matrix	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	116	-	103	-
p-Terphenyl-d14 (surr.)	1	%	107	-	83	-
OCOP in Soil						
Aldrin	0.01	mg/kg	< 0.01	-	< 0.01	-
alpha-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	-
beta-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	-
delta-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	-
Bifenthrin	0.2	mg/kg	< 0.2	-	< 0.2	-
Bromophos Ethyl	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlordane	0.01	mg/kg	< 0.01	-	< 0.01	-
Chlorpyrifos	0.02	mg/kg	< 0.02	-	< 0.02	-
Dieldrin	0.01	mg/kg	< 0.01	-	< 0.01	-
p,p-DDD	0.01	mg/kg	< 0.01	-	< 0.01	-
p,p-DDE	0.01	mg/kg	< 0.01	-	< 0.01	-
p,p-DDT	0.01	mg/kg	< 0.01	-	< 0.01	-
o,p-DDT	0.01	mg/kg	< 0.01	-	< 0.01	-
Endosulfan I	0.01	mg/kg	< 0.01	-	< 0.01	-
Endosulfan II	0.01	mg/kg	< 0.01	-	< 0.01	-
Endosulfan Sulfate	0.01	mg/kg	< 0.01	-	< 0.01	-
Endrin	0.01	mg/kg	< 0.01	-	< 0.01	-
Heptachlor	0.01	mg/kg	< 0.01	-	< 0.01	-
Heptachlor Epoxide	0.01	mg/kg	< 0.01	-	< 0.01	-
Hexachlorobenzene (HCB)	0.01	mg/kg	< 0.01	-	< 0.01	-
Lindane	0.01	mg/kg	< 0.01	-	< 0.01	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Oxychlordane	0.01	mg/kg	< 0.01	-	< 0.01	-
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	-
Ethion	0.05	mg/kg	< 0.05	-	< 0.05	-
Fenitrothion	0.1	mg/kg	< 0.1	-	< 0.1	-

Client Sample ID			TP03/0.0 Soil L25-Ja0026177	TP03/0.5 Soil L25-Ja0026178	TP04/0.0 Soil L25-Ja0026179	TP04/0.5 Soil L25-Ja0026180
Date Sampled	LOR	Unit	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
OCOP in Soil						
Malathion	0.1	mg/kg	< 0.1	-	< 0.1	-
Trifluralin	0.2	mg/kg	< 0.2	-	< 0.2	-
Carbamates in Soil						
Aminocarb	0.04	mg/kg	< 0.04	-	< 0.04	-
Aldicarb Sulfoxide	0.004	mg/kg	< 0.004	-	< 0.004	-
Carbendazim	0.04	mg/kg	< 0.04	-	< 0.04	-
Oxamyl	0.04	mg/kg	< 0.04	-	< 0.04	-
Aldicarb Sulfone	0.02	mg/kg	< 0.02	-	< 0.02	-
Methomyl	0.04	mg/kg	< 0.04	-	< 0.04	-
Fenuron/Fenuron TCA	0.005	mg/kg	< 0.005	-	< 0.005	-
Thidiazuron	0.04	mg/kg	< 0.04	-	< 0.04	-
Aldicarb	0.004	mg/kg	< 0.004	-	< 0.004	-
Bromacil	0.04	mg/kg	< 0.04	-	< 0.04	-
Mexacarbate	0.02	mg/kg	< 0.02	-	< 0.02	-
Monuron/Monuron TCA	0.04	mg/kg	< 0.04	-	< 0.04	-
Propoxur	0.004	mg/kg	< 0.004	-	< 0.004	-
Carbofuran	0.04	mg/kg	< 0.04	-	< 0.04	-
Fluometuron	0.02	mg/kg	< 0.02	-	< 0.02	-
Carbaryl	0.05	mg/kg	< 0.05	-	< 0.05	-
Diuron	0.04	mg/kg	< 0.04	-	< 0.04	-
Propachlor	0.02	mg/kg	< 0.02	-	< 0.02	-
Siduron	0.02	mg/kg	< 0.02	-	< 0.02	-
Methiocarb	0.04	mg/kg	< 0.04	-	< 0.04	-
Linuron	0.04	mg/kg	< 0.04	-	< 0.04	-
Neburon	0.04	mg/kg	< 0.04	-	< 0.04	-
Heavy Metals						
Arsenic	2	mg/kg	< 2	-	< 2	-
Beryllium	2	mg/kg	< 2	-	< 2	-
Boron	10	mg/kg	10	-	< 10	-
Cadmium	0.1	mg/kg	< 0.1	-	< 0.1	-
Chromium	1	mg/kg	18	-	17	-
Cobalt	5	mg/kg	19	-	15	-
Copper	1	mg/kg	7.1	-	7.1	-
Lead	1	mg/kg	35	-	26	-
Manganese	5	mg/kg	1300	-	670	-
Mercury	0.02	mg/kg	< 0.02	-	0.03	-
Nickel	1	mg/kg	9.4	-	9.9	-
Selenium	2	mg/kg	< 2	-	< 2	-
Zinc	5	mg/kg	5.1	-	< 5	-

Client Sample ID			TP03/0.0 Soil L25-Ja0026177	TP03/0.5 Soil L25-Ja0026178	TP04/0.0 Soil L25-Ja0026179	TP04/0.5 Soil L25-Ja0026180
Sample Matrix			Jan 13, 2025	Jan 13, 2025	Jan 13, 2025	Jan 13, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Microbiology						
E. Coli	1	CFU/g	< 10	< 10	< 10	11
Enterococci*		CFU/g	< 10	< 10	< 10	< 10
Sample Properties						
% Moisture	1	%	5.8	9.6	5.2	9.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorododecanoic acid (PFDsDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C4-PFBA (surr.)	1	%	67	-	68	-
13C5-PFPeA (surr.)	1	%	82	-	76	-
13C5-PFHxA (surr.)	1	%	72	-	81	-
13C4-PFHpA (surr.)	1	%	83	-	79	-
13C8-PFOA (surr.)	1	%	77	-	77	-
13C5-PFNA (surr.)	1	%	83	-	81	-
13C6-PFDA (surr.)	1	%	80	-	76	-
13C2-PFUnDA (surr.)	1	%	101	-	95	-
13C2-PFDsDA (surr.)	1	%	86	-	88	-
13C2-PFTeDA (surr.)	1	%	119	-	117	-
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
13C8-FOSA (surr.)	1	%	77	-	81	-
D3-N-MeFOSA (surr.)	1	%	134	-	129	-
D5-N-EtFOSA (surr.)	1	%	178	-	INT	-
D7-N-MeFOSE (surr.)	1	%	82	-	80	-
D9-N-EtFOSE (surr.)	1	%	80	-	81	-
D5-N-EtFOSAA (surr.)	1	%	95	-	90	-
D3-N-MeFOSAA (surr.)	1	%	85	-	76	-

Client Sample ID	LOR	Unit	TP03/0.0 Soil L25-Ja0026177 Jan 13, 2025	TP03/0.5 Soil L25-Ja0026178 Jan 13, 2025	TP04/0.0 Soil L25-Ja0026179 Jan 13, 2025	TP04/0.5 Soil L25-Ja0026180 Jan 13, 2025
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10	-	< 10	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C2-4:2 FTSA (surr.)	1	%	75	-	79	-
13C2-6:2 FTSA (surr.)	1	%	90	-	97	-
13C2-8:2 FTSA (surr.)	1	%	95	-	80	-
13C2-10:2 FTSA (surr.)	1	%	99	-	105	-
Perfluoroalkyl sulfonic acids (PFASAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanesulfonic acid (PFPes) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoroctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	-	< 5	-
13C3-PFBS (surr.)	1	%	93	-	90	-
18O2-PFHxS (surr.)	1	%	83	-	76	-
13C8-PFOS (surr.)	1	%	95	-	79	-
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	-	< 5	-
Sum of PFASs (n=30)*	50	ug/kg	< 50	-	< 50	-
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	-	< 10	-

Client Sample ID	LOR	Unit	TP05/0.0 Soil L25-Ja0026181 Jan 14, 2025	TP05/0.5 Soil L25-Ja0026182 Jan 14, 2025	TP06/0.0 Soil L25-Ja0026183 Jan 14, 2025	TP06/0.5 Soil L25-Ja0026184 Jan 14, 2025
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	-
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	-
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	-
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	-
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	-
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	-
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	-
TRH >C10-C16 less Naphthalene (F2)* ^{N01}	50	mg/kg	< 50	< 50	< 50	-
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	-
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	-

Client Sample ID	LOR	Unit	TP05/0.0 Soil L25-Ja0026181 Jan 14, 2025	TP05/0.5 Soil L25-Ja0026182 Jan 14, 2025	TP06/0.0 Soil L25-Ja0026183 Jan 14, 2025	TP06/0.5 Soil L25-Ja0026184 Jan 14, 2025
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	-
BTEX						
4-Bromofluorobenzene (surr.)	1	%	111	136	126	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	110	133	94	-
p-Terphenyl-d14 (surr.)	1	%	81	124	97	-
OCOP in Soil						
Aldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
alpha-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
beta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
delta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Bifenthrin	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Bromophos Ethyl	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Chlorpyrifos	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
p,p-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
o,p-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-

Client Sample ID			TP05/0.0 Soil L25-Ja0026181	TP05/0.5 Soil L25-Ja0026182	TP06/0.0 Soil L25-Ja0026183	TP06/0.5 Soil L25-Ja0026184
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
OCOP in Soil						
Endosulfan Sulfate	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Endrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Heptachlor Epoxide	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Hexachlorobenzene (HCB)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Lindane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Oxychlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethion	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Fenitrothion	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Malathion	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Trifluralin	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Carbamates in Soil						
Aminocarb	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Aldicarb Sulfoxide	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Carbendazim	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Oxamyl	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Aldicarb Sulfone	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Methomyl	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Fenuron/Fenuron TCA	0.005	mg/kg	< 0.005	< 0.005	< 0.005	-
Thidiazuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Aldicarb	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Bromacil	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Mexacarbate	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Monuron/Monuron TCA	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Propoxur	0.004	mg/kg	< 0.004	< 0.004	< 0.004	-
Carbofuran	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Fluometuron	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Carbaryl	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Diuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Propachlor	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Siduron	0.02	mg/kg	< 0.02	< 0.02	< 0.02	-
Methiocarb	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Linuron	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Neburon	0.04	mg/kg	< 0.04	< 0.04	< 0.04	-
Ammonia-N	10	mg/kg	< 10	< 10	< 10	-
Chromium (VI)	1	mg/kg	< 1	< 1	< 1	-
Nitrate-N	1	mg/kg	7.1	< 1	1.8	-
Nitrite-N	1	mg/kg	< 1	< 1	< 1	-
NOx-N	1	mg/kg	7.4	1.0	2.6	-
Phosphorus - Reactive (1:10 aqueous extract)	1	mg/kg	4.8	< 1	2.3	-
Total Kjeldahl Nitrogen	10	mg/kg	520	53	360	-
Total Nitrogen	10	mg/kg	530	54	360	-
Phosphorus	1	mg/kg	93	6.7	80	-

Client Sample ID			TP05/0.0 Soil L25-Ja0026181	TP05/0.5 Soil L25-Ja0026182	TP06/0.0 Soil L25-Ja0026183	TP06/0.5 Soil L25-Ja0026184
Sample Matrix			Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	-
Beryllium	2	mg/kg	< 2	< 2	< 2	-
Boron	10	mg/kg	18	44	21	-
Cadmium	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Chromium	1	mg/kg	17	18	19	-
Cobalt	5	mg/kg	10.0	12	15	-
Copper	1	mg/kg	6.5	5.2	8.8	-
Lead	1	mg/kg	22	23	34	-
Manganese	5	mg/kg	670	280	890	-
Mercury	0.02	mg/kg	0.04	0.02	0.03	-
Nickel	1	mg/kg	6.9	11	10	-
Selenium	2	mg/kg	< 2	< 2	< 2	-
Zinc	5	mg/kg	5.3	< 5	5.2	-
Microbiology						
E. Coli	1	CFU/g	< 10	< 10	< 10	< 10
Enterococci*		CFU/g	< 10	< 10	< 10	230
Sample Properties						
% Moisture	1	%	2.5	10.0	6.6	8.4
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorododecanoic acid (PFDsDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorotridecanoic acid (PFTsDA) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorotetradecanoic acid (PFTsDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
13C4-PFBA (surr.)	1	%	70	-	68	70
13C5-PFPeA (surr.)	1	%	80	-	80	81
13C5-PFHxA (surr.)	1	%	75	-	80	77
13C4-PFHpA (surr.)	1	%	80	-	76	76
13C8-PFOA (surr.)	1	%	74	-	78	80
13C5-PFNA (surr.)	1	%	78	-	82	82
13C6-PFDA (surr.)	1	%	83	-	76	80
13C2-PFUnDA (surr.)	1	%	76	-	84	95
13C2-PFDsDA (surr.)	1	%	84	-	86	86
13C2-PFTsDA (surr.)	1	%	134	-	125	133
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	< 5

Client Sample ID	LOR	Unit	TP05/0.0 Soil L25-Ja0026181 Jan 14, 2025	TP05/0.5 Soil L25-Ja0026182 Jan 14, 2025	TP06/0.0 Soil L25-Ja0026183 Jan 14, 2025	TP06/0.5 Soil L25-Ja0026184 Jan 14, 2025
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Perfluoroalkyl sulfonamido substances						
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
13C8-FOSA (surr.)	1	%	79	-	77	79
D3-N-MeFOSA (surr.)	1	%	143	-	137	134
D5-N-EtFOSA (surr.)	1	%	183	-	185	182
D7-N-MeFOSE (surr.)	1	%	79	-	74	75
D9-N-EtFOSE (surr.)	1	%	79	-	84	92
D5-N-EtFOSAA (surr.)	1	%	95	-	91	86
D3-N-MeFOSAA (surr.)	1	%	74	-	84	72
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	87	-	80	85
13C2-6:2 FTSA (surr.)	1	%	104	-	90	87
13C2-8:2 FTSA (surr.)	1	%	82	-	78	83
13C2-10:2 FTSA (surr.)	1	%	97	-	96	83
Perfluoroalkyl sulfonic acids (PFAS)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
13C3-PFBS (surr.)	1	%	82	-	84	92
18O2-PFHxS (surr.)	1	%	82	-	80	81
13C8-PFOS (surr.)	1	%	87	-	82	82
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	-	< 5	< 5
Sum of PFASs (n=30)*	50	ug/kg	< 50	-	< 50	< 50
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	-	< 10	< 10

Client Sample ID			TP07/0.0 Soil L25-Ja0026185	TP07/0.5 Soil L25-Ja0026186	TP08/0.0 Soil L25-Ja0026187	TP08/0.5 Soil L25-Ja0026188
Sample Matrix	LOR	Unit	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	-	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	-	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	-	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	-	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	-	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	-	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	-	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)* ^{N01}	50	mg/kg	< 50	-	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	-	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	-	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	-	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
BTEX						
4-Bromofluorobenzene (surr.)	1	%	129	-	122	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	91	-	100	145
p-Terphenyl-d14 (surr.)	1	%	90	-	101	140

