



GROUNDTECH  
CONSULTING

# Borehole Log

Borehole No.

**WBH114**

Sheet 1 of 5

Project Name: PROJECT OTTER	Project No. GRO-22165	Co-ords: 546631.47 - 258614.79	Hole Type CP
Location: CAMBRIDGE		Level: 12.02	Scale 1:50
Client: RPMI RAILPEN		Dates: 04/11/2022 - 08/11/2022	Logged By

Well

Remarks 1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 3.5m bgl. 4. SPT refusals recorded from 37.0m bgl. 5. Dual standpipe installed: Shallow installation to 1.5m: 0.5m plain, 1.0m slotted. Deep installation to 5.5m: 2.5m plain, 3.0m slotted.	
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Borehole No.

**WBH114**

Sheet 2 of 5

Project Name: PROJECT OTTER	Project No. GRO-22165	Co-ords: 546631.47 - 258614.79	Hole Type CP
Location: CAMBRIDGE		Level: 12.02	Scale 1:50
Client: RPMI RAILPEN		Dates: 04/11/2022 - 08/11/2022	Logged By

Well

Remarks  
1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 3.5m bgl. 4. SPT refusals recorded from 37.0m bgl. 5. Dual standpipe installed: Shallow installation to 1.5m: 0.5m plain, 1.0m slotted. Deep installation to 5.5m: 2.5m plain, 3.0m slotted.





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Location: CAMBRIDGE		Level: 12.02	Scale 1:50
Client: RPMI RAILPEN		Dates: 04/11/2022 - 08/11/2022	Logged By

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Location: CAMBRIDGE		Level: 12.02	Scale 1:50
Client: RPMI RAILPEN		Dates: 04/11/2022 - 08/11/2022	Logged By

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 3.5m bgl. 4. SPT refusals recorded from 37.0m bgl. 5. Dual standpipe installed: Shallow installation to 1.5m: 0.5m plain, 1.0m slotted. Deep installation to 5.5m: 2.5m plain, 3.0m slotted.







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Borehole No.

**WBH115**

Sheet 1 of 4

Project Name: PROJECT OTTER	Project No. GRO-22165	Co-ords: 546630.84 - 258735.64	Hole Type CP
Location: CAMBRIDGE		Level: 9.97	Scale 1:50
Client: RPMI RAILPEN		Dates: 09/11/2022 - 11/11/2022	Logged By

Well

Remarks 1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 2.6m bgl. 4. Standpipe installed to 4m: 1m plain, 3m slotted.	
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# Borehole Log

Borehole No.

**WBH115**

Sheet 2 of 4

Project Name: PROJECT OTTER	Project No. GRO-22165	Co-ords: 546630.84 - 258735.64	Hole Type CP
Location: CAMBRIDGE		Level: 9.97	Scale 1:50
Client: RPMI RAILPEN		Dates: 09/11/2022 - 11/11/2022	Logged By

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 2.6m bgl. 4. Standpipe installed to 4m: 1m plain, 3m slotted.





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**WBH115**

Sheet 3 of 4

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Location: CAMBRIDGE		Level: 9.97	Scale 1:50
Client: RPMI RAILPEN		Dates: 09/11/2022 - 11/11/2022	Logged By

Well

Remarks 1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 2.6m bgl. 4. Standpipe installed to 4m: 1m plain, 3m slotted.	
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Sheet 4 of 4

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Location: CAMBRIDGE		Level: 9.97	Scale 1:50
Client: RPMI RAILPEN		Dates: 09/11/2022 - 11/11/2022	Logged By

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Hand excavated inspection pit undertaken to 1.20m bgl. 3. Groundwater encountered at 2.6m bgl. 4. Standpipe installed to 4m: 1m plain, 3m slotted.





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# Borehole Log

Borehole No.

**WBH116**

Sheet 1 of 4

Project Name: PROJECT OTTER	Project No. GRO-22165	Co-ords: 546712.03 - 258746.31	Hole Type CP
Location: CAMBRIDGE		Level: 9.56	Scale 1:50
Client: RPMI RAILPEN		Dates: 11/11/2022 - 15/11/2022	Logged By MB

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Concrete coring undertaken to 0.30m bgl. 3. Hand excavated inspection pit dug to 1.40m bgl. 5. Groundwater encountered at 4.50m bgl. 6. SPT refusal at 37.5m bgl. 7. Standpipe installed to 5m: 1m plain, 4m slotted.





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Borehole No.

**WBH116**

Sheet 2 of 4

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Location: CAMBRIDGE		Level: 9.56	Scale 1:50
Client: RPMI RAILPEN		Dates: 11/11/2022 - 15/11/2022	Logged By MB

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Concrete coring undertaken to 0.30m bgl. 3. Hand excavated inspection pit dug to 1.40m bgl. 5. Groundwater encountered at 4.50m bgl. 6. SPT refusal at 37.5m bgl. 7. Standpipe installed to 5m: 1m plain, 4m slotted.





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Location: CAMBRIDGE		Level: 9.56	Scale 1:50
Client: RPMI RAILPEN		Dates: 11/11/2022 - 15/11/2022	Logged By MB

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Concrete coring undertaken to 0.30m bgl. 3. Hand excavated inspection pit dug to 1.40m bgl. 5. Groundwater encountered at 4.50m bgl. 6. SPT refusal at 37.5m bgl. 7. Standpipe installed to 5m: 1m plain, 4m slotted.





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Location: CAMBRIDGE		Level: 9.56	Scale 1:50
Client: RPMI RAILPEN		Dates: 11/11/2022 - 15/11/2022	Logged By MB

Well

## Remarks

1. Location cleared for utilities by a specialist using a CAT and GPR. 2. Concrete coring undertaken to 0.30m bgl. 3. Hand excavated inspection pit dug to 1.40m bgl. 5. Groundwater encountered at 4.50m bgl. 6. SPT refusal at 37.5m bgl. 7. Standpipe installed to 5m: 1m plain, 4m slotted.





## APPENDIX 4 – Geo-Environmental Testing Results

Waterman Infrastructure & Environment Limited  
Pickfords Wharf  
Clink Street  
London  
SE1 9DG



**Attention :** Ben Greenfield  
**Date :** 18th January, 2023  
**Your reference :** WIE17469  
**Our reference :** Test Report 22/18024  
**Location :** Project Otter  
**Date samples received :**  
**Status :** Final report  
**Issue :** 1

**Authorised By:**

**Paul Boden BSc**  
Senior Project Manager

Please include all sections of this report if it is reproduced

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	4-6	10-12	13-15	19-21	22-24	28-30	43-45	58-60	88-90	97-99	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH113	WBH113	LOD/LOR	Units	Method No.
Depth	0.50	1.50	2.50	4.50	0.50	2.00	9.00	10.00	0.80	2.50			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	03/11/2022	03/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	2	2	4	4			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	05/11/2022	05/11/2022			
Arsenic #	1.8	1.5	-	-	4.4	3.1	6.1	6.4	10.2	9.7	<0.5	mg/kg	TM30/PM15
Barium #	21	21	-	-	9	30	54	56	16	18	<1	mg/kg	TM30/PM15
Beryllium	<0.5	<0.5	-	-	<0.5	0.5	1.1	1.0	<0.5	<0.5	<0.5	mg/kg	TM30/PM15
Cadmium #	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Chromium #	8.0	7.3	-	-	7.5	9.5	27.6	24.2	31.1	31.2	<0.5	mg/kg	TM30/PM15
Copper #	9	9	-	-	2	9	23	22	7	7	<1	mg/kg	TM30/PM15
Lead #	7	7	-	-	<5	6	14	14	7	<5	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Nickel #	13.3	13.4	-	-	2.8	17.4	43.2	52.8	12.6	13.2	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	-	-	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM30/PM15
Vanadium	9	9	-	-	11	11	32	27	20	19	<1	mg/kg	TM30/PM15
Water Soluble Boron #	0.3	0.3	-	-	<0.1	1.2	1.3	1.7	0.3	0.3	<0.1	mg/kg	TM74/PM32
Zinc #	17	17	-	-	6	20	54	54	23	24	<5	mg/kg	TM30/PM15
<b>PAH MS</b>													
Naphthalene #	0.19	0.31	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	-	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.06	0.05	-	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	-	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	-	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	-	-	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	-	-	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	-	-	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	87	-	-	96	83	91	83	109	92	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #	<2	<2	-	-	<2	<2	-	-	<2	<2	<2	ug/kg	TM15/PM10
Benzene #	<3	<3	-	-	<3	<3	-	-	<3	<3	<3	ug/kg	TM15/PM10
Toluene #	<3	47	-	-	<3	<3	-	-	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	28	>>3245	-	-	<3	<3	-	-	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	123	>>9260	-	-	<5	<5	-	-	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene #	59	>>4120	-	-	<3	<3	-	-	<3	<3	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	104	105	-	-	102	108	-	-	109	109	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	103	87	-	-	98	103	-	-	101	103	<0	%	TM15/PM10



# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	4-6	10-12	13-15	19-21	22-24	28-30	43-45	58-60	88-90	97-99	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH113	WBH113	LOD/LOR	Units	Method No.
Depth	0.50	1.50	2.50	4.50	0.50	2.00	9.00	10.00	0.80	2.50			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	03/11/2022	03/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	2	2	4	4			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	05/11/2022	05/11/2022			
EPH (C8-C40) (EH_1D_Total) #	-	-	-	-	-	-	248	<30	-	-	<30	mg/kg	TM5/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	-	-	-	-	<30	-	-	-	<30	-	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
<b>Aliphatics</b>													
>C5-C6 (HS_1D_AL) #	0.4	1.9	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	6.5	19.0	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	8.8	43.4	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	4.8	7.1	-	-	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	8	11	-	-	<4	<4	-	-	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	22	24	-	-	<7	<7	-	-	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	<7	<7	-	-	<7	<7	-	-	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C44 (EH_1D_AL)	<7	<7	-	-	<7	<7	-	-	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-44 (EH+HS_1D_AL)	51	106	-	-	<26	<26	-	-	<26	<26	<26	mg/kg	TM5/PM8/PM12/PM16
<b>Aromatics</b>													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	0.1	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	0.8	25.2	-	-	<0.1	<0.1	-	-	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	6.0	13.6	-	-	<0.2	<0.2	-	-	<0.2 <sup>SV</sup>	<0.2 <sup>SV</sup>	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	<4	6	-	-	<4	<4	-	-	<4 <sup>SV</sup>	<4 <sup>SV</sup>	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	<7	<7	-	-	<7	<7	-	-	<7 <sup>SV</sup>	<7 <sup>SV</sup>	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	<7	<7	-	-	<7	<7	-	-	<7 <sup>SV</sup>	<7 <sup>SV</sup>	<7	mg/kg	TM5/PM8/PM16
>EC35-EC44 (EH_1D_AR)	<7	<7	-	-	<7	<7	-	-	<7 <sup>SV</sup>	<7 <sup>SV</sup>	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-44 (EH+HS_1D_AR)	<26	45	-	-	<26	<26	-	-	<26 <sup>SV</sup>	<26 <sup>SV</sup>	<26	mg/kg	TM5/PM8/PM12/PM16
Total aliphatics and aromatics (C5-44) (EH+HS_CU_1D_Total)	<52	151	-	-	<52	<52	-	-	<52 <sup>SV</sup>	<52 <sup>SV</sup>	<52	mg/kg	TM5/PM8/PM12/PM16
MTBE #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Benzene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Toluene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
o-Xylene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	<5	-	-	-	<5	-	<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	<35	-	-	-	<35	-	<35	ug/kg	TM17/PM8
Resorcinol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Catechol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	4-6	10-12	13-15	19-21	22-24	28-30	43-45	58-60	88-90	97-99	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH113	WBH113	LOD/LOR	Units	Method No.
Depth	0.50	1.50	2.50	4.50	0.50	2.00	9.00	10.00	0.80	2.50			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	03/11/2022	03/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	2	2	4	4			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	05/11/2022	05/11/2022			
Phenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
m/p-cresol #	-	-	-	-	-	-	-	-	-	-	<0.02	mg/kg	TM26/PM21B
o-cresol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total cresols #	-	-	-	-	-	-	-	-	-	-	<0.03	mg/kg	TM26/PM21B
Xylenols #	-	-	-	-	-	-	-	-	-	-	<0.06	mg/kg	TM26/PM21B
1-naphthol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2,3,5-trimethyl phenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2-isopropylphenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total Speciated Phenols HPLC	-	-	-	-	-	-	-	-	-	-	<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	20.4	20.5	24.1	28.2	7.6	23.2	32.8	26.8	26.0	9.3	<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	1.0	1.1	-	-	<0.6	1.4	<0.6	<0.6	<0.6	-	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH3	1.1	1.2	-	-	<0.6	1.6	<0.6	<0.6	<0.6	-	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH4	1.2	1.3	-	-	<0.6	1.7	<0.6	<0.6	<0.6	-	<0.6	mg/kg	TM38/PM20
Hexavalent Chromium #	<0.3	<0.3	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0263	0.0350	-	-	0.0099	0.0999	0.0471	0.0982	0.0075	-	<0.0015	g/l	TM38/PM20
Chromium III	8.0	7.3	-	-	7.5	9.5	27.6	24.2	31.1	31.2	<0.5	mg/kg	NONE/NONE
Free Cyanide	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Total Cyanide #	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.08	0.09	-	-	0.11	0.08	0.44	0.48	0.11	-	<0.02	%	TM21/PM24
Fraction Organic Carbon	<0.001	<0.001	-	-	0.001	<0.001	0.004	0.005	0.001	-	<0.001	None	TM21/PM24
Organic Matter	<0.2	<0.2	-	-	<0.2	<0.2	0.8	0.8	<0.2	-	<0.2	%	TM21/PM24
Sulphide	<10	<10	-	-	<10	<10	<10	<10	-	-	<10	mg/kg	TM107/PM45
ANC at pH4	-	-	-	-	2.49	-	-	-	1.01	-	<0.03	mol/kg	TM77/PM0
ANC at pH7	-	-	-	-	0.08	-	-	-	0.06	-	<0.03	mol/kg	TM77/PM0
Loss on Ignition #	-	-	-	-	<1.0	-	-	-	<1.0	-	<1.0	%	TM22/PM0
pH #	9.24	9.12	-	-	9.17	8.56	8.77	9.06	8.99	-	<0.01	pH units	TM73/PM11

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	136-138	145-147	205-207	247-249	262-264	283-285	298-300	346-348	358-360	373-375	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH114	WBH114	WBH115	WBH116	WBH116	WBH101	WBH101	WBH106	WBH106	WBH103	LOD/LOR	Units	Method No.
Depth	1.50	2.60	1.30	0.50	3.00	0.60	3.50	1.60	4.00	1.60			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/11/2022	04/11/2022	09/11/2022	11/11/2022	11/11/2022	15/11/2022	15/11/2022	17/11/2022	17/11/2022	18/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	5	5	8	10	10	12	12	13	13	14			
Date of Receipt	08/11/2022	08/11/2022	11/11/2022	16/11/2022	16/11/2022	18/11/2022	18/11/2022	19/11/2022	19/11/2022	22/11/2022			
Arsenic #	13.6	3.3	6.2	14.8	6.0	11.2	1.4	6.3	4.6	8.5	<0.5	mg/kg	TM30/PM15
Barium #	66	28	35	74	34	63	24	48	27	99	<1	mg/kg	TM30/PM15
Beryllium	1.2	<0.5	0.6	2.2	<0.5	1.0	<0.5	0.8	0.5	2.0	<0.5	mg/kg	TM30/PM15
Cadmium #	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Chromium #	77.1	16.4	28.9	52.5	39.7	37.2	10.3	26.2	22.6	52.6	<0.5	mg/kg	TM30/PM15
Copper #	12	11	10	45	10	22	7	15	10	13	<1	mg/kg	TM30/PM15
Lead #	15	7	9	37	13	32	6	19	6	12	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Nickel #	17.0	19.6	21.5	28.0	16.2	21.7	10.7	22.3	25.4	17.6	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	<1	<1	<1	1	<1	<1	1	<1	<1	mg/kg	TM30/PM15
Vanadium	39	15	24	37	16	71	7	25	18	56	<1	mg/kg	TM30/PM15
Water Soluble Boron #	0.9	0.6	0.7	1.1	0.7	0.8	0.4	1.4	0.9	0.9	<0.1	mg/kg	TM74/PM32
Zinc #	52	22	27	43	22	70	14	38	23	35	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	0.06	<0.04	<0.04	1.71	<0.04	<0.04	<0.04	<0.04	-	1.54	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.11	<0.03	<0.03	1.14	<0.03	0.12	<0.03	<0.03	-	0.66	<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.40	<0.05	<0.05	0.11	<0.05	0.11	<0.05	<0.05	-	1.51	<0.05	mg/kg	TM4/PM8
Fluorene #	0.25	<0.04	<0.04	0.33	<0.04	0.08	<0.04	<0.04	-	1.75	<0.04	mg/kg	TM4/PM8
Phenanthrene #	2.53	<0.03	<0.03	5.50	<0.03	1.33	<0.03	<0.03	-	13.09	<0.03	mg/kg	TM4/PM8
Anthracene #	0.68	<0.04	<0.04	2.58	<0.04	0.47	<0.04	<0.04	-	2.91	<0.04	mg/kg	TM4/PM8
Fluoranthene #	3.90	<0.03	<0.03	11.26	<0.03	3.89	<0.03	0.05	-	11.53	<0.03	mg/kg	TM4/PM8
Pyrene #	3.35	<0.03	<0.03	9.60	<0.03	3.25	<0.03	0.05	-	9.15	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.75	<0.06	<0.06	5.24	<0.06	1.69	<0.06	<0.06	-	3.91	<0.06	mg/kg	TM4/PM8
Chrysene #	1.73	<0.02	<0.02	5.49	<0.02	1.71	<0.02	<0.02	-	3.94	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	3.68	<0.07	<0.07	9.84	<0.07	2.90	<0.07	<0.07	-	6.11	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	2.14	<0.04	<0.04	5.90	<0.04	1.65	<0.04	<0.04	-	3.90	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	1.74	<0.04	<0.04	4.21	<0.04	1.26	<0.04	<0.04	-	2.47	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.29	<0.04	<0.04	0.75	<0.04	0.27	<0.04	<0.04	-	0.50	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.20	<0.04	<0.04	3.46	<0.04	1.05	<0.04	<0.04	-	2.07	<0.04	mg/kg	TM4/PM8
Coronene	0.25	<0.04	<0.04	0.68	<0.04	0.21	<0.04	<0.04	-	0.39	<0.04	mg/kg	TM4/PM8
PAH 17 Total	24.06	<0.64	<0.64	67.80	<0.64	19.99	<0.64	<0.64	-	65.43	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	2.65	<0.05	<0.05	7.08	<0.05	2.09	<0.05	<0.05	-	4.40	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.03	<0.02	<0.02	2.76	<0.02	0.81	<0.02	<0.02	-	1.71	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	103	101	96	98	87	95	87	98	-	96	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2	ug/kg	TM15/PM10
Benzene #	<3	<3	-	18	<3	<3	<3	<3	-	<3	<3	ug/kg	TM15/PM10
Toluene #	<3	<3	-	79	<3	<3	<3	<3	-	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	<3	<3	-	8	<3	<3	<3	<3	-	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	<5	<5	-	60	<5	<5	<5	<5	-	<5	<5	ug/kg	TM15/PM10
o-Xylene #	<3	<3	-	23	<3	<3	<3	<3	-	<3	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	89	113	-	74	111	97	109	96	-	93	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	80	102	-	53	96	80	96	73	-	77	<0	%	TM15/PM10

