

Appendix G – Soil lithological logs



BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE BH01

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Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 22/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.0	BH01_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining, 3 x acm fragments, trace charcoal fragments from 0.1mbgl.	-0.2
0.4		0.1	BH01_0.3-0.5			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.8		0.0	BH01_0.8-1.0							-0.8
1.0	SFA									-1.0
1.6						CLAY, medium plasticity, grey brown, with medium to coarse sub-angular and sub-rounded gravel (inferred highly weathered basalt), becoming grey from 2.2 m.	D	S	No odour, No staining.	-1.6
1.8		0.0	BH01_1.8-2.0							-1.8
2.8		0.0	BH01_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE BH02

Page 1 of 1

Client Department of Infrastructure, Transport , Regional Development Project Norfolk Island MPSDSC Project No. 12517635 Site Norfolk Island Hospital Location 2 Grassy Road, Norfolk Island Date Drilled 22/09/2020	Drill Co. Norfolk Industries Driller J.T Rig Type 6 tonne excavator Drill Method HA / SFA Total Depth (m) 3 Diameter (mm) 200	Easting Northing Grid Ref GDA94_MGA_zone_58 Elevation Logged By D.B Checked By A.H
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Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.0	BH02_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining.	-0.2
0.4		0.1	BH02_0.4-0.6			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.8		0.0	BH02_0.8-1.0							-0.8
1.0	SFA									-1.0
1.6						CLAY, medium plasticity, grey brown, with medium to coarse and cobble sub-angular and sub-rounded gravel (inferred highly weathered basalt), becoming grey from 2.3 m.	D	S	No odour, No staining.	-1.6
1.8		0.1	BH02_1.8-2.0							-1.8
2.8		0.0	BH02_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH03

ENVIRONMENTAL-SOIL BORE

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Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 22/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.1	BH03_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining, with roots and wooden fragments, trace plastic.	-0.2
0.4		0.3	BH03_0.4-0.6			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.8		0.2	BH03_0.8-1.0							-0.8
1.0	SFA									-1.0
1.4						CLAY, medium plasticity, grey mottled orange, with medium to coarse sub-angular and sub-rounded gravel (inferred highly weathered basalt) from 1.5 m, becoming grey from 2.4 m.	D	S	No odour, No staining.	-1.4
1.8		0.4	BH03_1.8-2.0							-1.8
2.8		0.1	BH03_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH04

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 22/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.1	BH04_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining.	-0.2
0.4		0.2	BH04_0.4-0.6			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.8		0.2	BH04_0.8-1.0							-0.8
1.0	SFA									-1.0
1.4						CLAY, medium plasticity, grey brown, with medium to coarse sub-angular and sub-rounded gravel (inferred highly weathered basalt), becoming grey from 2.4 m.	D	S	No odour, No staining.	-1.4
1.8		0.1	BH04_1.8-2.0							-1.8
2.8		0.1	BH04_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes
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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH05

ENVIRONMENTAL-SOIL BORE

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Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 23/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.1	BH05_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey brown.	D	MD	No odour, No staining, trace charcoal, glass and wire fragments, 1 x nail.	-0.2
0.4		2.0	BH05_0.4-0.6			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.8		0.1	BH05_0.8-1.0							-0.8
1.2	SFA					CLAY, medium plasticity, orange brown mottled red, grey and yellow, trace medium to coarse sub-angular gravel (inferred highly weathered basalt) from 1.5 m.	M	S	No odour, No staining.	-1.2
1.8		0.1	BH05_1.8-2.0							-1.8
2.8		0.0	BH05_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH06

ENVIRONMENTAL-SOIL BORE

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Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 23/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.6	BH06_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey brown.	D	MD	No odour, No staining, 1 x glass fragment.	-0.2
0.4		0.4	BH06_0.4-0.6			CLAY, medium plasticity, orange brown, becoming red from 1.2 m.	D	S	No odour, No staining.	-0.4
0.8		0.1	BH06_0.8-1.0							-0.8
1.0	SFA									-1.0
1.8		0.0	BH06_1.8-2.0			CLAY, medium plasticity, orange brown mottled red, grey and yellow, trace medium to coarse sub-angular gravel (inferred highly weathered basalt).	M	S	No odour, No staining.	-1.8
2.8		0.1	BH06_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH07

ENVIRONMENTAL-SOIL BORE

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Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 23/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.4	BH07_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey brown.	D	D	No odour, No staining.	-0.2
0.4		0.2	BH07_0.4-0.6			CLAY, medium plasticity, orange brown, becoming red from 1.1 m.	D	S	No odour, No staining.	-0.4
0.8		0.4	BH07_0.8-1.0							-0.8
1.0	SFA									-1.0
1.8		0.1	BH07_1.8-2.0							-1.8
2.2						CLAY, medium plasticity, brown mottled red, grey and orange, trace medium to coarse sub-angular and sub-rounded gravel (inferred highly weathered basalt).	M	S	No odour, No staining.	-2.2
2.8		0.1	BH07_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE BH08

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA / SFA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 3	Logged By D.B
Date Drilled 23/09/2020	Diameter (mm) 200	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.2	BH08_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-angular to sub-rounded gravel.	D	F	No odour, No staining.	-0.2
0.4		0.4	BH08_0.3-0.5			CLAY, medium plasticity, orange brown, becoming brown from 1.4 m, trace medium to coarse sub-angular gravel (inferred highly weathered basalt).	D	S	No odour, No staining.	-0.4
0.6				-0.6						
0.8		0.3	BH08_0.8-1.0	-0.8						
1.0	SFA			-1.0						
1.2				-1.2						
1.4				-1.4						
1.6				-1.6						
1.8		0.1	BH08_1.8-2.0	-1.8						
2.0				-2.0						
2.2				-2.2						
2.4				-2.4						
2.6				-2.6						
2.8		0.1	BH08_2.8-3.0	-2.8						
3.0				-3.0	Termination Depth at: 3.00 m					
3.2				-3.2						
3.4				-3.4						

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations
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BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE BH09

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Client Department of Infrastructure, Transport , Regional Development Project Norfolk Island MPSDSC Project No. 12517635 Site Norfolk Island Hospital Location 2 Grassy Road, Norfolk Island Date Drilled 23/09/2020	Drill Co. Norfolk Industries Driller J.T Rig Type 6 tonne excavator Drill Method HA / SFA Total Depth (m) 3 Diameter (mm) 200	Easting Northing Grid Ref GDA94_MGA_zone_58 Elevation Logged By D.B Checked By A.H
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Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.4	BH09_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining.	-0.2
0.4		0.2	BH09_0.3-0.5			CLAY, medium plasticity, orange brown, becoming brown at 1.3 m and brown mottled grey orange from 2.2m.	D	S	No odour, No staining.	-0.4
0.8		0.1	BH09_0.8-1.0							-0.8
1.0	SFA									-1.0
1.8		0.1	BH09_1.8-2.0							-1.8
2.8		0.1	BH09_2.8-3.0							-2.8
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE BH10

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Client Department of Infrastructure, Transport , Regional Development Project Norfolk Island MPSDSC Project No. 12517635 Site Norfolk Island Hospital Location 2 Grassy Road, Norfolk Island Date Drilled 23/09/2020	Drill Co. Norfolk Industries Driller J.T Rig Type 6 tonne excavator Drill Method HA / SFA Total Depth (m) 3 Diameter (mm) 200	Easting Northing Grid Ref GDA94_MGA_zone_58 Elevation Logged By D.B Checked By A.H
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Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.2	HA	0.3	BH10_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to coarse sub-angular gravel.	D	F	No odour, No staining, with plastic, glass and concrete and charcoal fragments. 1 x large concrete boulder (0.2 x 0.2m) at 1.1 m.	-0.2
0.4		0.3	BH10_0.4-0.6	-0.4						
0.6		0.6	BH10_0.8-1.0	-0.6						
0.8				-0.8						
1.0	SFA								-1.0	
1.2										-1.2
1.4		0.3	BH10_1.3-1.5			CLAY, medium plasticity, brown mottled grey and pale purple, trace medium to coarse sub-angular and sub-rounded gravel (inferred highly weathered basalt).	D	S	No odour, No staining.	-1.4
1.6				-1.6						
1.8		0.2	BH10_1.8-2.0	-1.8						
2.0				-2.0						
2.2									-2.2	
2.4									-2.4	
2.6									-2.6	
2.8		0.4	BH10_2.8-3.0						-2.8	
3.0						Termination Depth at: 3.00 m				-3.0
3.2										-3.2
3.4										-3.4

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA01

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 1	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)			
0.1	HA	2.1	HA01_0.0-0.2			Fill: Gravelly CLAY, low plasticity, brown, fine to medium sub-rounded gravel.	D	F	No odour, No staining, with metal, plastic and glass fragments.	-0.1			
0.2													
0.3		1.1	HA01_0.3-0.5			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.3			
0.4													-0.4
0.5													
0.6										-0.6			
0.7										-0.7			
0.8		0.7	HA01_0.8-1.0							-0.8			
0.9										-0.9			
1.0						Termination Depth at: 1.00 m				-1.0			
1.1										-1.1			
1.2										-1.2			
1.3										-1.3			
1.4										-1.4			
1.5										-1.5			
1.6										-1.6			
1.7										-1.7			
1.8										-1.8			
1.9										-1.9			

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA02

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 1	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	HA	0.2	HA02_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, brown and grey, becomes dark grey at 0.3m.	D	L	No odour, No staining, 3 x acm fragment, with glass and marine shell fragments.	-0.1
0.2				-0.2						
0.3		3.4	HA02_0.3-0.5							-0.3
0.4						CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.5	2.0	HA02_0.5-0.7		-0.5						
0.6				-0.6						
0.7										-0.7
0.8		0.2	HA02_0.8-1.0							-0.8
0.9										-0.9
1						Termination Depth at: 1.00 m				-1
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA03

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 1	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	HA	0.4	HA03_0.0-0.2			Fill: Clayey GRAVEL, medium plasticity, fine to coarse grained, sub-angular to sub-rounded, brown.	D	D	No odour, No staining.	-0.1
0.2										-0.2
0.3										
0.4		0.6	HA03_0.4-0.6			CLAY, brown.	D	S	No odour, No staining.	-0.4
0.5										-0.5
0.6										-0.6
0.7										-0.7
0.8		0.8	HA03_0.8-1.0							-0.8
0.9										-0.9
1.0						Termination Depth at: 1.00 m				-1.0
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA04

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 1	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	HA	0.7	HA04_0.0-0.2			Fill: Gravelly CLAY, brown, fine to medium sub-angular gravel.	D	F	No odour, No staining.	-0.1
0.2				-0.2						
0.3				-0.3						
0.4		1.1	HA04_0.4-0.6			Fill: CLAY, medium plasticity, brown, with fine to coarse and cobble sub-angular and sub-rounded gravel.	D	S	No odour, No staining.	-0.4
0.5			-0.5							
0.6			-0.6							
0.7										-0.7
0.8										-0.8
0.9		1.0	HA04_0.8-1.0							-0.9
1.0						Termination Depth at: 1.00 m				-1.0
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA05

ENVIRONMENTAL-SOIL BORE

Page 1 of 1

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 0.3	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	HA	0.8	HA05_0.0-0.2			Fill: Clayey GRAVEL, brown, fine to medium angular and sub-angular gravel.	D	D	No odour, No staining, with concrete fragments.	-0.1
0.2										-0.2
0.3						Termination Depth at: 0.30 m. Refusal on concrete.				-0.3
0.4										-0.4
0.5										-0.5
0.6										-0.6
0.7										-0.7
0.8										-0.8
0.9										-0.9
1										-1
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

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Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE HA06

ENVIRONMENTAL-SOIL BORE

Page 1 of 1

Client Department of Infrastructure, Transport , Regional Development	Drill Co. n/a	Easting
Project Norfolk Island MPSDSC	Driller n/a	Northing
Project No. 12517635	Rig Type n/a	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method HA	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 1	Logged By D.B
Date Drilled 24/09/2020	Diameter (mm) 110	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	HA	6.5	HA06_0.0-0.2			Fill: Gravelly CLAY, brown, with fine to coarse and cobble sub-angular and sub-rounded gravel.	D	F	No odour, No staining, with glass, plastic, ceramic and styrofoam fragments.	-0.1
0.2				-0.2						
0.3				-0.3						
0.4		1.7	HA06_0.4-0.6	-0.4						
0.5									-0.5	
0.6										-0.6
0.7										-0.7
0.8		2.4	HA06_0.8-1.0							-0.8
0.9										-0.9
1						Termination Depth at: 1.00 m				-1
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

SOIL BORE TP01

ENVIRONMENTAL-SOIL BORE

Client Department of Infrastructure, Transport , Regional Development	Drill Co. Norfolk Industries	Easting
Project Norfolk Island MPSDSC	Driller J.T	Northing
Project No. 12517635	Rig Type 6 tonne excavator	Grid Ref GDA94_MGA_zone_58
Site Norfolk Island Hospital	Drill Method TP	Elevation
Location 2 Grassy Road, Norfolk Island	Total Depth (m) 0.5	Logged By D.B
Date Drilled 23/09/2020	Diameter (mm) 300	Checked By A.H

Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	BE	1.1	TP01_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey and brown.	D	MD	No odour, No staining.	-0.1
0.2										
0.3		1.4	TP01_0.3-0.5			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.3
0.4										
0.5						Termination Depth at: 0.50 m				-0.5
0.6										-0.6
0.7										-0.7
0.8										-0.8
0.9										-0.9
1.0										-1.0
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE TP02

Page 1 of 1

Client Department of Infrastructure, Transport , Regional Development Project Norfolk Island MPSDSC Project No. 12517635 Site Norfolk Island Hospital Location 2 Grassy Road, Norfolk Island Date Drilled 23/09/2020	Drill Co. Norfolk Industries Driller J.T Rig Type 6 tonne excavator Drill Method TP Total Depth (m) 0.6 Diameter (mm) 300	Easting Northing Grid Ref GDA94_MGA_zone_58 Elevation Logged By D.B Checked By A.H
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Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	BE	0.7	TP02_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey and brown.	D	MD	No odour, No staining, 1 x acm fragment.	-0.1
0.2										-0.2
0.3										-0.3
0.4		2.4	TP02_0.4-0.6			CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.4
0.5										
0.6						Termination Depth at: 0.60 m				-0.6
0.7										-0.7
0.8										-0.8
0.9										-0.9
1.0										-1.0
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	Cohesive Soils
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Pushtube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard



BOREHOLE LOG

ENVIRONMENTAL-SOIL BORE

SOIL BORE TP03

Page 1 of 1

Client Department of Infrastructure, Transport , Regional Development Project Norfolk Island MPSDSC Project No. 12517635 Site Norfolk Island Hospital Location 2 Grassy Road, Norfolk Island Date Drilled 23/09/2020	Drill Co. Norfolk Industries Driller J.T Rig Type 6 tonne excavator Drill Method TP Total Depth (m) 0.6 Diameter (mm) 300	Easting Northing Grid Ref GDA94_MGA_zone_58 Elevation Logged By D.B Checked By A.H
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Depth (m)	Drilling Method	PID (ppm)	Sample ID	Water	Graphic Log	LITHOLOGICAL DESCRIPTION Soil Type (Classification Group Symbol); Particle Size; Colour; Secondary / Minor Components.	Moisture	Consistency	COMMENTS/ CONTAMINANT INDICATORS Odours, staining, waste materials, separate phase liquids, imported fill, ash.	Elevation (m)
0.1	BE	19.7	TP03_0.0-0.2			Fill: Clayey GRAVEL, fine to medium grained, sub-angular to sub-rounded, grey and brown.	D	MD	No odour, No staining.	-0.1
0.2										
0.3						CLAY, medium plasticity, orange brown.	D	S	No odour, No staining.	-0.3
0.4		2.1	TP03_0.4-0.6							-0.4
0.5										-0.5
0.6						Termination Depth at: 0.60 m				-0.6
0.7										-0.7
0.8										-0.8
0.9										-0.9
1.0										-1.0
1.1										-1.1
1.2										-1.2
1.3										-1.3
1.4										-1.4
1.5										-1.5
1.6										-1.6
1.7										-1.7
1.8										-1.8
1.9										-1.9

Notes

This log is not intended for geotechnical purposes.

Drilling Abbreviations	Moisture Abbreviations	Consistency Abbreviations	
AH-Air Hammer, AR-Air Rotary, BE-Bucket Excavation, CC-Concrete Coring, DC-Diamond Core, FH-Foam Hammer, HA-Hand Auger, HE-Hand Excavation (shovel), HFA-Hollow Flight Auger, NDD-Non Destructive Drilling, PT-Push tube, SD-Sonic Drilling, SFA-Solid Flight Auger, SS-Split Spoon, WB-Wash Bore, WS-Window Sampler	D-Dry, SM-Slightly Moist, M-Moist, VM-Very Moist, W-Wet, S-Saturated	Granular Soils VL-Very Loose, L-Loose, MD-Medium Dense, D-Dense, VD - Very Dense	Cohesive Soils VS-Very Soft, S-Soft, F-Firm, ST-Stiff, VST-Very Stiff, H-Hard

Appendix H – Calibration certificate

KENNARDS**HIRE****EQUIPMENT CERTIFICATION REPORT****PGN9003827 GAS DETECTOR - PID**Plant Number: 235015

SENSOR	CONCENTRATION	SPAN 1	SPAN 2	TRACEABILITY	PASS
PID Isobutylene	100ppm	0	100ppm	Lot # 1074828	<input checked="" type="checkbox"/>

Data Cleared

Battery Status <u>100</u> (%)	Temperature <u>22.0</u> °C
Electrical Test & Tag (AS/NZS 3760)	Inlet Filter Checked/Changed

Note: Calibration traceability information is available upon request.

Please clean/decontaminate instrument and accessories before returning. A minimum 'Cleaning Fee' \$55.00 (Inc GST) may apply if instrument is returned contaminated.

 Checked By: C. Lynch Date: 17/9/20 Signed: 
Accessories List:

User's Manual	Charger / Comms Adaptor	Wall Charger
2x Spare Air Filters	1x Spare Rechargeable Battery	Carry Transit Case
	Calibration Report	

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Appendix I – Laboratory documentation



CHAIN OF CUSTODY

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MELBOURNE 2-4 Westall Road Springvale VIC 3171
Ph: 03 8549 9800 E: samples.melbourne@alsglobal.com

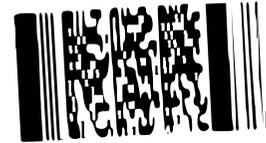
MUDGEEO 1/29 Sydney Road Mudgee NSW 2850
Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2305
Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

NOOWRA 4/13 Geary Place North Nowra NSW 2541
Ph: 02 4423 2065 E: nowra@alsglobal.com

PERTH 28 Rigali Way Wangara WA 6065
Ph: 08 9406 1301 E: samples.perth@alsglobal.com

Environmental Division
Brisbane
Work Order Reference
EB2025759



Telephone: +61-7-3243 7222

NSW 2500
No N/A
No N/A

CLIENT: GHD		TURNAROUND REQUIREMENTS : <input checked="" type="checkbox"/> Standard TAT (List due date):	
OFFICE: Gold Coast		(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) <input type="checkbox"/> Non Standard or urgent TAT (List due date):	
PROJECT: Norfolk Island MPS DSC	PROJECT NO. 12527635	ALS QUOTE NO.:	
ORDER NUMBER:	PURCHASE ORDER NO. 12527635_215a	COUNTRY OF ORIGIN:	
PROJECT MANAGER: Elijah Suares	CONTACT PH: 0455 138 396	COC SEQUENCE NUMBER (Circle)	
SAMPLER: Daniel Brazier	SAMPLER MOBILE: 0449 169 463	COC: 1 2 3 4 5 6 7	
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default): Excel, PDF, ESDAT	OF: 1 2 3 4 5 6 7	
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.comelius@ghd.com		RELINQUISHED BY: Daniel Brazier	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / elijah.suares@ghd.com		DATE/TIME: 30/08/2020	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TIMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).						Additional Information
	LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE <i>(refer to codes below)</i>	TOTAL BOTTLES	S-2 (8 metals)	EA200G (Asbestos presence / absence)	S-16 (TRH C6-C40, BTEXN, PAH, OC, OP, PCB, 8 Metals)	EP231X (full PFAS 28 analyte suite)	S-26 (TRH C6-C40, BTEXN, PAH, 8 Metals)	
1	BH01_0.0-0.2	22/09/2020	S					X	X			
2	BH01_0.3-0.5	22/09/2020	S									X
3	BH01_0.8-1.0	22/09/2020	S				X					
4	BH01_1.8-2.0	22/09/2020	S				X			X		
5	BH01_2.8-3.0	22/09/2020	S				X					
6	BH02_0.0-0.2	22/09/2020	S					X	X	X		
7	BH02_0.4-0.6	22/09/2020	S				X					
8	BH02_0.8-1.0	22/09/2020	S									X
9	BH02_1.8-2.0	22/09/2020	S				X					
10	BH02_2.8-3.0	22/09/2020	S									X
11	BH03_0.0-0.2	22/09/2020	S					X	X			
12	BH03_0.4-0.6	22/09/2020	S									X
TOTAL												

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



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CLIENT: GHD		TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date): (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)				FOR LABORATORY USE ONLY (Circle)		
OFFICE: Gold Coast		<input checked="" type="checkbox"/> Standard TAT (List due date):				Custody Seal Intact? Yes No N/A		
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635		ALS QUOTE NO.:		Free ice / frozen ice bricks present upon receipt? Yes No N/A		
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a		COUNTRY OF ORIGIN:		Random Sample Temperature on Receipt: °C		
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396		COC SEQUENCE NUMBER (Circle)		Other comment:		
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		RELINQUISHED BY:		RECEIVED BY:		RECEIVED BY:
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		DATE/TIME:		DATE/TIME:		DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.comelius@ghd.com				30/06/2020				
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / elijah.suares@ghd.com								

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TIMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).						Additional Information	
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13	BH03_0.8-1.0	22/09/2020	S				X			X			
14	BH03_1.8-2.0	22/09/2020	S									X	
15	BH03_2.8-3.0	22/09/2020	S				X						
16	BH04_0.0-0.2	23/09/2020	S					X	X				
17	BH04_0.4-0.6	23/09/2020	S									X	
18	BH04_0.8-1.0	23/09/2020	S				X			X			
19	BH04_1.8-2.0	23/09/2020	S				X						
20	BH04_2.8-3.0	23/09/2020	S									X	
21	BH05_0.0-0.2	23/09/2020	S					X	X	X			
22	BH05_0.4-0.6	23/09/2020	S									X	
23	BH05_0.8-1.0	23/09/2020	S				X						
24	BH05_1.8-2.0	23/09/2020	S				X						
TOTAL													

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Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugol's Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.