Client Sample ID			TP07/0.0 Soil L25-Ja0026185	TP07/0.5 Soil L25-Ja0026186	TP08/0.0 Soil L25-Ja0026187	TP08/0.5 Soil L25-Ja0026188
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
OCOP in Soil						
Aldrin	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
alpha-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
beta-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
delta-BHC (HCH)	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Bifenthrin	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bromophos Ethyl	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Chlordane	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Chlorpyrifos	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Dieldrin	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
p,p-DDD	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
p,p-DDE	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
p,p-DDT	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
o,p-DDT	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Endosulfan I	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Endosulfan II	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Endosulfan Sulfate	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Endrin	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Heptachlor	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Heptachlor Epoxide	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Hexachlorobenzene (HCB)	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Lindane	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Oxychlordane	0.01	mg/kg	< 0.01	-	< 0.01	< 0.01
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Fenitrothion	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Malathion	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Trifluralin	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Carbamates in Soil						
Aminocarb	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Aldicarb Sulfoxide	0.004	mg/kg	< 0.004	-	< 0.004	< 0.004
Carbendazim	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Oxamyl	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Aldicarb Sulfone	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Methomyl	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Fenuron/Fenuron TCA	0.005	mg/kg	< 0.005	-	< 0.005	< 0.005
Thidiazuron	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Aldicarb	0.004	mg/kg	< 0.004	-	< 0.004	< 0.004
Bromacil	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Mexacarbate	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Monuron/Monuron TCA	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Propoxur	0.004	mg/kg	< 0.004	-	< 0.004	< 0.004
Carbofuran	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Fluometuron	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Carbaryl	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Diuron	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Propachlor	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Siduron	0.02	mg/kg	< 0.02	-	< 0.02	< 0.02
Methiocarb	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04

Client Sample ID			TP07/0.0 Soil L25-Ja0026185	TP07/0.5 Soil L25-Ja0026186	TP08/0.0 Soil L25-Ja0026187	TP08/0.5 Soil L25-Ja0026188
Date Sampled	LOR	Unit	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Test/Reference						
Carbamates in Soil						
Linuron	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Neburon	0.04	mg/kg	< 0.04	-	< 0.04	< 0.04
Ammonia-N	10	mg/kg	< 10	-	< 10	< 10
Chromium (VI)	1	mg/kg	< 1	-	< 1	< 1
Nitrate-N	1	mg/kg	12	-	11	5.3
Nitrite-N	1	mg/kg	< 1	-	< 1	< 1
NOx-N	1	mg/kg	13	-	12	5.4
Phosphorus - Reactive (1:10 aqueous extract)	1	mg/kg	4.0	-	3.5	2.5
Total Kjeldahl Nitrogen	10	mg/kg	510	-	590	420
Total Nitrogen	10	mg/kg	520	-	600	430
Phosphorus	1	mg/kg	150	-	210	84
Heavy Metals						
Arsenic	2	mg/kg	< 2	-	< 2	3.3
Beryllium	2	mg/kg	< 2	-	< 2	< 2
Boron	10	mg/kg	< 10	-	18	60
Cadmium	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Chromium	1	mg/kg	13	-	19	26
Cobalt	5	mg/kg	6.5	-	22	29
Copper	1	mg/kg	4.6	-	12	18
Lead	1	mg/kg	18	-	47	93
Manganese	5	mg/kg	440	-	1400	1200
Mercury	0.02	mg/kg	< 0.02	-	0.03	< 0.02
Nickel	1	mg/kg	3.6	-	15	36
Selenium	2	mg/kg	< 2	-	< 2	6.0
Zinc	5	mg/kg	< 5	-	7.4	6.2
Microbiology						
E. Coli	1	CFU/g	< 10	< 10	< 10	< 10
Enterococci*		CFU/g	< 10	< 10	< 10	< 10
Sample Properties						
% Moisture	1	%	1.3	8.2	1.6	14
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorododecanoic acid (PFDODA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
13C4-PFBA (surr.)	1	%	72	-	70	72
13C5-PFPeA (surr.)	1	%	85	-	87	90
13C5-PFHxA (surr.)	1	%	82	-	88	79
13C4-PFHpA (surr.)	1	%	75	-	87	75
13C8-PFOA (surr.)	1	%	79	-	105	76
13C5-PFNA (surr.)	1	%	85	-	95	85

Client Sample ID			TP07/0.0 Soil L25-Ja0026185	TP07/0.5 Soil L25-Ja0026186	TP08/0.0 Soil L25-Ja0026187	TP08/0.5 Soil L25-Ja0026188
Sample Matrix	LOR	Unit	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Perfluoroalkyl carboxylic acids (PFCAs)						
13C6-PFDA (surr.)	1	%	97	-	92	78
13C2-PFUnDA (surr.)	1	%	78	-	92	79
13C2-PFDoDA (surr.)	1	%	93	-	95	83
13C2-PFTeDA (surr.)	1	%	114	-	147	126
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
13C8-FOSA (surr.)	1	%	77	-	86	80
D3-N-MeFOSA (surr.)	1	%	148	-	151	139
D5-N-EtFOSA (surr.)	1	%	189	-	195	173
D7-N-MeFOSE (surr.)	1	%	103	-	102	75
D9-N-EtFOSE (surr.)	1	%	77	-	84	81
D5-N-EtFOSAA (surr.)	1	%	81	-	86	74
D3-N-MeFOSAA (surr.)	1	%	73	-	81	78
n:2 Fluorotelomer sulfonic acids (n:2 FTSAAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10	-	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	84	-	94	83
13C2-6:2 FTSA (surr.)	1	%	102	-	90	102
13C2-8:2 FTSA (surr.)	1	%	105	-	126	98
13C2-10:2 FTSA (surr.)	1	%	102	-	93	101
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	-	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	-	< 5	< 5
13C3-PFBS (surr.)	1	%	97	-	105	90
18O2-PFHxS (surr.)	1	%	82	-	90	95
13C8-PFOS (surr.)	1	%	89	-	92	82

Client Sample ID			TP07/0.0 Soil L25-Ja0026185	TP07/0.5 Soil L25-Ja0026186	TP08/0.0 Soil L25-Ja0026187	TP08/0.5 Soil L25-Ja0026188
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	-	< 5	< 5
Sum of PFASs (n=30)*	50	ug/kg	< 50	-	< 50	< 50
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	-	< 10	< 10

Client Sample ID			TP09/0.0 Soil L25-Ja0026189	TP09/0.5 Soil L25-Ja0026190	QC101 Soil L25-Ja0026191	QC102 Soil L25-Ja0026192
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	-	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	-	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	-	< 50
TRH C29-C36	50	mg/kg	< 50	54	-	51
TRH C10-C36 (Total)	50	mg/kg	< 50	54	-	51
TRH C6-C10	20	mg/kg	< 20	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	-	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	-	< 50
TRH >C10-C16 less Naphthalene (F2) ^{*N01}	50	mg/kg	< 50	< 50	-	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	-	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	-	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	-	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
BTEX						
4-Bromofluorobenzene (surr.)	1	%	72	76	-	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	-	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5

Client Sample ID			TP09/0.0 Soil L25-Ja0026189	TP09/0.5 Soil L25-Ja0026190	QC101 Soil L25-Ja0026191	QC102 Soil L25-Ja0026192
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	83	84	-	122
p-Terphenyl-d14 (surr.)	1	%	79	148	-	114
OCOP in Soil						
Aldrin	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
alpha-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
beta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
delta-BHC (HCH)	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Bifenthrin	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bromophos Ethyl	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Chlordane	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Chlorpyrifos	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
p,p-DDD	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
p,p-DDE	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
p,p-DDT	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
o,p-DDT	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Endosulfan Sulfate	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Endrin	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Heptachlor Epoxide	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Hexachlorobenzene (HCB)	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Lindane	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Oxychlordane	0.01	mg/kg	< 0.01	< 0.01	-	< 0.01
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Fenitrothion	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Malathion	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Trifluralin	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Carbamates in Soil						
Aminocarb	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Aldicarb Sulfoxide	0.004	mg/kg	< 0.004	< 0.004	-	< 0.004
Carbendazim	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Oxamyl	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Aldicarb Sulfone	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Methomyl	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Fenuron/Fenuron TCA	0.005	mg/kg	< 0.005	< 0.005	-	< 0.005
Thidiazuron	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Aldicarb	0.004	mg/kg	< 0.004	< 0.004	-	< 0.004

Client Sample ID			TP09/0.0 Soil L25-Ja0026189	TP09/0.5 Soil L25-Ja0026190	QC101 Soil L25-Ja0026191	QC102 Soil L25-Ja0026192
Sample Matrix						
Eurofins Sample No.						
Date Sampled			Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Test/Reference	LOR	Unit				
Carbamates in Soil						
Bromacil	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Mexacarbate	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Monuron/Monuron TCA	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Propoxur	0.004	mg/kg	< 0.004	< 0.004	-	< 0.004
Carbofuran	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Fluometuron	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Carbaryl	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Diuron	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Propachlor	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Siduron	0.02	mg/kg	< 0.02	< 0.02	-	< 0.02
Methiocarb	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Linuron	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Neburon	0.04	mg/kg	< 0.04	< 0.04	-	< 0.04
Ammonia-N	10	mg/kg	< 10	< 10	-	< 10
Chromium (VI)	1	mg/kg	< 1	-	-	-
Nitrate-N	1	mg/kg	2.8	1.1	-	1.9
Nitrite-N	1	mg/kg	< 1	< 1	-	< 1
NOx-N	1	mg/kg	2.8	1.5	-	2.4
Phosphorus - Reactive (1:10 aqueous extract)	1	mg/kg	2.3	< 1	-	< 1
Total Kjeldahl Nitrogen	10	mg/kg	410	320	-	280
Total Nitrogen	10	mg/kg	410	320	-	280
Phosphorus	1	mg/kg	63	38	-	35
Heavy Metals						
Arsenic	2	mg/kg	< 2	-	-	-
Beryllium	2	mg/kg	< 2	-	-	-
Boron	10	mg/kg	25	-	-	-
Cadmium	0.1	mg/kg	< 0.1	-	-	-
Chromium	1	mg/kg	19	-	-	-
Cobalt	5	mg/kg	11	-	-	-
Copper	1	mg/kg	11	-	-	-
Lead	1	mg/kg	34	-	-	-
Manganese	5	mg/kg	540	-	-	-
Mercury	0.02	mg/kg	0.02	-	-	-
Nickel	1	mg/kg	12	-	-	-
Selenium	2	mg/kg	< 2	-	-	-
Zinc	5	mg/kg	5.8	-	-	-
Microbiology						
E. Coli	1	CFU/g	< 10	< 10	-	< 10
Enterococci*		CFU/g	< 10	< 10	-	< 10
Sample Properties						
% Moisture	1	%	7.6	12	13	13
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	-	< 5	-

Client Sample ID			TP09/0.0 Soil L25-Ja0026189	TP09/0.5 Soil L25-Ja0026190	QC101 Soil L25-Ja0026191	QC102 Soil L25-Ja0026192
Sample Matrix	LOR	Unit	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C4-PFBA (surr.)	1	%	55	-	69	-
13C5-PFPeA (surr.)	1	%	86	-	83	-
13C5-PFHxA (surr.)	1	%	73	-	68	-
13C4-PFHxA (surr.)	1	%	66	-	75	-
13C8-PFOA (surr.)	1	%	67	-	78	-
13C5-PFNA (surr.)	1	%	97	-	80	-
13C6-PFDA (surr.)	1	%	86	-	80	-
13C2-PFUnDA (surr.)	1	%	101	-	80	-
13C2-PFDoDA (surr.)	1	%	85	-	82	-
13C2-PFTeDA (surr.)	1	%	106	-	120	-
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5	-	< 5	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	-	< 10	-
13C8-FOSA (surr.)	1	%	83	-	75	-
D3-N-MeFOSA (surr.)	1	%	126	-	137	-
D5-N-EtFOSA (surr.)	1	%	187	-	192	-
D7-N-MeFOSE (surr.)	1	%	62	-	84	-
D9-N-EtFOSE (surr.)	1	%	65	-	79	-
D5-N-EtFOSAA (surr.)	1	%	95	-	90	-
D3-N-MeFOSAA (surr.)	1	%	65	-	92	-
n:2 Fluorotelomer sulfonic acids (n:2 FTsAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10	-	< 10	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	-	< 5	-
13C2-4:2 FTSA (surr.)	1	%	88	-	74	-
13C2-6:2 FTSA (surr.)	1	%	135	-	70	-
13C2-8:2 FTSA (surr.)	1	%	130	-	95	-
13C2-10:2 FTSA (surr.)	1	%	142	-	107	-

Client Sample ID			TP09/0.0 Soil L25-Ja0026189	TP09/0.5 Soil L25-Ja0026190	QC101 Soil L25-Ja0026191	QC102 Soil L25-Ja0026192
Sample Matrix			Jan 14, 2025	Jan 14, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	-	< 5	-
Perfluoroctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	-	< 5	-
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	-	< 5	-
13C3-PFBS (surr.)	1	%	91	-	89	-
18O2-PFHxS (surr.)	1	%	77	-	81	-
13C8-PFOS (surr.)	1	%	99	-	78	-
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	-	< 5	-
Sum of PFASs (n=30)*	50	ug/kg	< 50	-	< 50	-
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	-	< 5	-
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	-	< 10	-

Client Sample ID			QC105 Soil L25-Ja0026193
Sample Matrix			Jan 14, 2025
Eurofins Sample No.			
Date Sampled			
Test/Reference	LOR	Unit	
Sample Properties			
% Moisture	1	%	5.1
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5
Perfluoroctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	49
13C5-PFPeA (surr.)	1	%	69
13C5-PFHxA (surr.)	1	%	54
13C4-PFHxA (surr.)	1	%	48
13C8-PFOA (surr.)	1	%	61
13C5-PFNA (surr.)	1	%	51
13C6-PFDA (surr.)	1	%	52
13C2-PFUnDA (surr.)	1	%	73
13C2-PFDoDA (surr.)	1	%	56
13C2-PFTeDA (surr.)	1	%	75