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	136-138	145-147	205-207	247-249	262-264	283-285	298-300	346-348	358-360	373-375	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH114	WBH114	WBH115	WBH116	WBH116	WBH101	WBH101	WBH106	WBH106	WBH103	LOD/LOR	Units	Method No.
Depth	1.50	2.60	1.30	0.50	3.00	0.60	3.50	1.60	4.00	1.60			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/11/2022	04/11/2022	09/11/2022	11/11/2022	11/11/2022	15/11/2022	15/11/2022	17/11/2022	17/11/2022	18/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	5	5	8	10	10	12	12	13	13	14			
Date of Receipt	08/11/2022	08/11/2022	11/11/2022	16/11/2022	16/11/2022	18/11/2022	18/11/2022	19/11/2022	19/11/2022	22/11/2022			
EPH (C8-C40) (EH_1D_Total) #	-	-	-	-	-	-	-	-	<30	-	<30	mg/kg	TM5/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	-	-	-	-	-	-	-	<30	-	-	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
<b>Aliphatics</b>													
>C5-C6 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	<0.1	<0.1	0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	0.2	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	<0.2	<0.2	<0.2	3.7	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	<4	<4	<4	7	<4	<4	<4	<4	-	9	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	<7	<7	<7	-	26	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	63	<7	<7	-	82	<7	mg/kg	TM5/PM8/PM16
>C35-C44 (EH_1D_AL)	<7	<7	<7	<7	<7	<7	<7	<7	-	14	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-44 (EH+HS_1D_AL)	<26	<26	<26	<26	<26	63	<26	<26	-	131	<26	mg/kg	TM5/PM8/PM12/PM16
<b>Aromatics</b>													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	<0.2	<0.2	<0.2	0.6	<0.2	<0.2	<0.2	<0.2	-	5.6	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	7	<4	<4	9	<4	<4	<4	<4	-	79	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	59	<7	<7	97	<7	26	<7	<7	-	519	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	214	<7	<7	256	<7	182	<7	<7	-	914	<7	mg/kg	TM5/PM8/PM16
>EC35-EC44 (EH_1D_AR)	9	<7	<7	20	<7	25	<7	<7	-	96	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-44 (EH+HS_1D_AR)	289	<26	<26	383	<26	233	<26	<26	-	1614	<26	mg/kg	TM5/PM8/PM12/PM16
Total aliphatics and aromatics (C5-44) (EH+HS_CU_1D_Total)	289	<52	<52	383	<52	296	<52	<52	-	1745	<52	mg/kg	TM5/PM8/PM12/PM16
MTBE #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Benzene #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Toluene #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
o-Xylene #	-	-	<5	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	-	-	-	<5	-	-	<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	-	-	-	<35	-	-	<35	ug/kg	TM17/PM8
Resorcinol	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Catechol	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	136-138	145-147	205-207	247-249	262-264	283-285	298-300	346-348	358-360	373-375	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH114	WBH114	WBH115	WBH116	WBH116	WBH101	WBH101	WBH106	WBH106	WBH103			
Depth	1.50	2.60	1.30	0.50	3.00	0.60	3.50	1.60	4.00	1.60			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/11/2022	04/11/2022	09/11/2022	11/11/2022	11/11/2022	15/11/2022	15/11/2022	17/11/2022	17/11/2022	18/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	5	5	8	10	10	12	12	13	13	14			
Date of Receipt	08/11/2022	08/11/2022	11/11/2022	16/11/2022	16/11/2022	18/11/2022	18/11/2022	19/11/2022	19/11/2022	22/11/2022	LOD/LOR	Units	Method No.
Phenol #	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
m/p-cresol #	<0.02	-	-	-	-	-	-	-	-	-	<0.02	mg/kg	TM26/PM21B
o-cresol #	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total cresols #	<0.03	-	-	-	-	-	-	-	-	-	<0.03	mg/kg	TM26/PM21B
Xylenols #	<0.06	-	-	-	-	-	-	-	-	-	<0.06	mg/kg	TM26/PM21B
1-naphthol	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2,3,5-trimethyl phenol #	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2-isopropylphenol #	<0.01	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total Speciated Phenols HPLC	<0.15	-	-	-	-	-	-	-	-	-	<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	11.4	22.1	15.6	13.1	21.9	12.4	27.2	29.7	21.4	17.2	<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	<0.6	<0.6	<0.6	0.7	1.2	<0.6	<0.6	<0.6	-	<0.6	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH3	<0.6	<0.6	<0.6	0.9	1.5	<0.6	<0.6	<0.6	-	<0.6	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH4	<0.6	<0.6	<0.6	0.9	1.5	<0.6	<0.6	<0.6	-	<0.6	<0.6	mg/kg	TM38/PM20
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0832	0.0625	0.0463	0.1346	0.0316	0.2305	-	0.2451	-	0.1145	<0.0015	g/l	TM38/PM20
Chromium III	77.1	16.4	28.9	52.5	39.7	37.2	10.3	26.2	22.6	52.6	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #	<0.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.27	0.15	0.12	3.20	0.27	0.36	-	0.30	-	0.37	<0.02	%	TM21/PM24
Fraction Organic Carbon	0.003	0.002	0.001	0.032	0.003	0.004	-	0.003	-	0.004	<0.001	None	TM21/PM24
Organic Matter	0.5	0.3	0.2	5.5	0.5	0.6	-	0.5	-	0.6	<0.2	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	mg/kg	TM107/PM45
ANC at pH4	-	-	-	-	-	-	-	10.48	-	-	<0.03	mol/kg	TM77/PM0
ANC at pH7	-	-	-	-	-	-	-	0.17	-	-	<0.03	mol/kg	TM77/PM0
Loss on Ignition #	-	-	-	-	-	-	-	3.0	-	-	<1.0	%	TM22/PM0
pH #	11.52	8.80	9.30	10.72	8.53	8.98	-	11.08	-	11.93	<0.01	pH units	TM73/PM11

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	382-384	418-420	436-438	451-453	472-474	487-489	514-516	526-528	546-547	555	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH103	WBH105	WBH105	WBH105	WBH102	WBH102	WBH107	WBH107	WBH108	WBH108	LOD/LOR	Units	Method No.
Depth	3.00	1.30	4.00	10.50	1.00	4.00	1.50	3.90	1.50	4.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J	V			
Sample Date	18/11/2022	21/11/2022	21/11/2022	21/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	14	15	15	15	16	16	17	17	18	18			
Date of Receipt	22/11/2022	23/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022			
Arsenic #	7.3	13.2	13.1	5.5	13.0	6.6	13.6	-	14.9	-	<0.5	mg/kg	TM30/PM15
Barium #	32	77	161	49	180	48	60	-	62	-	<1	mg/kg	TM30/PM15
Beryllium	0.6	1.1	2.8	0.6	5.8	1.1	0.8	-	0.8	-	<0.5	mg/kg	TM30/PM15
Cadmium #	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	mg/kg	TM30/PM15
Chromium #	34.1	40.5	34.3	25.6	43.8	27.0	33.3	-	37.0	-	<0.5	mg/kg	TM30/PM15
Copper #	46	26	54	17	31	22	20	-	19	-	<1	mg/kg	TM30/PM15
Lead #	7	58	75	28	18	14	74	-	33	-	<5	mg/kg	TM30/PM15
Mercury #	<0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	mg/kg	TM30/PM15
Nickel #	23.5	27.2	21.1	22.9	14.9	42.6	19.7	-	19.0	-	<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	<1	<1	3	<1	1	-	1	-	<1	mg/kg	TM30/PM15
Vanadium	22	40	38	20	50	27	28	-	28	-	<1	mg/kg	TM30/PM15
Water Soluble Boron #	0.5	3.0	2.7	1.9	3.8	1.8	2.0	-	1.4	-	<0.1	mg/kg	TM74/PM32
Zinc #	46	84	217	61	150	53	57	-	49	-	<5	mg/kg	TM30/PM15
<b>PAH MS</b>													
Naphthalene #	<0.04	<0.04	0.34	-	<0.04	-	0.07	<0.04	1.24	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.16	-	<0.03	-	<0.03	<0.03	0.26	-	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	2.08	-	<0.05	-	<0.05	<0.05	1.20	-	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	2.36	-	<0.04	-	<0.04	<0.04	1.33	-	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.15	0.26	9.33	-	0.20	-	0.24	<0.03	10.97	-	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.07	2.66	-	0.05	-	<0.04	<0.04	3.33	-	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.15	0.55	11.86	-	0.35	-	0.36	<0.03	7.26	-	<0.03	mg/kg	TM4/PM8
Pyrene #	0.12	0.50	9.48	-	0.30	-	0.32	<0.03	12.77	-	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.08	0.38	3.48	-	0.16	-	0.20	<0.06	5.21	-	<0.06	mg/kg	TM4/PM8
Chrysene #	0.05	0.32	4.80	-	0.16	-	0.18	<0.02	4.71	-	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	0.61	6.13	-	0.26	-	0.29	<0.07	6.70	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	0.37	3.00	-	0.12	-	0.15	<0.04	7.85	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	<0.04	0.28	1.84	-	0.10	-	0.13	<0.04	4.47	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	0.06	0.36	-	<0.04	-	<0.04	<0.04	0.85	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	0.24	1.84	-	0.08	-	0.12	<0.04	5.78	-	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	0.06	0.68	-	<0.04	-	<0.04	<0.04	0.89	-	<0.04	mg/kg	TM4/PM8
PAH 17 Total	<0.64	3.70	60.40	-	1.78	-	2.06	<0.64	74.82	-	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	0.44	4.41	-	0.19	-	0.21	<0.05	4.82	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	0.17	1.72	-	0.07	-	0.08	<0.02	1.88	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	92	98	-	96	-	98	102	100	-	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Benzene #	-	<3	<3	<3	<3	<3	<3	<3	<3	4	<3	ug/kg	TM15/PM10
Toluene #	-	<3	<3	<3	<3	<3	7	<3	8	6	<3	ug/kg	TM15/PM10
Ethylbenzene #	-	<3	<3	<3	<3	<3	<3	<3	4	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	-	<5	<5	<5	<5	<5	6	<5	<5	10	<5	ug/kg	TM15/PM10
o-Xylene #	-	<3	<3	<3	<3	<3	<3	<3	<3	6	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	92	90	124	82	97	93	103	93	59	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	77	70	99	63	89	75	100	83	57	<0	%	TM15/PM10