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CLIENT: GHD		TURNAROUND REQUIREMENTS : <input checked="" type="checkbox"/> Standard TAT (List due date): (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)				FOR LABORATORY USE ONLY (Circle)		
OFFICE: Gold Coast		<input type="checkbox"/> Non Standard or urgent TAT (List due date):				Custody Seal Intact? Yes No N/A		
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635	ALS QUOTE NO.:		COC SEQUENCE NUMBER (Circle)			
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a	COUNTRY OF ORIGIN:		Free ice / frozen ice bricks present upon receipt? Yes No N/A			
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396		COC: 1 2 3 4 5 6 7			Random Sample Temperature on Receipt: °C	
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		OF: 1 2 3 4 5 6 7			Other comment:	
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		RELINQUISHED BY:		RECEIVED BY:		
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.cornelius@ghd.com				Daniel Brazier				
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / eljah.suares@ghd.com				DATE/TIME:		DATE/TIME:		
				30/0692020				

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).						Additional Information	
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25	BH05_2.8-3.0	23/09/2020	S									X	
90	BH06_0.0-0.2	23/09/2020	S					X	X	X			
91	BH06_0.4-0.6	23/09/2020	S				X						
28	BH06_0.8-1.0	23/09/2020	S									X	
29	BH06_1.8-2.0	23/09/2020	S									X	
30	BH06_2.8-3.0	23/09/2020	S				X						
31	BH07_0.0-0.2	23/09/2020	S					X	X	X			
32	BH07_0.4-0.6	23/09/2020	S									X	
33	BH07_0.8-1.0	23/09/2020	S				X						
34	BH07_1.8-2.0	23/09/2020	S									X	
35	BH07_2.8-3.0	23/09/2020	S				X						
36	BH08_0.0-0.2	23/09/2020	S					X	X	X			
TOTAL													

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OFFICE: Gold Coast		<input type="checkbox"/> Non Standard or urgent TAT (List due date):							Custody Seal Intact? Yes No N/A		
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635		ALS QUOTE NO.:		COC SEQUENCE NUMBER (Circle)			Free ice / frozen ice bricks present upon receipt? Yes No N/A		
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a		COUNTRY OF ORIGIN:		COC: 1 2 3 4 5 6 7			Random Sample Temperature on Receipt: °C		
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396				OF: 1 2 3 4 5 6 7			Other comment:		
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		RELINQUISHED BY:		RECEIVED BY:			RELINQUISHED BY:		RECEIVED BY:
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		Daniel Brazier		DATE/TIME:			DATE/TIME:		DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.comelius@ghd.com				DATE/TIME:		DATE/TIME:			DATE/TIME:		DATE/TIME:
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / elijah.suares@ghd.com				30/06/2020		DATE/TIME:			DATE/TIME:		DATE/TIME:

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37	BH08_0.3-0.5	23/09/2020	S				X							
38	BH08_0.8-1.0	23/09/2020	S										X	
39	BH08_1.8-2.0	23/09/2020	S				X							
40	BH08_2.8-3.0	23/09/2020	S										X	
41	BH09_0.0-0.2	23/09/2020	S					X	X	X				
42	BH09_0.3-0.5	23/09/2020	S										X	
43	BH09_0.8-1.0	23/09/2020	S				X							
44	BH09_1.8-2.0	23/09/2020	S										X	
45	BH09_2.8-3.0	23/09/2020	S				X							
46	BH10_0.0-0.2	23/09/2020	S					X	X	X		X		
47	BH10_0.4-0.6	23/09/2020	S										X	
48	BH10_0.8-1.0	23/09/2020	S				X		X					
TOTAL														

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ALSUSE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED Including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).							Additional Information	
	LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	S-2 (8 metals)	EA200G (Asbestos presence / absence)	S-16 (TRH C6-C40, BTEXN, PAH, OC, OP, PCB, 8 Metals)	EP231X (full PFAS 28 analyte suite)	S-26 (TRH C6-C40, BTEXN, PAH, 8 Metals)	EP074E (TCE - Halogenated aliphatics)		Hold
49	BH10_1.3-1.5	23/09/2020	S										X	
50	BH10_1.8-2.0	23/09/2020	S										X	
51	BH10_2.8-3.0	23/09/2020	S				X							
52	TP01_0.0-0.2	23/09/2020	S				X	X						
53	TP01_0.3-0.5	23/09/2020	S										X	
54	TP02_0.0-0.2	23/09/2020	S				X	X						
55	TP02_0.4-0.6	23/09/2020	S										X	
56	TP03_0.0-0.2	23/09/2020	S					X			X			
57	TP03_0.4-0.6	23/09/2020	S										X	
58	HA01_0.0-0.2	24/09/2020	S					X	X					
59	HA01_0.3-0.5	24/09/2020	S										X	
60	HA01_0.8-1.0	24/09/2020	S										X	
TOTAL														

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



CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 3/1 Burma Road Pooraka SA 5095
Ph: 08 8162 5130 E: adelaide@alsglobal.com

BRISBANE 2 Blyth Street Stafford QLD 4053
Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

GLADSTONE 44 Calemondah Drive Gladstone QLD 4680
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MELBOURNE 2-4 Westall Road Springvale VIC 3171
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NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304
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NOOWRA 4/13 Geary Place North Nowra NSW 2541
Ph: 02 4423 2063 E: nowra@alsglobal.com

PERTH 26 Riggall Way Wangara WA 6065
Ph: 08 9406 1301 E: samples.perth@alsglobal.com

OSYDNEY 277-289 Woodpark Road Smithfield NSW 2164
Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

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Ph: 07 4773 0000 E: ALSenviro.Townsville@alsglobal.com

WOLLONGONG 1/19-21 Ralph Black Drive, Nth Wollongong NSW 2520
Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: GHD		TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date): (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)				FOR LABORATORY USE ONLY (Circle)			
OFFICE: Gold Coast		<input checked="" type="checkbox"/> Non Standard or urgent TAT (List due date):				Custody Seal Intact? Yes No N/A			
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635		ALS QUOTE NO.:		Free ice / frozen ice bricks present upon receipt? Yes No N/A			
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a		COUNTRY OF ORIGIN:		Random Sample Temperature on Receipt: °C			
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396		COC SEQUENCE NUMBER (Circle)		Other comment:			
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		RELINQUISHED BY:		RECEIVED BY:		RECEIVED BY:	
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		DATE/TIME:		DATE/TIME:		DATE/TIME:	
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.comelius@ghd.com				30/06/2020					
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / elijah.suares@ghd.com									

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TIMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required):							Additional Information	
	LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	S-2 (8 metals)	EA200G (Asbestos presence / absence)	S-16 (TRH C6-C40, BTEXN, PAH, OC, OP, PCB, 8 Metals)	EP231X (full PFAS 28 analyte suite)	S-26 (TRH C6-C40, BTEXN, PAH, 8 Metals)	NT-9S (Total Nitrogen, TKN, NO2, NO3, NH3, TP)		EP074E (TCE - Halogenated aliphatics)
61	HA02_0.0-0.2	24/09/2020	S					X	X					
62	HA02_0.3-0.5	24/09/2020	S								X			
63	HA02_0.5-0.7	24/09/2020	S											X
64	HA02_0.8-1.0	24/09/2020	S											X
65	HA03_0.0-0.2	24/09/2020	S					X	X					
66	HA03_0.4-0.6	24/09/2020	S											X
67	HA03_0.8-1.0	24/09/2020	S							X				
68	HA04_0.0-0.2	24/09/2020	S					X	X	X			X	
69	HA04_0.4-0.6	24/09/2020	S											X
70	HA04_0.8-1.0	24/09/2020	S											X
71	HA05_0.0-0.2	24/09/2020	S					X			X	X	X	
72	HA06_0.0-0.2	24/09/2020	S					X	X	X			X	
TOTAL														

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugos Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.



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Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: GHD		TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date):		FOR LABORATORY USE ONLY (Circle)	
OFFICE: Gold Coast		(Standard TAT may be longer for some tests e.g. Ultra Trace Organics)		Custody Seal Intact? Yes No N/A	
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt? Yes No N/A	
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a	COUNTRY OF ORIGIN:	Random Sample Temperature on Receipt: °C	
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396		Other comment:	
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		RECEIVED BY:	
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		RELINQUISHED BY:	
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.omeiliu@ghd.com		DATE/TIME:		DATE/TIME:	
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / elijah.suares@ghd.com		30/06/2020		DATE/TIME:	

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TIMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price)							Additional Information		
	LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								
							S-2 (8 metals)	EA200G (Asbestos presence / absence)	S-16 (TRH C6-C40, BTEXN, PAH, OC, OP, PCB, 8 Metals)	EP231X (full PFAS 28 analyte suite)	S-26 (TRH C6-C40, BTEXN, PAH, 8 Metals)	NT-85 (Total Nitrogen, TKN, NO2, NO3, NH3, TP)	EP074E (TCE - Halogenated aliphatics)	Hold	
73	HA06_0.4-0.6	24/09/2020	S											X	
74	HA06_0.8-1.0	24/09/2020	S				X					X			
75	FD01	23/09/2020	S						X						
75	FS01	23/09/2020	S						X						Please forward to Eurofins for analysis
77	FD02	23/09/2020	S							X					
78	FS02	23/09/2020	S							X					Please forward to Eurofins for analysis
79	FD03	24/09/2020	S				X								
80	FS03	24/09/2020	S				X								Please forward to Eurofins for analysis
81	FD04	24/09/2020	S							X					
82	FS04	24/09/2020	S							X					Please forward to Eurofins for analysis
TOTAL															

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CLIENT: GHD		TURNAROUND REQUIREMENTS : <input type="checkbox"/> <input checked="" type="checkbox"/> Standard TAT (List due date): (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)				FOR LABORATORY USE ONLY (Circle)					
OFFICE: Gold Coast		<input type="checkbox"/> Non Standard or urgent TAT (List due date):				Custody Seal Intact? Yes No N/A					
PROJECT: Norfolk Island MPS DSC		PROJECT NO. 12527635		ALS QUOTE NO.:		Free ice / frozen ice bricks present upon receipt? Yes No N/A					
ORDER NUMBER:		PURCHASE ORDER NO. 12527635_215a		COUNTRY OF ORIGIN:		Random Sample Temperature on Receipt: °C					
PROJECT MANAGER: Elijah Suares		CONTACT PH: 0455 138 396		COC SEQUENCE NUMBER (Circle)		Other comment:					
SAMPLER: Daniel Brazier		SAMPLER MOBILE: 0449 169 463		RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
COC Emailed to ALS? (YES / NO)		EDD FORMAT (or default): Excel, PDF, ESDAT		DATE/TIME:		DATE/TIME:		DATE/TIME:		DATE/TIME:	
Email Reports to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / emma.cornelius@ghd.com				30/06/2020							
Email Invoice to (will default to PM if no other addresses are listed): daniel.brazier@ghd.com / eljah.suares@ghd.com											

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: SHORT HOLDING TIMES PLEASE EXTRACT AND ANALYSE ASAP

ALS USE ONLY	SAMPLE DETAILS			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price)					Additional Information	
	LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	W-26 (TRH C6-C40, BTEXN, PAH, 8 Metals)	W-13 (OCP, OPP, PCBs)	EP231X (full PFAS 28 analyte suite)	S-4 (TRH C6-C10, BTEXN)		Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
	83	RB01	22/09/2020	W			X					Metals and PFAS bottles to arrive via courier 1/10/2020
	84	RB02	23/09/2020	W			X	X				Metals and PFAS bottles to arrive via courier 1/10/2020
	85	RB03	24/09/2020	W					X			Metals and PFAS bottles to arrive via courier 1/10/2020
	86	TB01	22/09/2020	W						X		
	87	TB02	23/09/2020	W						X		
	88	TB03	24/09/2020	W						X		
	89	TB04	24/09/2020	W						X		
TOTAL												

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



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : EB2025759

Client	: GHD PTY LTD	Laboratory	: Environmental Division Brisbane
Contact	: MR DANIEL BRAZIER	Contact	: Andrew Epps
Address	:	Address	: 2 Byth Street Stafford QLD Australia 4053
E-mail	: daniel.brazier@ghd.com	E-mail	: andrew.epps@alsglobal.com
Telephone	: ----	Telephone	: +61 7 3552 8639
Facsimile	: ----	Facsimile	: +61-7-3243 7218
Project	: 12527635	Page	: 1 of 6
Order number	: 12527635_215a	Quote number	: EB2020GHDSE0038 (EN/005)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: Norfolk Island MPS DSC		
Sampler	: DANIEL BRAZIER		

Dates

Date Samples Received	: 30-Sep-2020 12:50	Issue Date	: 02-Oct-2020
Client Requested Due Date	: 13-Oct-2020	Scheduled Reporting Date	: 13-Oct-2020

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 4	Temperature	: 5.3°C, 7.1°C, 8.7°C, 6.3°C - Ice present
Receipt Detail	: MED ESKY	No. of samples received / analysed	: 85 / 54

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- **Please be advised that W-18 (volatile TRH/BTEXN) has been assigned to trip blanks as per standard. If this is incorrect, please contact client services at ALSEnviro.Brisbane@alsglobal.com.**
- **PFAS analysis has been added to sample "BH01_0.0-0.2" as per email from Daniel Brazier at 14:23 on 30/09/2020.**
- ***01/10/2020*: SRN has been resent to acknowledge changes to sample ID's and addition of analysis as per correspondence received by ALS from Dan Brazier, 01/10/2020. All missing asbestos bags have been accounted for and the original unlabelled asbestos bags; 'Blank ID A' & 'Blank ID B' have been determined to be the asbestos bags for 'HA02_0.0-0.2' & 'BH06_0.4-0.6'. Please note that the due date has been extended to allow for the additional analysis to be performed. For any further information regarding these adjustments please contact client services at ALSEnviro.Brisbane@alsglobal.com.**
- ***02/10/2020*: SRN has been resent to acknowledge receipt of additional containers for samples RB01, RB02, & RB03, an analysis added to these samples. For any further information regarding these adjustments please contact client services at ALSEnviro.Brisbane@alsglobal.com.**
- Discounted Package Prices apply only when specific ALS Group Codes ('W', 'S', 'NT' suites) are referenced on COCs.
- **Please be advised that asbestos and ammonia analysis will be conducted by ALS Environmental, Melbourne, NATA accreditation No. 825, Site No. 13778.**
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Analysis will be conducted by ALS Environmental, Brisbane, NATA accreditation no. 825, Site No. 818 (Micro site no. 18958).
- **Breaches in recommended extraction / analysis holding times (if any) are displayed overleaf in the Proactive Holding Time Report table.**
- **Samples "FS01", "FS02", "FS03", and "FS04" have been forwarded to Eurofins, as requested. Please note that this will incur a freight forwarding fee.**
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.



Sample Container(s)/Preservation Non-Compliances

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

- No sample container / preservation non-compliance exists.

Summary of Sample(s) and Requested Analysis

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

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

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EP074E VOC - Hal Aliphatics	SOIL - EP231X (solids) PFAS - Full Suite (28 analytes)	SOIL - S-02 8 Metals (incl. Digestion)	SOIL - S-16 TRH/TEXN/PAH/OC/OP/PCB/8Metals
EB2025759-001	22-Sep-2020 00:00	BH01_0.0-0.2		✓	✓		✓		✓
EB2025759-002	22-Sep-2020 00:00	BH01_0.3-0.5	✓						
EB2025759-003	22-Sep-2020 00:00	BH01_0.8-1.0		✓				✓	
EB2025759-004	22-Sep-2020 00:00	BH01_1.8-2.0		✓			✓	✓	
EB2025759-005	22-Sep-2020 00:00	BH01_2.8-3.0		✓				✓	
EB2025759-006	22-Sep-2020 00:00	BH02_0.0-0.2		✓	✓		✓		✓
EB2025759-007	22-Sep-2020 00:00	BH02_0.4-0.6		✓				✓	
EB2025759-008	22-Sep-2020 00:00	BH02_0.8-1.0	✓						
EB2025759-009	22-Sep-2020 00:00	BH02_1.8-2.0		✓				✓	
EB2025759-010	22-Sep-2020 00:00	BH02_2.8-3.0	✓						
EB2025759-011	22-Sep-2020 00:00	BH03_0.0-0.2		✓	✓				✓
EB2025759-012	22-Sep-2020 00:00	BH03_0.4-0.6	✓						
EB2025759-013	22-Sep-2020 00:00	BH03_0.8-1.0		✓			✓	✓	
EB2025759-014	22-Sep-2020 00:00	BH03_1.8-2.0	✓						
EB2025759-015	22-Sep-2020 00:00	BH03_2.8-3.0		✓				✓	
EB2025759-016	23-Sep-2020 00:00	BH04_0.0-0.2		✓	✓				✓
EB2025759-017	23-Sep-2020 00:00	BH04_0.4-0.6	✓						
EB2025759-018	23-Sep-2020 00:00	BH04_0.8-1.0		✓			✓	✓	
EB2025759-019	23-Sep-2020 00:00	BH04_1.8-2.0		✓				✓	
EB2025759-020	23-Sep-2020 00:00	BH04_2.8-3.0	✓						
EB2025759-021	23-Sep-2020 00:00	BH05_0.0-0.2		✓	✓		✓		✓
EB2025759-022	23-Sep-2020 00:00	BH05_0.4-0.6	✓						
EB2025759-023	23-Sep-2020 00:00	BH05_0.8-1.0		✓				✓	
EB2025759-024	23-Sep-2020 00:00	BH05_1.8-2.0		✓				✓	
EB2025759-025	23-Sep-2020 00:00	BH05_2.8-3.0	✓						
EB2025759-028	23-Sep-2020 00:00	BH06_0.8-1.0	✓						
EB2025759-029	23-Sep-2020 00:00	BH06_1.8-2.0	✓						
EB2025759-030	23-Sep-2020 00:00	BH06_2.8-3.0		✓				✓	
EB2025759-031	23-Sep-2020 00:00	BH07_0.0-0.2		✓	✓		✓		✓
EB2025759-032	23-Sep-2020 00:00	BH07_0.4-0.6	✓						
EB2025759-033	23-Sep-2020 00:00	BH07_0.8-1.0		✓				✓	
EB2025759-034	23-Sep-2020 00:00	BH07_1.8-2.0	✓						
EB2025759-035	23-Sep-2020 00:00	BH07_2.8-3.0		✓				✓	
EB2025759-036	23-Sep-2020 00:00	BH08_0.0-0.2		✓	✓		✓		✓
EB2025759-037	23-Sep-2020 00:00	BH08_0.3-0.5		✓				✓	