Client Sample ID			QC105
Sample Matrix			Soil
Eurofins Sample No.			L25-Ja0026193
Date Sampled			Jan 14, 2025
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	62
D3-N-MeFOSA (surr.)	1	%	97
D5-N-EtFOSA (surr.)	1	%	136
D7-N-MeFOSE (surr.)	1	%	78
D9-N-EtFOSE (surr.)	1	%	66
D5-N-EtFOSAA (surr.)	1	%	55
D3-N-MeFOSAA (surr.)	1	%	54
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	56
13C2-6:2 FTSA (surr.)	1	%	63
13C2-8:2 FTSA (surr.)	1	%	77
13C2-10:2 FTSA (surr.)	1	%	68
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)* ^{N15}	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)* ^{N15}	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	77
18O2-PFHxS (surr.)	1	%	52
13C8-PFOS (surr.)	1	%	70
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of PFASs (n=30)*	50	ug/kg	< 50
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 23, 2025	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 23, 2025	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 23, 2025	14 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 23, 2025	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Jan 23, 2025	14 Days
OCOP in Soil - Method: ARL003 - OCOP and PCB in Soil	Welshpool	Jan 23, 2025	14 Days
Carbamates in Soil - Method: ARL504 - Carbamates in Soil	Welshpool	Jan 23, 2025	14 Days
Ammonia-N - Method: ARL304 - Ammonia in Soil and Sediment by Discrete Analyser	Welshpool	Jan 23, 2025	7 Days
Chromium (VI) - Method: ARL051 - Hexavalent Chromium in Soil	Welshpool	Feb 03, 2025	28 Days
Nitrate-N - Method: ARL314 - NOx in Soil and Sediment by Discrete Analyser	Welshpool	Jan 23, 2025	7 Days
Nitrite-N - Method: ARL312 - Nitrite in Soil and Sediment by Discrete Analyser	Welshpool	Jan 23, 2025	7 Days
Phosphorus - Reactive (1:10 aqueous extract) - Method: ARL120 - Reactive Phosphorus in Soil	Welshpool	Jan 23, 2025	7 Day
Phosphorus - Method: ARL401/403 - Metals in Soil and Sediment by ICPOES/MS	Welshpool	Jan 23, 2025	7 Days
NEPM 2013 Metals without Cr6+ (As, Be, B, Cd, Co, Cr, Cu, Hg, Pb, Ni, Mn, Se, Zn) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Welshpool	Feb 04, 2025	28 Days
E. Coli - Method: PM 4.2A - Total Coliforms, E.coli and Thermotolerant Coliforms by Membrane Filtration	MicWA	Jan 20, 2025	24 Hours
Enterococci* - Method: PM 4.4 - Faecal Streptococci (Enterococci) by Membrane Filtration	MicWA	Jan 20, 2025	24 Day
NOx-N - Method: ARL314 - NOx in Soil and Sediment by Discrete Analyser	Welshpool	Jan 23, 2025	7 Days
Total Kjeldahl Nitrogen - Method: ARL118 - Total Phosphorus and TKN in Soil and Biosolids	Welshpool	Jan 23, 2025	7 Days
Total Nitrogen - Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP	Welshpool	Jan 20, 2025	7 Days
% Moisture - Method: ARL135 Moisture in Solids	Welshpool	Jan 20, 2025	14 Days
Perfluoroalkyl carboxylic acids (PFCAs) - Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS	Welshpool	Jan 23, 2025	28 Days
Perfluoroalkyl sulfonamido substances - Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS	Welshpool	Jan 23, 2025	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS	Welshpool	Jan 23, 2025	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS	Welshpool	Jan 23, 2025	28 Days
PFASs Summations - Method: Method ARL0510_ARL0511 PFAS in aqueous & solid samples by LC-MS/MS	Welshpool	Jan 23, 2025	



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Project Name: MT WALKER RD HYDEN
Project ID: WAE240126

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Report #:
Phone:
Fax:

WAE240126

1178807

08 6272 0200

08 9285 8444

Received:
Due:
Priority:
Contact Name:

Jan 17, 2025 4:15 PM

Jan 24, 2025

5 Day

Eurofins Analytical Services Manager : [REDACTED]

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370 & 2554

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	TP01/0.0	Jan 13, 2025		Soil	L25-Ja0026173	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	TP01/0.5	Jan 13, 2025		Soil	L25-Ja0026174	X	X		X	X	X	X	X	X	X	X	X	X	X
3	TP02/0.0	Jan 13, 2025		Soil	L25-Ja0026175	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	TP02/0.5	Jan 13, 2025		Soil	L25-Ja0026176		X	X	X					X					
5	TP03/0.0	Jan 13, 2025		Soil	L25-Ja0026177	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	TP03/0.5	Jan 13, 2025		Soil	L25-Ja0026178		X	X	X					X					
7	TP04/0.0	Jan 13, 2025		Soil	L25-Ja0026179	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	TP04/0.5	Jan 13, 2025		Soil	L25-Ja0026180		X	X	X					X					
9	TP05/0.0	Jan 14, 2025		Soil	L25-Ja0026181	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	TP05/0.5	Jan 14, 2025		Soil	L25-Ja0026182	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	TP06/0.0	Jan 14, 2025		Soil	L25-Ja0026183	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	TP06/0.5	Jan 14, 2025		Soil	L25-Ja0026184		X	X	X					X					X
13	TP07/0.0	Jan 14, 2025		Soil	L25-Ja0026185	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	TP07/0.5	Jan 14, 2025		Soil	L25-Ja0026186		X	X	X					X					



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Eurofins Analytical Services Manager : [REDACTED]

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370 & 2554

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	X	X		X	X	X	X	X	X	X	X	X	X	X	
15	TP08/0.0	Jan 14, 2025		Soil	L25-Ja0026187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16	TP08/0.5	Jan 14, 2025		Soil	L25-Ja0026188	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17	TP09/0.0	Jan 14, 2025		Soil	L25-Ja0026189	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18	TP09/0.5	Jan 14, 2025		Soil	L25-Ja0026190	X		X	X	X	X	X	X	X	X	X	X	X	X	
19	QC101	Jan 14, 2025		Soil	L25-Ja0026191									X					X	
20	QC102	Jan 14, 2025		Soil	L25-Ja0026192	X		X	X	X	X	X	X	X	X	X	X	X	X	
21	QC105	Jan 14, 2025		Soil	L25-Ja0026193									X					X	
22	QC106	Jan 14, 2025		Soil	L25-Ja0026194		X													
23	QC301	Jan 13, 2025		Water	L25-Ja0026195									X		X		X	X	
24	QC302	Jan 14, 2025		Water	L25-Ja0026196									X		X		X	X	
25	QC401	Jan 14, 2025		Water	L25-Ja0026197									X		X		X	X	
Test Counts						14	18	18	18	14	14	14	14	21	17	14	3	14	14	3
																	13			

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ppm: parts per million

µg/L: micrograms per litre

ppb: parts per billion

%: Percentage

org/100 mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

CFU: Colony Forming Unit

Colour: Pt-Co Units (CU)

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBT	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

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

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

- | | |
|--------------------------------------|----------------------------|
| Results <10 times the LOR: | No Limit |
| Results between 10-20 times the LOR: | RPD must lie between 0-50% |
| Results >20 times the LOR: | RPD must lie between 0-30% |

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

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
OCOP in Soil							
Aldrin	mg/kg	< 0.01			0.01	Pass	
alpha-BHC (HCH)	mg/kg	< 0.01			0.01	Pass	
beta-BHC (HCH)	mg/kg	< 0.01			0.01	Pass	
delta-BHC (HCH)	mg/kg	< 0.01			0.01	Pass	
Bifenthrin	mg/kg	< 0.2			0.2	Pass	
Bromophos Ethyl	mg/kg	< 0.05			0.05	Pass	
Chlordane	mg/kg	< 0.01			0.01	Pass	
Chlorpyrifos	mg/kg	< 0.02			0.02	Pass	
Dieldrin	mg/kg	< 0.01			0.01	Pass	
p,p-DDD	mg/kg	< 0.01			0.01	Pass	
p,p-DDE	mg/kg	< 0.01			0.01	Pass	
p,p-DDT	mg/kg	< 0.01			0.01	Pass	
o,p-DDT	mg/kg	< 0.01			0.01	Pass	
Endosulfan I	mg/kg	< 0.01			0.01	Pass	
Endosulfan II	mg/kg	< 0.01			0.01	Pass	
Endosulfan Sulfate	mg/kg	< 0.01			0.01	Pass	
Endrin	mg/kg	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.01			0.01	Pass	
Heptachlor Epoxide	mg/kg	< 0.01			0.01	Pass	
Hexachlorobenzene (HCB)	mg/kg	< 0.01			0.01	Pass	
Lindane	mg/kg	< 0.01			0.01	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Oxychlordane	mg/kg	< 0.01			0.01	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.05			0.05	Pass	
Fenitrothion	mg/kg	< 0.1			0.1	Pass	
Malathion	mg/kg	< 0.1			0.1	Pass	
Trifluralin	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Carbamates in Soil							
Aminocarb	mg/kg	< 0.04			0.04	Pass	
Aldicarb Sulfoxide	mg/kg	< 0.004			0.004	Pass	
Carbendazim	mg/kg	< 0.04			0.04	Pass	
Oxamyl	mg/kg	< 0.04			0.04	Pass	
Aldicarb Sulfone	mg/kg	< 0.02			0.02	Pass	
Methomyl	mg/kg	< 0.04			0.04	Pass	
Fenuron/Fenuron TCA	mg/kg	< 0.005			0.005	Pass	
Thidiazuron	mg/kg	< 0.04			0.04	Pass	
Aldicarb	mg/kg	< 0.004			0.004	Pass	
Bromacil	mg/kg	< 0.04			0.04	Pass	
Mexacarbate	mg/kg	< 0.02			0.02	Pass	
Monuron/Monuron TCA	mg/kg	< 0.04			0.04	Pass	
Propoxur	mg/kg	< 0.004			0.004	Pass	
Carbofuran	mg/kg	< 0.04			0.04	Pass	
Fluometuron	mg/kg	< 0.02			0.02	Pass	
Carbaryl	mg/kg	< 0.05			0.05	Pass	
Diuron	mg/kg	< 0.04			0.04	Pass	
Propachlor	mg/kg	< 0.02			0.02	Pass	
Siduron	mg/kg	< 0.02			0.02	Pass	
Methiocarb	mg/kg	< 0.04			0.04	Pass	
Linuron	mg/kg	< 0.04			0.04	Pass	
Neburon	mg/kg	< 0.04			0.04	Pass	
Method Blank							
Ammonia-N	mg/kg	< 10			10	Pass	
Chromium (VI)	mg/kg	< 1			1	Pass	
Nitrate-N	mg/kg	< 1			1	Pass	
Nitrite-N	mg/kg	< 1			1	Pass	
NOx-N	mg/kg	< 1			1	Pass	
Phosphorus - Reactive (1:10 aqueous extract)	mg/kg	< 1			1	Pass	
Total Kjeldahl Nitrogen	mg/kg	< 10			10	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Boron	mg/kg	< 10			10	Pass	
Cadmium	mg/kg	< 0.1			0.1	Pass	
Chromium	mg/kg	< 1			1	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 1			1	Pass	
Lead	mg/kg	< 1			1	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.02			0.02	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel	mg/kg	< 1			1	Pass	
Selenium	mg/kg	< 2			2	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluoroctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluoroctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluoronananesulfonic acid (PFNS)*	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPs)*	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluoroctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
PFASs Summations							
Sum of PFASs (n=30)*	ug/kg	< 50			50	Pass	
Method Blank							
Heavy Metals							
Beryllium	mg/kg	< 2			2	Pass	
Method Blank							
Nitrate-N	mg/kg	< 1			1	Pass	
Nitrite-N	mg/kg	< 1			1	Pass	
NOx-N	mg/kg	< 1			1	Pass	
Method Blank							
Nitrite-N	mg/kg	< 1			1	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ammonia-N	mg/kg	< 10			10	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Boron	mg/kg	< 10			10	Pass	
Cadmium	mg/kg	< 0.1			0.1	Pass	
Chromium	mg/kg	< 1			1	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 1			1	Pass	
Lead	mg/kg	< 1			1	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.02			0.02	Pass	
Nickel	mg/kg	< 1			1	Pass	
Selenium	mg/kg	< 2			2	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Phosphorus - Reactive (1:10 aqueous extract)	mg/kg	< 1			1	Pass	
Method Blank							
Ammonia-N	mg/kg	< 10			10	Pass	
Nitrate-N	mg/kg	< 1			1	Pass	
Nitrite-N	mg/kg	< 1			1	Pass	
NOx-N	mg/kg	< 1			1	Pass	
Phosphorus - Reactive (1:10 aqueous extract)	mg/kg	< 1			1	Pass	
Phosphorus	mg/kg	< 1			1	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Nitrate-N	mg/kg	< 1			1	Pass	
Nitrite-N	mg/kg	< 1			1	Pass	
NOx-N	mg/kg	< 1			1	Pass	
Total Kjeldahl Nitrogen	mg/kg	< 10			10	Pass	
Phosphorus	mg/kg	< 1			1	Pass	
Method Blank							
Nitrite-N	mg/kg	< 1			1	Pass	
Phosphorus	mg/kg	< 1			1	Pass	
Method Blank							
Ammonia-N	mg/kg	< 10			10	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	92			70-130	Pass	
TRH C6-C10	%	87			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	
Toluene	%	85			70-130	Pass	
Ethylbenzene	%	106			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	99			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total*	%	99			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	95			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	97			70-130	Pass	
Anthracene	%	107			70-130	Pass	
Benz(a)anthracene	%	103			70-130	Pass	
Benzo(a)pyrene	%	104			70-130	Pass	
Benzo(b&i;)fluoranthene	%	92			70-130	Pass	
Benzo(g.h.i;)perylene	%	123			70-130	Pass	
Benzo(k)fluoranthene	%	93			70-130	Pass	
Chrysene	%	98			70-130	Pass	
Dibenz(a.h)anthracene	%	102			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	97			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	101			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
Phenanthrene	%	97			70-130	Pass	
Pyrene	%	101			70-130	Pass	
LCS - % Recovery							
Carbamates in Soil							
Aminocarb	%	95			60-120	Pass	
Aldicarb Sulfoxide	%	104			60-120	Pass	
Carbendazim	%	91			60-120	Pass	
Oxamyl	%	106			60-120	Pass	
Aldicarb Sulfone	%	116			60-120	Pass	
Methomyl	%	98			60-120	Pass	
Fenuron/Fenuron TCA	%	102			60-120	Pass	
Thidiazuron	%	97			60-120	Pass	
Aldicarb	%	103			60-120	Pass	
Bromacil	%	92			60-120	Pass	
Mexacarbate	%	111			60-120	Pass	
Monuron/Monuron TCA	%	98			60-120	Pass	
Propoxur	%	95			60-120	Pass	
Carbofuran	%	102			60-120	Pass	
Fluometuron	%	105			60-120	Pass	
Carbaryl	%	101			60-120	Pass	
Diuron	%	107			60-120	Pass	
Propachlor	%	96			60-120	Pass	
Siduron	%	98			60-120	Pass	
Methiocarb	%	117			60-120	Pass	
Linuron	%	115			60-120	Pass	
Neburon	%	116			60-120	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	120			80-120	Pass	
Boron	%	118			80-120	Pass	
Cadmium	%	104			80-120	Pass	
Chromium	%	100			80-120	Pass	
Cobalt	%	103			80-120	Pass	
Copper	%	103			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Lead	%	103			80-120	Pass	
Manganese	%	97			80-120	Pass	
Mercury	%	102			80-120	Pass	
Nickel	%	101			80-120	Pass	
Selenium	%	105			80-120	Pass	
Zinc	%	109			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	87			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	88			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	89			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	84			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	81			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	86			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	86			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	92			50-150	Pass	
Perfluorododecanoic acid (PFDDoDA)	%	93			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	84			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	94			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	103			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	117			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	93			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	81			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	98			50-150	Pass	
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA)	%	83			50-150	Pass	
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA)	%	83			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	94			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	84			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	91			50-150	Pass	
Perfluoronananesulfonic acid (PFNS)*	%	88			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	%	87			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	89			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	89			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	108			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	88			50-150	Pass	
LCS - % Recovery							
Heavy Metals							
Beryllium	%	115			80-120	Pass	
LCS - % Recovery							
Heavy Metals							
Cadmium	%	118			80-120	Pass	
Chromium	%	114			80-120	Pass	
Manganese	%	111			80-120	Pass	
Mercury	%	114			80-120	Pass	
Nickel	%	116			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Selenium	%	111			80-120	Pass	
LCS - % Recovery							
Phosphorus	%	82			80-120	Pass	
LCS - % Recovery							
Phosphorus	%	112			80-120	Pass	
LCS - % Recovery							
OCOP in Soil							
Aldrin	%	91			60-120	Pass	
alpha-BHC (HCH)	%	90			60-120	Pass	
beta-BHC (HCH)	%	116			60-120	Pass	
delta-BHC (HCH)	%	102			60-120	Pass	
Dieldrin	%	97			60-120	Pass	
p,p-DDT	%	99			60-120	Pass	
Endosulfan II	%	108			60-120	Pass	
Endrin	%	94			60-120	Pass	
Heptachlor	%	89			60-120	Pass	
Heptachlor Epoxide	%	112			60-120	Pass	
Hexachlorobenzene (HCB)	%	114			60-120	Pass	
Lindane	%	99			60-120	Pass	
Methoxychlor	%	90			60-120	Pass	
Oxychlordane	%	90			60-120	Pass	
LCS - % Recovery							
Phosphorus	%	109			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C10-C14	%	127			70-130	Pass	
TRH >C10-C16	%	130			70-130	Pass	
LCS - % Recovery							
Phosphorus	%	108			80-120	Pass	
LCS - % Recovery							
Phosphorus	%	99			80-120	Pass	
CRM - % Recovery							
Nitrite-N	%	97			80-120	Pass	
Total Kjeldahl Nitrogen	%	112			80-120	Pass	
CRM - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	116			70-130	Pass	
Perfluoropentanoic acid (PFPeA)	%	93			70-130	Pass	
Perfluorohexanoic acid (PFHxA)	%	111			70-130	Pass	
Perfluoroheptanoic acid (PFHpA)	%	102			70-130	Pass	
Perfluorooctanoic acid (PFOA)	%	107			70-130	Pass	
Perfluorononanoic acid (PFNA)	%	113			70-130	Pass	
Perfluorodecanoic acid (PFDA)	%	113			70-130	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95			70-130	Pass	
Perfluorododecanoic acid (PFDoDA)	%	97			70-130	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	95			70-130	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	99			70-130	Pass	
CRM - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	93			70-130	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	119			70-130	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	109			70-130	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	107			70-130	Pass	
CRM - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ammonia-N	%	102			80-120	Pass	
Nitrate-N	%	103			80-120	Pass	
NOx-N	%	106			80-120	Pass	
Phosphorus - Reactive (1:10 aqueous extract)	%	109			80-120	Pass	
CRM - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	110			80-120	Pass	
Acenaphthylene	%	86			80-120	Pass	
Anthracene	%	92			80-120	Pass	
Benz(a)anthracene	%	107			70-130	Pass	
Benzo(a)pyrene	%	106			80-120	Pass	
Benzo(b&j)fluoranthene	%	109			80-120	Pass	
Benzo(g.h.i)perylene	%	108			80-120	Pass	
Benzo(k)fluoranthene	%	102			80-120	Pass	
Chrysene	%	113			80-120	Pass	
Dibenz(a.h)anthracene	%	109			80-120	Pass	
Fluoranthene	%	109			80-120	Pass	
Fluorene	%	97			80-120	Pass	
Indeno(1,2,3-cd)pyrene	%	107			80-120	Pass	
Naphthalene	%	101			70-130	Pass	
Phenanthrene	%	107			80-120	Pass	
Pyrene	%	114			80-120	Pass	
CRM - % Recovery							
Ammonia-N	%	102			80-120	Pass	
Nitrate-N	%	106			80-120	Pass	
NOx-N	%	106			80-120	Pass	
Phosphorus - Reactive (1:10 aqueous extract)	%	109			80-120	Pass	
CRM - % Recovery							
Nitrite-N	%	97			80-120	Pass	
CRM - % Recovery							
Nitrite-N	%	98			80-120	Pass	
Phosphorus	%	114			80-120	Pass	
CRM - % Recovery							
Ammonia-N	%	103			80-120	Pass	
Nitrate-N	%	102			80-120	Pass	
NOx-N	%	118			80-120	Pass	
Phosphorus - Reactive (1:10 aqueous extract)	%	108			80-120	Pass	
CRM - % Recovery							
Heavy Metals							
Cadmium	%	96			80-120	Pass	
Chromium	%	103			80-120	Pass	
Lead	%	99			80-120	Pass	
CRM - % Recovery							
Heavy Metals							
Arsenic	%	109			80-120	Pass	
Beryllium	%	97			80-120	Pass	
Boron	%	104			80-120	Pass	
Cadmium	%	99			80-120	Pass	
Chromium	%	103			80-120	Pass	
Cobalt	%	101			80-120	Pass	
Copper	%	106			80-120	Pass	
Lead	%	98			80-120	Pass	
Manganese	%	100			80-120	Pass	
Nickel	%	101			80-120	Pass	