# Element Materials Technology

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**Reference:** WIE17469  
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**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	382-384	418-420	436-438	451-453	472-474	487-489	514-516	526-528	546-547	555	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH103	WBH105	WBH105	WBH105	WBH102	WBH102	WBH107	WBH107	WBH108	WBH108	LOD/LOR	Units	Method No.
Depth	3.00	1.30	4.00	10.50	1.00	4.00	1.50	3.90	1.50	4.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J	V			
Sample Date	18/11/2022	21/11/2022	21/11/2022	21/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	14	15	15	15	16	16	17	17	18	18			
Date of Receipt	22/11/2022	23/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022			
EPH (C8-C40) (EH_1D_Total) #	153	-	-	-	-	-	-	-	-	-	<30	mg/kg	TM5/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	-	-	-	-	73	-	-	-	-	-	<30	mg/kg	TM5/PM8/PM16
<b>TPH CWG</b>													
<b>Aliphatics</b>													
>C5-C6 (HS_1D_AL) #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	-	<0.2	12.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	9.8	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	-	<4	11	<4	<4	<4	<4	<4	<4	37	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	-	<7	40	<7	<7	<7	<7	<7	<7	129	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	-	23	203	<7	59	<7	15	64	21	303	<7	mg/kg	TM5/PM8/PM16
>C35-C44 (EH_1D_AL)	-	<7	23	<7	24	<7	<7	<7	<7	27	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-44 (EH+HS_1D_AL)	-	<26	290	<26	83	<26	<26	64	<26	506	<26	mg/kg	TM5/PM8/PM16/PM12/PM15
<b>Aromatics</b>													
>C5-EC7 (HS_1D_AR) #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <sup>SV</sup>	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.6	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	-	<4	20	<4	<4	<4	<4	<4	<4	39	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	-	<7	134	<7	<7	<7	<7	<7	34	214	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	-	<7	332	<7	120	<7	61	11	117	640	<7	mg/kg	TM5/PM8/PM16
>EC35-EC44 (EH_1D_AR)	-	<7	44	<7	66	<7	<7	<7	34	43	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-44 (EH+HS_1D_AR)	-	<26	530	<26	186	<26	61	<26	185	941	<26	mg/kg	TM5/PM8/PM16/PM12/PM15
Total aliphatics and aromatics (C5-44) (EH+HS_CU_1D_Total)	-	<52	820	<52	269	<52	61	64	185	1447	<52	mg/kg	TM5/PM8/PM16/PM12/PM15
MTBE #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Benzene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Toluene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
o-Xylene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	<5	-	-	-	-	-	<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	<35	-	-	-	-	-	<35	ug/kg	TM17/PM8
Resorcinol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Catechol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	382-384	418-420	436-438	451-453	472-474	487-489	514-516	526-528	546-547	555	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH103	WBH105	WBH105	WBH105	WBH102	WBH102	WBH107	WBH107	WBH108	WBH108	LOD/LOR	Units	Method No.
Depth	3.00	1.30	4.00	10.50	1.00	4.00	1.50	3.90	1.50	4.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J	V			
Sample Date	18/11/2022	21/11/2022	21/11/2022	21/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	14	15	15	15	16	16	17	17	18	18			
Date of Receipt	22/11/2022	23/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022			
Phenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
m/p-cresol #	-	-	-	-	-	-	-	-	-	-	<0.02	mg/kg	TM26/PM21B
o-cresol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total cresols #	-	-	-	-	-	-	-	-	-	-	<0.03	mg/kg	TM26/PM21B
Xylenols #	-	-	-	-	-	-	-	-	-	-	<0.06	mg/kg	TM26/PM21B
1-naphthol	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2,3,5-trimethyl phenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
2-isopropylphenol #	-	-	-	-	-	-	-	-	-	-	<0.01	mg/kg	TM26/PM21B
Total Speciated Phenols HPLC	-	-	-	-	-	-	-	-	-	-	<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	21.4	19.8	25.1	26.5	16.6	31.4	15.5	25.0	12.1	48.4	<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	2.4	13.3	33.8	13.5	<0.6	-	<0.6	<0.6	19.4	-	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH3	2.9	16.2	41.0	16.4	<0.6	-	<0.6	<0.6	23.5	-	<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH4	3.2	17.1	43.5	17.5	<0.6	-	<0.6	<0.6	25.0	-	<0.6	mg/kg	TM38/PM20
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0618	0.3610	0.7420	-	1.5013	-	0.1592	-	0.1507	-	<0.0015	g/l	TM38/PM20
Chromium III	34.1	40.5	34.3	25.6	43.8	27.0	33.3	-	37.0	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	-	<0.5	<1.5 <sub>AA</sub>	-	-	-	<0.5	-	<0.5	-	<0.5	mg/kg	TM89/PM45
Total Cyanide #	-	<0.5	<1.5 <sub>AA</sub>	-	-	-	<0.5	-	2.5	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	<0.5	<1.5 <sub>AA</sub>	-	-	-	<0.5	-	2.5	-	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.12	1.06	3.53	-	0.92	-	0.82	-	0.30	-	<0.02	%	TM21/PM24
Fraction Organic Carbon	0.001	0.011	0.035	-	0.009	-	0.008	-	0.003	-	<0.001	None	TM21/PM24
Organic Matter	0.2	1.8	6.1	-	1.6	-	1.4	-	0.5	-	<0.2	%	TM21/PM24
Sulphide	<10	16	20	-	<10	-	<10	-	<10	-	<10	mg/kg	TM107/PM45
ANC at pH4	-	-	-	-	1.39	-	-	-	-	-	<0.03	mol/kg	TM77/PM0
ANC at pH7	-	-	-	-	0.26	-	-	-	-	-	<0.03	mol/kg	TM77/PM0
Loss on Ignition #	-	-	-	-	4.9	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	11.47	8.73	8.84	-	11.07	-	11.98	-	11.69	-	<0.01	pH units	TM73/PM11



# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	556	570-572	582-584	618-620	627-629	639-641	651-653	669-671	678-680				
Sample ID	WBH108	WBH104	WBH104	WBH104	WBH109	WBH109	WBH109	WBH110	WBH110				
Depth	4.50	1.00	3.70	14.0	0.80	3.00	7.00	0.80	2.10				
COC No / misc													
Containers	J	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	24/11/2022	24/11/2022	24/11/2022	24/11/2022	29/11/2022	29/11/2022	29/11/2022	01/12/2022	01/12/2022				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	18	18	18	18	19	19	19	20	20				
Date of Receipt	26/11/2022	26/11/2022	26/11/2022	26/11/2022	02/12/2022	02/12/2022	02/12/2022	03/12/2022	03/12/2022				
										LOD/LOR	Units	Method No.	
Arsenic #	27.5	12.5	17.6	28.3	9.2	9.0	9.0	18.3	6.0	<0.5	mg/kg	TM30/PM15	
Barium #	350	115	224	527	35	108	67	89	35	<1	mg/kg	TM30/PM15	
Beryllium	3.3	1.4	2.0	2.4	<0.5	0.8	0.9	1.9	0.5	<0.5	mg/kg	TM30/PM15	
Cadmium #	2.3	0.7	<0.1	0.4	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15	
Chromium #	50.4	28.3	48.4	53.9	31.6	35.3	34.8	46.4	26.1	<0.5	mg/kg	TM30/PM15	
Copper #	205	46	467 <sup>AB</sup>	214	28	32	18	42	11	<1	mg/kg	TM30/PM15	
Lead #	441	120	213	167	26	24	29	110	13	<5	mg/kg	TM30/PM15	
Mercury #	2.3	<0.1	17.5	1.8	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	mg/kg	TM30/PM15	
Nickel #	47.1	21.4	36.8	48.6	9.3	34.0	30.5	26.0	21.0	<0.7	mg/kg	TM30/PM15	
Selenium #	<1	2	2	2	<1	<1	1	1	<1	<1	mg/kg	TM30/PM15	
Vanadium	46	41	35	39	19	28	28	40	19	<1	mg/kg	TM30/PM15	
Water Soluble Boron #	6.3	3.9	4.7	4.8	0.5	0.7	1.1	1.4	1.0	<0.1	mg/kg	TM74/PM32	
Zinc #	1836	159	309	882	38	64	43	79	24	<5	mg/kg	TM30/PM15	
PAH MS													
Naphthalene #	0.38	<0.04	<0.04	0.45	<0.04	<0.04	<0.04	0.29	<0.04	<0.04	mg/kg	TM4/PM8	
Acenaphthylene	0.27	0.04	<0.03	0.34	0.07	0.05	<0.03	1.62	0.07	<0.03	mg/kg	TM4/PM8	
Acenaphthene #	2.85	<0.05	<0.05	0.64	<0.05	<0.05	<0.05	0.10	<0.05	<0.05	mg/kg	TM4/PM8	
Fluorene #	3.76	<0.04	<0.04	0.62	<0.04	<0.04	<0.04	0.37	<0.04	<0.04	mg/kg	TM4/PM8	
Phenanthrene #	18.61	0.17	0.11	4.28	0.37	0.13	<0.03	5.66	0.21	<0.03	mg/kg	TM4/PM8	
Anthracene #	8.08	0.05	<0.04	1.18	0.16	0.05	<0.04	2.08	0.08	<0.04	mg/kg	TM4/PM8	
Fluoranthene #	15.59	0.37	0.17	5.59	1.27	0.33	<0.03	12.76	0.64	<0.03	mg/kg	TM4/PM8	
Pyrene #	11.40	0.35	0.14	4.37	1.09	0.31	<0.03	11.72	0.62	<0.03	mg/kg	TM4/PM8	
Benzo(a)anthracene #	5.12	0.20	0.13	2.24	0.62	0.21	<0.06	6.58	0.43	<0.06	mg/kg	TM4/PM8	
Chrysene #	4.90	0.18	0.08	2.04	0.63	0.20	<0.02	6.95	0.41	<0.02	mg/kg	TM4/PM8	
Benzo(bk)fluoranthene #	7.15	0.33	0.14	3.78	1.10	0.38	<0.07	13.76	0.76	<0.07	mg/kg	TM4/PM8	
Benzo(a)pyrene #	4.37	0.17	0.08	1.88	0.63	0.22	<0.04	7.70	0.48	<0.04	mg/kg	TM4/PM8	
Indeno(123cd)pyrene #	2.63	0.16	0.07	1.55	0.48	0.16	<0.04	6.43	0.29	<0.04	mg/kg	TM4/PM8	
Dibenzo(ah)anthracene #	0.50	<0.04	<0.04	0.19	0.10	<0.04	<0.04	1.34	<0.04	<0.04	mg/kg	TM4/PM8	
Benzo(ghi)perylene #	2.09	0.12	<0.04	1.21	0.41	0.15	<0.04	6.10	0.25	<0.04	mg/kg	TM4/PM8	
Coronene	0.38	<0.04	<0.04	0.23	0.10	<0.04	<0.04	1.02	<0.04	<0.04	mg/kg	TM4/PM8	
PAH 17 Total	88.08	2.14	0.92	30.59	7.03	2.19	<0.64	84.48	4.24	<0.64	mg/kg	TM4/PM8	
Benzo(b)fluoranthene	5.15	0.24	0.10	2.72	0.79	0.27	<0.05	9.91	0.55	<0.05	mg/kg	TM4/PM8	
Benzo(k)fluoranthene	2.00	0.09	0.04	1.06	0.31	0.11	<0.02	3.85	0.21	<0.02	mg/kg	TM4/PM8	
PAH Surrogate % Recovery	129	96	92	94	97	103	98	97	99	<0	%	TM4/PM8	
Methyl Tertiary Butyl Ether #	-	<2	<2	<2	-	<2	<2	<2	<2	<2	ug/kg	TM15/PM10	
Benzene #	-	5	<3	<3	-	<3	<3	<3	<3	<3	ug/kg	TM15/PM10	
Toluene #	-	12	<3	<3	-	<3	<3	<3	<3	<3	ug/kg	TM15/PM10	
Ethylbenzene #	-	<3	<3	<3	-	<3	<3	5	<3	<3	ug/kg	TM15/PM10	
m/p-Xylene #	-	10	8	<5	-	<5	<5	6	<5	<5	ug/kg	TM15/PM10	
o-Xylene #	-	<3	<3	<3	-	<3	<3	<3	<3	<3	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	-	102	69	95	-	95	96	96	110	<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	-	78	58	79	-	83	92	76	100	<0	%	TM15/PM10	