			(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EP074E VOC - Hal Aliphatics	SOIL - EP231X (solids) PFAS - Full Suite (28 analytes)	SOIL - S-02 8 Metals (incl. Digestion)	SOIL - S-16 TRH/BTEXN/PAH/OC/OP/PCB/8Metals
EB2025759-038	23-Sep-2020 00:00	BH08_0.8-1.0	✓						
EB2025759-039	23-Sep-2020 00:00	BH08_1.8-2.0		✓				✓	
EB2025759-040	23-Sep-2020 00:00	BH08_2.8-3.0	✓						
EB2025759-041	23-Sep-2020 00:00	BH09_0.0-0.2		✓	✓		✓		✓
EB2025759-042	23-Sep-2020 00:00	BH09_0.3-0.5	✓						
EB2025759-043	23-Sep-2020 00:00	BH09_0.8-1.0		✓				✓	
EB2025759-044	23-Sep-2020 00:00	BH09_1.8-2.0	✓						
EB2025759-045	23-Sep-2020 00:00	BH09_2.8-3.0		✓				✓	
EB2025759-046	23-Sep-2020 00:00	BH10_0.0-0.2		✓	✓	✓	✓		✓
EB2025759-047	23-Sep-2020 00:00	BH10_0.4-0.6	✓						
EB2025759-048	23-Sep-2020 00:00	BH10_0.8-1.0		✓				✓	✓
EB2025759-049	23-Sep-2020 00:00	BH10_1.3-1.5	✓						
EB2025759-050	23-Sep-2020 00:00	BH10_1.8-2.0	✓						
EB2025759-051	23-Sep-2020 00:00	BH10_2.8-3.0		✓				✓	
EB2025759-052	23-Sep-2020 00:00	TP01_0.0-0.2		✓	✓			✓	
EB2025759-053	23-Sep-2020 00:00	TP01_0.3-0.5	✓						
EB2025759-054	23-Sep-2020 00:00	TP02_0.0-0.2		✓	✓			✓	
EB2025759-055	23-Sep-2020 00:00	TP02_0.4-0.6	✓						
EB2025759-056	23-Sep-2020 00:00	TP03_0.0-0.2		✓	✓				
EB2025759-057	23-Sep-2020 00:00	TP03_0.4-0.6	✓						
EB2025759-058	24-Sep-2020 00:00	HA01_0.0-0.2		✓	✓				✓
EB2025759-059	24-Sep-2020 00:00	HA01_0.3-0.5	✓						
EB2025759-060	24-Sep-2020 00:00	HA01_0.8-1.0	✓						
EB2025759-061	24-Sep-2020 00:00	HA02_0.0-0.2		✓	✓				✓
EB2025759-062	24-Sep-2020 00:00	HA02_0.3-0.5		✓					
EB2025759-063	24-Sep-2020 00:00	HA02_0.5-0.7	✓						
EB2025759-064	24-Sep-2020 00:00	HA02_0.8-1.0	✓						
EB2025759-065	24-Sep-2020 00:00	HA03_0.0-0.2		✓	✓				✓
EB2025759-066	24-Sep-2020 00:00	HA03_0.4-0.6	✓						
EB2025759-067	24-Sep-2020 00:00	HA03_0.8-1.0		✓			✓		
EB2025759-068	24-Sep-2020 00:00	HA04_0.0-0.2		✓	✓	✓	✓		✓
EB2025759-069	24-Sep-2020 00:00	HA04_0.4-0.6	✓						
EB2025759-070	24-Sep-2020 00:00	HA04_0.8-1.0	✓						
EB2025759-071	24-Sep-2020 00:00	HA05_0.0-0.2		✓	✓	✓			
EB2025759-072	24-Sep-2020 00:00	HA06_0.0-0.2		✓	✓	✓	✓		✓
EB2025759-073	24-Sep-2020 00:00	HA06_0.4-0.6	✓						
EB2025759-074	24-Sep-2020 00:00	HA06_0.8-1.0		✓				✓	
EB2025759-075	23-Sep-2020 00:00	FD01		✓					✓
EB2025759-077	23-Sep-2020 00:00	FD02		✓			✓		
EB2025759-079	24-Sep-2020 00:00	FD03		✓				✓	
EB2025759-081	24-Sep-2020 00:00	FD04		✓			✓		



Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EP074E VOC - Hal Aliphatics	SOIL - EP231X (solids) PFAS - Full Suite (28 analytes)	SOIL - S-02 8 Metals (incl. Digestion)	SOIL - S-16 TRH/BTEXN/PAH/OC/OP/PCB/8Metals
EB2025759-090	22-Sep-2020 00:00	BH06_0.0-0.2		✓	✓		✓		✓
EB2025759-091	23-Sep-2020 00:00	BH06_0.4-0.6		✓				✓	

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - NT-8S NH3, NO2, NO3, NOX, TKN, TN, TP	SOIL - S-26 8 metals/TRH/BTEXN/PAH
EB2025759-056	23-Sep-2020 00:00	TP03_0.0-0.2		✓
EB2025759-062	24-Sep-2020 00:00	HA02_0.3-0.5		✓
EB2025759-071	24-Sep-2020 00:00	HA05_0.0-0.2	✓	✓
EB2025759-074	24-Sep-2020 00:00	HA06_0.8-1.0	✓	

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - EP231X PFAS - Full Suite (28 analytes)	WATER - W-13 OC/OP/PCB	WATER - W-18 TRH(C6 - C9)/BTEXN	WATER - W-26 TRH/BTEXN/PAH/8 Metals
EB2025759-083	22-Sep-2020 00:00	RB01				✓
EB2025759-084	23-Sep-2020 00:00	RB02		✓		✓
EB2025759-085	24-Sep-2020 00:00	RB03	✓			
EB2025759-086	22-Sep-2020 00:00	TB01			✓	
EB2025759-087	23-Sep-2020 00:00	TB02			✓	
EB2025759-088	24-Sep-2020 00:00	TB03			✓	
EB2025759-089	22-Sep-2020 00:00	TB04			✓	

Proactive Holding Time Report

The following table summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory.

Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.



Method	Client Sample ID(s)	Container	Due for extraction	Due for analysis	Samples Received		Instructions Received	
					Date	Evaluation	Date	Evaluation
EP074: Volatile Organic Compounds								
	BH10_0.0-0.2	Soil Glass Jar - Unpreserved	30-Sep-2020	30-Sep-2020	30-Sep-2020	✓	01-Oct-2020	✗

Matrix: WATER

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

Method	Client Sample ID(s)	Container	Due for extraction	Due for analysis	Samples Received		Instructions Received	
					Date	Evaluation	Date	Evaluation
EP066: Polychlorinated Biphenyls (PCB)								
	RB02	Amber Glass Bottle - Unpreserved	30-Sep-2020	09-Nov-2020	30-Sep-2020	✓	01-Oct-2020	✗
EP068: Pesticides by GCMS								
	RB02	Amber Glass Bottle - Unpreserved	30-Sep-2020	09-Nov-2020	30-Sep-2020	✓	01-Oct-2020	✗
EP071: TRH - Semivolatile Fraction								
	RB01	Amber Glass Bottle - Unpreserved	29-Sep-2020	08-Nov-2020	30-Sep-2020	✗	01-Oct-2020	✗
	RB02	Amber Glass Bottle - Unpreserved	30-Sep-2020	09-Nov-2020	30-Sep-2020	✓	01-Oct-2020	✗
EP075(SIM): PAH/Phenols (GC/MS - SIM)								
	RB01	Amber Glass Bottle - Unpreserved	29-Sep-2020	08-Nov-2020	30-Sep-2020	✗	01-Oct-2020	✗
	RB02	Amber Glass Bottle - Unpreserved	30-Sep-2020	09-Nov-2020	30-Sep-2020	✓	01-Oct-2020	✗

Requested Deliverables

ACCOUNTS PAYABLE

- A4 - AU Tax Invoice (INV)

Email accountspayableAU@ghd.com

DANIEL BRAZIER

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- A4 - AU Tax Invoice (INV)
- Chain of Custody (CoC) (COC)
- EDI Format - ENMRG (ENMRG)
- EDI Format - ESDAT (ESDAT)
- EDI Format - XTab (XTAB)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email daniel.brazier@ghd.com
 Email daniel.brazier@ghd.com

ELIJAH SUARES

- A4 - AU Tax Invoice (INV)

Email elijah.suares@ghd.com

EMMA CORNELIUS

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ENMRG (ENMRG)
- EDI Format - ESDAT (ESDAT)
- EDI Format - XTab (XTAB)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email emma.cornelius@ghd.com
 Email emma.cornelius@ghd.com

GHD LAB REPORTS

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email ghdlabreports@ghd.com
 Email ghdlabreports@ghd.com
 Email ghdlabreports@ghd.com
 Email ghdlabreports@ghd.com
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 Email ghdlabreports@ghd.com

CERTIFICATE OF ANALYSIS

Work Order : **EB2025759**
Client : **GHD PTY LTD**
Contact : **MR DANIEL BRAZIER**
Address :
Telephone : ----
Project : 12527635
Order number : 12527635_215a
C-O-C number : ----
Sampler : DANIEL BRAZIER
Site : Norfolk Island MPS DSC
Quote number : EN/005
No. of samples received : 85
No. of samples analysed : 54

Page : 1 of 74
Laboratory : Environmental Division Brisbane
Contact : Andrew Epps
Address : 2 Byth Street Stafford QLD Australia 4053
Telephone : +61 7 3552 8639
Date Samples Received : 30-Sep-2020 12:50
Date Analysis Commenced : 30-Sep-2020
Issue Date : 13-Oct-2020 11:25



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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Diana Mesa	Senior Organic Chemist	Brisbane Organics, Stafford, QLD
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD
Morgan Lennox	2IC Organic Chemist	Brisbane Organics, Stafford, QLD
Uyen Dalkin	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Vanessa Phung	Team Leader - Asbestos	Melbourne Asbestos, Springvale, VIC



General Comments

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

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

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

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

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

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

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

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP231X PFAS: Matrix spike recovery not determined due to dilution of primary sample.
- EG035T (Total Mercury): Sample HA02_0.0-0.2(EB2025759-061) shows poor matrix spike recovery due to sample heterogeneity. Confirmed by visual inspection.
- EG005T (Total Metals by ICP-AES): Sample BH03_0.0-0.2 (EB2025759-011) shows poor duplicate results due to sample heterogeneity. Confirmed by visual inspection.
- EG005T (Total Metals by ICP-AES): Sample HA02_0.0-0.2 (EB2025759-061) shows poor matrix spike recovery due to sample heterogeneity. Confirmed by visual inspection.
- EG005T (Total Metals by ICP-AES): Samples BH01_0.8-1.0 (EB2025759-003) and BH08_1.8-2.0 (EB2025759-039) show poor matrix spike recovery due to sample heterogeneity. Confirmed by visual inspection.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres



- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	12.5	30.9	33.2	32.3	14.2	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	Yes	----	----	----	No	
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	No	
Asbestos Type	1332-21-4	-	--	Ch	----	----	----	-	
Sample weight (dry)	----	0.01	g	36.7	----	----	----	56.8	
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	----	----	----	V.PHUNG	
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	No	
Organic Fibre	----	0.1	g/kg	Yes	----	----	----	Yes	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	169	337	244	160	140	
Copper	7440-50-8	5	mg/kg	5	6	10	28	5	
Lead	7439-92-1	5	mg/kg	13	9	6	<5	14	
Nickel	7440-02-0	2	mg/kg	4	6	59	70	3	
Zinc	7440-66-6	5	mg/kg	29	6	20	28	31	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.6	1.0	<0.1	<0.1	0.7	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	<0.1	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	<0.05	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	<0.05	
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	<0.05	
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	<0.05	
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	<0.05	
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	<0.05	
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	<0.05	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	<0.05	
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	<0.05	
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	<0.05	
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	<0.05	
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	<0.05	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time					22-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	EB2025759-006
				Result	Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	----	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	----	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time					22-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	EB2025759-006
				Result	Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	----	----	----	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	----	----	1.2
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	----	----	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	<50



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time					22-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	EB2025759-006
				Result	Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	----	----	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----	<1
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	<0.001	----	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	<0.0002



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH01_0.0-0.2	BH01_0.8-1.0	BH01_1.8-2.0	BH01_2.8-3.0	BH02_0.0-0.2
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-001	EB2025759-003	EB2025759-004	EB2025759-005	EB2025759-006	
				Result	Result	Result	Result	Result	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	52.0	----	----	----	52.2	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	94.6	----	----	----	93.3	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	122	----	----	----	125	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	86.4	----	----	----	82.3	
2-Chlorophenol-D4	93951-73-6	0.5	%	67.2	----	----	----	62.0	
2,4,6-Tribromophenol	118-79-6	0.5	%	68.0	----	----	----	65.0	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	82.6	----	----	----	80.8	
Anthracene-d10	1719-06-8	0.5	%	88.7	----	----	----	88.2	
4-Terphenyl-d14	1718-51-0	0.5	%	103	----	----	----	101	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	79.4	----	----	----	78.5	
Toluene-D8	2037-26-5	0.2	%	90.7	----	----	----	91.2	
4-Bromofluorobenzene	460-00-4	0.2	%	94.0	----	----	----	94.4	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	89.5	----	85.0	----	108	
13C8-PFOA	----	0.0002	%	109	----	110	----	117	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	24.9	33.6	11.5	30.3	31.9	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	----	----	No	----	----	
Asbestos (Trace)	1332-21-4	5	Fibres	----	----	No	----	----	
Asbestos Type	1332-21-4	-	--	----	----	-	----	----	
Sample weight (dry)	----	0.01	g	----	----	48.6	----	----	
APPROVED IDENTIFIER:	----	-	--	----	----	U.DALKIN	----	----	
Synthetic Mineral Fibre	----	0.1	g/kg	----	----	No	----	----	
Organic Fibre	----	0.1	g/kg	----	----	Yes	----	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	368	258	125	377	191	
Copper	7440-50-8	5	mg/kg	5	18	17	7	22	
Lead	7439-92-1	5	mg/kg	10	16	145	10	<5	
Nickel	7440-02-0	2	mg/kg	3	34	6	7	27	
Zinc	7440-66-6	5	mg/kg	9	17	594	7	18	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	1.0	<0.1	0.8	0.8	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	----	
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	----	
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	----	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	----	
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	----	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	----	----	<0.05	----	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	----	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	----	----	
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	----	----	
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	----	----	
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	----	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	----	----	
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	----	----	
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	----	----	
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	----	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	----	----	
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	----	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	----	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	----	<0.05	----	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	----	----	
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	----	----	
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	----	----	
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	----	----	
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	----	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Client sample ID

				BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	----	0.6	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	1.2	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	----	----	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	----	----	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	----	<50	----	----	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	----	----	
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	----	----	
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	----	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	----	----	
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	----	----	
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	----	----	
^ Total Xylenes	----	0.5	mg/kg	----	----	<0.5	----	----	
Naphthalene	91-20-3	1	mg/kg	----	----	<1	----	----	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	----	----	<0.0002	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	----	----	<0.001	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	----	----	<0.0002	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	----	----	<0.0002	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	----	----	<0.0005	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	----	----	<0.0002	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	----	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	----	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	----	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	----	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	----	----	<0.0002	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	----	----	<0.0002	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	----	----	<0.0005	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	----	----	<0.0005	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	----	----	<0.0005	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	----	<0.0005	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	----	----	<0.0002	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	----	<0.0002	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH02_0.4-0.6	BH02_1.8-2.0	BH03_0.0-0.2	BH03_0.8-1.0	BH03_2.8-3.0
Client sampling date / time				22-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-007	EB2025759-009	EB2025759-011	EB2025759-013	EB2025759-015	
				Result	Result	Result	Result	Result	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	----	<0.0002	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	40.9	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	----	----	103	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	----	----	117	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	----	----	76.3	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	76.6	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	----	82.0	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	85.2	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	----	80.1	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	86.5	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	----	81.9	----	----	
Toluene-D8	2037-26-5	0.2	%	----	----	73.4	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	----	91.1	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	----	----	----	97.0	----	
13C8-PFOA	----	0.0002	%	----	----	----	111	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	17.8	34.3	30.3	12.9	32.4	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	No	----	
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	No	----	
Asbestos Type	1332-21-4	-	--	-	----	----	-	----	
Sample weight (dry)	----	0.01	g	57.7	----	----	82.1	----	
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	----	----	V.PHUNG	----	
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	No	----	
Organic Fibre	----	0.1	g/kg	Yes	----	----	Yes	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	156	430	228	100	405	
Copper	7440-50-8	5	mg/kg	8	<5	26	29	8	
Lead	7439-92-1	5	mg/kg	22	10	7	199	11	
Nickel	7440-02-0	2	mg/kg	4	4	48	11	12	
Zinc	7440-66-6	5	mg/kg	38	5	21	205	5	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.9	0.9	<0.1	0.6	0.4	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	<0.1	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	<0.05	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	<0.05	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	<0.05	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	<0.2	----	
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	<0.2	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	<0.2	----	
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	<0.05	----	
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	<0.2	----	
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	<0.2	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	<0.05	----	
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	<0.05	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	<0.5	----	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	----	0.6	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	1.2	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	<10	----	
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	<50	----	
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	<100	----	
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	<100	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	<10	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	<10	----	
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	<50	----	
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	<100	----	
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	<100	----	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	<50	----	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	<0.2	----	
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	<0.5	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	<0.2	----	
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
Naphthalene	91-20-3	1	mg/kg	<1	----	----	<1	----	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	<0.0002	----	0.0007	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	<0.001	----	<0.001	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	0.0003	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	<0.0002	----	0.0010	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	0.0007	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH04_0.0-0.2	BH04_0.8-1.0	BH04_1.8-2.0	BH05_0.0-0.2	BH05_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-016	EB2025759-018	EB2025759-019	EB2025759-021	EB2025759-023	
				Result	Result	Result	Result	Result	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	0.0010	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	51.1	----	----	54.6	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	90.5	----	----	97.9	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	126	----	----	136	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	70.9	----	----	83.0	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	48.2	----	----	64.8	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	65.0	----	----	66.0	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	71.6	----	----	78.3	----	
Anthracene-d10	1719-06-8	0.5	%	86.9	----	----	88.4	----	
4-Terphenyl-d14	1718-51-0	0.5	%	99.2	----	----	102	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	78.6	----	----	79.1	----	
Toluene-D8	2037-26-5	0.2	%	89.1	----	----	87.6	----	
4-Bromofluorobenzene	460-00-4	0.2	%	88.5	----	----	89.8	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	----	90.5	----	99.0	----	
13C8-PFOA	----	0.0002	%	----	108	----	104	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	35.6	42.8	14.0	34.9	40.2	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	----	----	No	----	----	
Asbestos (Trace)	1332-21-4	5	Fibres	----	----	No	----	----	
Asbestos Type	1332-21-4	-	--	----	----	-	----	----	
Sample weight (dry)	----	0.01	g	----	----	82.3	----	----	
APPROVED IDENTIFIER:	----	-	--	----	----	V.PHUNG	----	----	
Synthetic Mineral Fibre	----	0.1	g/kg	----	----	No	----	----	
Organic Fibre	----	0.1	g/kg	----	----	Yes	----	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	269	199	125	335	71	
Copper	7440-50-8	5	mg/kg	25	26	7	13	46	
Lead	7439-92-1	5	mg/kg	17	7	13	9	6	
Nickel	7440-02-0	2	mg/kg	57	39	4	17	111	
Zinc	7440-66-6	5	mg/kg	23	23	14	9	33	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.2	<0.1	1.1	0.4	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	----	
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	----	
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	----	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	----	
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	----	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	----	
4.4'-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	----	----	<0.05	----	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	----	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	----	----	
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	----	----	
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	----	----	
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	----	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	----	----	
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	----	----	
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	----	----	
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	----	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	----	----	
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	----	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	----	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	----	<0.05	----	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	----	----	
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	----	----	
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	----	----	
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	----	----	
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	----	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----	
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----	
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----	
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----	
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----	
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----	
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----	
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----	
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	----	<0.5	----	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	----	0.6	----	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	1.2	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	----	----	
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	----	----	
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	----	----	
C29 - C36 Fraction	----	100	mg/kg	----	----	<100	----	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	----	<10	----	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	----	<10	----	----	
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	----	----	
>C16 - C34 Fraction	----	100	mg/kg	----	----	<100	----	----	
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	----	----	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	<50	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	----	<50	----	----	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	----	----	
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	----	----	
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	----	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	----	----	
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	----	----	
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	----	----	
^ Total Xylenes	----	0.5	mg/kg	----	----	<0.5	----	----	
Naphthalene	91-20-3	1	mg/kg	----	----	<1	----	----	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	----	0.0002	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	----	<0.0002	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	----	<0.001	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	----	<0.0002	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	----	<0.0002	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	----	<0.0005	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	----	<0.0002	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	----	<0.0005	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	----	<0.0005	----	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	----	<0.0005	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	----	<0.0005	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	----	<0.0002	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	----	<0.0002	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	----	<0.0005	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	----	<0.0005	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	----	<0.0005	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	<0.0005	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	----	0.0002	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	0.0002	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH05_1.8-2.0	BH06_2.8-3.0	BH07_0.0-0.2	BH07_0.8-1.0	BH07_2.8-3.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-024	EB2025759-030	EB2025759-031	EB2025759-033	EB2025759-035	
				Result	Result	Result	Result	Result	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	0.0002	----	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	50.5	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	----	----	90.8	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	----	----	120	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	----	----	76.2	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	57.2	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	----	64.7	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	65.7	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	----	84.0	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	95.4	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	----	81.6	----	----	
Toluene-D8	2037-26-5	0.2	%	----	----	87.9	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	----	87.1	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	----	----	94.0	----	----	
13C8-PFOA	----	0.0002	%	----	----	103	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	16.7	27.8	38.1	19.8	34.3	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	No	----	
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	No	----	
Asbestos Type	1332-21-4	-	--	-	----	----	-	----	
Sample weight (dry)	----	0.01	g	70.4	----	----	38.4	----	
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	----	----	V.PHUNG	----	
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	No	----	
Organic Fibre	----	0.1	g/kg	Yes	----	----	Yes	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	112	236	89	161	323	
Copper	7440-50-8	5	mg/kg	6	8	46	24	18	
Lead	7439-92-1	5	mg/kg	11	9	<5	21	12	
Nickel	7440-02-0	2	mg/kg	5	6	122	6	56	
Zinc	7440-66-6	5	mg/kg	11	6	33	22	18	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	1.2	1.1	<0.1	1.4	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	<0.1	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	<0.05	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	<0.05	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	<0.05	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09_0.8-1.0
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
[^] Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	<0.05	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	<0.2	----	
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	<0.2	----	
[^] Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
[^] Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	<0.05	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	<0.05	----	
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	<0.2	----	
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	<0.05	----	
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	<0.2	----	
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	<0.05	----	
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	<0.2	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	<0.05	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	<0.05	----	
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	<0.05	----	
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	<0.05	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	<0.05	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09_0.8-1.0
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	EB2025759-043
				Result	Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	<0.5	----	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	----	0.6	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	1.2	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	<10	----	
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	<50	----	
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	<100	----	
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	<100	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	<10	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	<10	----	
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	<50	----	
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	<100	----	
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	<100	----	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	<50	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09__0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	<50	----	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	<0.2	----	
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	<0.5	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	<0.5	----	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	<0.2	----	
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	<0.5	----	
Naphthalene	91-20-3	1	mg/kg	<1	----	----	<1	----	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	----	0.0002	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	----	<0.001	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09__0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	----	<0.0005	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	0.0002	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	0.0002	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH08_0.0-0.2	BH08_0.3-0.5	BH08_1.8-2.0	BH09_0.0-0.2	BH09_0.8-1.0
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-036	EB2025759-037	EB2025759-039	EB2025759-041	EB2025759-043	
				Result	Result	Result	Result	Result	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	0.0002	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	51.8	----	----	48.2	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	93.4	----	----	90.8	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	127	----	----	133	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	72.8	----	----	68.8	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	50.8	----	----	49.8	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	68.8	----	----	66.0	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	67.4	----	----	61.1	----	
Anthracene-d10	1719-06-8	0.5	%	84.9	----	----	84.5	----	
4-Terphenyl-d14	1718-51-0	0.5	%	100	----	----	97.6	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	78.2	----	----	77.0	----	
Toluene-D8	2037-26-5	0.2	%	87.4	----	----	86.0	----	
4-Bromofluorobenzene	460-00-4	0.2	%	86.4	----	----	89.6	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	81.5	----	----	97.0	----	
13C8-PFOA	----	0.0002	%	96.0	----	----	108	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	37.4	19.1	18.1	29.2	12.0	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	----	No	----	----	No	
Asbestos (Trace)	1332-21-4	5	Fibres	----	No	----	----	No	
Asbestos Type	1332-21-4	-	--	----	-	----	----	-	
Sample weight (dry)	----	0.01	g	----	50.0	----	----	78.0	
APPROVED IDENTIFIER:	----	-	--	----	V.PHUNG	----	----	V.PHUNG	
Synthetic Mineral Fibre	----	0.1	g/kg	----	No	----	----	No	
Organic Fibre	----	0.1	g/kg	----	Yes	----	----	Yes	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	1	1	<1	<1	
Chromium	7440-47-3	2	mg/kg	173	210	184	193	119	
Copper	7440-50-8	5	mg/kg	54	23	32	28	6	
Lead	7439-92-1	5	mg/kg	6	58	121	8	14	
Nickel	7440-02-0	2	mg/kg	135	16	18	60	5	
Zinc	7440-66-6	5	mg/kg	24	107	155	20	11	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.2	1.1	2.0	<0.1	1.7	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	<0.1	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	<0.05	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	<0.05	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	<0.05	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	<0.05	----	----	
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	<0.05	----	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	<0.05	----	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	<0.05	----	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	<0.05	----	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	<0.05	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	<0.05	----	----	
4.4'-DDE	72-55-9	0.05	mg/kg	----	<0.05	<0.05	----	----	
Endrin	72-20-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	<0.05	----	----	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	<0.05	<0.05	----	----	
4.4'-DDD	72-54-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	<0.05	----	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
4.4'-DDT	50-29-3	0.2	mg/kg	----	<0.2	<0.2	----	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	<0.05	----	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	<0.2	----	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	<0.05	----	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	----	<0.05	<0.05	----	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	<0.05	----	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	<0.05	----	----	
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	<0.2	----	----	
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	<0.05	----	----	
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	<0.05	----	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	<0.05	----	----	
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	<0.2	----	----	
Malathion	121-75-5	0.05	mg/kg	----	<0.05	<0.05	----	----	
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	<0.05	----	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	<0.05	----	----	
Parathion	56-38-2	0.2	mg/kg	----	<0.2	<0.2	----	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	<0.05	----	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	<0.05	<0.05	----	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	<0.05	----	----	
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	<0.05	----	----	
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	<0.05	----	----	
Ethion	563-12-2	0.05	mg/kg	----	<0.05	<0.05	----	----	
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	<0.05	----	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	<0.05	----	----	
EP074E: Halogenated Aliphatic Compounds									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit		EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
Dichlorodifluoromethane	75-71-8	5	mg/kg	----	<5	----	----	----	----
Chloromethane	74-87-3	5	mg/kg	----	<5	----	----	----	----
Vinyl chloride	75-01-4	5	mg/kg	----	<5	----	----	----	----
Bromomethane	74-83-9	5	mg/kg	----	<5	----	----	----	----
Chloroethane	75-00-3	5	mg/kg	----	<5	----	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg	----	<5	----	----	----	----
1.1-Dichloroethene	75-35-4	0.5	mg/kg	----	<0.5	----	----	----	----
Iodomethane	74-88-4	0.5	mg/kg	----	<0.5	----	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	----	<0.5	----	----	----	----
1.1-Dichloroethane	75-34-3	0.5	mg/kg	----	<0.5	----	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	----	<0.5	----	----	----	----
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	----	<0.5	----	----	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	----	<0.5	----	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	----	<0.5	----	----	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	----	<0.5	----	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	----	<0.5	----	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	----	<0.5	----	----	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	----	<0.5	----	----	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	----	<0.5	----	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	----	<0.5	----	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	----	<0.5	----	----	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	----	<0.5	----	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	----	<0.5	----	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	----	<0.5	----	----	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	----	<0.5	----	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	----	<0.5	----	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	----	<0.5	----	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg	----	<0.5	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit	EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052	
				Result	Result	Result	Result	Result	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	<0.5	----	----	
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	<0.5	----	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	<0.5	----	----	
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	<0.5	----	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	<0.5	<0.5	----	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	<0.5	----	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	<0.5	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	<0.5	----	----	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	<0.5	----	----	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	<0.5	----	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	<0.5	----	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	<0.5	----	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.6	0.6	----	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	1.2	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	----	<10	<10	----	----	
C10 - C14 Fraction	----	50	mg/kg	----	<50	<50	----	----	
C15 - C28 Fraction	----	100	mg/kg	----	<100	<100	----	----	
C29 - C36 Fraction	----	100	mg/kg	----	<100	<100	----	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	<50	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	<10	<10	----	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	<10	<10	----	----	
>C10 - C16 Fraction	----	50	mg/kg	----	<50	<50	----	----	
>C16 - C34 Fraction	----	100	mg/kg	----	<100	<100	----	----	
>C34 - C40 Fraction	----	100	mg/kg	----	<100	<100	----	----	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	<50	----	----	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	<50	<50	----	----	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	----	<0.2	<0.2	----	----	
Toluene	108-88-3	0.5	mg/kg	----	<0.5	<0.5	----	----	
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	<0.5	----	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	<0.5	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time					23-Sep-2020 00:00				
Compound	CAS Number	LOR	Unit		EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg	----	<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg	----	<1	<1	<1	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	0.0009	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	<0.0002	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	<0.0005	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052	
				Result	Result	Result	Result	Result	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	<0.0002	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	<0.0005	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	<0.0005	----	----	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	<0.0005	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	<0.0005	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	<0.0002	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	<0.0002	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	0.0009	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	0.0009	----	----	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	0.0009	----	----	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	48.3	50.6	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	----	93.0	95.4	----	----	
EP068T: Organophosphorus Pesticide Surrogate									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH09__2.8-3.0	BH10_0.0-0.2	BH10_0.8-1.0	BH10_2.8-3.0	TP01_0.0-0.2
Client sampling date / time				23-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-045	EB2025759-046	EB2025759-048	EB2025759-051	EB2025759-052	
				Result	Result	Result	Result	Result	
EP068T: Organophosphorus Pesticide Surrogate - Continued									
DEF	78-48-8	0.05	%	----	130	95.1	----	----	
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	----	71.2	----	----	----	
Toluene-D8	2037-26-5	0.5	%	----	84.6	----	----	----	
4-Bromofluorobenzene	460-00-4	0.5	%	----	89.0	----	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	----	67.6	64.6	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	46.4	42.2	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	61.2	63.0	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	----	66.9	65.0	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	83.4	85.0	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	95.7	98.1	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	60.6	87.6	----	----	
Toluene-D8	2037-26-5	0.2	%	----	81.0	89.0	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	78.2	92.7	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	----	79.0	----	----	----	
13C8-PFOA	----	0.0002	%	----	103	----	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP02_0.0-0.2	TP03_0.0-0.2	HA01_0.0-0.2	HA02_0.0-0.2	HA02_0.3-0.5
Client sampling date / time				23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	
Compound	CAS Number	LOR	Unit	EB2025759-054	EB2025759-056	EB2025759-058	EB2025759-061	EB2025759-062	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	15.0	16.3	20.8	8.4	13.1	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	Yes	No	No	Yes	----	
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	----	
Asbestos Type	1332-21-4	-	--	Ch+Am	-	-	Ch + Am	----	
Sample weight (dry)	----	0.01	g	61.9	64.5	39.2	51.9	----	
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	V.PHUNG	V.PHUNG	U.DALKIN	----	
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	----	
Organic Fibre	----	0.1	g/kg	Yes	Yes	Yes	Yes	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	141	157	160	134	169	
Copper	7440-50-8	5	mg/kg	34	58	82	31	6	
Lead	7439-92-1	5	mg/kg	192	1300	1050	630	19	
Nickel	7440-02-0	2	mg/kg	8	10	14	10	3	
Zinc	7440-66-6	5	mg/kg	821	873	565	471	17	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.8	0.7	1.6	0.5	0.9	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	<0.1	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	<0.05	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	<0.05	----	
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	<0.05	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	<0.05	----	
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	<0.05	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	<0.05	----	
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	<0.05	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	<0.05	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	<0.05	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP02_0.0-0.2	TP03_0.0-0.2	HA01_0.0-0.2	HA02_0.0-0.2	HA02_0.3-0.5
Client sampling date / time				23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	
Compound	CAS Number	LOR	Unit	EB2025759-054	EB2025759-056	EB2025759-058	EB2025759-061	EB2025759-062	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	<0.05	----	
4.4'-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	<0.05	----	
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	<0.05	----	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	----	<0.05	<0.05	----	
4.4'-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	<0.05	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
4.4'-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	<0.2	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	<0.05	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	<0.2	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	<0.05	----	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	----	----	<0.05	<0.05	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	<0.05	----	
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	<0.05	----	
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	<0.2	----	
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	<0.05	----	
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	<0.05	----	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	<0.05	----	
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	<0.2	----	
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	<0.05	----	
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	<0.05	----	
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	<0.05	----	
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	<0.2	----	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	<0.05	----	
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	----	<0.05	<0.05	----	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	<0.05	----	
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	<0.05	----	
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	<0.05	----	
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	<0.05	----	
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	<0.05	----	
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	<0.05	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP02_0.0-0.2	TP03_0.0-0.2	HA01_0.0-0.2	HA02_0.0-0.2	HA02_0.3-0.5
Client sampling date / time					23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	EB2025759-054	EB2025759-056	EB2025759-058	EB2025759-061	EB2025759-062	EB2025759-062
				Result	Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	1.2	1.2	1.2	1.2
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	----	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	----	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	----	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	----	<100	160	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	160	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	----	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	----	<100	190	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	----	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	190	<50	<50	<50



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP02_0.0-0.2	TP03_0.0-0.2	HA01_0.0-0.2	HA02_0.0-0.2	HA02_0.3-0.5
Client sampling date / time				23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	EB2025759-054	EB2025759-056	EB2025759-058	EB2025759-061	EB2025759-062	
				Result	Result	Result	Result	Result	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	----	<1	<1	<1	<1	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	51.8	44.4	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	----	----	95.2	106	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	----	----	140	118	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	----	66.3	69.8	80.9	80.9	80.9
2-Chlorophenol-D4	93951-73-6	0.5	%	----	45.2	50.4	80.1	49.4	49.4
2,4,6-Tribromophenol	118-79-6	0.5	%	----	62.8	68.6	89.0	81.3	81.3
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	----	63.9	65.7	87.7	74.8	74.8
Anthracene-d10	1719-06-8	0.5	%	----	84.8	87.9	87.3	106	106
4-Terphenyl-d14	1718-51-0	0.5	%	----	97.5	100	89.7	121	121
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	75.9	79.0	87.4	79.6	79.6
Toluene-D8	2037-26-5	0.2	%	----	87.3	86.8	73.2	89.1	89.1
4-Bromofluorobenzene	460-00-4	0.2	%	----	89.7	86.7	82.9	90.9	90.9



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%	----	28.8	----	----	----	
Moisture Content	----	1.0	%	23.2	----	23.1	15.9	19.9	
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	No	No	No	
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	No	No	No	
Asbestos Type	1332-21-4	-	--	-	----	-	-	-	
Sample weight (dry)	----	0.01	g	41.5	----	36.1	42.1	43.4	
APPROVED IDENTIFIER:	----	-	--	V.PHUNG	----	V.PHUNG	V.PHUNG	V.PHUNG	
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	No	No	No	
Organic Fibre	----	0.1	g/kg	Yes	----	Yes	Yes	Yes	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	----	<5	<5	<5	
Cadmium	7440-43-9	1	mg/kg	1	----	2	<1	1	
Chromium	7440-47-3	2	mg/kg	194	----	229	181	220	
Copper	7440-50-8	5	mg/kg	63	----	57	16	34	
Lead	7439-92-1	5	mg/kg	215	----	60	18	117	
Nickel	7440-02-0	2	mg/kg	25	----	10	22	16	
Zinc	7440-66-6	5	mg/kg	180	----	346	30	184	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.6	----	0.4	0.9	0.6	
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg	----	----	----	<20	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N (Sol.)	14797-65-0	0.1	mg/kg	----	----	----	0.2	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N (Sol.)	14797-55-8	0.1	mg/kg	----	----	----	0.7	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg	----	----	----	0.9	----	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	20	mg/kg	----	----	----	1510	----	
EK062: Total Nitrogen as N (TKN + NOx)									
^ Total Nitrogen as N	----	20	mg/kg	----	----	----	1510	----	
EK067G: Total Phosphorus as P by Discrete Analyser									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EK067G: Total Phosphorus as P by Discrete Analyser - Continued									
Total Phosphorus as P	----	2	mg/kg	----	----	----	922	----	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	<0.1	----	<0.1	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Endrin	72-20-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	----	<0.2	----	<0.2	
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	<0.2	----	<0.2	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	<0.2	----	<0.2	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EP068B: Organophosphorus Pesticides (OP) - Continued									
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	<0.2	----	<0.2	
Malathion	121-75-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Parathion	56-38-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Ethion	563-12-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05	
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg	----	----	<5	<5	<5	
Chloromethane	74-87-3	5	mg/kg	----	----	<5	<5	<5	
Vinyl chloride	75-01-4	5	mg/kg	----	----	<5	<5	<5	
Bromomethane	74-83-9	5	mg/kg	----	----	<5	<5	<5	
Chloroethane	75-00-3	5	mg/kg	----	----	<5	<5	<5	
Trichlorofluoromethane	75-69-4	5	mg/kg	----	----	<5	<5	<5	
1.1-Dichloroethene	75-35-4	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Iodomethane	74-88-4	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1.1-Dichloroethane	75-34-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Carbon Tetrachloride	56-23-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1.2-Dichloroethane	107-06-2	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Trichloroethene	79-01-6	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Dibromomethane	74-95-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EP074E: Halogenated Aliphatic Compounds - Continued									
1,3-Dichloropropane	142-28-9	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Tetrachloroethene	127-18-4	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Pentachloroethane	76-01-7	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
Hexachlorobutadiene	87-68-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Benzo(b+j)fluoranthene	205-99-2	205-82-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	0.6	0.6	0.6	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	1.2	1.2	1.2	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	----	<10	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	----	<50	<50	<50	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	mg/kg	<100	----	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	170	----	<100	<100	<100	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	170	----	<50	<50	<50	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	<10	<10	<10	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	<10	<10	<10	
>C10 - C16 Fraction	----	50	mg/kg	<50	----	<50	<50	<50	
>C16 - C34 Fraction	----	100	mg/kg	200	----	110	<100	<100	
>C34 - C40 Fraction	----	100	mg/kg	<100	----	<100	<100	<100	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	200	----	110	<50	<50	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	<50	<50	<50	
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	<0.2	<0.2	<0.2	
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	<0.5	<0.5	<0.5	
Naphthalene	91-20-3	1	mg/kg	<1	----	<1	<1	<1	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	0.0004	0.0003	----	<0.0002	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	0.0050	0.0008	----	0.0015	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	<0.001	<0.001	----	<0.001	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	0.0010	<0.0002	----	<0.0002	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	0.0009	<0.0002	----	<0.0002	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	0.0002	<0.0002	----	<0.0002	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	0.0012	0.0002	----	<0.0002	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	<0.0002	<0.0002	----	<0.0002	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	
				Result	Result	Result	Result	Result	
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	<0.0005	----	<0.0005	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	0.0087	0.0013	----	0.0015	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	0.0054	0.0011	----	0.0015	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	0.0087	0.0013	----	0.0015	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	49.4	----	55.9	----	54.3	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	86.8	----	117	----	120	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	127	----	116	----	111	
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	----	----	67.0	73.2	72.1	
Toluene-D8	2037-26-5	0.5	%	----	----	78.4	88.4	84.4	
4-Bromofluorobenzene	460-00-4	0.5	%	----	----	84.8	96.8	90.9	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	70.7	----	66.8	104	79.5	
2-Chlorophenol-D4	93951-73-6	0.5	%	55.8	----	42.2	95.6	65.7	
2,4,6-Tribromophenol	118-79-6	0.5	%	60.9	----	74.1	69.1	59.6	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	59.6	----	60.2	90.8	63.9	
Anthracene-d10	1719-06-8	0.5	%	84.2	----	96.0	91.7	91.1	
4-Terphenyl-d14	1718-51-0	0.5	%	96.2	----	111	118	110	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	70.2	----	59.8	66.2	65.2	
Toluene-D8	2037-26-5	0.2	%	86.0	----	75.0	84.4	80.7	
4-Bromofluorobenzene	460-00-4	0.2	%	83.2	----	75.1	83.4	80.3	
EP231S: PFAS Surrogate									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA03_0.0-0.2	HA03_0.8-1.0	HA04_0.0-0.2	HA05_0.0-0.2	HA06_0.0-0.2
Client sampling date / time				24-Sep-2020 00:00					
Compound	CAS Number	LOR	Unit	EB2025759-065	EB2025759-067	EB2025759-068	EB2025759-071	EB2025759-072	EB2025759-072
				Result	Result	Result	Result	Result	Result
EP231S: PFAS Surrogate - Continued									
13C4-PFOS	----	0.0002	%	----	110	92.0	----	97.0	
13C8-PFOA	----	0.0002	%	----	110	105	----	109	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time				24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	
Compound	CAS Number	LOR	Unit	EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081	
				Result	Result	Result	Result	Result	
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%	----	----	18.8	----	22.9	
Moisture Content	----	1.0	%	26.7	19.4	----	17.8	----	
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	----	<5	----	
Cadmium	7440-43-9	1	mg/kg	1	<1	----	<1	----	
Chromium	7440-47-3	2	mg/kg	227	193	----	156	----	
Copper	7440-50-8	5	mg/kg	82	31	----	75	----	
Lead	7439-92-1	5	mg/kg	120	17	----	816	----	
Nickel	7440-02-0	2	mg/kg	19	8	----	14	----	
Zinc	7440-66-6	5	mg/kg	250	25	----	458	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.4	1.4	----	1.6	----	
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg	<20	----	----	----	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N (Sol.)	14797-65-0	0.1	mg/kg	<0.1	----	----	----	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N (Sol.)	14797-55-8	0.1	mg/kg	5.1	----	----	----	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg	5.1	----	----	----	----	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	20	mg/kg	2180	----	----	----	----	
EK062: Total Nitrogen as N (TKN + NOx)									
[^] Total Nitrogen as N	----	20	mg/kg	2180	----	----	----	----	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	2	mg/kg	2130	----	----	----	----	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time					24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	----	----
4.4'-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	<0.05	----	----	----	----
4.4'-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	----	----
4.4'-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	----	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time					24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	----	----
Benzo(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.6	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time					24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	----	<10	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg	----	<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	----	<1	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	----	<0.0002	----	----	0.0003
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	----	0.0012	----	----	0.0009
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	----	<0.001	----	----	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	----	<0.0002	----	----	<0.0002



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time					24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	----	<0.0002	----	0.0002	0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	----	<0.0002	----	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	<0.0005