Test		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Selenium		%	103			80-120	Pass	
Zinc		%	106			90-110	Pass	
CRM - % Recovery								
Phosphorus		%	117			80-120	Pass	
CRM - % Recovery								
Total Kjeldahl Nitrogen		%	102			80-120	Pass	
Phosphorus		%	113			80-120	Pass	
CRM - % Recovery								
Phosphorus		%	99			80-120	Pass	
CRM - % Recovery								
Ammonia-N		%	104			80-120	Pass	
Nitrate-N		%	106			80-120	Pass	
NOx-N		%	106			80-120	Pass	
Phosphorus - Reactive (1:10 aqueous extract)		%	108			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
OCOP in Soil				Result 1				
Aldrin	L25-Ja0027250	NCP	%	106			60-120	Pass
Dieldrin	L25-Ja0027250	NCP	%	114			60-120	Pass
p,p-DDT	L25-Ja0027250	NCP	%	119			60-120	Pass
Endrin	L25-Ja0027250	NCP	%	117			60-120	Pass
Heptachlor	L25-Ja0027250	NCP	%	108			60-120	Pass
Lindane	L25-Ja0027250	NCP	%	94			60-120	Pass
Spike - % Recovery								
Carbamates in Soil				Result 1				
Aminocarb	L25-Ja0026174	CP	%	84			60-120	Pass
Aldicarb Sulfoxide	L25-Ja0026174	CP	%	98			60-120	Pass
Carbendazim	L25-Ja0026174	CP	%	84			60-120	Pass
Oxamyl	L25-Ja0026174	CP	%	104			60-120	Pass
Aldicarb Sulfone	L25-Ja0026174	CP	%	107			60-120	Pass
Methomyl	L25-Ja0026174	CP	%	99			60-120	Pass
Fenuron/Fenuron TCA	L25-Ja0026174	CP	%	94			60-120	Pass
Thidiazuron	L25-Ja0026174	CP	%	92			60-120	Pass
Aldicarb	L25-Ja0026174	CP	%	92			60-120	Pass
Bromacil	L25-Ja0026174	CP	%	97			60-120	Pass
Mexacarbate	L25-Ja0026174	CP	%	102			60-120	Pass
Monuron/Monuron TCA	L25-Ja0026174	CP	%	92			60-120	Pass
Propoxur	L25-Ja0026174	CP	%	91			60-120	Pass
Carbofuran	L25-Ja0026174	CP	%	93			60-120	Pass
Fluometuron	L25-Ja0026174	CP	%	90			60-120	Pass
Carbaryl	L25-Ja0026174	CP	%	89			60-120	Pass
Diuron	L25-Ja0026174	CP	%	85			60-120	Pass
Propachlor	L25-Ja0026174	CP	%	85			60-120	Pass
Siduron	L25-Ja0026174	CP	%	86			60-120	Pass
Methiocarb	L25-Ja0026174	CP	%	119			60-120	Pass
Linuron	L25-Ja0026174	CP	%	92			60-120	Pass
Neburon	L25-Ja0026174	CP	%	96			60-120	Pass
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	L25-Ja0026174	CP	%	124			75-125	Pass
Beryllium	L25-Ja0026174	CP	%	125			75-125	Pass
Boron	L25-Ja0026174	CP	%	124			75-125	Pass
Cadmium	L25-Ja0026174	CP	%	124			75-125	Pass
Chromium	L25-Ja0026174	CP	%	119			75-125	Pass

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cobalt	L25-Ja0026174	CP	%	121			75-125	Pass	
Copper	L25-Ja0026174	CP	%	116			75-125	Pass	
Lead	L25-Ja0026174	CP	%	124			75-125	Pass	
Manganese	L25-Ja0026174	CP	%	124			75-125	Pass	
Mercury	L25-Ja0026174	CP	%	119			75-125	Pass	
Nickel	L25-Ja0026174	CP	%	125			75-125	Pass	
Selenium	L25-Ja0026174	CP	%	106			75-125	Pass	
Zinc	L25-Ja0026174	CP	%	120			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	L25-Ja0026175	CP	%	94			70-130	Pass	
TRH C6-C10	L25-Ja0026175	CP	%	90			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	L25-Ja0026175	CP	%	92			70-130	Pass	
Toluene	L25-Ja0026175	CP	%	91			70-130	Pass	
Ethylbenzene	L25-Ja0026175	CP	%	115			70-130	Pass	
m&p-Xylenes	L25-Ja0026175	CP	%	106			70-130	Pass	
o-Xylene	L25-Ja0026175	CP	%	107			70-130	Pass	
Xylenes - Total*	L25-Ja0026175	CP	%	106			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	L25-Ja0026175	CP	%	102			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	L25-Ja0026175	CP	%	91			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	L25-Ja0026175	CP	%	81			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	L25-Ja0026175	CP	%	97			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	L25-Ja0026175	CP	%	88			50-150	Pass	
Perfluoroctanoic acid (PFOA)	L25-Ja0026175	CP	%	94			50-150	Pass	
Perfluorononanoic acid (PFNA)	L25-Ja0026175	CP	%	95			50-150	Pass	
Perfluorodecanoic acid (PFDA)	L25-Ja0026175	CP	%	94			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	L25-Ja0026175	CP	%	90			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	L25-Ja0026175	CP	%	96			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	L25-Ja0026175	CP	%	95			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	L25-Ja0026175	CP	%	104			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluoroctane sulfonamide (FOSA)	L25-Ja0026175	CP	%	93			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L25-Ja0026175	CP	%	109			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L25-Ja0026175	CP	%	95			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L25-Ja0026175	CP	%	83			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L25-Ja0026175	CP	%	81			50-150	Pass	
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA)	L25-Ja0026175	CP	%	99			50-150	Pass	
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA)	L25-Ja0026175	CP	%	101			50-150	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L25-Ja0026175	CP	%	103			50-150	Pass	
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSA)	L25-Ja0026175	CP	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L25-Ja0026175	CP	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L25-Ja0026175	CP	%	89			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	L25-Ja0026175	CP	%	87			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)*	L25-Ja0026175	CP	%	97			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)*	L25-Ja0026175	CP	%	90			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	L25-Ja0026175	CP	%	91			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	L25-Ja0026175	CP	%	93			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	L25-Ja0026175	CP	%	97			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	L25-Ja0026175	CP	%	105			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	L25-Ja0026175	CP	%	92			50-150	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	L25-Ja0026183	CP	%	96			70-130	Pass	
Acenaphthylene	L25-Ja0026183	CP	%	95			70-130	Pass	
Anthracene	L25-Ja0026183	CP	%	93			70-130	Pass	
Benz(a)anthracene	L25-Ja0026183	CP	%	94			70-130	Pass	
Benzo(a)pyrene	L25-Ja0026183	CP	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	L25-Ja0026183	CP	%	109			70-130	Pass	
Benzo(g.h.i)perylene	L25-Ja0026183	CP	%	108			70-130	Pass	
Benzo(k)fluoranthene	L25-Ja0026183	CP	%	88			70-130	Pass	
Chrysene	L25-Ja0026183	CP	%	114			70-130	Pass	
Dibenz(a.h)anthracene	L25-Ja0026183	CP	%	87			70-130	Pass	
Fluoranthene	L25-Ja0026183	CP	%	101			70-130	Pass	
Fluorene	L25-Ja0026183	CP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	L25-Ja0026183	CP	%	86			70-130	Pass	
Naphthalene	L25-Ja0026183	CP	%	95			70-130	Pass	
Phenanthrene	L25-Ja0026183	CP	%	104			70-130	Pass	
Pyrene	L25-Ja0026183	CP	%	103			70-130	Pass	
Spike - % Recovery									
OCOP in Soil				Result 1					
alpha-BHC (HCH)	L25-Ja0050409	NCP	%	94			60-120	Pass	
beta-BHC (HCH)	L25-Ja0050409	NCP	%	89			60-120	Pass	
delta-BHC (HCH)	L25-Ja0050409	NCP	%	96			60-120	Pass	
Endosulfan II	L25-Ja0050409	NCP	%	83			60-120	Pass	
Heptachlor Epoxide	L25-Ja0050409	NCP	%	120			60-120	Pass	
Hexachlorobenzene (HCB)	L25-Ja0050409	NCP	%	104			60-120	Pass	
Methoxychlor	L25-Ja0050409	NCP	%	103			60-120	Pass	
Oxychlordane	L25-Ja0050409	NCP	%	92			60-120	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heavy Metals				Result 1					
Arsenic	L25-Ja0026185	CP	%	113			75-125	Pass	
Beryllium	L25-Ja0026185	CP	%	123			75-125	Pass	
Boron	L25-Ja0026185	CP	%	119			75-125	Pass	
Cadmium	L25-Ja0026185	CP	%	123			75-125	Pass	
Chromium	L25-Ja0026185	CP	%	124			75-125	Pass	
Copper	L25-Ja0026185	CP	%	124			75-125	Pass	
Nickel	L25-Ja0026185	CP	%	124			75-125	Pass	
Selenium	L25-Ja0026185	CP	%	117			75-125	Pass	
Spike - % Recovery				Result 1					
Heavy Metals				Result 1					
Arsenic	L25-Ja0026187	CP	%	115			75-125	Pass	
Beryllium	L25-Ja0026187	CP	%	120			75-125	Pass	
Boron	L25-Ja0026187	CP	%	107			75-125	Pass	
Chromium	L25-Ja0026187	CP	%	123			75-125	Pass	
Cobalt	L25-Ja0026187	CP	%	125			75-125	Pass	
Copper	L25-Ja0026187	CP	%	123			75-125	Pass	
Nickel	L25-Ja0026187	CP	%	121			75-125	Pass	
Selenium	L25-Ja0026187	CP	%	118			75-125	Pass	
Zinc	L25-Ja0026187	CP	%	123			75-125	Pass	
Spike - % Recovery				Result 1					
Phosphorus	L25-Ja0026188	CP	%	103			80-120	Pass	
Spike - % Recovery				Result 1					
Heavy Metals				Result 1					
Arsenic	L25-Ja0026188	CP	%	98			75-125	Pass	
Boron	L25-Ja0026188	CP	%	89			75-125	Pass	
Cadmium	L25-Ja0026188	CP	%	120			75-125	Pass	
Chromium	L25-Ja0026188	CP	%	111			75-125	Pass	
Cobalt	L25-Ja0026188	CP	%	120			75-125	Pass	
Copper	L25-Ja0026188	CP	%	114			75-125	Pass	
Lead	L25-Ja0026188	CP	%	117			75-125	Pass	
Nickel	L25-Ja0026188	CP	%	111			75-125	Pass	
Selenium	L25-Ja0026188	CP	%	101			75-125	Pass	
Zinc	L25-Ja0026188	CP	%	118			75-125	Pass	
Spike - % Recovery				Result 1					
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	L25-Ja0026190	CP	%	111			70-130	Pass	
TRH >C10-C16	L25-Ja0026190	CP	%	112			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate				Result 1					
OCOP in Soil				Result 1	Result 2	RPD			
Aldrin	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
alpha-BHC (HCH)	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
beta-BHC (HCH)	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
delta-BHC (HCH)	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Bifenthrin	L25-Ja0027249	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bromophos Ethyl	L25-Ja0027249	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordane	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Chlorpyrifos	L25-Ja0027249	NCP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Dieldrin	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
p,p-DDD	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
p,p-DDE	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
p,p-DDT	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
OCOP in Soil									
o,p-DDT	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endosulfan I	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endosulfan II	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endosulfan Sulfate	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endrin	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor Epoxide	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Hexachlorobenzene (HCB)	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Lindane	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Methoxychlor	L25-Ja0027249	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Oxychlordane	L25-Ja0027249	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Diazinon	L25-Ja0027249	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	L25-Ja0027249	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Fenitrothion	L25-Ja0027249	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Malathion	L25-Ja0027249	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Trifluralin	L25-Ja0027249	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Carbamates in Soil									
Aminocarb	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Aldicarb Sulfoxide	L25-Ja0026173	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass	
Carbendazim	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Oxamyl	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Aldicarb Sulfone	L25-Ja0026173	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Methomyl	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Fenuron/Fenuron TCA	L25-Ja0026173	CP	mg/kg	< 0.005	< 0.005	<1	30%	Pass	
Thidiazuron	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Aldicarb	L25-Ja0026173	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass	
Bromacil	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Mexacarbate	L25-Ja0026173	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Monuron/Monuron TCA	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Propoxur	L25-Ja0026173	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass	
Carbofuran	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Fluometuron	L25-Ja0026173	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Carbaryl	L25-Ja0026173	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Diuron	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Propachlor	L25-Ja0026173	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Siduron	L25-Ja0026173	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass	
Methiocarb	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Linuron	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Neburon	L25-Ja0026173	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Phosphorus	L25-Ja0026173	CP	mg/kg	29	27	8.0	20%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)					Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)					Result 1	Result 2	RPD	
Perfluoroundecanoic acid (PFUnDA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDsDA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTsDA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTsDA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances					Result 1	Result 2	RPD	
Perfluoroctane sulfonamide (FOSA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA)	L25-Ja0026173	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA)	L25-Ja0026173	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					Result 1	Result 2	RPD	
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSAs)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSAs)	L25-Ja0026173	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSAs)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSAs)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)					Result 1	Result 2	RPD	
Perfluorobutanesulfonic acid (PFBS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)*	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)*	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroctanesulfonic acid (PFOS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	L25-Ja0026173	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons					Result 1	Result 2	RPD	
TRH C6-C9	L25-Ja0026174	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	L25-Ja0026174	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	L25-Ja0026174	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	L25-Ja0026174	CP	mg/kg	< 50	< 50	<1	30%	Pass

Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C10	L25-Ja0026174	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH >C10-C16	L25-Ja0026174	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	L25-Ja0026174	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	L25-Ja0026174	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	L25-Ja0026174	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	L25-Ja0026174	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	L25-Ja0026174	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	L25-Ja0026174	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	L25-Ja0026174	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total*	L25-Ja0026174	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	L25-Ja0026174	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	L25-Ja0026177	CP	%	5.8	4.8	18	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Phosphorus	L25-Ja0026187	CP	mg/kg	210	220	4.0	20%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	L25-Ja0026187	CP	%	1.6	1.5	5.0	30%	Pass
Duplicate								
Carbamates in Soil				Result 1	Result 2	RPD		
Aminocarb	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Aldicarb Sulfoxide	L25-Ja0026188	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass
Carbendazim	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Oxamyl	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Aldicarb Sulfone	L25-Ja0026188	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass
Methomyl	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Fenuron/Fenuron TCA	L25-Ja0026188	CP	mg/kg	< 0.005	< 0.005	<1	30%	Pass
Thidiazuron	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Aldicarb	L25-Ja0026188	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass
Bromacil	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass

Duplicate								
Carbamates in Soil				Result 1	Result 2	RPD		
Mexacarbate	L25-Ja0026188	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass
Monuron/Monuron TCA	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Propoxur	L25-Ja0026188	CP	mg/kg	< 0.004	< 0.004	<1	30%	Pass
Carbofuran	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Fluometuron	L25-Ja0026188	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass
Carbaryl	L25-Ja0026188	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Diuron	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Propachlor	L25-Ja0026188	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass
Siduron	L25-Ja0026188	CP	mg/kg	< 0.02	< 0.02	<1	30%	Pass
Methiocarb	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Linuron	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Neburon	L25-Ja0026188	CP	mg/kg	< 0.04	< 0.04	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Total Kjeldahl Nitrogen	L25-Ja0026188	CP	mg/kg	420	400	6.0	20%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroctanoic acid (PFOA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluoroctane sulfonamide (FOSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluoroctanesulfonamidoacetic acid (N-EtFOSAA)	L25-Ja0026188	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluoroctanesulfonamidoacetic acid (N-MeFOSAA)	L25-Ja0026188	CP	ug/kg	< 10	< 10	<1	30%	Pass

Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)			Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluoroctanesulfonic acid(6:2 FTSA)	L25-Ja0026188	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)			Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)*	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)*	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	L25-Ja0026188	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons			Result 1	Result 2	RPD			
TRH C10-C14	L25-Ja0026189	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	L25-Ja0026189	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	L25-Ja0026189	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	L25-Ja0026189	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	L25-Ja0026189	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	L25-Ja0026189	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons			Result 1	Result 2	RPD			
Acenaphthene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	L25-Ja0026189	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
			Result 1	Result 2	RPD			
Total Kjeldahl Nitrogen	L25-Ja0026192	CP	mg/kg	280	310	12	20%	Pass

Comments

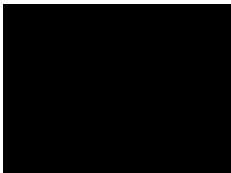
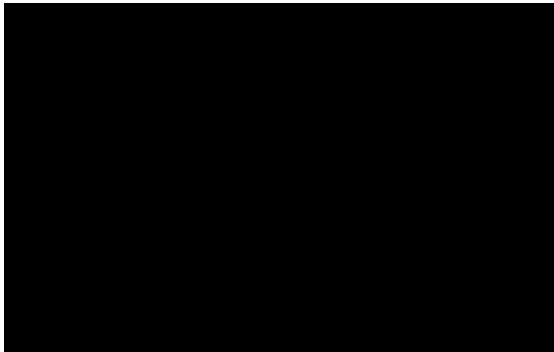
Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q05	The matrix spike concentration is less than five times the background concentration in the sample - therefore the spike recovery cannot be determined
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:



Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request

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Galt Environment P/L
50 Edward Street
Osborne Park
WA 6017



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Accreditation Number 2377
Site Number 2370 & 2554

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Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: - ALL SRA/Results

Report 1178807-W
Project name MT WALKER RD HYDEN
Project ID WAE240126
Received Date Jan 17, 2025

Client Sample ID			QC301 Water L25-Ja0026195	QC302 Water L25-Ja0026196	QC401 Water L25-Ja0026197
Sample Matrix	LOR	Unit	Jan 13, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.					
Date Sampled					
Test/Reference					
Total Recoverable Hydrocarbons					
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C15-C28	0.04	mg/L	< 0.04	< 0.04	< 0.04
TRH C29-C36	0.04	mg/L	< 0.04	< 0.04	< 0.04
TRH C10-C36 (Total)	0.04	mg/L	< 0.04	< 0.04	< 0.04
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2)* ^{N01}	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH >C16-C34	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH >C34-C40	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH >C10-C40 (total)*	0.05	mg/L	< 0.05	< 0.05	< 0.05
BTEX					
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003
BTEX					
4-Bromofluorobenzene (surr.)	1	%	94	97	93
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene ^{N02}	0.001	mg/L	< 0.001	< 0.001	< 0.001
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.001	mg/L	< 0.001	< 0.001	< 0.001
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001

Client Sample ID			QC301 Water L25-Ja0026195	QC302 Water L25-Ja0026196	QC401 Water L25-Ja0026197
Sample Matrix			Jan 13, 2025	Jan 14, 2025	Jan 14, 2025
Eurofins Sample No.					
Date Sampled					
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	82	109	75
p-Terphenyl-d14 (surr.)	1	%	60	83	55
OCOP in Water					
Aldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001
alpha-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001
beta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001
delta-BHC (HCH)	0.001	ug/L	< 0.001	< 0.001	< 0.001
Bifenthrin	0.05	ug/L	< 0.05	< 0.05	< 0.05
Bromophos Ethyl	0.005	ug/L	< 0.005	< 0.005	< 0.005
Chlordane	0.002	ug/L	< 0.002	< 0.002	< 0.002
Chlorothalonil	0.01	ug/L	< 0.01	< 0.01	< 0.01
Chlorpyrifos	0.005	ug/L	< 0.005	< 0.005	< 0.005
Diazinon	0.01	ug/L	< 0.01	< 0.01	< 0.01
Dieldrin	0.001	ug/L	< 0.001	< 0.001	< 0.001
Endosulfan I	0.001	ug/L	< 0.001	< 0.001	< 0.001
Endosulfan II	0.001	ug/L	< 0.001	< 0.001	< 0.001
Endosulfan Sulfate	0.001	ug/L	< 0.001	< 0.001	< 0.001
Endrin	0.01	ug/L	< 0.01	< 0.01	< 0.01
Ethion	0.01	ug/L	< 0.01	< 0.01	< 0.01
Fenitrothion	0.01	ug/L	< 0.01	< 0.01	< 0.01
Fipronil	0.02	ug/L	< 0.02	< 0.02	< 0.02
Hexachlorobenzene (HCB)	0.001	ug/L	< 0.001	< 0.001	< 0.001
Heptachlor Epoxide	0.001	ug/L	< 0.001	< 0.001	< 0.001
Heptachlor	0.001	ug/L	< 0.001	< 0.001	< 0.001
Lindane	0.001	ug/L	< 0.001	< 0.001	< 0.001
Malathion	0.01	ug/L	< 0.01	< 0.01	< 0.01
Methoxychlor	0.02	ug/L	< 0.02	< 0.02	< 0.02
o,p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001
Oxychlordane	0.001	ug/L	< 0.001	< 0.001	< 0.001
p,p-DDD	0.001	ug/L	< 0.001	< 0.001	< 0.001
p,p-DDE	0.001	ug/L	< 0.001	< 0.001	< 0.001
p,p-DDT	0.001	ug/L	< 0.001	< 0.001	< 0.001
Parathion Ethyl	0.02	ug/L	< 0.02	< 0.02	< 0.02
Parathion Methyl	0.02	ug/L	< 0.02	< 0.02	< 0.02
Trifluralin	0.01	ug/L	< 0.01	< 0.01	< 0.01
Vinclozolin	0.02	ug/L	< 0.02	< 0.02	< 0.02
Carbamates					
Aldicarb	1	ug/L	< 1	< 1	< 1
Aldicarb Sulfone	1	ug/L	< 1	< 1	< 1
Aldicarb Sulfoxide	1	ug/L	< 1	< 1	< 1
Aminocarb	1	ug/L	< 1	< 1	< 1
Bromacil	2	ug/L	< 2	< 2	< 2

Client Sample ID			QC301 Water L25-Ja0026195	QC302 Water L25-Ja0026196	QC401 Water L25-Ja0026197
Sample Matrix					
Eurofins Sample No.					
Date Sampled					
Test/Reference	LOR	Unit			
Carbamates					
Carbaryl	4	ug/L	< 4	< 4	< 4
Carbendazim	1	ug/L	< 1	< 1	< 1
Carbofuran	1	ug/L	< 1	< 1	< 1
Diuron	0.5	ug/L	< 0.5	< 0.5	< 0.5
EPTC	5	ug/L	< 5	< 5	< 5
Fenamiphos	0.1	ug/L	< 0.1	< 0.1	< 0.1
Fenuron/Fenuron TCA	2	ug/L	< 2	< 2	< 2
Fluometuron	1	ug/L	< 1	< 1	< 1
Linuron	5	ug/L	< 5	< 5	< 5
Methiocarb	4	ug/L	< 4	< 4	< 4
Methomyl	2	ug/L	< 2	< 2	< 2
Mexacarbate	1	ug/L	< 1	< 1	< 1
Monuron/Monuron TCA	2	ug/L	< 2	< 2	< 2
Oxamyl	2	ug/L	< 2	< 2	< 2
Propachlor	1	ug/L	< 1	< 1	< 1
Propham	5	ug/L	< 5	< 5	< 5
Propoxur	1	ug/L	< 1	< 1	< 1
Siduron	1	ug/L	< 1	< 1	< 1
Ammonia (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02
Filterable Reactive Phosphorus	0.01	mg/L	< 0.01	< 0.01	< 0.01
Nitrate (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01
Nitrite (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01
NOx (as N)	0.01	mg/L	< 0.01	< 0.01	< 0.01
Total Kjeldahl Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2
Total Nitrogen	0.2	mg/L	< 0.2	< 0.2	< 0.2
Total Phosphorus	0.01	mg/L	< 0.01	< 0.01	< 0.01

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 22, 2025	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 22, 2025	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 22, 2025	7 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Welshpool	Jan 22, 2025	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Welshpool	Jan 22, 2025	7 Days
OCOP in Water - Method: ARL No. 002 - OCOP and PCB in Water	Welshpool	Jan 22, 2025	7 Days
Carbamates - Method: SOP #6 Analysis of Volatile Organic Compounds in Passivated Canisters EPA Method TO-15	Welshpool	Jan 22, 2025	14 Days
Ammonia (as N) - Method: ARL303 - Ammonia in Water by Discrete Analyser	Welshpool	Jan 22, 2025	28 Days
Filterable Reactive Phosphorus - Method: ARL309 - Filterable Reactive Phosphorus in Water by Discrete Analyser	Welshpool	Jan 22, 2025	28 Days
Nitrate (as N) - Method: ARL313/319 - NOx in Water by Discrete Analyser	Welshpool	Jan 22, 2025	28 Days
Nitrite (as N) - Method: ARL311 - Nitrite in Water by Discrete Analyser	Welshpool	Jan 22, 2025	2 Days
NOx (as N) - Method: ARL313/319 - NOx in Water by Discrete Analyser	Welshpool	Jan 22, 2025	28 Days
Total Kjeldahl Nitrogen - Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP	Welshpool	Jan 20, 2025	28 Day
Total Nitrogen - Method: ARL No. 330 - Persulfate Method for Simultaneous Determination of TN & TP	Welshpool	Jan 22, 2025	28 Days
Total Phosphorus - Method: ARL308 - Total Phosphorus in Water by Discrete Analyser	Welshpool	Jan 22, 2025	28 Days