Please see attached notes for all abbreviations and acronyms

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**  
**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	556	570-572	582-584	618-620	627-629	639-641	651-653	669-671	678-680				
Sample ID	WBH108	WBH104	WBH104	WBH104	WBH109	WBH109	WBH109	WBH110	WBH110				
Depth	4.50	1.00	3.70	14.0	0.80	3.00	7.00	0.80	2.10				
COC No / misc													
Containers	J	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	24/11/2022	24/11/2022	24/11/2022	24/11/2022	29/11/2022	29/11/2022	29/11/2022	01/12/2022	01/12/2022				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	18	18	18	18	19	19	19	20	20				
Date of Receipt	26/11/2022	26/11/2022	26/11/2022	26/11/2022	02/12/2022	02/12/2022	02/12/2022	03/12/2022	03/12/2022				
											LOD/LOR	Units	Method No.
EPH (C8-C40) (EH_1D_Total) #	-	-	-	-	-	-	-	-	-		<30	mg/kg	TM5/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	-	-	-	-	-	-	-	<30	-		<30	mg/kg	TM5/PM8/PM16
TPH CWG													
<b>Aliphatics</b>													
>C5-C6 (HS_1D_AL) #	-	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	-	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	<0.1	0.4 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	-	<0.2	15.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	-	<4	30	<4	<4	<4	<4	<4	<4		<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	-	<7	<7	<7	<7	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	-	<7	29	<7	136	73	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
>C35-C44 (EH_1D_AL)	-	<7	11	<7	68	39	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-44 (EH+HS_1D_AL)	-	<26	86	<26	204	112	<26	<26	<26		<26	mg/kg	TM5/PM8/PM16/PM12/PM15
<b>Aromatics</b>													
>C5-EC7 (HS_1D_AR) #	-	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	-	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	-	<0.1	<0.1 <sup>SV</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	-	<0.2	<0.2	0.7 <sup>SV</sup>	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	-	<4	<4	20 <sup>SV</sup>	<4	<4	<4	<4	<4		<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	-	<7	<7	119 <sup>SV</sup>	<7	<7	<7	40	<7		<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	-	64	115	292 <sup>SV</sup>	259	172	<7	228	<7		<7	mg/kg	TM5/PM8/PM16
>EC35-EC44 (EH_1D_AR)	-	39	43	56	146	99	<7	52	<7		<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-44 (EH+HS_1D_AR)	-	103	158	488	405	271	<26	320	<26		<26	mg/kg	TM5/PM8/PM16/PM12/PM15
Total aliphatics and aromatics (C5-44) (EH+HS_CU_1D_Total)	-	103	244	488	609	383	<52	320	<52		<52	mg/kg	TM5/PM8/PM16/PM12/PM15
MTBE #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
Benzene #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
Toluene #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
o-Xylene #	-	-	-	-	<5	-	-	-	-		<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	-	-	-	<5	-		<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	-	-	-	<35	-		<35	ug/kg	TM17/PM8
Resorcinol	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
Catechol	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B

Please see attached notes for all abbreviations and acronyms

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	556	570-572	582-584	618-620	627-629	639-641	651-653	669-671	678-680				
Sample ID	WBH108	WBH104	WBH104	WBH104	WBH109	WBH109	WBH109	WBH110	WBH110				
Depth	4.50	1.00	3.70	14.0	0.80	3.00	7.00	0.80	2.10				
COC No / misc													
Containers	J	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	24/11/2022	24/11/2022	24/11/2022	24/11/2022	29/11/2022	29/11/2022	29/11/2022	01/12/2022	01/12/2022				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	18	18	18	18	19	19	19	20	20				
Date of Receipt	26/11/2022	26/11/2022	26/11/2022	26/11/2022	02/12/2022	02/12/2022	02/12/2022	03/12/2022	03/12/2022				
											LOD/LOR	Units	Method No.
Phenol #	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
m/p-cresol #	-	-	-	-	-	-	-	-	-		<0.02	mg/kg	TM26/PM21B
o-cresol #	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
Total cresols #	-	-	-	-	-	-	-	-	-		<0.03	mg/kg	TM26/PM21B
Xylenols #	-	-	-	-	-	-	-	-	-		<0.06	mg/kg	TM26/PM21B
1-naphthol	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
2,3,5-trimethyl phenol #	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
2-isopropylphenol #	-	-	-	-	-	-	-	-	-		<0.01	mg/kg	TM26/PM21B
Total Speciated Phenols HPLC	-	-	-	-	-	-	-	-	-		<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	57.2	23.3	31.8	32.5	11.3	22.1	23.1	15.6	20.8		<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	46.8	3.9	65.1	37.5	<0.6	<0.6	4.4	<0.6	0.8		<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH3	57.1	4.8	79.1	45.6	<0.6	0.9	5.3	<0.6	1.1		<0.6	mg/kg	TM38/PM20
Ammoniacal Nitrogen as NH4	60.4	5.1	83.8	48.2	<0.6	0.9	5.7	<0.6	1.1		<0.6	mg/kg	TM38/PM20
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.2872	0.6186	0.1678	0.0861	0.1868	0.8067	0.0510	0.2179	0.0706		<0.0015	g/l	TM38/PM20
Chromium III	50.4	28.3	48.4	53.9	31.6	35.3	34.8	46.4	26.1		<0.5	mg/kg	NONE/NONE
Free Cyanide	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Total Cyanide #	-	<0.5	13.7	2.1	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	<0.5	13.7	2.1	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	13.87	2.53	4.31	11.10	0.69	0.58	0.63	1.82	0.23		<0.02	%	TM21/PM24
Fraction Organic Carbon	0.139	0.025	0.043	0.111	0.007	0.006	0.006	0.018	0.002		<0.001	None	TM21/PM24
Organic Matter	23.9	4.4	7.4	19.1	1.2	1.0	1.1	3.1	0.4		<0.2	%	TM21/PM24
Sulphide	129	<10	99	15	<10	<10	<10	<10	<10		<10	mg/kg	TM107/PM45
ANC at pH4	-	-	-	-	-	-	-	0.15	-		<0.03	mol/kg	TM77/PM0
ANC at pH7	-	-	-	-	-	-	-	0.08	-		<0.03	mol/kg	TM77/PM0
Loss on Ignition #	-	-	-	-	-	-	-	5.5	-		<1.0	%	TM22/PM0
pH #	8.75	10.12	8.93	8.15	11.09	10.34	8.25	9.17	9.16		<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report :** Liquid

**Liquids/products:** V=40ml vial, G=glass bottle, P=plastic bottle  
H=H<sub>2</sub>SO<sub>4</sub>, Z=ZnAc, N=NaOH, HN=HNO<sub>3</sub>

EMT Sample No.	705-713	714-722	723-731	732-740	741-749	750-758	759-767	768-776	777-785	786-794	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH107	WBH108	WBH111	WBH112	WBH113	WBH114	WBH115	WBH116	WBH101	WBH102			
Depth													
COC No / misc													
Containers	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G			
Sample Date	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	16/12/2022	16/12/2022			
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water			
Batch Number	21	21	21	21	21	21	21	21	21	21			
Date of Receipt	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	LOD/LOR	Units	Method No.
Dissolved Arsenic #	<2.5	15.2	<2.5	<2.5	<2.5	<2.5	<2.5	3.0	<2.5	<2.5	<2.5	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Boron	205	5193	91	202	85	106	90	119	132	389	<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/l	TM30/PM14
Dissolved Lead #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM30/PM14
Dissolved Manganese #	44	138	93	8	15	3	<2	67	99	34	<2	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM30/PM14
Dissolved Nickel #	4	3	53	5	3	4	3	6	5	4	<2	ug/l	TM30/PM14
Dissolved Selenium #	18	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM30/PM14
Dissolved Vanadium #	<1.5	3.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	ug/l	TM30/PM14
Dissolved Zinc #	8	6	222	6	5	4	<3	15	4	<3	<3	ug/l	TM30/PM14
Total Hardness Dissolved (as CaCO3)	205	654	456	410	363	422	370	398	333	520	<1	mg/l	TM30/PM14
<b>PAH MS</b>													
Naphthalene #	<0.1	1.2	>>8.1	<0.1	0.8	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM4/PM30
Acenaphthylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Acenaphthene #	0.014	0.266	0.021	<0.005	0.008	0.005	0.026	0.005	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Fluorene #	0.005	0.136	0.048	<0.005	0.009	0.005	0.010	<0.005	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Phenanthrene #	<0.005	0.233	0.024	<0.005	0.008	0.005	0.012	0.017	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Anthracene #	<0.005	0.032	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Fluoranthene #	0.008	0.068	0.005	<0.005	<0.005	0.006	<0.005	0.049	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Pyrene #	0.009	0.047	0.005	0.005	<0.005	0.009	<0.005	0.049	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Benzo(a)anthracene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Chrysene #	<0.005	0.009	<0.005	<0.005	<0.005	0.005	<0.005	0.025	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene #	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	0.038	<0.008	<0.008	<0.008	ug/l	TM4/PM30
Benzo(a)pyrene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	ug/l	TM4/PM30
PAH 16 Total #	<0.173	1.991	8.203	<0.173	0.825	0.235	<0.173	0.246	<0.173	<0.173	<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	0.027	<0.008	<0.008	<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	0.011	<0.008	<0.008	<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	73	78	75	76	80	77	77	76	95	86	<0	%	TM4/PM30
<b>Methyl Tertiary Butyl Ether #</b>													
Methyl Tertiary Butyl Ether #	<0.1	<0.1	2.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Benzene #	<0.5	3.2	312.4	<0.5	2.1	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM15/PM10
Toluene #	<5	<5	34	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM15/PM10
Ethylbenzene #	<1	<1	<1	<1	3	1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
m/p-Xylene #	<2	<2	53	<2	5	2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
o-Xylene #	<1	<1	68	<1	1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	89	92	86	92	89	85	92	87	95	96	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	105	108	102	111	106	103	111	102	107	100	<0	%	TM15/PM10