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	HA06_0.8-1.0	FD01	FD02	FD03	FD04
Client sampling date / time				24-Sep-2020 00:00	23-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	24-Sep-2020 00:00	
Compound	CAS Number	LOR	Unit	EB2025759-074	EB2025759-075	EB2025759-077	EB2025759-079	EB2025759-081	
				Result	Result	Result	Result	Result	
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	<0.0005	----	<0.0005	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	----	----	0.0012	----	0.0014	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	0.0012	----	0.0012	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	0.0012	----	0.0014	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	54.4	----	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	----	122	----	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	----	123	----	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	----	73.6	----	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	----	55.2	----	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	----	67.7	----	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	----	61.4	----	----	----	
Anthracene-d10	1719-06-8	0.5	%	----	91.8	----	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	----	110	----	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	----	78.6	----	----	----	
Toluene-D8	2037-26-5	0.2	%	----	85.2	----	----	----	
4-Bromofluorobenzene	460-00-4	0.2	%	----	86.6	----	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	----	----	102	----	104	
13C8-PFOA	----	0.0002	%	----	----	113	----	103	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH06_0.0-0.2	BH06_0.4-0.6	----	----	----
Client sampling date / time				22-Sep-2020 00:00	23-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-090	EB2025759-091	-----	-----	-----	
				Result	Result	----	----	----	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----	----
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----	----
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----	----
4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH06_0.0-0.2	BH06_0.4-0.6	----	----	----
Client sampling date / time				22-Sep-2020 00:00	23-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-090	EB2025759-091	-----	-----	-----	
				Result	Result	----	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	----	----	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	----	----	----	----	
C10 - C14 Fraction	----	50	mg/kg	<50	----	----	----	----	
C15 - C28 Fraction	----	100	mg/kg	<100	----	----	----	----	
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	----	----	----	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
>C10 - C16 Fraction	----	50	mg/kg	<50	----	----	----	----	
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----	
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH06_0.0-0.2	BH06_0.4-0.6	----	----	----
Client sampling date / time				22-Sep-2020 00:00	23-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-090	EB2025759-091	-----	-----	-----	
				Result	Result	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH06_0.0-0.2	BH06_0.4-0.6	----	----	----
Client sampling date / time				22-Sep-2020 00:00	23-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-090	EB2025759-091	-----	-----	-----	
				Result	Result	----	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	----	----	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	----	----	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	----	----	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	----	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	----	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	----	----	----	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	----	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	----	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	----	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH06_0.0-0.2	BH06_0.4-0.6	----	----	----
Client sampling date / time				22-Sep-2020 00:00	23-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-090	EB2025759-091	-----	-----	-----	
				Result	Result	----	----	----	
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	50.3	----	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	123	----	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	120	----	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	93.2	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	89.6	----	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%	98.5	----	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	96.6	----	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	101	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	102	----	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	86.2	----	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	74.0	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	87.7	----	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%	120	----	----	----	----	----
13C8-PFOA	----	0.0002	%	110	----	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087	
				Result	Result	Result	Result	Result	
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	----	----	----	
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----	
EP066: Polychlorinated Biphenyls (PCB)									
^ Total Polychlorinated biphenyls	----	1	µg/L	----	<1	----	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L	----	<0.5	----	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	<0.5	----	----	----	
beta-BHC	319-85-7	0.5	µg/L	----	<0.5	----	----	----	
gamma-BHC	58-89-9	0.5	µg/L	----	<0.5	----	----	----	
delta-BHC	319-86-8	0.5	µg/L	----	<0.5	----	----	----	
Heptachlor	76-44-8	0.5	µg/L	----	<0.5	----	----	----	
Aldrin	309-00-2	0.5	µg/L	----	<0.5	----	----	----	
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	<0.5	----	----	----	
trans-Chlordane	5103-74-2	0.5	µg/L	----	<0.5	----	----	----	
alpha-Endosulfan	959-98-8	0.5	µg/L	----	<0.5	----	----	----	
cis-Chlordane	5103-71-9	0.5	µg/L	----	<0.5	----	----	----	
Dieldrin	60-57-1	0.5	µg/L	----	<0.5	----	----	----	
4,4'-DDE	72-55-9	0.5	µg/L	----	<0.5	----	----	----	
Endrin	72-20-8	0.5	µg/L	----	<0.5	----	----	----	
beta-Endosulfan	33213-65-9	0.5	µg/L	----	<0.5	----	----	----	
4,4'-DDD	72-54-8	0.5	µg/L	----	<0.5	----	----	----	
Endrin aldehyde	7421-93-4	0.5	µg/L	----	<0.5	----	----	----	
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	<0.5	----	----	----	
4,4'-DDT	50-29-3	2.0	µg/L	----	<2.0	----	----	----	
Endrin ketone	53494-70-5	0.5	µg/L	----	<0.5	----	----	----	
Methoxychlor	72-43-5	2.0	µg/L	----	<2.0	----	----	----	
^ Total Chlordane (sum)	----	0.5	µg/L	----	<0.5	----	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L		----	<0.5	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		----	<0.5	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		----	<0.5	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L		----	<0.5	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L		----	<2.0	----	----	----
Dimethoate	60-51-5	0.5	µg/L		----	<0.5	----	----	----
Diazinon	333-41-5	0.5	µg/L		----	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		----	<0.5	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L		----	<2.0	----	----	----
Malathion	121-75-5	0.5	µg/L		----	<0.5	----	----	----
Fenthion	55-38-9	0.5	µg/L		----	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L		----	<0.5	----	----	----
Parathion	56-38-2	2.0	µg/L		----	<2.0	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L		----	<0.5	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L		----	<0.5	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L		----	<0.5	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L		----	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	µg/L		----	<0.5	----	----	----
Ethion	563-12-2	0.5	µg/L		----	<0.5	----	----	----
Carbophenothion	786-19-6	0.5	µg/L		----	<0.5	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L		----	<0.5	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	----	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	----	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	----	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	----	<5	<5
EP231A: Perfluoroalkyl Sulfonic Acids									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087	
				Result	Result	Result	Result	Result	
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	----	----	<0.02	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	----	----	<0.02	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.02	µg/L	----	----	<0.02	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	----	----	<0.02	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	----	----	<0.01	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	----	----	<0.02	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	----	----	<0.1	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	----	----	<0.02	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	----	----	<0.02	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	----	----	<0.02	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	----	----	<0.01	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	----	----	<0.02	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	----	----	<0.02	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	----	----	<0.02	----	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	----	----	<0.02	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	----	----	<0.02	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	----	----	<0.05	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	----	----	<0.02	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	----	----	<0.05	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	----	----	<0.05	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit		EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		----	----	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		----	----	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		----	----	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		----	----	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		----	----	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		----	----	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		----	----	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		----	----	<0.05	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		----	----	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		----	----	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		----	----	<0.01	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	1	%		----	115	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		----	97.5	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		----	109	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		25.7	27.8	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		74.8	80.8	----	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%		74.5	82.0	----	----	----
EP075(SIM)T: PAH Surrogates									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	RB01	RB02	RB03	TB01	TB02
Client sampling date / time					22-Sep-2020 00:00	23-Sep-2020 00:00	24-Sep-2020 00:00	22-Sep-2020 00:00	23-Sep-2020 00:00
Compound	CAS Number	LOR	Unit	EB2025759-083	EB2025759-084	EB2025759-085	EB2025759-086	EB2025759-087	
				Result	Result	Result	Result	Result	
EP075(SIM)T: PAH Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	1.0	%	88.4	92.8	----	----	----	
Anthracene-d10	1719-06-8	1.0	%	87.9	89.4	----	----	----	
4-Terphenyl-d14	1718-51-0	1.0	%	85.9	92.0	----	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	104	101	----	70.2	75.3	
Toluene-D8	2037-26-5	2	%	100	101	----	94.4	103	
4-Bromofluorobenzene	460-00-4	2	%	111	107	----	91.1	112	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	----	----	96.8	----	----	
13C8-PFOA	----	0.02	%	----	----	104	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	TB03	TB04	----	----	----
Client sampling date / time				24-Sep-2020 00:00	22-Sep-2020 00:00	----	----	----	
Compound	CAS Number	LOR	Unit	EB2025759-088	EB2025759-089	-----	-----	-----	
				Result	Result	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L	<20	<20	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	----	----	----	
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	----	----	----	
EP080: BTEXN									
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----	
Toluene	108-88-3	2	µg/L	<2	<2	----	----	----	
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----	
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----	
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----	
^ Total Xylenes	----	2	µg/L	<2	<2	----	----	----	
^ Sum of BTEX	----	1	µg/L	<1	<1	----	----	----	
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	75.6	75.2	----	----	----	
Toluene-D8	2037-26-5	2	%	106	103	----	----	----	
4-Bromofluorobenzene	460-00-4	2	%	107	104	----	----	----	



Analytical Results

Descriptive Results

Sub-Matrix: SOIL

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH01_0.0-0.2 - 22-Sep-2020 00:00	Brown clay like soil with rock and organic matter plus multiple fibrous asbestos fragments approx 25 x 16 x 4mm and 3 x 2 x 1mm.
EA200: Description	BH02_0.0-0.2 - 22-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH03_0.0-0.2 - 22-Sep-2020 00:00	Brown soil with rock and organic matter.
EA200: Description	BH04_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH05_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH07_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH08_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH09_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH10_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	TP01_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	TP02_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter plus one asbestos fine approx 35 x 15 x 5mm.
EA200: Description	TP03_0.0-0.2 - 23-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	HA01_0.0-0.2 - 24-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	HA02_0.0-0.2 - 24-Sep-2020 00:00	Brown soil with rock and organic matter plus multiple asbestos sheeting fragments approx 30 x 16 x 3mm, one fibrous asbestos fragment approx 3 x 2 x 1mm and multiple asbestos fibre bundles approx 2 x 1 x 0.5mm.
EA200: Description	HA03_0.0-0.2 - 24-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	HA04_0.0-0.2 - 24-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	HA05_0.0-0.2 - 24-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	HA06_0.0-0.2 - 24-Sep-2020 00:00	Brown clay like soil with rock and organic matter.
EA200: Description	BH06_0.0-0.2 - 22-Sep-2020 00:00	Brown soil with rock and organic matter.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	16	134
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	10	138
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	23	134
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	53	134
Toluene-D8	2037-26-5	60	131
4-Bromofluorobenzene	460-00-4	59	127
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	35	154
2-Chlorophenol-D4	93951-73-6	42	153
2,4,6-Tribromophenol	118-79-6	26	157
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	34	156
Anthracene-d10	1719-06-8	37	153
4-Terphenyl-d14	1718-51-0	42	172
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	53	134
Toluene-D8	2037-26-5	60	131
4-Bromofluorobenzene	460-00-4	59	127
EP231S: PFAS Surrogate			
13C4-PFOS	----	76	136
13C8-PFOA	----	78	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	37	138
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	45	139
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	45	139
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	72
2-Chlorophenol-D4	93951-73-6	27	130
2,4,6-Tribromophenol	118-79-6	19	181



Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	14	146
Anthracene-d10	1719-06-8	35	137
4-Terphenyl-d14	1718-51-0	36	154
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	66	138
Toluene-D8	2037-26-5	79	120
4-Bromofluorobenzene	460-00-4	74	118
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

QUALITY CONTROL REPORT

Work Order	: EB2025759	Page	: 1 of 37
Client	: GHD PTY LTD	Laboratory	: Environmental Division Brisbane
Contact	: MR DANIEL BRAZIER	Contact	: Andrew Epps
Address	:	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: ----	Telephone	: +61 7 3552 8639
Project	: 12527635	Date Samples Received	: 30-Sep-2020
Order number	: 12527635_215a	Date Analysis Commenced	: 30-Sep-2020
C-O-C number	: ----	Issue Date	: 13-Oct-2020
Sampler	: DANIEL BRAZIER		
Site	: Norfolk Island MPS DSC		
Quote number	: EN/005		
No. of samples received	: 85		
No. of samples analysed	: 54		



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

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

This Quality Control Report contains the following information:

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Diana Mesa	Senior Organic Chemist	Brisbane Organics, Stafford, QLD
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD
Morgan Lennox	2IC Organic Chemist	Brisbane Organics, Stafford, QLD
Uyen Dalkin	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Vanessa Phung	Team Leader - Asbestos	Melbourne Asbestos, Springvale, VIC



General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3285708)									
EB2025759-001	BH01_0.0-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	169	139	19.5	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	5	5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	10	27.6	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	29	28	0.00	No Limit
EB2025759-018	BH04_0.8-1.0	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	430	426	0.857	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	5	5	0.00	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3285710)									
EB2025759-037	BH08_0.3-0.5	EG005T: Cadmium	7440-43-9	1	mg/kg	1	1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	236	226	4.42	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	8	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	6	0.00	No Limit
EB2025759-056	TP03_0.0-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	1	1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	157	156	0.00	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	10	14	37.1	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3285710) - continued									
EB2025759-056	TP03_0.0-0.2	EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	58	78	29.6	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	1300	1560	18.5	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	873	806	8.00	0% - 20%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3289315)									
EB2025759-011	BH03_0.0-0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	125	146	16.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	18.2	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	17	# 5190	199	0% - 20%
		EG005T: Lead	7439-92-1	5	mg/kg	145	176	19.8	0% - 20%
EG005T: Zinc	7440-66-6	5	mg/kg	594	# 765	25.2	0% - 20%		
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3285717)									
EB2025759-001	BH01_0.0-0.2	EA055: Moisture Content	----	0.1	%	12.5	12.4	0.917	0% - 50%
EB2025759-018	BH04_0.8-1.0	EA055: Moisture Content	----	0.1	%	34.3	33.4	2.64	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3285718)									
EB2025759-037	BH08_0.3-0.5	EA055: Moisture Content	----	0.1	%	27.8	27.5	1.08	0% - 20%
EB2025759-056	TP03_0.0-0.2	EA055: Moisture Content	----	0.1	%	16.3	16.1	1.31	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3285719)									
EB2025759-077	FD02	EA055: Moisture Content	----	0.1	%	18.8	19.0	1.27	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3289321)									
EB2025759-011	BH03_0.0-0.2	EA055: Moisture Content	----	0.1	%	11.5	13.0	12.8	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3285709)									
EB2025759-001	BH01_0.0-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.6	0.5	0.00	No Limit
EB2025759-018	BH04_0.8-1.0	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.9	1.0	14.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3285711)									
EB2025759-037	BH08_0.3-0.5	EG035T: Mercury	7439-97-6	0.1	mg/kg	1.1	1.2	10.9	No Limit
EB2025759-056	TP03_0.0-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.7	0.9	29.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3289316)									
EB2025759-011	BH03_0.0-0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.8	0.9	0.00	No Limit
EK055: Ammonia as N (QC Lot: 3290721)									
EB2025745-001	Anonymous	EK055: Ammonia as N	7664-41-7	20	mg/kg	1660	1520	9.13	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 3285715)									
EB2025759-071	HA05_0.0-0.2	EK057G: Nitrite as N (Sol.)	14797-65-0	0.1	mg/kg	0.2	0.2	0.00	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 3285716)									
EB2025759-071	HA05_0.0-0.2	EK059G: Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg	0.9	0.9	0.00	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 3285714)									
EB2025759-071	HA05_0.0-0.2	EK061G: Total Kjeldahl Nitrogen as N	----	20	mg/kg	1510	1490	1.44	0% - 20%



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 3285713)									
EB2025759-071	HA05_0.0-0.2	EK067G: Total Phosphorus as P	----	2	mg/kg	922	941	2.01	0% - 20%
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 3285706)									
EB2025759-065	HA03_0.0-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EB2025759-001	BH01_0.0-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 3289313)									
EB2025759-011	BH03_0.0-0.2	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3285705)									
EB2025759-065	HA03_0.0-0.2	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EB2025759-001	BH01_0.0-0.2	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05
EP068: Hexachlorobenzene (HCB)	118-74-1			0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068: beta-BHC	319-85-7			0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068: gamma-BHC	58-89-9			0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068: delta-BHC	319-86-8			0.05	mg/kg	<0.05	<0.05	0.00	No Limit
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit		



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3285705) - continued									
EB2025759-001	BH01_0.0-0.2	EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit		
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3289312)									
EB2025759-011	BH03_0.0-0.2	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3289312) - continued									
EB2025759-011	BH03_0.0-0.2	EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3285705)									
EB2025759-065	HA03_0.0-0.2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit		
EB2025759-001	BH01_0.0-0.2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3285705) - continued									
EB2025759-001	BH01_0.0-0.2	EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit		
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3289312)									
EB2025759-011	BH03_0.0-0.2	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3289312) - continued									
EB2025759-011	BH03_0.0-0.2	EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3285705)									
EB2025759-065	HA03_0.0-0.2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EB2025759-001	BH01_0.0-0.2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3285705) - continued									
EB2025759-001	BH01_0.0-0.2	EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3289312)									
EB2025759-011	BH03_0.0-0.2	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit		
EP074E: Halogenated Aliphatic Compounds (QC Lot: 3286721)									
EB2025759-046	BH10_0.0-0.2	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074E: Halogenated Aliphatic Compounds (QC Lot: 3286721) - continued									
EB2025759-046	BH10_0.0-0.2	EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.00	No Limit
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.00	No Limit		
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3285704)									
EB2025759-058	HA01_0.0-0.2	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit		
EB2025759-001	BH01_0.0-0.2	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3285704) - continued									
EB2025759-001	BH01_0.0-0.2	EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3289311)									
EB2025759-011	BH03_0.0-0.2	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3285703)									
EB2025759-058	HA01_0.0-0.2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	160	190	18.4	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EB2025759-001	BH01_0.0-0.2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3286720)									
EB2025759-046	BH10_0.0-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3286724)									



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3286724) - continued									
EB2025759-001	BH01_0.0-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EB2025759-058	HA01_0.0-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3289310)									
EB2025759-011	BH03_0.0-0.2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3289314)									
EB2025759-011	BH03_0.0-0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3285703)									
EB2025759-058	HA01_0.0-0.2	EP071: >C16 - C34 Fraction	----	100	mg/kg	190	220	16.8	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	120	14.3	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EB2025759-001	BH01_0.0-0.2	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3286720)									
EB2025759-046	BH10_0.0-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3286724)									
EB2025759-001	BH01_0.0-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EB2025759-058	HA01_0.0-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3289310)									
EB2025759-011	BH03_0.0-0.2	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3289314)									
EB2025759-011	BH03_0.0-0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 3286720)									
EB2025759-046	BH10_0.0-0.2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
EP080: BTEXN (QC Lot: 3286724)									
EB2025759-001	BH01_0.0-0.2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 3286724) - continued									
EB2025759-001	BH01_0.0-0.2	EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EB2025759-058	HA01_0.0-0.2	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
		EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
	91-20-3								
EP080: BTEXN (QC Lot: 3289314)									
EB2025759-011	BH03_0.0-0.2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
	91-20-3								
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 3285712)									
EB2025759-001	BH01_0.0-0.2	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
EB2025759-067	HA03_0.8-1.0	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0004	0.0004	0.00	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0050	0.0050	0.00	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 3289318)									
EB2025759-090	BH06_0.0-0.2	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0004	66.7	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 3285712)									



Sub-Matrix: SOIL

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 3285712) - continued									
EB2025759-001	BH01_0.0-0.2	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.00	No Limit
EB2025759-067	HA03_0.8-1.0	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0010	0.0011	0.00	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0009	0.0009	0.00	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0002	0.0003	0.00	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0012	0.0012	0.00	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.00	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 3289318)									
EB2025759-090	BH06_0.0-0.2	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.00	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 3285712)									
EB2025759-001	BH01_0.0-0.2	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 3285712) - continued									
EB2025759-001	BH01_0.0-0.2	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
EB2025759-067	HA03_0.8-1.0	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 3289318)									
EB2025759-090	BH06_0.0-0.2	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 3285712)									
EB2025759-001	BH01_0.0-0.2	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	276199-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 3285712) - continued									
EB2025759-001	BH01_0.0-0.2	EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
EB2025759-067	HA03_0.8-1.0	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 3289318)									
EB2025759-090	BH06_0.0-0.2	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.00	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 3294182)									
EB2026086-008	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.1 µg/L	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<1 µg/L	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<1 µg/L	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	2 µg/L	0.003	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<1 µg/L	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	1 µg/L	0.001	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<5 µg/L	<0.005	0.00	No Limit
EB2026025-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0005	<0.0005	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.005	<0.005	0.00	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.099	0.091	8.67	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 3294183)									
EB2026086-008	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.1 µg/L	<0.0001	0.00	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)	
EG035F: Dissolved Mercury by FIMS (QC Lot: 3294183) - continued										
EB2026025-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit	
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3289201)										
EB2024101-017	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit	
EB2025912-003	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit	
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3292266)										
EB2025759-083	RB01	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit	
EB2025947-007	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3289201)										
EB2024101-017	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit	
EB2025912-003	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3292266)										
EB2025759-083	RB01	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit	
EB2025947-007	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit	
EP080: BTEXN (QC Lot: 3289201)										
EB2024101-017	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit	
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit	
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.00	No Limit	
			106-42-3							
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit	
EB2025912-003	Anonymous	EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit	
		EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit	
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit	
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.00	No Limit	
			106-42-3							
EB2025947-007	Anonymous	EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit	
		EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit	
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit	
			106-42-3							
EP080: BTEXN (QC Lot: 3292266)										
EB2025759-083	RB01	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit	
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit	
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.00	No Limit	
			106-42-3							
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit	
EB2025947-007	Anonymous	EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit	
		EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit	
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit	
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit	

Appendix J – Quality assurance and quality control

Field QA/QC program

QA/QC sampling

Field QA/QC samples were collected with reference to AS 4482.1: 2005 and NEPM 2013 Schedule B (3) requirements and included the analyses of the following types of samples in Table J1.

The primary laboratory used as part of the investigation was ALS Environmental (ALS) with Eurofins assuming the role of the secondary laboratory for analysis of the inter-laboratory duplicate samples.

Table J1 Field QA/QC sample details

Field QA/QC sample type	Details
Intra-Laboratory Duplicate (Blind)	Comprise a single sample that is divided into two separate sampling containers. Both samples are sent anonymously to the primary project laboratory. Blind duplicates provide an indication of the analytical precision of the laboratory, but are inherently influenced by other factors such as sampling techniques and sample media heterogeneity.
Inter-Laboratory Duplicate (Split)	Inter-Laboratory Duplicate (Split) samples are two separate samples collected at the same location and analysed by two separate laboratories to determine the analytical proficiency of the primary laboratory.
Rinsate blank	A rinsate blank is a sample of analyte free water poured over or through decontaminated field sampling equipment prior to the collection of environmental samples. This sample is taken to assess the adequacy of the decontamination process.
Transport blank	A transport blank is a sample of analyte free water which is stored with field samples during transportation to the laboratory. This sample is taken to assess potential cross contamination which may have occurred during transportation.