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Company Name: Galt Environment P/L
Address: 50 Edward Street
Osborne Park
WA 6017

Project Name: MT WALKER RD HYDEN
Project ID: WAE240126

Order No.:
Report #:
Phone:
Fax:

WAE240126

1178807

08 6272 0200

08 9285 8444

Received:
Due:
Priority:
Contact Name:

Jan 17, 2025 4:15 PM

Jan 24, 2025

5 Day

Eurofins Analytical Services Manager : [REDACTED]

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370 & 2554

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	X	X		X	X	X	X	X	X	X	X	X	X	
1	TP01/0.0	Jan 13, 2025		Soil	L25-Ja0026173	X	X	X	X	X	X	X	X	X	X	X	X		X
2	TP01/0.5	Jan 13, 2025		Soil	L25-Ja0026174	X	X		X	X	X	X	X	X	X	X	X	X	
3	TP02/0.0	Jan 13, 2025		Soil	L25-Ja0026175	X	X	X	X	X	X	X	X	X	X	X	X	X	
4	TP02/0.5	Jan 13, 2025		Soil	L25-Ja0026176		X	X	X					X					
5	TP03/0.0	Jan 13, 2025		Soil	L25-Ja0026177	X	X	X	X	X	X	X	X	X	X	X	X	X	
6	TP03/0.5	Jan 13, 2025		Soil	L25-Ja0026178		X	X	X					X					
7	TP04/0.0	Jan 13, 2025		Soil	L25-Ja0026179	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	TP04/0.5	Jan 13, 2025		Soil	L25-Ja0026180		X	X	X					X					
9	TP05/0.0	Jan 14, 2025		Soil	L25-Ja0026181	X	X	X	X	X	X	X	X	X	X	X	X	X	
10	TP05/0.5	Jan 14, 2025		Soil	L25-Ja0026182	X	X	X	X	X	X	X	X	X	X	X	X	X	
11	TP06/0.0	Jan 14, 2025		Soil	L25-Ja0026183	X	X	X	X	X	X	X	X	X	X	X	X	X	
12	TP06/0.5	Jan 14, 2025		Soil	L25-Ja0026184		X	X	X					X				X	
13	TP07/0.0	Jan 14, 2025		Soil	L25-Ja0026185	X	X	X	X	X	X	X	X	X	X	X	X	X	
14	TP07/0.5	Jan 14, 2025		Soil	L25-Ja0026186		X	X	X					X					



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[REDACTED]

Eurofins Analytical Services Manager : [REDACTED]

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370 & 2554

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
15	TP08/0.0	Jan 14, 2025		Soil	L25-Ja0026187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16	TP08/0.5	Jan 14, 2025		Soil	L25-Ja0026188	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
17	TP09/0.0	Jan 14, 2025		Soil	L25-Ja0026189	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18	TP09/0.5	Jan 14, 2025		Soil	L25-Ja0026190	X		X	X	X	X	X	X	X	X	X	X	X	X	X		
19	QC101	Jan 14, 2025		Soil	L25-Ja0026191										X					X		
20	QC102	Jan 14, 2025		Soil	L25-Ja0026192	X		X	X	X	X	X	X	X	X	X	X	X	X	X		
21	QC105	Jan 14, 2025		Soil	L25-Ja0026193									X							X	
22	QC106	Jan 14, 2025		Soil	L25-Ja0026194		X															
23	QC301	Jan 13, 2025		Water	L25-Ja0026195										X		X		X	X		
24	QC302	Jan 14, 2025		Water	L25-Ja0026196										X		X		X	X		
25	QC401	Jan 14, 2025		Water	L25-Ja0026197										X		X		X	X		
Test Counts						14	18	18	18	14	14	14	14	21	17	14	3	14	14	3	3	13

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ppm: parts per million

µg/L: micrograms per litre

ppb: parts per billion

%: Percentage

org/100 mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

CFU: Colony Forming Unit

Colour: Pt-Co Units (CU)

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBT	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

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

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

- | | |
|--------------------------------------|----------------------------|
| Results <10 times the LOR: | No Limit |
| Results between 10-20 times the LOR: | RPD must lie between 0-50% |
| Results >20 times the LOR: | RPD must lie between 0-30% |

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

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.02			0.02	Pass	
TRH C15-C28	mg/L	< 0.04			0.04	Pass	
TRH C29-C36	mg/L	< 0.04			0.04	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.02			0.02	Pass	
TRH >C16-C34	mg/L	< 0.05			0.05	Pass	
TRH >C34-C40	mg/L	< 0.05			0.05	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1,2,3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
OCOP in Water							
Aldrin	ug/L	< 0.001			0.001	Pass	
alpha-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
beta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
delta-BHC (HCH)	ug/L	< 0.001			0.001	Pass	
Bifenthrin	ug/L	< 0.05			0.05	Pass	
Bromophos Ethyl	ug/L	< 0.005			0.005	Pass	
Chlordane	ug/L	< 0.002			0.002	Pass	
Chlorothalonil	ug/L	< 0.01			0.01	Pass	
Chlorpyrifos	ug/L	< 0.005			0.005	Pass	
Diazinon	ug/L	< 0.01			0.01	Pass	
Dieldrin	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	ug/L	< 0.001			0.001	Pass	
Endosulfan II	ug/L	< 0.001			0.001	Pass	
Endosulfan Sulfate	ug/L	< 0.001			0.001	Pass	
Endrin	ug/L	< 0.01			0.01	Pass	
Ethion	ug/L	< 0.01			0.01	Pass	
Fenitrothion	ug/L	< 0.01			0.01	Pass	
Fipronil	ug/L	< 0.02			0.02	Pass	
Hexachlorobenzene (HCB)	ug/L	< 0.001			0.001	Pass	
Heptachlor Epoxide	ug/L	< 0.001			0.001	Pass	
Heptachlor	ug/L	< 0.001			0.001	Pass	
Lindane	ug/L	< 0.001			0.001	Pass	
Malathion	ug/L	< 0.01			0.01	Pass	
Methoxychlor	ug/L	< 0.02			0.02	Pass	
o,p-DDT	ug/L	< 0.001			0.001	Pass	
Oxychlordane	ug/L	< 0.001			0.001	Pass	
p,p-DDD	ug/L	< 0.001			0.001	Pass	
p,p-DDE	ug/L	< 0.001			0.001	Pass	
p,p-DDT	ug/L	< 0.001			0.001	Pass	
Parathion Ethyl	ug/L	< 0.02			0.02	Pass	
Parathion Methyl	ug/L	< 0.02			0.02	Pass	
Trifluralin	ug/L	< 0.01			0.01	Pass	
Vinclozolin	ug/L	< 0.02			0.02	Pass	
Method Blank							
Carbamates							
Aldicarb	ug/L	< 1			1	Pass	
Aldicarb Sulfone	ug/L	< 1			1	Pass	
Aldicarb Sulfoxide	ug/L	< 1			1	Pass	
Aminocarb	ug/L	< 1			1	Pass	
Bromacil	ug/L	< 2			2	Pass	
Carbaryl	ug/L	< 4			4	Pass	
Carbendazim	ug/L	< 1			1	Pass	
Carbofuran	ug/L	< 1			1	Pass	
Diuron	ug/L	< 0.5			0.5	Pass	
EPTC	ug/L	< 5			5	Pass	
Fenamiphos	ug/L	< 0.1			0.1	Pass	
Fenuron/Fenuron TCA	ug/L	< 2			2	Pass	
Fluometuron	ug/L	< 1			1	Pass	
Linuron	ug/L	< 5			5	Pass	
Methiocarb	ug/L	< 4			4	Pass	
Methomyl	ug/L	< 2			2	Pass	
Mexacarbate	ug/L	< 1			1	Pass	
Monuron/Monuron TCA	ug/L	< 2			2	Pass	
Oxamyl	ug/L	< 2			2	Pass	
Propachlor	ug/L	< 1			1	Pass	
Propham	ug/L	< 5			5	Pass	
Propoxur	ug/L	< 1			1	Pass	
Siduron	ug/L	< 1			1	Pass	
Method Blank							
Ammonia (as N)	mg/L	< 0.02			0.02	Pass	
Filterable Reactive Phosphorus	mg/L	< 0.01			0.01	Pass	
Nitrite (as N)	mg/L	< 0.01			0.01	Pass	
Total Nitrogen	mg/L	< 0.2			0.2	Pass	
Total Phosphorus	mg/L	< 0.01			0.01	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons							
TRH C6-C9	%	90			70-130	Pass	
TRH C10-C14	%	117			70-130	Pass	
TRH C6-C10	%	84			70-130	Pass	
TRH >C10-C16	%	124			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	
Toluene	%	88			70-130	Pass	
Ethylbenzene	%	101			70-130	Pass	
m&p-Xylenes	%	96			70-130	Pass	
o-Xylene	%	97			70-130	Pass	
Xylenes - Total*	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	89			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	103			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	103			70-130	Pass	
Benz(a)anthracene	%	102			70-130	Pass	
Benzo(a)pyrene	%	103			70-130	Pass	
Benzo(b&j)fluoranthene	%	102			70-130	Pass	
Benzo(g.h.i)perylene	%	103			70-130	Pass	
Benzo(k)fluoranthene	%	102			70-130	Pass	
Chrysene	%	103			70-130	Pass	
Dibenz(a.h)anthracene	%	105			70-130	Pass	
Fluoranthene	%	101			70-130	Pass	
Fluorene	%	106			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	100			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	103			70-130	Pass	
Pyrene	%	104			70-130	Pass	
LCS - % Recovery							
OCOP in Water							
Aldrin	%	96			60-120	Pass	
alpha-BHC (HCH)	%	90			60-120	Pass	
beta-BHC (HCH)	%	102			60-120	Pass	
delta-BHC (HCH)	%	95			60-120	Pass	
Bifenthrin	%	91			60-120	Pass	
Chlordane	%	94			60-120	Pass	
Chlorothalonil	%	89			60-120	Pass	
Dieldrin	%	97			60-120	Pass	
Endosulfan I	%	90			60-120	Pass	
Endosulfan II	%	83			60-120	Pass	
Endosulfan Sulfate	%	101			60-120	Pass	
Endrin	%	88			60-120	Pass	
Hexachlorobenzene (HCB)	%	89			60-120	Pass	
Heptachlor Epoxide	%	85			60-120	Pass	
Heptachlor	%	87			60-120	Pass	
Lindane	%	85			60-120	Pass	
Methoxychlor	%	94			60-120	Pass	
o,p-DDT	%	88			60-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Oxychlordane	%	90			60-120	Pass	
p,p-DDD	%	85			60-120	Pass	
p,p-DDE	%	84			60-120	Pass	
p,p-DDT	%	89			60-120	Pass	
Vinclozolin	%	91			60-120	Pass	
LCS - % Recovery							
Carbamates							
Aldicarb	%	92			60-120	Pass	
Aldicarb Sulfone	%	95			60-120	Pass	
Aldicarb Sulfoxide	%	91			60-120	Pass	
Aminocarb	%	90			60-120	Pass	
Bromacil	%	100			60-120	Pass	
Carbaryl	%	90			60-120	Pass	
Carbendazim	%	93			60-120	Pass	
Carbofuran	%	97			60-120	Pass	
Diuron	%	114			60-120	Pass	
EPTC	%	87			60-120	Pass	
Fenamiphos	%	105			60-120	Pass	
Fenuron/Fenuron TCA	%	96			60-120	Pass	
Fluometuron	%	108			60-120	Pass	
Linuron	%	81			60-120	Pass	
Methiocarb	%	90			60-120	Pass	
Methomyl	%	90			60-120	Pass	
Mexacarbate	%	90			60-120	Pass	
Monuron/Monuron TCA	%	96			60-120	Pass	
Oxamyl	%	81			60-120	Pass	
Propachlor	%	103			60-120	Pass	
Propham	%	101			60-120	Pass	
Propoxur	%	94			60-120	Pass	
Siduron	%	109			60-120	Pass	
CRM - % Recovery							
Total Nitrogen	%	93			80-120	Pass	
CRM - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	116			80-120	Pass	
Acenaphthylene	%	106			80-120	Pass	
Anthracene	%	105			80-120	Pass	
Benz(a)anthracene	%	102			70-130	Pass	
Benzo(a)pyrene	%	120			80-120	Pass	
Benzo(b&i)fluoranthene	%	105			80-120	Pass	
Benzo(g,h,i)perylene	%	104			80-120	Pass	
Benzo(k)fluoranthene	%	104			80-120	Pass	
Chrysene	%	103			80-120	Pass	
Dibenz(a,h)anthracene	%	113			80-120	Pass	
Fluoranthene	%	117			80-120	Pass	
Fluorene	%	116			80-120	Pass	
Indeno(1,2,3-cd)pyrene	%	108			80-120	Pass	
Naphthalene	%	114			70-130	Pass	
Phenanthrene	%	112			80-120	Pass	
Pyrene	%	103			80-120	Pass	
CRM - % Recovery							
Total Nitrogen	%	97			80-120	Pass	
CRM - % Recovery							
Nitrite (as N)	%	97			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons									
TRH C6-C9	L25-Ja0029328	NCP	%	94			70-130	Pass	
TRH C10-C14	L25-Ja0029328	NCP	%	105			70-130	Pass	
TRH C6-C10	L25-Ja0029328	NCP	%	88			70-130	Pass	
TRH >C10-C16	L25-Ja0029328	NCP	%	102			70-130	Pass	
Spike - % Recovery									
BTEX									
Benzene	L25-Ja0029328	NCP	%	85			70-130	Pass	
Toluene	L25-Ja0029328	NCP	%	86			70-130	Pass	
Ethylbenzene	L25-Ja0029328	NCP	%	105			70-130	Pass	
m&p-Xylenes	L25-Ja0029328	NCP	%	103			70-130	Pass	
o-Xylene	L25-Ja0029328	NCP	%	102			70-130	Pass	
Xylenes - Total*	L25-Ja0029328	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
Naphthalene	L25-Ja0029328	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	L25-Ja0029329	NCP	%	106			70-130	Pass	
Acenaphthylene	L25-Ja0029329	NCP	%	105			70-130	Pass	
Anthracene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Benz(a)anthracene	L25-Ja0029329	NCP	%	107			70-130	Pass	
Benzo(a)pyrene	L25-Ja0029329	NCP	%	100			70-130	Pass	
Benzo(b&j)fluoranthene	L25-Ja0029329	NCP	%	108			70-130	Pass	
Benzo(g.h.i)perylene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Benzo(k)fluoranthene	L25-Ja0029329	NCP	%	101			70-130	Pass	
Chrysene	L25-Ja0029329	NCP	%	103			70-130	Pass	
Dibenz(a.h)anthracene	L25-Ja0029329	NCP	%	101			70-130	Pass	
Fluoranthene	L25-Ja0029329	NCP	%	104			70-130	Pass	
Fluorene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Indeno(1,2,3-cd)pyrene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Naphthalene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Phenanthrene	L25-Ja0029329	NCP	%	104			70-130	Pass	
Pyrene	L25-Ja0029329	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Carbamates									
Aldicarb	L25-Ja0029718	NCP	%	94			60-120	Pass	
Aldicarb Sulfone	L25-Ja0029718	NCP	%	100			60-120	Pass	
Aldicarb Sulfoxide	L25-Ja0029718	NCP	%	98			60-120	Pass	
Aminocarb	L25-Ja0029718	NCP	%	96			60-120	Pass	
Bromacil	L25-Ja0029718	NCP	%	104			60-120	Pass	
Carbaryl	L25-Ja0029718	NCP	%	84			60-120	Pass	
Carbendazim	L25-Ja0029718	NCP	%	96			60-120	Pass	
Carbofuran	L25-Ja0029718	NCP	%	102			60-120	Pass	
Diuron	L25-Ja0029718	NCP	%	111			60-120	Pass	
EPTC	L25-Ja0029718	NCP	%	88			60-120	Pass	
Fenamiphos	L25-Ja0029718	NCP	%	110			60-120	Pass	
Fenuron/Fenuron TCA	L25-Ja0029718	NCP	%	104			60-120	Pass	
Fluometuron	L25-Ja0029718	NCP	%	107			60-120	Pass	
Linuron	L25-Ja0029718	NCP	%	94			60-120	Pass	
Methiocarb	L25-Ja0029718	NCP	%	116			60-120	Pass	
Methomyl	L25-Ja0029718	NCP	%	91			60-120	Pass	
Mexacarbate	L25-Ja0029718	NCP	%	92			60-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Monuron/Monuron TCA	L25-Ja0029718	NCP	%	99			60-120	Pass	
Oxamyl	L25-Ja0029718	NCP	%	98			60-120	Pass	
Propachlor	L25-Ja0029718	NCP	%	90			60-120	Pass	
Propham	L25-Ja0029718	NCP	%	93			60-120	Pass	
Propoxur	L25-Ja0029718	NCP	%	95			60-120	Pass	
Siduron	L25-Ja0029718	NCP	%	103			60-120	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	B25-Ja0027267	NCP	%	106			80-120	Pass	
Filterable Reactive Phosphorus	B25-Ja0027267	NCP	%	103			80-120	Pass	
Nitrate (as N)	B25-Ja0027267	NCP	%	94			70-130	Pass	
Nitrite (as N)	B25-Ja0027267	NCP	%	98			80-120	Pass	
NOx (as N)	B25-Ja0027267	NCP	%	95			80-120	Pass	
Spike - % Recovery									
				Result 1					
Total Nitrogen	L25-Ja0026196	CP	%	98			70-130	Pass	
Total Phosphorus	L25-Ja0026196	CP	%	91			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	L25-Ja0029327	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	L25-Ja0029332	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C15-C28	L25-Ja0029332	NCP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C29-C36	L25-Ja0029332	NCP	mg/L	< 0.04	< 0.04	<1	30%	Pass	
TRH C6-C10	L25-Ja0029327	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	L25-Ja0029332	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C16-C34	L25-Ja0029332	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C34-C40	L25-Ja0029332	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	L25-Ja0029327	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	L25-Ja0029327	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	L25-Ja0029327	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	L25-Ja0029327	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	L25-Ja0029327	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	L25-Ja0029327	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	L25-Ja0029327	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Naphthalene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Phenanthrene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Pyrene	L25-Ja0028102	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Carbamates				Result 1	Result 2	RPD		
Aldicarb	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Aldicarb Sulfone	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Aldicarb Sulfoxide	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Aminocarb	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Bromacil	L25-Ja0029717	NCP	ug/L	< 2	< 2	<1	30%	Pass
Carbaryl	L25-Ja0029717	NCP	ug/L	< 4	< 4	<1	30%	Pass
Carbendazim	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Carbofuran	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Diuron	L25-Ja0029717	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
EPTC	L25-Ja0029717	NCP	ug/L	< 5	< 5	<1	30%	Pass
Fenamiphos	L25-Ja0029717	NCP	ug/L	< 0.1	< 0.1	<1	30%	Pass
Fenuron/Fenuron TCA	L25-Ja0029717	NCP	ug/L	< 2	< 2	<1	30%	Pass
Fluometuron	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Linuron	L25-Ja0029717	NCP	ug/L	< 5	< 5	<1	30%	Pass
Methiocarb	L25-Ja0029717	NCP	ug/L	< 4	< 4	<1	30%	Pass
Methomyl	L25-Ja0029717	NCP	ug/L	< 2	< 2	<1	30%	Pass
Mexacarbate	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Monuron/Monuron TCA	L25-Ja0029717	NCP	ug/L	< 2	< 2	<1	30%	Pass
Oxamyl	L25-Ja0029717	NCP	ug/L	< 2	< 2	<1	30%	Pass
Propachlor	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Propham	L25-Ja0029717	NCP	ug/L	< 5	< 5	<1	30%	Pass
Propoxur	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Siduron	L25-Ja0029717	NCP	ug/L	< 1	< 1	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Ammonia (as N)	L25-Ja0026195	CP	mg/L	< 0.02	< 0.02	<1	20%	Pass
Filterable Reactive Phosphorus	L25-Ja0026195	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass
Nitrate (as N)	L25-Ja0026195	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Nitrite (as N)	L25-Ja0026195	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass
NOx (as N)	L25-Ja0026195	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass
Total Nitrogen	L25-Ja0026195	CP	mg/L	< 0.2	< 0.2	<1	30%	Pass
Total Phosphorus	L25-Ja0026195	CP	mg/L	< 0.01	< 0.01	<1	20%	Pass