**Element Materials Technology**

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**Report :** Liquid

**Liquids/products:** V=40ml vial, G=glass bottle, P=plastic bottle  
H=H<sub>2</sub>SO<sub>4</sub>, Z=ZnAc, N=NaOH, HN=HNO<sub>3</sub>

EMT Sample No.	705-713	714-722	723-731	732-740	741-749	750-758	759-767	768-776	777-785	786-794	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH107	WBH108	WBH111	WBH112	WBH113	WBH114	WBH115	WBH116	WBH101	WBH102			
Depth													
COC No / misc													
Containers	V H H N Z P G	V H H N Z P G	V H H N F N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G	V H H N Z P G			
Sample Date	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	16/12/2022	16/12/2022			
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water			
Batch Number	21	21	21	21	21	21	21	21	21	21			
Date of Receipt	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	LOD/LOR	Units	Method No.
TPH CWG													
<b>Aliphatics</b>													
>C5-C6 #	<10	<10	280	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>C6-C8 #	<10	19	374	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>C8-C10 #	<10	21	254	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>C10-C12 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM5/PM16/PM30
>C12-C16 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>C16-C21 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>C21-C35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>C35-C44	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-44	<10	40	908	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
<b>Aromatics</b>													
>C5-EC7 #	<10	<10	288	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>EC7-EC8 #	<10	<10	28	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>EC8-EC10 #	<10	<10	134	<10	14	<10	<10	<10	<10	<10	<10	ug/l	TM36/PM12
>EC10-EC12 #	<5	37	101	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM5/PM16/PM30
>EC12-EC16 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>EC16-EC21 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>EC21-EC35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>EC35-EC44	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Total aromatics C5-44	<10	37	551	<10	14	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Total aliphatics and aromatics(C5-44)	<10	77	1459	<10	14	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Sulphate as SO4 #	127.3	<0.5	36.3	97.2	99.6	69.5	57.7	64.3	119.9	377.5	<0.5	mg/l	TM38/PM0
Chloride #	111.8	703.5	6232.4	75.2	113.2	134.2	72.3	133.9	74.9	256.2	<0.3	mg/l	TM38/PM0
Free Cyanide #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM89/PM0
Total Cyanide #	<0.01	0.10	0.21	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	mg/l	TM89/PM0
Ammoniacal Nitrogen as N #	1.14	336.19	0.74	<0.03	<0.03	<0.03	<0.03	<0.03	0.26	0.06	<0.03	mg/l	TM38/PM0
Thiocyanate	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/l	TM107/PM0
pH #	8.40	7.79	7.81	7.49	7.77	7.54	7.78	7.51	7.61	7.79	<0.01	pH units	TM73/PM0





**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**SVOC Report :** Solid

EMT Sample No.	4-6	10-12	22-24	28-30	43-45	58-60	136-138	145-147	247-249	262-264	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH114	WBH114	WBH116	WBH116			
Depth	0.50	1.50	0.50	2.00	9.00	10.00	1.50	2.60	0.50	3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	04/11/2022	04/11/2022	11/11/2022	11/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	2	2	5	5	10	10			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	08/11/2022	08/11/2022	16/11/2022	16/11/2022	LOD/LOR	Units	Method No.
SVOC MS													
<b>Phenols</b>													
2-Chlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
<b>PAHs</b>													
2-Chloronaphthalene #	<10 <sup>+</sup>	<10 <sup>+</sup>	<10	<10 <sup>+</sup>	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #	118	87	<10	<10	<10	<10	61	<10	1041	<10	<10	ug/kg	TM16/PM8
Naphthalene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Acenaphthylene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Acenaphthene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Fluorene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Phenanthrene #	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Anthracene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Fluoranthene #	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Pyrene #	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(a)anthracene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Chrysene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(bk)fluoranthene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Indeno(123cd)pyrene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Dibenzo(ah)anthracene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
<b>Phthalates</b>													
Bis(2-ethylhexyl) phthalate	<100	<100	<100	<100	<100	<100	172	<100	<100	<100	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #	<100	<100	<100 <sup>+</sup>	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8



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 Reference: WIE17469  
 Location: Project Otter  
 Contact: Ben Greenfield  
 EMT Job No: 22/18024

SVOC Report : Solid

EMT Sample No.	4-6	10-12	22-24	28-30	43-45	58-60	136-138	145-147	247-249	262-264	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH114	WBH114	WBH116	WBH116			
Depth	0.50	1.50	0.50	2.00	9.00	10.00	1.50	2.60	0.50	3.00			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	04/11/2022	04/11/2022	11/11/2022	11/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	2	2	5	5	10	10			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	08/11/2022	08/11/2022	16/11/2022	16/11/2022	LOD/LOR	Units	Method No.
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #	<10	<10	<10*	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	<10	<10	<10	<10	<10	<10	209	<10	278	<10	<10	ug/kg	TM16/PM8
Dibenzofuran #	<10	<10	<10	<10	<10	<10	170	<10	530	<10	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #	<10*	<10*	<10*	<10*	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #	<10*	<10*	<10*	<10*	<10	<10	<10	<10	<10*	<10*	<10	ug/kg	TM16/PM8
Nitrobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	105	111	124	111	112	104	113	105	112	112	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	105	115	96	105	98	82	117	90	112	108	<0	%	TM16/PM8

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**SVOC Report :** Solid

EMT Sample No.	283-285	346-348	373-375	382-384	418-420	436-438	451-453	472-474	514-516	526-528	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH101	WBH106	WBH103	WBH103	WBH105	WBH105	WBH105	WBH102	WBH107	WBH107			
Depth	0.60	1.60	1.60	3.00	1.30	4.00	10.50	1.00	1.50	3.90			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	15/11/2022	17/11/2022	18/11/2022	18/11/2022	21/11/2022	21/11/2022	21/11/2022	22/11/2022	23/11/2022	23/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	12	13	14	14	15	15	15	16	17	17			
Date of Receipt	18/11/2022	19/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	23/11/2022	24/11/2022	26/11/2022	26/11/2022	LOD/LOR	Units	Method No.
SVOC MS													
<b>Phenols</b>													
2-Chlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	149	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
<b>PAHs</b>													
2-Chloronaphthalene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #	20	<10	996	<10	83	1998	<10	31	92	<10	<10	ug/kg	TM16/PM8
Naphthalene	-	-	-	-	-	-	<10	-	-	<10	<10	ug/kg	TM16/PM8
Acenaphthylene	-	-	-	-	-	-	22	-	-	<10	<10	ug/kg	TM16/PM8
Acenaphthene	-	-	-	-	-	-	35	-	-	<10	<10	ug/kg	TM16/PM8
Fluorene	-	-	-	-	-	-	34	-	-	<10	<10	ug/kg	TM16/PM8
Phenanthrene #	-	-	-	-	-	-	247	-	-	<10	<10	ug/kg	TM16/PM8
Anthracene	-	-	-	-	-	-	73	-	-	<10	<10	ug/kg	TM16/PM8
Fluoranthene #	-	-	-	-	-	-	372	-	-	<10	<10	ug/kg	TM16/PM8
Pyrene #	-	-	-	-	-	-	305	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(a)anthracene	-	-	-	-	-	-	173	-	-	<10	<10	ug/kg	TM16/PM8
Chrysene	-	-	-	-	-	-	133	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(bk)fluoranthene	-	-	-	-	-	-	221	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(a)pyrene	-	-	-	-	-	-	132	-	-	<10	<10	ug/kg	TM16/PM8
Indeno(123cd)pyrene	-	-	-	-	-	-	62	-	-	<10	<10	ug/kg	TM16/PM8
Dibenzo(ah)anthracene	-	-	-	-	-	-	23	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(ghi)perylene	-	-	-	-	-	-	73	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	-	-	-	-	-	-	159	-	-	<10	<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	-	-	-	-	-	-	62	-	-	<10	<10	ug/kg	TM16/PM8
<b>Phthalates</b>													
Bis(2-ethylhexyl) phthalate	772	<100	414	<100	<100	<100	<100	354	142	<100	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	130	<100*	<100*	<100*	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #	<100	<100*	<100*	<100*	<100	<100	<100	<100*	<100*	<100*	<100	ug/kg	TM16/PM8