GHD adopts the AS4482.1 acceptance criteria of 30% and 50% RPD for field duplicates of inorganics and organics, respectively. Blind duplicate samples should have RPDs less than the criteria in each instance. The laboratory RPDs have been assessed using the following ranges:

- Results <10 times LOR: no limits.
- Results between 10 and 30 times LOR 0% - 50%.
- Results >30 times LOR: 0-20% However, it is noted that the criteria will not always be achieved, particularly in heterogeneous materials, or at low analyte concentrations.

In the instance where samples and their corresponding duplicates have concentrations of target analytes less than the laboratory LOR, no quantitative comparison can be carried out and therefore the RPD is undefined. This is also the case for situations where the sample result is less than ten times the laboratory LOR.

Sampling handling and preservation

Soil samples were collected from the solid flight auger, hand auger and the excavator bucket were transferred directly to the laboratory supplied sample jars. Soil jars were filled to full to reduce headspace in the sample containers.

Samples were placed immediately into an insulated cooler box with ice while on site and stored on ice while in transit to the laboratory. All samples were transported under a completed chain of custody and under an ALS Australian Quarantine and Inspection Service (AQIS) permit.

The security seal of the cooler boxes used to transport the samples to the laboratory were received intact as per the Sample Receipt Notification (documented within the laboratory reports in Appendix I).

Chain of custody

Unique Chain of Custody documentation and distinct batch numbers accompany all sample batches. This documentation is included in Appendix I.

Sample analysis and extraction holding times

All samples were analysed and extracted within holding times with the exception of those outlined in Table J2.

Table J2 Holding time exceedances

Laboratory report	Field IDs	Analysis	Holding Time Exceedances		Comment / Justification
			Extraction	Analysis	
EB2025759	HA05_0.0-0.2 HA06_0.8-1.0	Nitrite as N	5	5	<ul style="list-style-type: none"> Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the analysis request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime
	BH10_0.0-0.2	VOC (Halogenated Aliphatic Compounds)	None	2	<ul style="list-style-type: none"> Sample extracted within holding time Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the analysis request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime. VOCs - holding time issues only relate to Styrene and vinyl chloride which are not contaminants of concern for the site. All VOC concentrations were less than detect for this sample and across the site, indicating low risk of contamination on the site. Minor exceedances of holding times are unlikely to change the outcome of the analysis.
	BH04_0.0-0.2 HA05_0.0-0.2 HA06_0.8-1.0	VOC (Halogenated Aliphatic Compounds)	None	1	<ul style="list-style-type: none"> Sample extracted within holding time Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the analysis request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime. VOCs - holding time issues only relate to Styrene and vinyl chloride which are not contaminants of concern for the site.

Laboratory report	Field IDs	Analysis	Holding Time Exceedances		Comment / Justification
			Extraction	Analysis	
					<ul style="list-style-type: none"> All VOC concentrations were less than detect for this sample and across the site, indicating low risk of contamination on the site. Minor exceedances of holding times are unlikely to change the outcome of the analysis
	RB01	PCBs, OC/OPPs, PAH, TPH, TRH	7	7	<ul style="list-style-type: none"> Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the analysis request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed bottle, which would have decreased the likelihood of changes to the concentrations overtime.
	RB02	PAH, TPH, TRH	8	8	<ul style="list-style-type: none"> Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the analysis request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed bottle, which would have decreased the likelihood of changes to the concentrations overtime.
EB2027285	HA01_0.3-0.5	Total recoverable mercury	None	4	<ul style="list-style-type: none"> Sample extracted within holding time Rebatch sample. Laboratory failed to extract and analyse the sample with the holding time, even though there was sufficient time allowed for the re-batch request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime.
	BH06_0.0-0.2 BH09_0.8-1.0 BH04_0.8-1.0 BH05_1.8-2.0	Hexavalent chromium	1	1	<ul style="list-style-type: none"> Rebatch samples. Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the re-batch request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime.

Laboratory report	Field IDs	Analysis	Holding Time Exceedances		Comment / Justification
			Extraction	Analysis	
	BH07_0.0-0.2 BH08_0.3-0.5 BH10_2.8-3.0				<ul style="list-style-type: none"> Minor exceedances of holding times are unlikely to change the outcome of the analysis. Due to the low volatility of these compounds, the extraction time breaches are unlikely to have compromised the interpretation of the data.
	BH01_0.8-1.0 BH02_1.8-2.0 BH03_0.0-0.2	Hexavalent chromium	2	2	<ul style="list-style-type: none"> Rebatch samples. Laboratory failed to extract sample within holding times for analysis, even though there was sufficient time allowed for the re-batch request. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime. Due to the low volatility of these compounds, the extraction time breaches are unlikely to have compromised the interpretation of the data.
	HA06_0.8-1.0	NOx	5	5	<ul style="list-style-type: none"> Rebatch sample. Meeting short holding times less than 14 days for rebatching after initial screening was never considered achievable given that samples had to be freighted to mainland Australia and inspected and cleared by Australian Quarantine and Inspection Service, prior to collection by a secondary freight company to deliver to the laboratory. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime.
	HA01_0.3-0.5 HA01_0.8-1.0 HA03_0.4-0.6 HA04_0.4-0.6	TPH, TRH, BTEXN	13	13	<ul style="list-style-type: none"> Rebatch sample. Meeting short holding times less than 14 days for rebatching after initial screening was never considered achievable given that samples had to be freighted to mainland Australia and inspected and cleared by Australian Quarantine and Inspection Service, prior to collection by a secondary freight company to deliver to the laboratory. Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which

Laboratory report	Field IDs	Analysis	Holding Time Exceedances		Comment / Justification
			Extraction	Analysis	
					would have decreased the likelihood of changes to the concentrations overtime.
	HA06_0.4-0.6	Nitrate as N	26	26	<ul style="list-style-type: none"> • Rebatch sample. Meeting short holding times less than 14 days for rebatching after initial screening was never considered achievable given that samples had to be freighted to mainland Australia and inspected and cleared by Australian Quarantine and Inspection Service, prior to collection by a secondary freight company to deliver to the laboratory. • Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime.

Laboratory report	Field IDs	Analysis	Holding Time Exceedances		Comment / Justification
			Extraction	Analysis	
					would have decreased the likelihood of changes to the concentrations overtime.
	HA06_0.4-0.6	Nitrate as N	26	26	<ul style="list-style-type: none"> • Rebatch sample. Meeting short holding times less than 14 days for rebatching after initial screening was never considered achievable given that samples had to be freighted to mainland Australia and inspected and cleared by Australian Quarantine and Inspection Service, prior to collection by a secondary freight company to deliver to the laboratory. • Sample was already with the laboratory in a controlled storage environment (i.e. chilled) and within a sealed container, which would have decreased the likelihood of changes to the concentrations overtime.

Field QA/QC sampling

Soil samples

A summary of the soil field duplicates collected as part of this investigation is provided in Table J3.

Table J3 Soil QAQC samples

Date	Parent sample	QA sample	QA/QC Sample Type	Analytes
23/09/2020	BH09_0.0-0.2	FD01	Duplicate	8 metals, TRH, BTEXN, PAH OC/OP, PCBs
		FS01	Split	
23/09/2020	BH10_0.0-0.2	FD02	Duplicate	PFAS
		FS02	Split	
24/09/2020	HA01_0.0-0.2	FD03	Duplicate	8 metals
		FS03	Split	
24/09/2020	HA04_0.0-0.2	FD04	Duplicate	PFAS
		FS04	Split	

Rinsate blank samples

A summary of the rinsate samples collected as part of this investigation have been provided in Table J4.

Table J4 Rinsates samples collected

Date	Sample ID	Analytes
22/09/2020	RB01	8 metals, TRH, BTEXN, PAH
23/09/2020	RB02	8 metals, TRH, BTEXN, PAH OC/OP, PCBs
24/09/2020	RB03	PFAS

Trip blanks

A summary of the trip blanks collected as part of this investigation have been provided in Table J5.

Table J5 Rinsate samples collected

Date	Sample ID	Analytes
22/09/2020	TB01	BTEXN, TRH (C6-C10)
23/09/2020	TB02	
24/09/2020	TB03	
24/09/2020	TB04	

Field QA/QC results

The field QC results discussion below considers all soil samples collected as part of this investigation.

Sample target frequency

A summary of the frequency rate for QA samples collected and analysed have been provided in Table J6 and J7.

Table J6 Soil QA/QC target frequency rates

Number of samples collected	Number of samples analysed	Number of QA/QC samples	Target frequency collection	Target frequency analysis
74	43	4	5.40%	9.30%

Table J7 Soil QA/QC target frequency rates for analytes

Analysis	No of primary samples analysed	No of QA/QC samples analysed	Frequency analysis
Heavy metals	43	2	4.65 %
Lead	45	2	4.44 %
Speciated chromium	16	n/a	n/a
BTEXN, TRH	23	1	4.34 %
PAH	19	1	5.26 %
OP / OPPs, PCBs	16	1	6.25 %
Asbestos (presence / absence)	19	n/a	n/a
PFAS	21	2	9.52 %
VOC	4	0	0
Nutrients	4	0	0

The total number of samples collected and analysed for the field program were within the target frequency. Minor exceedances of the frequency of samples analysed for particular analytes were recorded for some analytes and were generally associated with scheduling additional analysis for delineation following receipt of initial results.

Soil sample RPD

Relative percentage differences (RPD's) for soil samples were calculated between the primary and duplicate results. All samples were within the acceptable data quality limits, except for the RPD results summarised in Table J8.

The soil RPDs are provided in Appendix K.

Table J8 Soil QA/QC target frequency rates for analytes

Primary & QA Pair	Analyte	Primary (mg/kg)	QA/QC (mg/kg)	RPD (%)
BH09_0.0_0.2 & FS02	Chromium (III + VI)	161	360	76
HA01_0.0_0.2 & FS03	Chromium (III + VI)	160	400	86

RPD exceedances for chromium were reported in two samples, however the exceedances was found between the primary and secondary laboratory. These RPD exceedances were identified in samples collected from fill material (gravely clay) and are likely associated with:

- The heterogeneous nature of the fill material.
- The laboratory method/procedures and/or incomplete mixing of the sample prior to analysis at the secondary laboratory where FS02 and FS03 were analysed.

Given that none of the chromium samples that were speciated for chromium exceeded human health criteria these RPD exceedances are not considered to affect the overall interpretation of the results for the purposes of this assessment.

Rinsate blanks

The results are summarised in Table J9 and are presented in Appendix K

Table J9 Rinsate blanks QA/QC summary

Date	Sample ID	Analytes	Analytical results
22/09/2020	TB01	8 metals, TRH, BTEXN, PAH	All samples less than the laboratory LOR demonstrating that decontamination procedures were sufficient to minimise potential cross contamination between sample locations.
23/09/2020	TB02	8 metals, TRH, BTEXN, PAH OC/OP, PCBs	
24/09/2020	TB03	PFAS	

Transport blanks

The results are summarised in Table J10 and are presented in Appendix K.

Table J10 Transport blank QA/QC summary

Date	Sample ID	Analytes	Analytical results
22/09/2020	TB01	BTEXN, TRH (C6-C10)	All samples less than the laboratory LOR demonstrating no cross contamination in samples during transportation
23/09/2020	TB02		
24/09/2020	TB03		

Date	Sample ID	Analytes	Analytical results
24/09/2020	TB04		
24/09/2020	TB03	PFAS	

Laboratory QA/QC program,

The laboratory subcontracted by GHD to analyse samples (ALS) is certified by the NATA for the required analysis. NATA certification provides for laboratory QA procedures to be in place and to be carried out on an on-going basis.

As part of the NATA requirements, ALS carried out and reported analysis of laboratory quality control samples, such as:

- Duplicate samples (the same sample analysed more than once)
- Blanks (containing none of the analytes to be analysed)
- Spiked samples (containing known additions of the analytes to appropriate matrices)
- Standard samples (samples containing known concentrations of the analytes - also known as reference standards).

Laboratory QA/QC procedures

As part of NATA requirements, the laboratory incorporated a range of QA methods to ensure accuracy of data. This includes the analyses of internal laboratory QC samples, details of which have been provided in Table J11.

Table J11 Laboratory QC sample details

Laboratory QA/QC sample	Details
Laboratory (Method) Blank	Usually an organic or aqueous solution that is as free as possible of analytes of interest to which is added all the reagents, in the same volume, as used in the preparation and subsequent analysis of the samples. The reagent blank is carried through the complete sample preparation procedure and contains the same reagent concentrations in the final solution as in the sample solution used for analysis. The reagent blank is used to correct for possible contamination resulting from the preparation or processing of the sample.
Laboratory Control Sample	A reference standard of known concentration is analysed along with a batch of samples. The Laboratory Control Sample provides an indication of the analytical accuracy and the precision of the test method and is used for inorganic analyses.
Laboratory Spike	An authentic field sample is 'spiked' by adding an aliquot of known concentration of the target analyte(s) prior to sample extraction and analysis. A spike documents the effect of the sample matrix on the extraction and analytical techniques. Spiked samples will be analysed for each batch where samples are analysed for organic chemicals of concern.
Surrogate Samples	These are organic compounds which are similar to the analyte of interest in terms of chemical composition, extractability, and chromatographic conditions (retention time), but which are not normally found in environmental samples. These surrogate compounds are 'spiked' into blanks, standards and samples submitted for organic analyses by gas-chromatographic techniques prior to sample extraction. Surrogate

Laboratory QA/QC sample	Details
	Standard / Spikes provide a means of checking that no gross errors have occurred during any stage of the test method leading to significant analyte loss.
Laboratory Duplicates	<p>The analytical laboratory collects duplicate sub samples from one sample submitted for analytical testing at a rate equivalent to one in twenty samples per analytical batch, or one sample per batch if less than twenty samples are analysed in a batch. A laboratory duplicate provides data on the analytical precision and reproducibility of the test result.</p> <p>The precision of analysis performed by the laboratory is determined by the calculation of the relative percent difference (RPD). The RPD is calculated based on a comparison of an intra-laboratory split of the sample material with results representing the percent difference between the two sample concentrations for a specific contaminant.</p> <p>The RPD is calculated using the following formula:</p> $RPD(\%) = \frac{ C_o - C_d }{C_o + C_d} \times 200$ <p>Where Co = Analyte concentration of the original sample Cd = Analyte concentration of the duplicate sample</p>

The laboratory is required to provide this information to GHD. The individual analytical laboratories conduct an assessment of the laboratory QC program internally; however, the results are also reviewed and assessed by GHD.

Laboratory QA/QC results

The NATA certified laboratory's utilised for this assessment undertook their own internal quality assurance and quality control procedures for sample analysis. GHD has reviewed the internal laboratory control data provided with the laboratory reports, which are provided in Appendix I. Exceedances of internal laboratory QA/QC are summarised in Table J12.

Table J12 Laboratory QA/QC outliers summary

Types	Laboratory Reports	Sample ID	Analytes	Reasons
Matrix Spike Recovery - Soil	EB2025759	BH01_0.8-1.0, BH08_1.8-2.0, HA02_0.0-0.2	Arsenic	Recovery less than lower data quality objective
		BH01_0.8-1.0, HA02_0.0-0.2	Chromium	Recovery less than lower data quality objective
		HA02_0.0-0.2	Lead	MS recovery not determined background level greater than or equal to 4x spike level
		BH08_1.8-2.0	Nickel	Recovery less than lower data quality objective
		HA02_0.0-0.2	Zinc	MS recovery not determined background level greater than or equal to 4x spike level
		HA02_0.0-0.2	Mercury	Recovery less than lower data quality objective
		BH01_0.8-1.0,	Total Phosphorus as P	MS recovery not determined background level greater than or equal to 4x spike level
		EB2027285	HA01_0.8-1.0	Arsenic
	HA06_0.8-1.0	Total Phosphorus as P	MS recovery not determined background level greater than or equal to 4x spike level	
	Matrix Spike Recovery - Water	EB2025759	N/A (Lab QC)	PFPsS, PFHxS, PFHpS, PFOS, PFHxA
Duplicate RPDs	EB2025759	BH03_0.0-0.2	Copper, Zinc	RPD exceeds LOR based limits
	EB2027285	BH04_0.8-1.0	Chromium	RPD exceeds LOR based limits

Types	Laboratory Reports	Sample ID	Analytes	Reasons
Laboratory Surrogate Recovery	EB2025759	BH05_0.0-0.2, HA01_0.0-0.2	DEF	Recovery greater than upper data quality objective
Laboratory Control Spike Recovery	EB2025759	N/A (Lab QC)	Fenamiphos	Recovery greater than upper control limit
Laboratory QC Sample Frequency - Water	EB2025759	N/A (Lab QC)	PAH, Phenols, Pesticides by GCMS, PCBs, TRH	Less than NEPM 2013 and ALS QC Standard
Laboratory QC Sample Frequency - Soil	EB2027285	N/A (Lab QC)	Total Mercury by FIMS, TRH	Less than NEPM 2013 and ALS QC Standard

The internal laboratory QA/QC analysis, including method blanks, control samples, laboratory spikes and surrogate spikes is considered to be of sufficient quality for the purposes of this assessment.

Overall assessment of data quality

Except for the non-conformances listed above, the majority of the QA/QC parameters were within the specified requirements. Therefore the data is considered to be valid and of sufficient quality for the purposes of this assessment.

Appendix K – Tabulated results



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

	Asbestos			Metals										BTEXN					TRH - NEPM 2013								
	Asbestos Fibres g	Asbestos (Trace) Fibres	Friable Asbestos -	Arsenic mg/kg	Cadmium mg/kg	Chromium (III+VI) mg/kg	Chromium (hexavalent) mg/kg	Chromium (Trivalent) mg/kg	Copper mg/kg	Lead mg/kg	Mercury mg/kg	Nickel mg/kg	Zinc mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene (o) mg/kg	Xylene (m & p) mg/kg	Xylene Total mg/kg	BTEX (Sum of Total) - Lab Calc mg/kg	F1 (C6-C10 minus BTEX) mg/kg	C6-C10 Fraction mg/kg	F2 (>C10-C16 minus Naphthalene) mg/kg	>C10-C16 Fraction mg/kg	F3 (>C16-C34 Fraction) mg/kg	F4 (>C34-C40 Fraction) mg/kg	>C10-C40 (Sum of Total) mg/kg
EQL	0.1	5	-	2	0.4	2	0.5	2	5	5	0.1	2	5	0.1	0.1	0.1	0.1	0.2	0.3	0.2	10	10	50	50	100	100	50
NEPM 2013 Table 1A(1) HIL A Res				100	20	100	100		6000	300	40	400	7400								45		110				
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand														0.5	160	55			40		45		110				
														0.5	220	NL			60		70		240				
														0.5	310	NL			95		110		440				
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)														100	14000	4500			12000		4400		3300		4500	6300	
CRC CARE 2011 Soil Direct Contact Intrusive Works														1100	120000	85000			130000		82000		62000		85000	120000	
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand														77	NL	NL			NL		NL		NL				
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)														160	NL	NL			NL		NL		NL				

Location	Matrix	Field ID	Sample depth range	Date sampled	Asbestos Fibres	Asbestos (Trace)	Friable Asbestos	Arsenic	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Chromium (Trivalent)	Copper	Lead	Mercury	Nickel	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	BTEX (Sum of Total) - Lab Calc	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	<5	<1	193	-	-	28	8	<0.1	60	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	168	<0.5	168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	No	0	-	<5	<1	160	-	-	82	1050	1.6	14	565	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	190	<100	190	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	158	<8	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	<5	<1	215	-	-	10	23	1	10	24	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	9	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	Yes*	0	-	<5	<1	134	-	-	31	630	0.5	10	471	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	<5	<1	169	-	-	6	19	0.9	3	17	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	No	0	-	-	-	142	<8	142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	No	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	Yes#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	No	0	-	<5	1	194	-	-	63	215	0.6	25	180	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	200	<100	200	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	177	<8	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	No	0	-	<5	2	229	-	-	57	60	0.4	10	346	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	110	<100	110	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	202	<8	202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	No	0	-	<5	<1	181	-	-	16	18	0.9	22	30	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	164	<4	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	No	0	-	<5	1	220	-	-	34	117	0.6	16	184	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	<5	1	227	-	-	82	120	0.4	19	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	209	<20	209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	No	0	-	<5	<1	119	-	-	6	14	1.7	5	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	Yes*	0	-	<5	<1	141	-	-	34	192	0.8	8	821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	No	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	Yes#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	No	0	-	<5	1	157	-	-	58	1300	0.7	10	873	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	0	23	0	43	43	59	16	16	43	45	43	43	43	23	23	23	23	23	23	23	23	23	23	23	23	20	20	20	20	20
Number of Results	0	23	0	43	43	59	16	16	43	45	43	43	43	23	23	23	23	23	23	23	23	23	23	23	23	20	20	20	20	20
Minimum Concentration	99999	0	99999	<5	<1	71	<0.5	99	<5	<5	<0.1	3	5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
Maximum Concentration	0	0	0	<5	2	430	25.2	356	82	1300	2	135	873	<0.2	<0.5	<0.5														



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

	TRH - NEPM 1999					PAHs																				
	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab Calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ) (half LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	20	50	50	50	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
NEPM 2013 Table 1A(1) HIL A Res																										
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand																			3	3			300	3	3	3
																			NL	NL						
																			NL	NL						
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)																			1400	1400						
CRC CARE 2011 Soil Direct Contact Intrusive Works																			29000	29000						
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand																			NL	NL						
																			NL	NL						
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)																										