Comments

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:



Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request

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Appendix E: Quality Analysis and Quality Control Reports

QA/QC Report - Duplicate and Triplicate Samples



Lab Report Number	Field ID	Duplicate		Triplicate		Duplicate		Triplicate		Duplicate		Triplicate		Duplicate		Triplicate					
		1178807	1178807	1178807	PGA0905	1178807	1178807	1178807	PGA0905	1178807	1178807	1178807	TP09/0.0	1178807	1178807	1178807	TP09/0.5	1178807	1178807		
		TP06/0.5	QC105	TP06/0.5	QC205	TP08/0.5	QC101	TP08/0.5	QC201	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
		Date	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025		
	Unit	EQL																			
BTEX																					
Naphthalene (VOC)	mg/kg	0.5						<0.5			<0.5			<0.5		<0.5	0	<0.5	<1.0	0	
Benzene	mg/kg	0.1						<0.1			<0.1			<0.1		<0.1	0	<0.1	<0.20	0	
Toluene	mg/kg	0.1						<0.1			<0.1			<0.1		<0.1	0	<0.1	<0.50	0	
Ethylbenzene	mg/kg	0.1						<0.1			<0.1			<0.1		<0.1	0	<0.1	<1.0	0	
Xylene (m & p)	mg/kg	0.2						<0.2			<0.2			<0.2		<0.2	0	<0.2	<2.0	0	
Xylene (o)	mg/kg	0.1						<0.1			<0.1			<0.1		<0.1	0	<0.1	<1.0	0	
Xylene Total	mg/kg	0.3						<0.3			<0.3			<0.3		<0.3	0	<0.3	<3.0	0	
TRH																					
C6-C10 Fraction (F1)	mg/kg	20						<20			<20			<20		<20	0	<20	<25	0	
C6-C10 (F1 minus BTEX)	mg/kg	20						<20			<20			<20		<20	0	<20	<25	0	
>C10-C16 Fraction (F2)	mg/kg	50						<50			<50			<50		<50	0	<50	<50	0	
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg	50						<50			<50			<50		<50	0	<50	<50	0	
>C16-C40 Fraction (F3)	mg/kg	100						<100			<100			<100		<100	0	<100	<100	0	
>C34-C40 Fraction (F4)	mg/kg	100						<100			<100			<100		<100	0	<100	<100	0	
>C10-C40 Fraction (Sum)	mg/kg	50						<100			<100			<100		<100	0	<100	<50	0	
Other																					
Chlordane (gamma)	mg/kg	0.1																	<0.10		
Phasalone	mg/kg	0.1																	<0.10		
Biological																					
E. Coli	orgs/g	1	<10				<10			<10			<10		<10	<10	0	<10			
Halogenated Benzenes																					
Hexachlorobenzene	mg/kg	0.01																	<0.01	<0.01	0
Herbicides																					
Molinate	mg/kg	0.5																	<0.50		
Trifluralin	mg/kg	0.2																	<0.2		
Perfluoralkane Carboxylic Acids																					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0002	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005						
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005						
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005						
Perfluorooctanoic acid (PFOA)	mg/kg	0.0001	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005						
Perfluorodecanoic acid (PFDA)	mg/kg	0.0005	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005						
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0005	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005						
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005						
Perfluorotetradecanoic acid (PTeDA)	mg/kg	0.005	<0.005	<0.005	0	<0.005	<0.0050	0	<0.005	<0.005	0	<0.005	<0.0050	0	<0.005						
Perfluorotridecanoic acid (PTrDA)	mg/kg	0.0005	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005						
Perfluoroundecanoic acid (PUndDA)	mg/kg	0.0005	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005	<0.005	0	<0.005	<0.00050	0	<0.005						
(n:2) Fluorotelomer Sulfonic Acids																					
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0001	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005	<0.005	0	<0.005	<0.00010	0	<0.005						
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	mg/kg	0.0001	<0.01	<0.01	0	<0.01	<0.00010	0	<0.01	<0.01	0	<0.01	<0.00010	0	<0.01						
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0002	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005						
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0002	<0.005	<0.005	0	<0.005	<0.00020	0	<0.005</												

QA/QC Report - Duplicate and Triplicate Samples



Lab Report Number	Field ID	Duplicate		Triplicate		Duplicate		Triplicate		Duplicate		Triplicate		Duplicate		Triplicate	
		1178807	1178807	1178807	PGA0905	1178807	1178807	1178807	PGA0905	1178807	1178807	1178807	PGA0905	1178807	1178807	1178807	PGA0905
		TP06/0.5	QC105	TP06/0.5	QC205	TP08/0.5	QC101	TP08/0.5	QC201	TP09/0.0	QC106	TP09/0.5	QC102	TP09/0.0	QC106	TP09/0.5	QC202
		Date	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD	14 Jan 2025	14 Jan 2025	RPD
	Unit	EQL															
Inorganics																	
Reactive Phosphorus (Orthophosphate)	mg/kg	1						2.5		2.5		2.3		<1	<1	0	<1
Nitrite + Nitrate as N	mg/kg	1						5.4		5.4		2.8		1.5	2.4	46	1.5
Ammonia as N	mg/kg	0.5						<10		<10		<10		<10	0	<10	0.84
Kjeldahl Nitrogen Total	mg/kg	10						420		420		410		320	280	13	320
Nitrate (as N)	mg/kg	0.5						5.3		5.3		2.8		1.1	1.9	53	1.1
Nitrate (as NO3-)	mg/kg	3															5.2
Nitrite (as N)	mg/kg	0.5						<1		<1		<1		<1	<1	0	<0.50
Nitrite (as NO2-)	mg/kg	2															<2.0
Organic Nitrogen as N	mg/kg	10															290
Nitrogen (Total Oxidised)	mg/kg	0.5															1.3
Nitrogen (Total)	mg/kg	10						430		430		410		320	280	13	320
Total Phosphorus (Organic Phosphate)	mg/kg	1						84		84		63		38	35	8	38
Reactive Phosphorus as P (Orthophosphate as P)	mg/kg	0.5															<0.50
Organochlorine Pesticides																	
Vic EPA 1828.2 OCP (Total)*	MG/KG	0.1															<0.10
2,4-DDT	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	
4,4-DDE	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	<0.01	<0.10	0
a-BHC	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	<0.01	<0.10	0
Aldrin	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	<0.01	<0.10	0
Aldrin + Dieldrin	mg/kg	0.1															<0.10
b-BHC	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Chlordane	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	
Chlordane (cis)	mg/kg	0.1															<0.10
d-BHC	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
DDD	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
DDT	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
DDT+DDE+DDD	mg/kg	0.1															<0.10
Dieldrin	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Endosulfan I	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Endosulfan II	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Endosulfan sulphate	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Endrin	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Endrin aldehyde	mg/kg	0.1															<0.10
Endrin ketone	mg/kg	0.1															<0.10
g-BHC (Lindane)	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Heptachlor	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Heptachlor epoxide	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Methoxychlor	mg/kg	0.1						<0.2		<0.2		<0.2		<0.2	0	<0.2	<0.10
Oxychlordane	mg/kg	0.01						<0.01		<0.01		<0.01		<0.01	0	<0.01	<0.10
Organophosphorous Pesticides																	
Azinphos methyl	mg/kg	0.1															<0.10
Bromophos-ethyl	mg/kg	0.1															<0.10
Chlorpyrifos	mg/kg	0.02						<0.02		<0.02		<0.02		<0.02	0	<0.02	<0.10
Chlorpyrifos-methyl	mg/kg	0.1															<0.10
Coumaphos	mg/kg	0.1															<0.10
Diazinon	mg/kg	0.1						<0.2		<0.2		<0.2		<0.2	0	<0.2	<0.10
Dichlorvos	mg/kg	0.1															<0.10
Dimethoate	mg/kg	0.1															<0.10
Disulfoton	mg/kg	0.1															<0.10
Ethion	mg/kg	0.05						<0.05		<0.05		<0.05		<0.05	0	<0.05	<0.10
Fenitrothion	mg/kg	0.1						<0.1		<0.1		<0.1		<0.1	0	<0.1	<0.10
Fenthion	mg/kg	0.1															<0.10
Malathion	mg/kg	0.1						<0.1		<0.1		<0.1		<0.1	0	<	