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**SVOC Report :** Solid

EMT Sample No.	283-285	346-348	373-375	382-384	418-420	436-438	451-453	472-474	514-516	526-528	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH101	WBH106	WBH103	WBH103	WBH105	WBH105	WBH105	WBH102	WBH107	WBH107			
Depth	0.60	1.60	1.60	3.00	1.30	4.00	10.50	1.00	1.50	3.90			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	15/11/2022	17/11/2022	18/11/2022	18/11/2022	21/11/2022	21/11/2022	21/11/2022	22/11/2022	23/11/2022	23/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	12	13	14	14	15	15	15	16	17	17			
Date of Receipt	18/11/2022	19/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	23/11/2022	24/11/2022	26/11/2022	26/11/2022	LOD/LOR	Units	Method No.
SVOC MS													
<b>Other SVOCs</b>													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #	<10	<10	<10	<10	<10	<10	<10	<10*	<10*	<10*	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	111	<10	1822	<10	1712	11423	19	33	<10	<10	<10	ug/kg	TM16/PM8
Dibenzofuran #	84	<10	1679	<10	858	12350	22	26	31	<10	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #	<10	<10*	<10*	<10*	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	112	100	102	95	125	120	119	135 <sup>SV</sup>	129	133	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	124	116	130	110	127	127	126	125	119	121	<0	%	TM16/PM8

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**SVOC Report :** Solid

EMT Sample No.	546-547	556	570-572	582-584	618-620	639-641	651-653	669-671	678-680				
Sample ID	WBH108	WBH108	WBH104	WBH104	WBH104	WBH109	WBH109	WBH110	WBH110				
Depth	1.50	4.50	1.00	3.70	14.0	3.00	7.00	0.80	2.10				
COC No / misc													
Containers	V J	J	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	24/11/2022	24/11/2022	24/11/2022	24/11/2022	24/11/2022	29/11/2022	29/11/2022	01/12/2022	01/12/2022				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	18	18	18	18	18	19	19	20	20				
Date of Receipt	26/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022	02/12/2022	02/12/2022	03/12/2022	03/12/2022				
										LOD/LOR	Units	Method No.	
SVOC MS													
<b>Phenols</b>													
2-Chlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,4-Dichlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,4-Dimethylphenol	<10	<10	<10	<10	21	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Methylphenol	<10	<10	<10	<10	48	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Phenol #	<10	<10	<10	<10	23	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
<b>PAHs</b>													
2-Chloronaphthalene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2-Methylnaphthalene #	282	506	21	<10	284	<10	<10	89	<10	<10	ug/kg	TM16/PM8	
Naphthalene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Acenaphthylene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Acenaphthene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Fluorene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Phenanthrene #	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Anthracene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Fluoranthene #	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Pyrene #	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(a)anthracene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Chrysene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(bk)fluoranthene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Indeno(123cd)pyrene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Dibenzo(ah)anthracene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(b)fluoranthene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
Benzo(k)fluoranthene	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8	
<b>Phthalates</b>													
Bis(2-ethylhexyl) phthalate	<100	382	<100	154	<100	183	<100	186	<100	<100	ug/kg	TM16/PM8	
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8	
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	129	<100	<100	ug/kg	TM16/PM8	
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8	
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8	
Dimethyl phthalate #	<100*	<100	<100*	<100*	<100*	<100	<100	<100	<100	<100	ug/kg	TM16/PM8	

Please see attached notes for all abbreviations and acronyms

Client Name: Waterman Infrastructure & Environment Limited  
 Reference: WIE17469  
 Location: Project Otter  
 Contact: Ben Greenfield  
 EMT Job No: 22/18024

SVOC Report : Solid

EMT Sample No.	546-547	556	570-572	582-584	618-620	639-641	651-653	669-671	678-680		LOD/LOR	Units	Method No.
Sample ID	WBH108	WBH108	WBH104	WBH104	WBH104	WBH109	WBH109	WBH110	WBH110				
Depth	1.50	4.50	1.00	3.70	14.0	3.00	7.00	0.80	2.10				
COC No / misc													
Containers	V J	J	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	24/11/2022	24/11/2022	24/11/2022	24/11/2022	24/11/2022	29/11/2022	29/11/2022	01/12/2022	01/12/2022				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	18	18	18	18	18	19	19	20	20				
Date of Receipt	26/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022	02/12/2022	02/12/2022	03/12/2022	03/12/2022				
Please see attached notes for all abbreviations and acronyms													
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
1,2,4-Trichlorobenzene #	<10*	<10	<10*	<10*	<10*	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Bromophenylphenylether #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Carbazole	170	1017	90	<10	196	<10	<10	79	<10	<10	ug/kg	TM16/PM8	
Dibenzofuran #	308	1245	64	16	474	<10	<10	84	<10	<10	ug/kg	TM16/PM8	
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Hexachlorobutadiene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Isophorone #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
N-nitrosodi-n-propylamine #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Nitrobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8	
Surrogate Recovery 2-Fluorobiphenyl	133 <sup>SV</sup>	120	135 <sup>SV</sup>	151 <sup>SV</sup>	135 <sup>SV</sup>	106	107	124	106	<0	%	TM16/PM8	
Surrogate Recovery p-Terphenyl-d14	126	144 <sup>SV</sup>	125	138 <sup>SV</sup>	126	115	112	134 <sup>SV</sup>	104	<0	%	TM16/PM8	

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**SVOC Report :** Liquid

EMT Sample No.	705-713	714-722	723-731	732-740	741-749	750-758	759-767	768-776	777-785	786-794	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH107	WBH108	WBH111	WBH112	WBH113	WBH114	WBH115	WBH116	WBH101	WBH102			
Depth													
COC No / misc													
Containers	V H H N N Z P G	V H H N N Z P G	V H H N U F N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G			
Sample Date	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	16/12/2022	16/12/2022			
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water			
Batch Number	21	21	21	21	21	21	21	21	21	21			
Date of Receipt	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	LOD/LOR	Units	Method No.
SVOC MS													
<b>Phenols</b>													
2-Chlorophenol #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylphenol #	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	8	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Phenol	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
<b>PAHs</b>													
2-Chloronaphthalene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylnaphthalene #	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
<b>Phthalates</b>													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Di-n-butyl phthalate #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Diethyl phthalate #	<1*	<1*	<1*	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
<b>Other SVOCs</b>													
1,2-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,3-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,4-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4-Dinitrotoluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Bromophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chlorophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Azobenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether #	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Carbazole #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Dibenzofuran #	<0.5	<0.5	<0.5	<0.5*	<0.5*	<0.5*	<0.5*	<0.5*	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Hexachlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorobutadiene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachloroethane #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Isophorone #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Nitrobenzene #	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	96	112	100	114	119	123	121	122	75	67 <sup>SV</sup>	<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	98	112	101	120	130	125	131 <sup>SV</sup>	128	81	72	<0	%	TM16/PM30



# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**VOC Report :** Solid

EMT Sample No.	4-6	10-12	13-15	19-21	22-24	28-30	43-45	58-60	88-90	97-99	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH111	WBH111	WBH111	WBH111	WBH112	WBH112	WBH111	WBH112	WBH113	WBH113			
Depth	0.50	1.50	2.50	4.50	0.50	2.00	9.00	10.00	0.80	2.50			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	31/10/2022	01/11/2022	01/11/2022	03/11/2022	03/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	2	2	4	4			
Date of Receipt	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	02/11/2022	03/11/2022	03/11/2022	05/11/2022	05/11/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #	4	8	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Trichlorofluoromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chloroform #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Benzene #	<3	<3	6	49	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dichloropropane #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromodichloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #	<3	47	<3	10	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Dibromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	28	>>3245	16	38	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	123	>>9260	42	113	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene #	59	>>4120	9	35	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Isopropylbenzene #	26	822	5	9	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	202	>>3285	27	35	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	550	>>5065	37	37	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	2183	13694 <sup>AC</sup>	186	114	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	47	368	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene	28	160	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene	167	853	19	10	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	580	>>3867	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	104	105	109	107	102	108	95	87	109	109	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	103	87	104	100	98	103	84	83	101	103	<0	%	TM15/PM10



# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**VOC Report :** Solid

EMT Sample No.	136-138	145-147	247-249	262-264	283-285	298-300	346-348	358-360	373-375	382-384	Please see attached notes for all abbreviations and acronyms		
	Sample ID	WBH114	WBH114	WBH116	WBH116	WBH101	WBH101	WBH106	WBH106	WBH103			
Depth	1.50	2.60	0.50	3.00	0.60	3.50	1.60	4.00	1.60	3.00			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/11/2022	04/11/2022	11/11/2022	11/11/2022	15/11/2022	15/11/2022	17/11/2022	17/11/2022	18/11/2022	18/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	5	5	10	10	12	12	13	13	14	14			
Date of Receipt	08/11/2022	08/11/2022	16/11/2022	16/11/2022	18/11/2022	18/11/2022	19/11/2022	19/11/2022	22/11/2022	22/11/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Trichlorofluoromethane #	<2*	<2*	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chloroform #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Benzene #	<3	<3	18	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dichloropropane #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromodichloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #	<3	<3	79	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Dibromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	<3	<3	8	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	<5	<5	60	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene #	<3	<3	23	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	5	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	26	<6	<6	<6	<6	<6	29	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	31	<27	35	<27	<27	<27	<27	<27	84	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	89	113	74	111	97	109	96	106	93	101	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	80	102	53	96	80	96	73	95	77	92	<0	%	TM15/PM10

Please include all sections of this report if it is reproduced

# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**VOC Report :** Solid

EMT Sample No.	418-420	436-438	451-453	472-474	487-489	514-516	526-528	546-547	555	570-572	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH105	WBH105	WBH105	WBH102	WBH102	WBH107	WBH107	WBH108	WBH108	WBH104			
Depth	1.30	4.00	10.50	1.00	4.00	1.50	3.90	1.50	4.00	1.00			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J	V	V J T			
Sample Date	21/11/2022	21/11/2022	21/11/2022	22/11/2022	22/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022	24/11/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	15	15	15	16	16	17	17	18	18	18			
Date of Receipt	23/11/2022	23/11/2022	23/11/2022	24/11/2022	24/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022	26/11/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Trichlorofluoromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7	<7	<7	16	<7	<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chloroform #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Benzene #	<3	<3	<3	<3	<3	<3	<3	<3	4	5	<3	ug/kg	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dichloropropane #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromodichloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #	<3	<3	<3	<3	<3	7	<3	8	6	12	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Dibromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	<3	<3	<3	<3	<3	<3	<3	4	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	<5	<5	<5	<5	<5	6	<5	<5	10	10	<5	ug/kg	TM15/PM10
o-Xylene #	<3	<3	<3	<3	<3	<3	<3	<3	6	<3	<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	13	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	10	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	6	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	331	142	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	92	90	124	82	97	93	103	93	59	102	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	77	70	99	63	89	75	100	83	57	78	<0	%	TM15/PM10