Location	Matrix	Field ID	Sample depth range	Date sampled	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total)	Total 8 PAHs (as BaP TEQ)(zero LOR)	Total 8 PAHs (as BaP TEQ) (half LOR)	Total 8 PAHs (as BaP TEQ)(full LOR)		
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	160	160	<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	0.6	1.2			
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	<10	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	170	170	<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	0.6	1.2			
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	<10	<50	<100	<100	<50	<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	0.6	1.2			
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	C6-C9	C10-C14	C15-C28	C29-C36	C10-C36	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total)	Total 8 PAHs (as BaP TEQ)(zero LOR)	Total 8 PAHs (as BaP TEQ) (half LOR)	Total 8 PAHs (as BaP TEQ)(full LOR)
Number of Results	23	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	23	0	19	19	19	19	19	19
Minimum Concentration	<10	<50	<100	<100	<50	<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	99999	<0.5	<0.5	<0.5	<0.5	0.6	1.2
Maximum Concentration	<10	<50	<100	170	170	<0.5	<0.5	<																		



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

		OC Pesticides																											
		Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HIL A Res							6		50						240		270				10				6		10	300	20
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand	0-1m																												
	1-2m																												
	2-4m																												
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)																													
CRC CARE 2011 Soil Direct Contact Intrusive Works																													
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand	0 to 2m																												
	2 to 4m																												
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)																													

Location	Matrix	Field ID	Sample depth range	Date sampled																										
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	0	0	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0
Number of Results	99999	99999	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	99999
Minimum Concentration	0	0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	0	
Maximum Concentration																														

Asbestos Notes
 Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per A54964. The result can be interpreted
 No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
 Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
 Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
 NL: indicates concentration is not limiting



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

	Chlorinated Hydrocarbons														Halogenated Hydrocarbons		PCBs	VOCs											
	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,3-dichloropropane	Carbon tetrachloride	Chloromethane	cis-1,2-dichloroethene	Hexachlorobutadiene	Vinyl chloride	Bromomethane	Dichlorodifluoromethane		PCBs (Total)	1,1-dichloroethane	1,2,3-trichloropropane	Chloroethane	cis-1,4-Dichloro-2-butene	Dibromomethane	Iodomethane	Pentachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,4-Dichloro-2-butene
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	0.5	5	5	5	100	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5
NEPM 2013 Table 1A(1) HIL A Res																	1000												
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand																													
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)																													
CRC CARE 2011 Soil Direct Contact Intrusive Works																													
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand																													
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)																													

Location	Matrix	Field ID	Sample depth range	Date sampled	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,1-dichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,3-dichloropropane	Carbon tetrachloride	Chloromethane	cis-1,2-dichloroethene	Hexachlorobutadiene	Vinyl chloride	Bromomethane	Dichlorodifluoromethane	PCBs (Total)	1,1-dichloroethane	1,2,3-trichloropropane	Chloroethane	cis-1,4-Dichloro-2-butene	Dibromomethane	Iodomethane	Pentachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,4-Dichloro-2-butene	Trichlorofluoromethane		
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-		
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<5	<5	<5	<100	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<5	<5	<5	<100	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<5	<5	<5	<100	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary		
Number of Results	4	4
Minimum Concentration	<0.5	<0.5
Maximum Concentration	<0.5	<0.5

Asbestos Notes
Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per A54964. The result can be interpreted as:
No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
NL: indicates concentration is not limiting



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

	PFAS - Perfluoroalkyl Carboxylic Acids												PFAS - Perfluoroalkyl Sulfonic Acids								PFAS - Perfluoroalkyl Sulfonamide						
	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTeDA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluoropropenesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	
EQL	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
NEPM 2013 Table 1A(1) HIL A Res																											
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand																											
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)																											
CRC CARE 2011 Soil Direct Contact Intrusive Works																											
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand																											
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)							0.1									0.01		0.01									

Location	Matrix	Field ID	Sample depth range	Date sampled	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTeDA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluoropropenesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononanesulfonic acid (PFNS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	0.003	0.0114	0.0055	0.0023	0.0085	0.0008	0.0032	<0.0002	0.0007	<0.0002	<0.0005	-	<0.0002	<0.0002	0.0005	0.0002	0.0218	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	<0.001	0.001	0.0009	0.0002	0.0012	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	0.0004	<0.0002	0.005	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	0.0003	<0.0002	0.0008	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0015	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	-	<0.0002	<0.0002	0.001	<0.0002	0.0015	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Number of Results	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Minimum Concentration	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	99999	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	99999	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002
Maximum Concentration	0.003	0.0114	0.0055	0.0023	0.0085	0.0008	0.0032	<0.0002	0.0007	<0.0002	<0.0005	-	<0.0002	<0.0002	0.0005	0.0002	0.0218	-	<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002		

Asbestos Notes
Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted as:
No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
NL: indicates concentration is not limiting



Appendix K
Table 1
Tabulated Soil Results - Human health criteria

	PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums					Nutrients						
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	PFAS (Sum of Total)(WA DER list)	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0005	0.0005	0.0005	0.0002	0.005	0.0002	0.005	0.0002	20	0.1	0.1	0.1	20	20	2
NEPM 2013 Table 1A(1) HIL A Res																
NEPM 2013 Table 1A(3) HSL A/B Res Soil for Vapour Intrusion, Sand						0-1m										
						1-2m										
						2-4m										
CRC CARE 2011 Soil Direct Contact HSL-A Residential (Low Density)																
CRC CARE 2011 Soil Direct Contact Intrusive Works																
CRC CARE 2011 Soil HSL Vap.Int Intrusive Works, Sand						0 to 2m										
						2 to 4m										
PFAS NEMP 2.0 2020 Residential with garden/accessible soil (HIL A)						0.01										

Location	Matrix	Field ID	Sample depth range	Date sampled	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	-	
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0223	-	0.0579	-	0.053	-	-	-	-	-	-	
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0054	-	0.0087	-	0.0087	-	-	-	-	-	-	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	-	0.0013	-	0.0013	-	-	-	-	-	-	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	-	
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	<20	0.7	0.2	0.9	1510	1510	922
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0015	-	0.0015	-	0.0015	-	-	-	-	-	-	-
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	<20	3.9	<0.1	3.9	2650	2650	1270
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	<20	5.1	<0.1	5.1	2180	2180	2130
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	-	0.0025	-	0.0025	<20	5.8	<0.1	5.8	2280	2270	1920
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	21	21	21	21	21	0	21	0	21	4	4	4	4	4	4	4
Number of Results	21	21	21	21	21	0	21	0	21	4	4	4	4	4	4	4
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	99999	<0.0002	99999	<0.0002	<20	0.7	<0.1	0.9	1510	1510	922
Maximum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	0.0223	0	0.0579	0	0.053	<20	5.8	0.2	5.8	2650	2650	2130

Asbestos Notes
 Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted
 No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
 Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
 Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
 NL: indicates concentration is not limiting



Appendix K
Table 2
Tabulated Soil Results - Ecological Criteria

	Asbestos			Metals										BTEXN						TRH - NEPM 2013							
	Asbestos fibres g	Asbestos (Trace) Fibres	Friable Asbestos -	Arsenic mg/kg	Cadmium mg/kg	Chromium (III+VI) mg/kg	Chromium (hexavalent) mg/kg	Chromium (Trivalent) mg/kg	Copper mg/kg	Lead mg/kg	Mercury mg/kg	Nickel mg/kg	Zinc mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene (o) mg/kg	Xylene (m & p) mg/kg	Xylene Total mg/kg	BTEX (Sum of Total) - Lab Calc mg/kg	F1 (C6-C10 minus BTEX) mg/kg	C6-C10 Fraction mg/kg	F2 (>C10-C16 minus Naphthalene) mg/kg	>C10-C16 Fraction mg/kg	F3 (>C16-C34 Fraction) mg/kg	F4 (>C34-C40 Fraction) mg/kg	>C10-C40 (Sum of Total) mg/kg
EQL	0.1	5	-	2	0.4	2	0.5	2	5	5	0.1	2	5	0.1	0.1	0.1	0.1	0.2	0.3	0.2	10	10	50	50	100	100	50
NEPM 2013 EIL-Urban Residential- Public Open Space				100		190		190	60	1100		30	70								125			25			
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Coarse Soil														8	10	1.5											
PFAS NEMP 2.0 2020 Ecological indirect exposure																											

Location	Matrix	Field ID	Sample depth range	Date sampled	No	0	<5	1	210	-	-	23	58	1.1	16	107	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
BH10	soil	BH10_0.0-0.2	0-0.2	9/23/2020	No	0	<5	1	210	-	-	23	58	1.1	16	107	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
BH10	soil	BH10_0.8-1.0	0.8-1	9/23/2020	-	-	<5	1	184	-	-	32	121	2	18	155	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	<5	<1	193	-	-	28	8	<0.1	60	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	168	<0.5	168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	No	0	<5	<1	160	-	-	82	1050	1.6	14	565	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	190	<100	190	
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	158	<8	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	<5	<1	215	-	-	10	23	1	10	24	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	9	-	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	Yes*	0	<5	<1	134	-	-	31	630	0.5	10	471	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	<5	<1	169	-	-	6	19	0.9	3	17	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	No	0	-	-	142	<8	142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	No	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	Yes#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	No	0	<5	1	194	-	-	63	215	0.6	25	180	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	200	<100	200	
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	177	<8	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	No	0	<5	2	229	-	-	57	60	0.4	10	346	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	110	<100	110	
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	202	<8	202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	-	-	-	-	-	
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	No	0	<5	<1	181	-	-	16	18	0.9	22	30	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	164	<4	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	No	0	<5	1	220	-	-	34	117	0.6	16	184	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	<5	1	227	-	-	82	120	0.4	19	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	209	<20	209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	No	0	<5	<1	119	-	-	6	14	1.7	5	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	Yes*	0	<5	<1	141	-	-	34	192	0.8	8	821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	No	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	Yes#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	No	0	<5	1	157	-	-	58	1300	0.7	10	873	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50	
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Statistical Summary	0	23	0	43	43	59	16	16	43	45	43	43	43	23	23	23	23	23	23	23	23	23	23	23	20	20	20	20	20
Number of Results	0	23	0	43	43	59	16	16	43	45	43	43	43	23	23	23	23	23	23	23	23	23	23	23	20	20	20	20	20
Minimum Concentration	99999	0	99999	<5	<1	71	<0.5	99	<5	<5	<0.1	3	5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
Maximum Concentration	0	0	0	<5	2	430	25.2	356	82	1300	2	135	873	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	200	<100	200	

Asbestos Notes

Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
 No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
 Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
 Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes

NL: indicates concentration is not limiting



Appendix K
Table 2
Tabulated Soil Results - Ecological Criteria

	TRH - NEPM 1999					PAHs																				
	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(e)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab Calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ) (half LOR) - Lab Calc	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	20	50	50	50	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
NEPM 2013 EIL-Urban Residential- Public Open Space																										
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Coarse Soil																										
PFAS NEMP 2.0 2020 Ecological indirect exposure																										

Location	Matrix	Field ID	Sample depth range	Date sampled	<10	<50	<100	<100	<50	<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	0.6	1.2	
BH10	soil	BH10_0.0-0.2	0-0.2	9/23/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
BH10	soil	BH10_0.8-1.0	0.8-1	9/23/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	160	160	<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	0.6	1.2
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	<10	<50	<100	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	170	170	<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	0.6	1.2
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	<10	<50	<100	<100	<50	<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	0.6	1.2
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	23	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Number of Results	23	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Minimum Concentration	<10	<50	<100	<100	<50	<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	0.6	1.2
Maximum Concentration	<10	<50	<100	170	170	<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	0.6	1.2

Asbestos Notes
 Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sampl
 No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
 Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
 Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
 NL: indicates concentration is not limiting



Appendix K
Table 2
Tabulated Soil Results - Ecological Criteria

		OC Pesticides																											
		Organochlorine pesticides EPA Vic	Other organochlorine pesticides EPA Vic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4-DDD	4,4-DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQI		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEPM 2013 EIL-Urban Residential- Public Open Space																													
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Coarse Soil																													
PFAS NEMP 2.0 2020 Ecological indirect exposure																													

Location	Matrix	Field ID	Sample depth range	Date sampled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
BH10	soil	BH10_0.0-0.2	0-0.2	9/23/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BH10	soil	BH10_0.8-1.0	0.8-1	9/23/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
Number of Results	0	0	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0				
Minimum Concentration	99999	99999	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	99999
Maximum Concentration	0	0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0

Asbestos Notes



Appendix K
Table 2
Tabulated Soil Results - Ecological Criteria

	PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums				Nutrients							
	4:2 Fluorotelomer sulfonic acid (4:2 FTS) mg/kg	6:2 Fluorotelomer Sulfonate (6:2 FTS) mg/kg	8:2 Fluorotelomer sulfonic acid (8:2 FTS) mg/kg	10:2 Fluorotelomer sulfonic acid (10:2 FTS) mg/kg	Sum of PFHxS and PFOS mg/kg	Sum of US EPA PFAS (PFOS + PFOA)* mg/kg	PFAS (Sum of Total) mg/kg	Sum of enHealth PFAS (PFHxS + PFOA + PFOA)* mg/kg	PFAS (Sum of Total)(WA DER List) mg/kg	Ammonia as N mg/kg	Nitrate (as N) mg/kg	Nitrite (as N) mg/kg	Nitrogen (Total Oxidised) (as N) mg/kg	Nitrogen (Total) mg/kg	Kjeldahl Nitrogen Total mg/kg	Phosphorus (Total) mg/kg
EQL	0.0005	0.0005	0.0005	0.0005	0.0002	0.005	0.0002	0.005	0.0002	20	0.1	0.1	0.1	20	20	2
NEPM 2013 EIL-Urban Residential- Public Open Space																
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Coarse Soil																
PFAS NEMP 2.0 2020 Ecological indirect exposure																

Location	Matrix	Field ID	Sample depth range	Date sampled	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH01	soil	BH01_0.0-0.2	0-0.2	9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH01	soil	BH01_0.3-0.5	0.3-0.5	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH01	soil	BH01_0.8-1.0	0.8-1	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH01	soil	BH01_0.8-1.0	0.8-1	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH01	soil	BH01_1.8-2.0	1.8-2	9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH01	soil	BH01_2.8-3.0	2.8-3	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH01	solid	BH01_0.0-0.2A	0-0.2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH01	solid	BH01_0.0-0.2B	0-0.2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02	soil	BH02_0.0-0.2	0-0.2	9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH02	soil	BH02_0.4-0.6	0.4-0.6	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02	soil	BH02_1.8-2.0	1.8-2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02	soil	BH02_1.8-2.0	1.8-2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03	soil	BH03_0.0-0.2	0-0.2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03	soil	BH03_0.0-0.2	0-0.2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03	soil	BH03_0.8-1.0	0.8-1	9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH03	soil	BH03_2.8-3.0	2.8-3	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH04	soil	BH04_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH04	soil	BH04_0.8-1.0	0.8-1	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH04	soil	BH04_0.8-1.0	0.8-1	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH04	soil	BH04_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05	soil	BH05_0.0-0.2	0-0.2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	-	0.001	-	0.001	-	-	-	-	-
BH05	soil	BH05_0.8-1.0	0.8-1	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05	soil	BH05_0.8-1.0	0.8-1	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH05	soil	BH05_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05	soil	BH05_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH06	soil	BH06_0.0-0.2	0-0.2	9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH06	soil	BH06_0.0-0.2	0-0.2	9/22/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH06	soil	BH06_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH06	soil	BH06_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07	soil	BH07_0.0-0.2	0-0.2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0002	-	0.0002	-	0.0002	-	-	-	-	-
BH07	soil	BH07_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07	soil	BH07_0.8-1.0	0.8-1	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07	soil	BH07_0.8-1.0	0.8-1	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH07	soil	BH07_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08	soil	BH08_0.0-0.2	0-0.2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-
BH08	soil	BH08_0.3-0.5	0.3-0.5	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08	soil	BH08_0.3-0.5	0.3-0.5	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08	soil	BH08_1.8-2.0	1.8-2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH09	soil	BH09_0.8-1.0	0.8-1	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH09	soil	BH09_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH09	soil	BH09_0.0-0.2	0-0.2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0002	-	0.0002	-	0.0002	-	-	-	-	-
BH09	soil	BH09_0.8-1.0	0.8-1	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-



**Appendix K
Table 2
Tabulated Soil Results - Ecological Criteria**

	PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums				Nutrients							
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	PFAS (Sum of Total)	Sum of enHealth PFAS (PFHxS + PFOA + PFOA)*	PFAS (Sum of Total)(WA DER List)	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0005	0.0005	0.0005	0.0002	0.005	0.0002	0.005	0.0002	20	0.1	0.1	0.1	20	20	2
NEPM 2013 EIL-Urban Residential- Public Open Space																
NEPM 2013 Table 1B(6) ESLs for Areas of Ecological Significance, Coarse Soil																
PFAS NEMP 2.0 2020 Ecological indirect exposure																

Location	Matrix	Field ID	Sample depth range	Date sampled	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	-	0.0009	-	0.0009	-	-	-	-	-	-	-
BH10	soil	BH10_0.0-0.2	0-0.2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	-	0.0009	-	0.0009	-	-	-	-	-	-	-
BH10	soil	BH10_0.8-1.0	0.8-1	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_1.8-2.0	1.8-2	9/23/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10	soil	BH10_2.8-3.0	2.8-3	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA01	soil	HA01_0.8-1.0	0.8-1	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.3-0.5	0.3-0.5	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	soil	HA02_0.5-0.7	0.5-0.7	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA02	solid	HA02_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0223	-	0.0579	-	0.053	-	-	-	-	-	-	-
HA03	soil	HA03_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA03	soil	HA03_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0054	-	0.0087	-	0.0087	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	-	0.0013	-	0.0013	-	-	-	-	-	-	-
HA04	soil	HA04_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA04	soil	HA04_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	-	-
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	<20	0.7	0.2	0.9	1510	1510	922
HA05	soil	HA05_0.0-0.2	0-0.2	9/24/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HA06	soil	HA06_0.0-0.2	0-0.2	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0015	-	0.0015	-	0.0015	-	-	-	-	-	-	-
HA06	soil	HA06_0.4-0.6	0.4-0.6	9/24/2020	-	-	-	-	-	-	-	-	-	<20	3.9	<0.1	3.9	2650	2650	1270
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	-	0.0025	-	0.0025	<20	5.8	<0.1	5.8	2180	2180	2130
HA06	soil	HA06_0.8-1.0	0.8-1	9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	-	0.0025	-	0.0025	<20	5.8	<0.1	5.8	2280	2270	1920
TP01	soil	TP01_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	soil	TP02_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP02	solid	TP02_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.0-0.2	0-0.2	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP03	soil	TP03_0.4-0.6	0.4-0.6	9/23/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary	21	21	21	21	21	0	21	0	21	4	4	4	4	4	4	4
Number of Results	21	21	21	21	21	0	21	0	21	4	4	4	4	4	4	4
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0002	99999	<0.0002	99999	<0.0002	<20	0.7	<0.1	0.9	1510	1510	922
Maximum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	0.0223	0	0.0579	0	0.053	<20	5.8	0.2	5.8	2650	2650	2130

Asbestos Notes
 Asbestos (Trace) : Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sampl
 No: No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining.
 Yes*: Asbestos detected by polarised light microscopy including dispersion staining.
 Yes#: Friability is assessed by crushing using finger pressure as defined under WorkSafe Australia regulations

Other Notes
 NL: indicates concentration is not limiting



**Appendix K
Table 3
Soil QA/QC Results**

Field ID	BH09 0.0-0.2	FD01	RPD	BH09 0.0-0.2	FS01	RPD	BH10 0.0-0.2	FD02	RPD	BH10 0.0-0.2
Sampled Date	9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59
Chem_Group	ChemName	Units	EQL							
Inorganics	Moisture (%)	%	1 : 0.1 (Dupe)							
	Moisture (%)	%	1	19.8	19.4	2	19.8			19.1
								18.8	2	19.1
Metals	Arsenic	mg/kg	5 : 2 (Interlab)	<5	<5	0	<5	4.8	0	
	Cadmium	mg/kg	1 : 0.4 (Interlab)	<1	<1	0	<1	<0.4	0	
	Chromium (III+VI)	mg/kg	2 : 5 (Interlab)	161	193	18	161	360	76	
	Copper	mg/kg	5	24	31	25	24	35	37	
	Lead	mg/kg	5	21	17	21	21	17	21	
	Mercury	mg/kg	0.1	1.4	1.4	0	1.4	1	33	
	Nickel	mg/kg	2 : 5 (Interlab)	6	8	29	6	21	111	
	Zinc	mg/kg	5	22	25	13	22	45	69	
BTEXN	Benzene	mg/kg	0.2 : 0.1 (Interlab)	<0.2	<0.2	0	<0.2	<0.1	0	
	Toluene	mg/kg	0.5 : 0.1 (Interlab)	<0.5	<0.5	0	<0.5	<0.1	0	
	Ethylbenzene	mg/kg	0.5 : 0.1 (Interlab)	<0.5	<0.5	0	<0.5	<0.1	0	
	Xylene (o)	mg/kg	0.5 : 0.1 (Interlab)	<0.5	<0.5	0	<0.5	<0.1	0	
	Xylene (m & p)	mg/kg	0.5 : 0.2 (Interlab)	<0.5	<0.5	0	<0.5	<0.2	0	
	Xylene Total	mg/kg	0.5 : 0.3 (Interlab)	<0.5	<0.5	0	<0.5	<0.3	0	
	BTEX (Sum of Total) - Lab Calc	mg/kg	0.2	<0.2	<0.2	0	<0.2			
TRH - NEPM 2013	F1 (C6-C10 minus BTEX)	mg/kg	10 : 20 (Interlab)	<10	<10	0	<10	<20	0	
	C6-C10 Fraction	mg/kg	10 : 20 (Interlab)	<10	<10	0	<10	<20	0	
	F2 (>C10-C16 minus Naphthalene)	mg/kg	50	<50	<50	0	<50	<50	0	
	>C10-C16 Fraction	mg/kg	50	<50	<50	0	<50	<50	0	
	F3 (>C16-C34 Fraction)	mg/kg	100	<100	<100	0	<100	<100	0	
	F4 (>C34-C40 Fraction)	mg/kg	100	<100	<100	0	<100	<100	0	
	>C10-C40 (Sum of Total)	mg/kg	50 : 100 (Interlab)	<50	<50	0	<50	<100	0	
TRH - NEPM 1999	C6-C9 Fraction	mg/kg	10 : 20 (Interlab)	<10	<10	0	<10	<20	0	
	C10-C14 Fraction	mg/kg	50 : 20 (Interlab)	<50	<50	0	<50	<20	0	
	C15-C28 Fraction	mg/kg	100 : 50 (Interlab)	<100	<100	0	<100	<50	0	
	C29-C36 Fraction	mg/kg	100 : 50 (Interlab)	<100	<100	0	<100	<50	0	
	C10-C36 (Sum of Total)	mg/kg	50	<50	<50	0	<50	<50	0	
PAHs - standard 16	Acenaphthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzo(a)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzo(a)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzo(b)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Benzo(g,h,i)perylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Chrysene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Dibenz(a,h)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Fluorene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Naphthalene	mg/kg	1 : 0.5 (Interlab)	<1	<1	0	<1	<0.5	0	
	Naphthalene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	PAHs (Sum of total) - Lab calc	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	
	Total 8 PAHs (as BaP TEQ) (half LOR) - Lab Calc	mg/kg	0.5	0.6	0.6	0	0.6	0.6	0	
	Total 8 PAHs (as BaP TEQ)(full LOR) - Lab Calc	mg/kg	0.5	1.2	1.2	0	1.2	1.2	0	