Lab Report Number	Matrix Type	Date	Rinsate	Rinsate	Field Blank
			1178807	1178807	1178807
			Water	Water	Water
			13 Jan 2025	14 Jan 2025	14 Jan 2025
	Unit	EQL			
NA					
Fipronil	mg/L	0.00002	<0.00002	<0.00002	<0.00002
BTEX					
Naphthalene (VOC)	mg/L	0.001	<0.001	<0.001	<0.001
Benzene	µg/L	1	<1	<1	<1
Toluene	µg/L	1	<1	<1	<1
Ethylbenzene	µg/L	1	<1	<1	<1
Xylene (m & p)	µg/L	2	<2	<2	<2
Xylene (o)	µg/L	1	<1	<1	<1
Xylene Total	µg/L	3	<3	<3	<3
TRH					
C6-C10 Fraction (F1)	µg/L	20	<20	<20	<20
C6-C10 (F1 minus BTEX)	µg/L	20	<20	<20	<20
>C10-C16 Fraction (F2)	µg/L	20	<20	<20	<20
>C10-C16 Fraction (F2 minus Naphthalene)	µg/L	20	<20	<20	<20
>C16-C34 Fraction (F3)	µg/L	50	<50	<50	<50
>C34-C40 Fraction (F4)	µg/L	50	<50	<50	<50
>C10-C40 Fraction (Sum)	µg/L	50	<50	<50	<50
Fungicides					
Chlorothalonil	µg/L	0.01	<0.01	<0.01	<0.01
Vinclozolin	µg/L	0.02	<0.02	<0.02	<0.02
Halogenated Benzenes					
Hexachlorobenzene	µg/L	0.001	<0.001	<0.001	<0.001
Herbicides					
Trifluralin	mg/L	0.00001	<0.00001	<0.00001	<0.00001
Inorganics					
Reactive Phosphorus (Orthophosphate)	mg/L	0.01	<0.01	<0.01	<0.01
Nitrite + Nitrate as N	mg/L	0.01	<0.01	<0.01	<0.01
Ammonia as N	mg/L	0.02	<0.02	<0.02	<0.02
Kjeldahl Nitrogen Total	mg/L	0.2	<0.2	<0.2	<0.2
Nitrate (as N)	mg/L	0.01	<0.01	<0.01	<0.01
Nitrite (as N)	mg/L	0.01	<0.01	<0.01	<0.01
Nitrogen (Total)	mg/L	0.2	<0.2	<0.2	<0.2
Total Phosphorus (Organic Phosphate)	mg/L	0.01	<0.01	<0.01	<0.01
Organochlorine Pesticides					
2,4-DDT	µg/L	0.001	<0.001	<0.001	<0.001
4,4-DDE	µg/L	0.001	<0.001	<0.001	<0.001
a-BHC	µg/L	0.001	<0.001	<0.001	<0.001
Aldrin	µg/L	0.001	<0.001	<0.001	<0.001
b-BHC	µg/L	0.001	<0.001	<0.001	<0.001
Chlordane	µg/L	0.002	<0.002	<0.002	<0.002
d-BHC	µg/L	0.001	<0.001	<0.001	<0.001
DDD	µg/L	0.001	<0.001	<0.001	<0.001
DDT	µg/L	0.001	<0.001	<0.001	<0.001
Dieldrin	µg/L	0.001	<0.001	<0.001	<0.001
Endosulfan I	µg/L	0.001	<0.001	<0.001	<0.001
Endosulfan II	µg/L	0.001	<0.001	<0.001	<0.001
Endosulfan sulphate	µg/L	0.001	<0.001	<0.001	<0.001
Endrin	µg/L	0.01	<0.01	<0.01	<0.01
g-BHC (Lindane)	µg/L	0.001	<0.001	<0.001	<0.001
Heptachlor	µg/L	0.001	<0.001	<0.001	<0.001
Heptachlor epoxide	µg/L	0.001	<0.001	<0.001	<0.001
Methoxychlor	µg/L	0.02	<0.02	<0.02	<0.02
Oxychlordane	µg/L	0.000001	<0.000001	<0.000001	<0.000001
Organophosphorous Pesticides					
Chlorpyrifos	µg/L	0.005	<0.005	<0.005	<0.005
Diazinon	µg/L	0.01	<0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01	<0.01
Malathion	µg/L	0.01	<0.01	<0.01	<0.01
Methyl parathion	µg/L	0.02	<0.02	<0.02	<0.02
PAH					
Acenaphthene	µg/L	1	<1	<1	<1
Acenaphthylene	µg/L	1	<1	<1	<1
Anthracene	µg/L	1	<1	<1	<1
Benzo(a)anthracene	µg/L	1	<1	<1	<1
Benzo(a) pyrene	µg/L	1	<1	<1	<1
Benzo(b+j)fluoranthene	µg/L	0.001	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene	µg/L	1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1	<1	<1	<1
Chrysene	µg/L	1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1	<1	<1	<1
Fluoranthene	µg/L	1	<1	<1	<1
Fluorene	µg/L	1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	<1	<1
Naphthalene	µg/L	1	<1	<1	<1
Phenanthrene	µg/L	1	<1	<1	<1
Pyrene	µg/L	1	<1	<1	<1
Benzo(a)pyrene TEQ calc (Zero)	µg/L	0.001	<0.001	<0.001	<0.001
PAHs (Sum of total)	µg/L	1	<1	<1	<1
Pesticides					
Bifenthrin	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Bromophos	mg/L	0.000005	<0.000005	<0.000005	<0.000005
Parathion	µg/L	0.02	<0.02	<0.02	<0.02
TPH					
C6-C9 Fraction	µg/L	20	<20	<20	<20
C10-C14 Fraction	µg/L	20	<20	<20	<20
C15-C28 Fraction	µg/L	40	<40	<40	<40
C29-C36 Fraction	µg/L	40	<40	<40	<40
C10-C36 Fraction (Sum)	µg/L	40	<40	<40	<40

Appendix F: Laboratory Results

	Unit	EOL	PFAS NEMP 2020 Residential with garden/accessible soil [HIL A]	NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand	NEPM 2013 Table 1A(1) HILs Res A Soil	Field ID Date	TP01/0.0 13 Jan 2025	TP01/0.5 13 Jan 2025	TP02/0.0 13 Jan 2025	TP02/0.5 13 Jan 2025	TP03/0.0 13 Jan 2025	TP03/0.5 13 Jan 2025	TP04/0.0 13 Jan 2025	TP04/0.5 13 Jan 2025	TP05/0.0 14 Jan 2025	TP05/0.5 14 Jan 2025	TP06/0.0 14 Jan 2025	TP06/0.5 14 Jan 2025	TP07/0.0 14 Jan 2025	TP07/0.5 14 Jan 2025	TP08/0.0 14 Jan 2025	TP08/0.5 14 Jan 2025	TP09/0.0 14 Jan 2025	TP09/0.5 14 Jan 2025
Asbestos							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Asbestos (Trace)	Comment						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Asbestos Detected	-						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Fibres Identified and estimated Asbestos Content (%)	Comment						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Total Analytical Fraction	%	0.1					83	97	110	140	70	69	61	78	75	100	91	92	66	81	122	146	65	
Total Asbestos	µg/kg	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Total Dry Mass	g	0.1					240	259	380	360	240	116	170	115	241	248	232	265	234	222	348	235	110	
NA																								
Aminocarb	mg/kg	0.04					<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Thidiazuron	mg/kg	0.04					<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Pesticides by LCMSMS (Positive)																								
Siduron	mg/kg	0.02					<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
BTEX																								
Naphthalene (VOC)	mg/kg	0.5					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Benzene	mg/kg	0.1					0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5	
Toluene	mg/kg	0.1					160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540	160 220 310 540		
Ethylbenzene	mg/kg	0.1					55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55		
Xylene (m & p)	mg/kg	0.2					<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Xylene (o)	mg/kg	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Xylene Total	mg/kg	0.3					40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170	40 60 95 170			
TRH																								
C6-C10 Fraction (F1)	mg/kg	20					<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20		
C6-C10 (F1 minus BTEX)	mg/kg	20					45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200	45 70 110 200		
<C10-C16 Fraction (F2)	mg/kg	50					<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		
<C10-C16 Fraction (F2 minus Naphthalene)	mg/kg	50					110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440	110 240 440		
<C16-C34 Fraction (F3)	mg/kg	100					<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
<C34-C40 Fraction (F4)	mg/kg	100					<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
<C10-C40 Fraction (Sum)	mg/kg	100					<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
Biological																								
E. Coli	org/g	1					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Carbamates																								
Methiocarb	mg/kg	0.04					<0.04	<0.04	<															

	Unit	FOL	PFAS NEMP 2020 Residential with garden/accessible soil [HIL A]	NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand	NEPM 2013 Table 1A(1) HILs Res A Soil	Field ID	TP01/0.0	TP01/0.5	TP02/0.0	TP02/0.5	TP03/0.0	TP03/0.5	TP04/0.0	TP04/0.5	TP05/0.0	TP05/0.5	TP06/0.0	TP06/0.5	TP07/0.0	TP07/0.5	TP08/0.0	TP08/0.5	TP09/0.0	TP09/0.5
						Date	13 Jan 2025	14 Jan 2025																
Asbestos																								
Inorganics																								
Reactive Phosphorus (Orthophosphate)	mg/kg	1					<1	<1	4.2	2.9		1.7		4.8	<1	2.3	4.0		3.5	2.5	2.3	<1		
Nitrite + Nitrate as N	mg/kg	1					1.7	1.4	5.5	3.7		3.0		7.4	1.0	2.6	1.3		12	5.4	2.8	1.5		
Ammonia-N as N	mg/kg	10					<10	<10	<10	<10		<10		<10	<10	<10	<10		<10	<10	<10	<10		
Kjeldahl Nitrogen Total	mg/kg	10					150	36	500	410		300		520	53	260	510		500	420	410	320		
Nitrate (as N)	mg/kg	1					1.5	1.1	5.1	3.7		3.0		7.1	<1	1.8	12		11	5.3	2.8	1.1		
Nitrite (as N)	mg/kg	1					<1	<1	<1	<1		<1		<1	<1	<1	<1		<1	<1	<1	<1		
Nitrogen (Total)	mg/kg	10					150	37	600	410		300		530	54	360	520		600	430	410	320		
Total Phosphorus (Organic Phosphate)	mg/kg	1					29	4.7	110	67		37		93	6.7	80	150		210	84	63	38		
Metals																								
Arsenic	mg/kg	2					100	<2	<2	<2		<2		<2	<2	<2	<2		<2	3.3	<2			
Beryllium	mg/kg	2					60	<2	<2	<2		<2		<2	<2	<2	<2		<2	<2	<2	<2		
Boron	mg/kg	10					4,500	<10	<10	<10		<10		18	44	21	<10		18	60	25			
Cadmium	mg/kg	0.1					20	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1		
Chromium (hexavalent)	mg/kg	1					100	<1	<1	<1		<1		<1	<1	<1	<1		<1	<1	<1	<1		
Chromium (III+VI)	mg/kg	1					9.2	11	15	18		17		17	18	19	13		19	26	19			
Cobalt	mg/kg	5					100	<5	<5	<10		<10		10.0	12	15	6.5		22	29	11			
Copper	mg/kg	1					6,000	2.8	3.5	5.7		7.1		6.5	5.2	8.8	4.6		12	18	11			
Lead	mg/kg	1					300	14	11	21		35		22	23	34	18		47	93	34			
Manganese	mg/kg	5					3,800	190	610	1,300		670		670	280	890	440		1,400	1,200	540			
Mercury	mg/kg	0.02					40	<0.02	<0.02	<0.02		<0.02		0.03	0.04	0.02	0.03		0.03	<0.02	0.02			
Nickel	mg/kg	1					400	3.1	3.7	9.4		9.9		6.9	11	10	3.6		15	36	12			
Selenium	mg/kg	2					200	<2	<2	<2		<2		<2	<2	<2	<2		<2	6.0	<2			
Zinc	mg/kg	5					7,400	<5	<5	<5		<5		<5	<5	<5	<5		<5	7.4	6.2	5.8		
Organochlorine Pesticides																								
2,4-DDT	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
4,4-DDE	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
a-BHC	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
Aldrin	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
b-BHC	mg/kg	0.01					50	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
Chlordane	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
d-BHC	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
DDD	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
DDT	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
Dieldrin	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01			
Endosulfan I	mg/kg	0.01					<0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0									

Appendix G: Understanding Your Report



UNDERSTANDING YOUR REPORT

GALT FORM PMP29 Rev3

1. EXPECTATIONS OF THE REPORT

This document has been prepared to clarify what is and is not provided in your report. It is intended to inform you of what your realistic expectations of this report should be and how to manage your risks associated with the conditions on site.

Geotechnical engineering and environmental science are less exact than other engineering and scientific disciplines. We include this information to help you understand where our responsibilities begin and end. You should read and understand this information. Please contact us if you do not understand the report or this explanation. We have extensive experience in a wide variety of projects and we can help you to manage your risk.

2. THIS REPORT RELATES TO PROJECT-SPECIFIC CONDITIONS

This report was developed for a unique set of project-specific conditions to meet the needs of the nominated client. It took into account the following:

- ❖ the project objectives as we understood them and as described in this report;
- ❖ the specific site mentioned in this report; and
- ❖ the current and proposed development at the site.

It should not be used for any purpose other than that indicated in the report. You should not rely on this report if any of the following conditions apply:

- ❖ the report was not written for you;
- ❖ the report was not written for the site specific to your development;
- ❖ the report was not written for your project (including a development at the correct site but other than that listed in the report); or
- ❖ the report was written before significant changes occurred at the site (such as a development or a change in ground conditions).

You should always inform us of changes in the proposed project (including minor changes) and request an assessment of their impact.

Where we are not informed of developments relevant to your report, we cannot be held responsible or liable for problems that may arise as a consequence.

Where design is to be carried out by others using information provided by us, we recommend that we be involved in the design process by being engaged for consultation with other members of the project team. Furthermore, we recommend that we be able to review work produced by other members of the project team that relies on information provided in our report.

3. DATA PROVIDED BY THIRD PARTIES

Where data is provided by third parties, it will be identified as such in our reports. We necessarily rely on the completeness and accuracy of data provided by third parties in order to draw conclusions presented in our reports. We are not responsible for omissions, incomplete or inaccurate data associated with third party data, including where we have been requested to provide advice in relation to field investigation data provided by third parties.

4. SOIL LOGS

Our reports often include logs of intrusive and non-intrusive investigation techniques. These logs are based on our interpretation of field data and laboratory results. The logs should only be read in conjunction with the report they were issued with and should not be re-drawn for inclusion in other documents not prepared by us.

5. THIRD PARTY RELIANCE

We have prepared this report for use by the client. This report must be regarded as confidential to the client and the client's professional advisors. We do not accept any responsibility for contents of this document from any party other than the nominated client. We take no responsibility for any damages suffered by a third party because of any decisions or actions they may make based on this report. Any reliance or decisions made by a third party based on this report are the responsibility of the third party and not of us.

6. CHANGE IN SUBSURFACE CONDITIONS

The recommendations in this report are based on the ground conditions that existed at the time when the study was undertaken. Changes in ground conditions can occur in numerous ways including anthropogenic events (such as construction or contaminating activities on or adjacent to the site) or natural events (such as floods, groundwater fluctuations or earthquakes). We should be consulted prior to use of this report so that we can comment on its reliability. It is important to note that where ground conditions have changed, additional sampling, testing or analysis may be required to fully assess the changed conditions.

7. SUBSURFACE CONDITIONS DURING CONSTRUCTION

Practical constraints mean that we cannot know every minute detail about the subsurface conditions at a particular site. We use professional judgement to form an opinion about the subsurface conditions at the site. Some variation to our evaluated conditions is likely and significant variation is possible. Accordingly, our report should not be considered as final as it is developed from professional judgement and opinion.

The most effective means of dealing with unanticipated ground conditions is to engage us for construction support. We can only finalise our recommendations by observing actual subsurface conditions encountered during construction. We cannot accept liability for a report's recommendations if we cannot observe construction.

8. ENVIRONMENTAL AND GEOTECHNICAL ISSUES

Unless specifically mentioned otherwise in our report, environmental considerations are not addressed in geotechnical reports. Similarly, geotechnical issues are not addressed in environmental reports. The investigation techniques used for geotechnical investigations can differ from those used for environmental investigations. It is the client's responsibility to satisfy themselves that geotechnical and environmental considerations have been taken into account for the site.

Geotechnical advice presented in a Galt Environmental report has been provided by Galt Geotechnics under a sub-contract agreement. Similarly, environmental advice presented in a Galt Geotechnics report has been provided by Galt Environmental under a sub-contract agreement.

Unless specifically noted otherwise, no parties shall draw any inferences about the applicability of the Western Australian state government landfill levy from the contents of this document.

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