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# Element Materials Technology

**Client Name:** Waterman Infrastructure & Environment Limited  
**Reference:** WIE17469  
**Location:** Project Otter  
**Contact:** Ben Greenfield  
**EMT Job No:** 22/18024

**VOC Report :** Liquid

EMT Sample No.	705-713	714-722	723-731	732-740	741-749	750-758	759-767	768-776	777-785	786-794	Please see attached notes for all abbreviations and acronyms		
Sample ID	WBH107	WBH108	WBH111	WBH112	WBH113	WBH114	WBH115	WBH116	WBH101	WBH102			
Depth													
COC No / misc													
Containers	V H H N N Z P G	V H H N N Z P G	V H H N U F N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G	V H H N N Z P G			
Sample Date	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	15/12/2022	16/12/2022	16/12/2022			
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water			
Batch Number	21	21	21	21	21	21	21	21	21	21			
Date of Receipt	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether #	<0.1	<0.1	2.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Vinyl Chloride #	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Chloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Trichlorofluoromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Dichloromethane (DCM) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Bromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chloroform #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Carbon tetrachloride #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Benzene #	<0.5	3.2	312.4	<0.5	2.1	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Bromodichloromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Toluene #	<5	<5	34	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,2-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dibromoethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chlorobenzene #	<2	6	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Ethylbenzene #	<1	<1	<1	<1	3	1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
m/p-Xylene #	<2	<2	53	<2	5	2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
o-Xylene #	<1	<1	68	<1	1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Styrene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Bromoform #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/l	TM15/PM10
Bromobenzene #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Propylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	17	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
tert-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
sec-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Isopropyltoluene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,4-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
n-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	89	92	86	92	89	85	92	87	95	96	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	105	108	102	111	106	103	111	102	107	100	<0	%	TM15/PM10



Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	10.1		
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	90.8		
Particle Size <4mm =	>95%				
<b>EMT Job No</b>	<b>22/18024</b>		<b>Landfill Waste Acceptance Criteria Limits</b>		
<b>Sample No</b>	<b>24</b>		<b>Inert Waste Landfill</b>	<b>Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Client Sample No</b>	<b>WBH112</b>				
<b>Depth/Other</b>	<b>0.50</b>				
<b>Sample Date</b>	<b>31/10/2022</b>				
<b>Batch No</b>	<b>1</b>				
<b>Solid Waste Analysis</b>					
Total Organic Carbon (%)	0.11		3	5	6
Loss on Ignition (%)	<1.0		-	-	10
Sum of BTEX (mg/kg)	<0.017		6	-	-
Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30		500	-	-
PAH Sum of 17(mg/kg)	<0.64		100	-	-
pH (pH Units)	9.17		-	>6	-
ANC to pH 7 (mol/kg)	0.08		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	2.49		-	to be evaluated	to be evaluated
<b>Eluate Analysis</b>	<b>10:1 conc<sup>n</sup> leached</b>		<b>Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg</b>		
	<b>C<sub>10</sub></b> <b>mg/l</b>	<b>A<sub>10</sub></b> <b>mg/kg</b>	<b>mg/kg</b>		
Arsenic	<0.0025	<0.025	0.5	2	25
Barium	<0.003	<0.03	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	<0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	0.007	0.07	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	4.7	47	800	15000	25000
Fluoride	<0.3	<3	10	150	500
Sulphate as SO4	1.2	12	1000	20000	50000
Total Dissolved Solids	60	600	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	<2	<20	500	800	1000

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	8.9		
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	91.8		
Particle Size <4mm =	>95%				
<b>EMT Job No</b>	<b>22/18024</b>		<b>Landfill Waste Acceptance Criteria Limits</b>		
<b>Sample No</b>	<b>90</b>		<b>Inert Waste Landfill</b>	<b>Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Client Sample No</b>	<b>WBH113</b>				
<b>Depth/Other</b>	<b>0.80</b>				
<b>Sample Date</b>	<b>03/11/2022</b>				
<b>Batch No</b>	<b>4</b>				
<b>Solid Waste Analysis</b>					
Total Organic Carbon (%)	0.11		3	5	6
Loss on Ignition (%)	<1.0		-	-	10
Sum of BTEX (mg/kg)	<0.017		6	-	-
Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30		500	-	-
PAH Sum of 17(mg/kg)	<0.64		100	-	-
pH (pH Units)	8.99		-	>6	-
ANC to pH 7 (mol/kg)	0.06		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	1.01		-	to be evaluated	to be evaluated
<b>Eluate Analysis</b>	<b>10:1 conc<sup>n</sup> leached</b>		<b>Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg</b>		
	<b>C<sub>10</sub></b>	<b>A<sub>10</sub></b>	<b>mg/kg</b>		
	<b>mg/l</b>	<b>mg/kg</b>			
Arsenic	0.0025	0.025	0.5	2	25
Barium	<0.003	<0.03	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	<0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	0.003	0.03	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	1.9	19	800	15000	25000
Fluoride	<0.3	<3	10	150	500
Sulphate as SO4	1.6	16	1000	20000	50000
Total Dissolved Solids	44	440	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	<2	<20	500	800	1000

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	30.9		
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	76.4		
Particle Size <4mm =	>95%				
<b>EMT Job No</b>	<b>22/18024</b>		<b>Landfill Waste Acceptance Criteria Limits</b>		
<b>Sample No</b>	<b>348</b>		<b>Inert Waste Landfill</b>	<b>Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Client Sample No</b>	<b>WBH106</b>				
<b>Depth/Other</b>	<b>1.60</b>				
<b>Sample Date</b>	<b>17/11/2022</b>				
<b>Batch No</b>	<b>13</b>				
<b>Solid Waste Analysis</b>					
Total Organic Carbon (%)	0.30		3	5	6
Loss on Ignition (%)	3.0		-	-	10
Sum of BTEX (mg/kg)	<0.017		6	-	-
Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30		500	-	-
PAH Sum of 17(mg/kg)	<0.64		100	-	-
pH (pH Units)	11.08		-	>6	-
ANC to pH 7 (mol/kg)	0.17		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	10.48		-	to be evaluated	to be evaluated
<b>Eluate Analysis</b>	<b>10:1 conc<sup>n</sup> leached</b>		<b>Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg</b>		
	<b>C<sub>10</sub></b> <b>mg/l</b>	<b>A<sub>10</sub></b> <b>mg/kg</b>	<b>mg/kg</b>		
Arsenic	0.0030	0.030	0.5	2	25
Barium	0.005	0.05	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	0.0039	0.039	0.5	10	70
Copper	0.014	0.14	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	0.019	0.19	0.5	10	30
Nickel	0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	6.2	62	800	15000	25000
Fluoride	<0.3	<3	10	150	500
Sulphate as SO4	53.8	538	1000	20000	50000
Total Dissolved Solids	192	1920	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	4	40	500	800	1000



Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	20.6		
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	82.9		
Particle Size <4mm =	>95%				
<b>EMT Job No</b>	<b>22/18024</b>		<b>Landfill Waste Acceptance Criteria Limits</b>		
<b>Sample No</b>	<b>474</b>		<b>Inert Waste Landfill</b>	<b>Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Client Sample No</b>	<b>WBH102</b>				
<b>Depth/Other</b>	<b>1.00</b>				
<b>Sample Date</b>	<b>22/11/2022</b>				
<b>Batch No</b>	<b>16</b>				
<b>Solid Waste Analysis</b>					
Total Organic Carbon (%)	0.92		3	5	6
Loss on Ignition (%)	4.9		-	-	10
Sum of BTEX (mg/kg)	<0.017		6	-	-
Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	73		500	-	-
PAH Sum of 17(mg/kg)	1.78		100	-	-
pH (pH Units)	11.07		-	>6	-
ANC to pH 7 (mol/kg)	0.26		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	1.39		-	to be evaluated	to be evaluated
<b>Eluate Analysis</b>	<b>10:1 conc<sup>n</sup> leached</b>		<b>Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg</b>		
	<b>C<sub>10</sub></b>	<b>A<sub>10</sub></b>	<b>mg/kg</b>		
	<b>mg/l</b>	<b>mg/kg</b>			
Arsenic	<0.0025	<0.025	0.5	2	25
Barium	0.041	0.41	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	0.0020	0.020	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	0.003	0.03	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	18.9	189	800	15000	25000
Fluoride	<0.3	<3	10	150	500
Sulphate as SO4	742.8	7424	1000	20000	50000
Total Dissolved Solids	1188	11874	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	2	<20	500	800	1000

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	20.7		
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	82.9		
Particle Size <4mm =	>95%				
<b>EMT Job No</b>	<b>22/18024</b>		<b>Landfill Waste Acceptance Criteria Limits</b>		
<b>Sample No</b>	<b>671</b>		<b>Inert Waste Landfill</b>	<b>Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Client Sample No</b>	<b>WBH110</b>				
<b>Depth/Other</b>	<b>0.80</b>				
<b>Sample Date</b>	<b>01/12/2022</b>				
<b>Batch No</b>	<b>20</b>				
<b>Solid Waste Analysis</b>					
Total Organic Carbon (%)	1.82		3	5	6
Loss on Ignition (%)	5.5		-	-	10
Sum of BTEX (mg/kg)	<0.017		6	-	-
Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30		500	-	-
PAH Sum of 17(mg/kg)	84.48		100	-	-
pH (pH Units)	9.17		-	>6	-
ANC to pH 7 (mol/kg)	0.08		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	0.15		-	to be evaluated	to be evaluated
<b>Eluate Analysis</b>	<b>10:1 conc<sup>n</sup> leached</b>		<b>Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg</b>		
	<b>C<sub>10</sub></b> <b>mg/l</b>	<b>A<sub>10</sub></b> <b>mg/kg</b>	<b>mg/kg</b>		
Arsenic	0.0314	0.314	0.5	2	25
Barium	<0.003	<0.03	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	0.009	0.09	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	0.003	0.03	0.06	0.7	5
Selenium	0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	2.3	23	800	15000	25000
Fluoride	0.7	7	10	150	500
Sulphate as SO4	35.3	353	1000	20000	50000
Total Dissolved Solids	130	1299	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	4	40	500	800	1000