**Appendix K
Table 3
Soil QA/QC Results**

Field ID			BH09 0.0-0.2	FD01	RPD	BH09 0.0-0.2	FS01	RPD	BH10 0.0-0.2	FD02	RPD	BH10 0.0-0.2
Sampled Date			9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59
OC Pesticides	4,4'-DDE	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	a-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Aldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Aldrin + Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	b-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Chlordane	mg/kg	0.05 : 0.1 (Interlab)	<0.05	<0.05	0	<0.05	<0.05	<0.1	0		
	Chlordane (cis)	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Chlordane (trans)	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	d-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	4,4 DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	4,4 DDT	mg/kg	0.2 : 0.05 (Interlab)	<0.2	<0.2	0	<0.2	<0.05	0			
	DDT+DDE+DDD - Lab Calc	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endosulfan	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Endosulfan I (alpha)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endosulfan II (beta)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endosulfan Sulfate	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endrin aldehyde	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Endrin ketone	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	g-BHC (Lindane)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Heptachlor	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
	Heptachlor epoxide	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0			
Hexachlorobenzene	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0				
Methoxychlor	mg/kg	0.2 : 0.05 (Interlab)	<0.2	<0.2	0	<0.2	<0.05	0				
OP Pesticides	Azinphos methyl	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Bromophos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Carbophenothion	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Chlorfenvinphos	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Chlorpyrifos	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Chlorpyrifos-methyl	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Demeton-S-methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Diazinon	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Dichlorvos	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Dimethoate	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Ethion	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Fenamiphos	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Fenthion	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Malathion	mg/kg	0.05 : 0.2 (Interlab)	<0.05	<0.05	0	<0.05	<0.2	0			
	Methyl parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0			
	Monocrotophos	mg/kg	0.2 : 2 (Interlab)	<0.2	<0.2	0	<0.2	<2	0			
	Parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0			
	Pirimphos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	Prothiofos	mg/kg	0.05	<0.05	<0.05	0	<0.05					
	PCBs	PCBs (Total)	µg/kg	100	<100	<100	0	<100				
PFAS - Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic acid (PFBA)	mg/kg	0.001 : 0.005 (Interlab)						<0.001	<0.001	0	<0.001
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorooctanoic acid (PFOA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorononanoic acid (PFNA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorodecanoic acid (PFDA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorotridecanoic acid (PFTTrDA)	mg/kg	0.0002 : 0.005 (Interlab)						<0.0002	<0.0002	0	<0.0002
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005 : 0.005 (Interlab)						<0.0005	<0.0005	0	<0.0005



**Appendix K
Table 3
Soil QA/QC Results**

Field ID		BH09 0.0-0.2	FD01	RPD	BH09 0.0-0.2	FS01	RPD	BH10 0.0-0.2	FD02	RPD	BH10 0.0-0.2
Sampled Date		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59	9/23/2020 14:59		9/23/2020 14:59
PFAS - Perfluoroalkyl Sulfonic Acids	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002 : 0.005 (Interlab)					0.0009	0.0012	29	0.0009
	Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
PFAS - Perfluoroalkyl Sulfonamide	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002 : 0.005 (Interlab)					<0.0002	<0.0002	0	<0.0002
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002 : 0.01 (Interlab)					<0.0002	<0.0002	0	<0.0002
	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
	N-Ethyl perfluorooctane sulfonamidoethanol (EFOSAE)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
PFAS - Fluorotelomer Sulfonic Acids	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005 : 0.01 (Interlab)					<0.0005	<0.0005	0	<0.0005
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)					<0.0005	<0.0005	0	<0.0005
PFAS - Sums	Sum of PFHxS and PFOS	mg/kg	0.0002 : 0.005 (Interlab)					0.0009	0.0012	29	0.0009
	PFAS (Sum of Total)	mg/kg	0.0002 : 0.05 (Interlab)					0.0009	0.0012	29	0.0009
	PFAS (Sum of Total)(WA DER List)	mg/kg	0.0002 : 0.01 (Interlab)					0.0009	0.0012	29	0.0009

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 200 (1-10 x EQL); 50 (10-30 x EQL); 50 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



**Appendix K
Table 3
Soil QA/QC Results**

Field ID	FS02	RPD	HA01 0.0-0.2	FD03	RPD	HA01 0.0-0.2	FS03	RPD	HA04 0.0-0.2	FD04	RPD	HA04 0.0-0.2	FS04	RPD
Sampled Date	9/23/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59	

OC Pesticides	4,4'-DDE	mg/kg	0.05											
	a-BHC	mg/kg	0.05											
	Aldrin	mg/kg	0.05											
	Aldrin + Dieldrin	mg/kg	0.05											
	b-BHC	mg/kg	0.05											
	Chlordane	mg/kg	0.05 : 0.1 (Interlab)											
	Chlordane (cis)	mg/kg	0.05											
	Chlordane (trans)	mg/kg	0.05											
	d-BHC	mg/kg	0.05											
	4,4 DDD	mg/kg	0.05											
	4,4 DDT	mg/kg	0.2 : 0.05 (Interlab)											
	DDT+DDE+DDD - Lab Calc	mg/kg	0.05											
	Dieldrin	mg/kg	0.05											
	Endosulfan	mg/kg	0.05											
	Endosulfan I (alpha)	mg/kg	0.05											
	Endosulfan II (beta)	mg/kg	0.05											
	Endosulfan Sulfate	mg/kg	0.05											
	Endrin	mg/kg	0.05											
	Endrin aldehyde	mg/kg	0.05											
	Endrin ketone	mg/kg	0.05											
	g-BHC (Lindane)	mg/kg	0.05											
	Heptachlor	mg/kg	0.05											
	Heptachlor epoxide	mg/kg	0.05											
Hexachlorobenzene	mg/kg	0.05												
Methoxychlor	mg/kg	0.2 : 0.05 (Interlab)												
OP Pesticides	Azinphos methyl	mg/kg	0.05 : 0.2 (Interlab)											
	Bromophos-ethyl	mg/kg	0.05											
	Carbophenothion	mg/kg	0.05											
	Chlorfenvinphos	mg/kg	0.05 : 0.2 (Interlab)											
	Chlorpyrifos	mg/kg	0.05 : 0.2 (Interlab)											
	Chlorpyrifos-methyl	mg/kg	0.05 : 0.2 (Interlab)											
	Demeton-S-methyl	mg/kg	0.05											
	Diazinon	mg/kg	0.05 : 0.2 (Interlab)											
	Dichlorvos	mg/kg	0.05 : 0.2 (Interlab)											
	Dimethoate	mg/kg	0.05 : 0.2 (Interlab)											
	Ethion	mg/kg	0.05 : 0.2 (Interlab)											
	Fenamiphos	mg/kg	0.05											
	Fenthion	mg/kg	0.05 : 0.2 (Interlab)											
	Malathion	mg/kg	0.05 : 0.2 (Interlab)											
	Methyl parathion	mg/kg	0.2											
	Monocrotophos	mg/kg	0.2 : 2 (Interlab)											
	Parathion	mg/kg	0.2											
	Pirimphos-ethyl	mg/kg	0.05											
Prothiofos	mg/kg	0.05												
PCBs	PCBs (Total)	µg/kg	100											
PFAS - Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic acid (PFBA)	mg/kg	0.001 : 0.005 (Interlab)	<0.005	0				<0.001	<0.001	0	<0.001	<0.005	0
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorooctanoic acid (PFOA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				0.0002	0.0002	0	0.0002	<0.005	0
	Perfluorononanoic acid (PFNA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorodecanoic acid (PFDA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorotridecanoic acid (PFTriDA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0



**Appendix K
Table 3
Soil QA/QC Results**

Field ID	FS02	RPD	HA01 0.0-0.2	FD03	RPD	HA01 0.0-0.2	FS03	RPD	HA04 0.0-0.2	FD04	RPD	HA04 0.0-0.2	FS04	RPD
Sampled Date	9/23/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59		9/24/2020 14:59	9/24/2020 14:59	
PFAS - Perfluoroalkyl Sulfonic Acids	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				0.0003	0.0003	0	0.0003	<0.005	0
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				0.0008	0.0009	12	0.0008	<0.005	0
	Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
PFAS - Perfluoroalkyl Sulfonamide	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				<0.0002	<0.0002	0	<0.0002	<0.005	0
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	N-Ethyl perfluorooctane sulfonamide (EFOSA)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002 : 0.01 (Interlab)	<0.01	0				<0.0002	<0.0002	0	<0.0002	<0.01	0
	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	N-Ethyl perfluorooctane sulfonamidoethanol (EFFOSE)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	N-Ethyl perfluorooctane sulfonamidoacetic acid (EFOSAA)	mg/kg	0.0002 : 0.01 (Interlab)	<0.01	0				<0.0002	<0.0002	0	<0.0002	<0.01	0
PFAS - Fluorotelomer Sulfonic Acids	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005 : 0.01 (Interlab)	<0.01	0				<0.0005	<0.0005	0	<0.0005	<0.01	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005 : 0.005 (Interlab)	<0.005	0				<0.0005	<0.0005	0	<0.0005	<0.005	0
PFAS - Sums	Sum of PFHxS and PFOS	mg/kg	0.0002 : 0.005 (Interlab)	<0.005	0				0.0011	0.0012	9	0.0011	<0.005	0
	PFAS (Sum of Total)	mg/kg	0.0002 : 0.05 (Interlab)	<0.05	0				0.0013	0.0014	7	0.0013	<0.05	0
	PFAS (Sum of Total)(WA DER List)	mg/kg	0.0002 : 0.01 (Interlab)	<0.01	0				0.0013	0.0014	7	0.0013	<0.01	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
 **High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 200 (1-10 x EC
 ***Interlab Duplicates are matched on a per compound basis as methods vary between labor.



**Appendix K
Table 4
Rinsate Results**

SDG Field ID	ALSE-Brisbane 30-Sep-20		ALSE-Brisbane 30-Sep-20		ALSE-Brisbane 30-Sep-20	
	Sample Date	Sample Type	Sample Date	Sample Type	Sample Date	Sample Type
	9/22/2020 15:00	Rinsate	9/23/2020 15:00	Rinsate	9/24/2020 15:00	Rinsate
Chem_Group	ChemName	Units	EQL			
BTEXN	Benzene	µg/L	1	<1	<1	
	Toluene	µg/L	2	<2	<2	
	Ethylbenzene	µg/L	2	<2	<2	
	Xylene (o)	µg/L	2	<2	<2	
	Xylene (m & p)	µg/L	2	<2	<2	
	Xylene Total	µg/L	2	<2	<2	
	BTEX (Sum of Total) - Lab Calc	µg/L	1	<1	<1	
Metals	Arsenic (Filtered)	mg/L	0.001	<0.001	<0.001	
	Cadmium (Filtered)	mg/L	0.0001	<0.0001	<0.0001	
	Chromium (III+VI) (Filtered)	mg/L	0.001	<0.001	<0.001	
	Copper (Filtered)	mg/L	0.001	<0.001	<0.001	
	Lead (Filtered)	mg/L	0.001	<0.001	<0.001	
	Mercury (Filtered)	mg/L	0.0001	<0.0001	<0.0001	
	Nickel (Filtered)	mg/L	0.001	<0.001	<0.001	
	Zinc (Filtered)	mg/L	0.005	<0.005	<0.005	
OC Pesticides	4,4'-DDE	µg/L	0.5		<0.5	
	a-BHC	µg/L	0.5		<0.5	
	Aldrin	µg/L	0.5		<0.5	
	Aldrin + Dieldrin	µg/L	0.5		<0.5	
	b-BHC	µg/L	0.5		<0.5	
	Chlordane	µg/L	0.5		<0.5	
	Chlordane (cis)	µg/L	0.5		<0.5	
	Chlordane (trans)	µg/L	0.5		<0.5	
	d-BHC	µg/L	0.5		<0.5	
	4,4 DDD	µg/L	0.5		<0.5	
	4,4 DDT	µg/L	2		<2	
	DDT+DDE+DDD - Lab Calc	µg/L	0.5		<0.5	
	Dieldrin	µg/L	0.5		<0.5	
	Endosulfan I (alpha)	µg/L	0.5		<0.5	
	Endosulfan II (beta)	µg/L	0.5		<0.5	
	Endosulfan Sulfate	µg/L	0.5		<0.5	
	Endrin	µg/L	0.5		<0.5	
	Endrin aldehyde	µg/L	0.5		<0.5	
	Endrin ketone	µg/L	0.5		<0.5	
	g-BHC (Lindane)	µg/L	0.5		<0.5	
Heptachlor	µg/L	0.5		<0.5		
Heptachlor epoxide	µg/L	0.5		<0.5		
Hexachlorobenzene	µg/L	0.5		<0.5		
Methoxychlor	µg/L	2		<2		
OP Pesticides	Azinphos methyl	µg/L	0.5		<0.5	
	Bromophos-ethyl	µg/L	0.5		<0.5	
	Carbophenothion	µg/L	0.5		<0.5	
	Chlorfenvinphos	µg/L	0.5		<0.5	
	Chlorpyrifos	µg/L	0.5		<0.5	
	Chlorpyrifos-methyl	µg/L	0.5		<0.5	
	Demeton-S-methyl	µg/L	0.5		<0.5	
	Diazinon	µg/L	0.5		<0.5	
	Dichlorvos	µg/L	0.5		<0.5	
	Dimethoate	µg/L	0.5		<0.5	
	Ethion	µg/L	0.5		<0.5	
	Fenamiphos	µg/L	0.5		<0.5	
	Fenthion	µg/L	0.5		<0.5	
	Malathion	µg/L	0.5		<0.5	
	Methyl parathion	µg/L	2		<2	
	Monocrotophos	µg/L	2		<2	
	Parathion	µg/L	2		<2	
	Pirimphos-ethyl	µg/L	0.5		<0.5	
Prothiofos	µg/L	0.5		<0.5		



**Appendix K
Table 4
Rinsate Results**

		SDG	ALSE-Brisbane 30-Sep-20	ALSE-Brisbane 30-Sep-20	ALSE-Brisbane 30-Sep-20
		Field ID	RB01	RB02	RB03
		Sampled_Date	9/22/2020 15:00	9/23/2020 15:00	9/24/2020 15:00
		Sample Type	Rinsate	Rinsate	Rinsate
PAHs - standard 16	Acenaphthene	µg/L	1	<1	<1
	Acenaphthylene	µg/L	1	<1	<1
	Anthracene	µg/L	1	<1	<1
	Benz(a)anthracene	µg/L	1	<1	<1
	Benzo(a)pyrene	µg/L	0.5	<0.5	<0.5
	Benzo(b+j)fluoranthene	µg/L	1	<1	<1
	Benzo(k)fluoranthene	µg/L	1	<1	<1
	Benzo(g,h,i)perylene	µg/L	1	<1	<1
	Chrysene	µg/L	1	<1	<1
	Dibenz(a,h)anthracene	µg/L	1	<1	<1
	Fluoranthene	µg/L	1	<1	<1
	Fluorene	µg/L	1	<1	<1
	Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	<1
	Naphthalene	µg/L	1	<5	<5
	Phenanthrene	µg/L	1	<1	<1
	Pyrene	µg/L	1	<1	<1
	PAHs (Sum of total) - Lab calc	µg/L	0.5	<0.5	<0.5
	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	µg/L	0.5	<0.5	<0.5
PCBs	PCBs (Total)	µg/L	1	<1	
PFAS - Fluorotelomer Sulfonic Acids	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05		<0.05
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05		<0.05
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05		<0.05
	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05		<0.05
PFAS - Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic acid (PFBA)	µg/L	0.1		<0.1
	Perfluoropentanoic acid (PFPeA)	µg/L	0.02		<0.02
	Perfluorohexanoic acid (PFHxA)	µg/L	0.02		<0.02
	Perfluoroheptanoic acid (PFHpA)	µg/L	0.02		<0.02
	Perfluorooctanoic acid (PFOA)	µg/L	0.01		<0.01
	Perfluorononanoic acid (PFNA)	µg/L	0.02		<0.02
	Perfluorodecanoic acid (PFDA)	µg/L	0.02		<0.02
	Perfluoroundecanoic acid (PFUnDA)	µg/L	0.02		<0.02
	Perfluorododecanoic acid (PFDoDA)	µg/L	0.02		<0.02
	Perfluorotridecanoic acid (PFTeDA)	µg/L	0.02		<0.02
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05		<0.05
PFAS - Perfluoroalkyl Sulfonamide	Perfluorooctane sulfonamide (FOSA)	µg/L	0.02		<0.02
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05		<0.05
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05		<0.05
	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02		<0.02
	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05		<0.05
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05		<0.05
	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02		<0.02
PFAS - Perfluoroalkyl Sulfonic Acids	Perfluorobutane sulfonic acid (PFBS)	µg/L	0.02		<0.02
	Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02		<0.02
	Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.02		<0.02
	Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02		<0.02
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01		<0.01
	Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02		<0.02
PFAS - Sums	Sum of PFHxS and PFOS	µg/L	0.01		<0.01
	PFAS (Sum of Total)	µg/L	0.01		<0.01
	PFAS (Sum of Total)(WA DER List)	µg/L	0.01		<0.01
TRH - NEPM 1999	C6-C9 Fraction	µg/L	20	<20	<20
	C10-C14 Fraction	µg/L	50	<50	<50
	C15-C28 Fraction	µg/L	100	<100	<100
	C29-C36 Fraction	µg/L	50	<50	<50
	C10-C36 (Sum of Total)	µg/L	50	<50	<50
TRH - NEPM 2013	F1 (C6-C10 minus BTEX)	µg/L	20	<20	<20
	C6-C10 Fraction	µg/L	20	<20	<20
	F2 (>C10-C16 minus Naphthalene)	µg/L	100	<100	<100
	>C10-C16 Fraction	µg/L	100	<100	<100
	F3 (>C16-C34 Fraction)	µg/L	100	<100	<100
	F4 (>C34-C40 Fraction)	µg/L	100	<100	<100
	>C10-C40 (Sum of Total)	µg/L	100	<100	<100



**Appendix K
Table 5
Transport Blank Results**

Department of Infrastructure, Transport , Regional Development and Communication
NHIRACS
MPS DSC

SDG	ALSE-Brisbane 30-Sep-20	ALSE-Brisbane 30-Sep-20	ALSE-Brisbane 30-Sep-20	ALSE-Brisbane 30-Sep-20
Field ID	TB01	TB02	TB03	TB04
Sampled_Date/Time	9/22/2020 15:00	9/23/2020 15:00	9/24/2020 15:00	9/24/2020 15:00
Sample Type	Trip_B	Trip_B	Trip_B	Trip_B

Chem_Group	ChemName	Units	EQL				
BTEXN	Benzene	µg/L	1	<1	<1	<1	<1
	Toluene	µg/L	2	<2	<2	<2	<2
	Ethylbenzene	µg/L	2	<2	<2	<2	<2
	Xylene (o)	µg/L	2	<2	<2	<2	<2
	Xylene (m & p)	µg/L	2	<2	<2	<2	<2
	Xylene Total	µg/L	2	<2	<2	<2	<2
	BTEX (Sum of Total) - Lab Calc	µg/L	1	<1	<1	<1	<1
TRH - NEPM 1999	C6-C9 Fraction	µg/L	20	<20	<20	<20	<20
TRH - NEPM 2013	F1 (C6-C10 minus BTEX)	µg/L	20	<20	<20	<20	<20
	C6-C10 Fraction	µg/L	20	<20	<20	<20	<20

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Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	D.Brazier	A.Hughes / K. Clulow		B.Murphy		24.11.20

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