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Newport City Council
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Attention: Meirion Humphreys

CERTIFICATE OF ANALYSIS

Date: 19 November 2018
Customer: H_NCC_NPT
Sample Delivery Group (SDG): 181030-11
Your Reference:
Location: Docksway Landfill Site
Report No: 481673

This report has been revised and directly supersedes 480622 in its entirety.

We received 19 samples on Tuesday October 30, 2018 and 19 of these samples were scheduled for analysis which was completed on Monday November 19, 2018. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Approved By:

Sonia McWhan

Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11	Client Reference:	Report Number: 481673
Location: Docksway Landfill Site	Order Number: 700124102	Superseded Report: 480622

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
18629699	C3_Asb		0.00 - 0.00	29/10/2018
18629674	GP07_05		0.00 - 0.00	29/10/2018
18629747	GW03_09		0.00 - 0.00	29/10/2018
18629642	GW06_13		0.00 - 0.00	29/10/2018
18629770	GW06_34		0.00 - 0.00	29/10/2018
18629604	GW06_36		0.00 - 0.00	29/10/2018
18629616	GW06_37		0.00 - 0.00	29/10/2018
18629653	GW06_39		0.00 - 0.00	29/10/2018
18629686	GW07_07		0.00 - 0.00	29/10/2018
18629664	GW07_40		0.00 - 0.00	29/10/2018
18629724	GW09_31		0.00 - 0.00	29/10/2018
18629736	GW09_32		0.00 - 0.00	29/10/2018
18629593	GW09_35		0.00 - 0.00	29/10/2018
18629713	GW12_30		0.00 - 0.00	29/10/2018
18629757	GW12_33		0.00 - 0.00	29/10/2018
18629626	GW12_38		0.00 - 0.00	29/10/2018
18629588	SW_23		0.00 - 0.00	29/10/2018
18629705	SW_24		0.00 - 0.00	29/10/2018
18629709	SW_1A		0.00 - 0.00	29/10/2018

Maximum Sample/Coolbox Temperature (°C) : 8.0

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	700124102
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	481673
		Superseded Report:	480622

Results Legend <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> Test </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: red; border: 1px solid black; margin-right: 5px;"></div> No Determination Possible </div> </div> Sample Types - S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type	
		18629653	GW06_39		0.00 - 0.00	NaOH (ALE245)	GW
		18629686	GW07_07		0.00 - 0.00	NaOH (ALE245)	GW
		18629664	GW07_40		0.00 - 0.00	NaOH (ALE245)	GW
		18629724	GW09_31		0.00 - 0.00	NaOH (ALE245)	GW
						H2SO4 (ALE244)	GW
						500ml Plastic (ALE208)	GW
					250ml BOD (ALE212)	GW	
					0.5l glass bottle (ALE227)	GW	
					Vial (ALE297)	GW	
					NaOH (ALE245)	GW	
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					250ml BOD (ALE212)	GW	



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	700124102
Location:	Docksway Landfill Site	Order Number:	
		Report Number:	481673
		Superseded Report:	480622

Results Legend

- X Test
- N No Determination Possible

Sample Types -

- S - Soil/Solid
- UNS - Unspecified Solid
- GW - Ground Water
- SW - Surface Water
- LE - Land Leachate
- PL - Prepared Leachate
- PR - Process Water
- SA - Saline Water
- TE - Trade Effluent
- TS - Treated Sewage
- US - Untreated Sewage
- RE - Recreational Water
- DW - Drinking Water Non-regulatory
- UNL - Unspecified Liquid
- SL - Sludge
- G - Gas
- OTH - Other

Results Legend	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container										Sample Type			
					H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)		250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)
	18629709	SW_1A		0.00 - 0.00	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	GW
	18629705	SW_24		0.00 - 0.00	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	SW
	18629688	SW_23		0.00 - 0.00	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	SW
	18629626	GW12_38		0.00 - 0.00	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	GW
	18629757	GW12_33		0.00 - 0.00	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	Vial (ALE297)	NaOH (ALE245)	GW
Pesticides (Suite II) by GCMS	All	NDPs: 0 Tests: 15																
Pesticides (Suite III) by GCMS	All	NDPs: 0 Tests: 15																
pH Value	All	NDPs: 0 Tests: 18			X				X					X				X
Phenols by HPLC (W)	All	NDPs: 0 Tests: 15				X							X					
Phosphate by Kone (w)	All	NDPs: 0 Tests: 13			X									X				
Sulphide	All	NDPs: 0 Tests: 13			X									X				
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 15													X			
VOC MS (W)	All	NDPs: 0 Tests: 15											X					X



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SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	480622
		Report Number:	
		Superseded Report:	

Results Legend		Customer Sample Ref.	C3_Asb	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36
#	ISO17025 accredited.	Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
M	mCERTS accredited.	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.	Date Sampled	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.	Sampled Time
tot.unfilt	Total / unfiltered sample.	Date Received	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
*	Subcontracted test.	SDG Ref	181030-11	181030-11	181030-11	181030-11	181030-11	181030-11
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	Lab Sample No.(s)	18629699	18629674	18629747	18629642	18629770	18629604
(F)	Trigger breach confirmed	AGS Reference						
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Ionic balance	% Diff	Calulation			-3.56	-6.3	-2.54	-4.6
Description of Sample*		SUB (ASB)	See Attached					
Asbestos Identification*		SUB (ASB)	Not Detected					
Alkalinity, Total as CaCO3	<2 mg/l	TM043			475 #	865 #	605 #	930 #
BOD, unfiltered	<1 mg/l	TM045	<1 #		<1 #	<1 #	11.5 #	2.56 #
Carbon, Organic (diss.filt)	<3 mg/l	TM090			10.6	15.7	16.6	13.2
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	<0.2 #	5.55 #	2.92 #	9.78 #	5.24 #	9.57 #
Sulphide	<0.01 mg/l	TM101			0.0199 2 #	<0.01 2 #	0.47 2 #	<0.01 2 #
COD, unfiltered	<7 mg/l	TM107	56.4 #		48.4 #	119 #	58.2 #	120 #
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120	1.85 #		2.05 #	7.3 #	1.31 #	9.86 #
Arsenic (diss.filt)	<0.5 µg/l	TM152		37.1 2 #	3.65 2 #	3.72 2 #	13.2 2 #	4.17 2 #
Boron (diss.filt)	<10 µg/l	TM152			503 2 #	1550 2 #	720 2 #	1410 2 #
Cadmium (diss.filt)	<0.08 µg/l	TM152			<0.08 2 #	<0.08 2 #	<0.08 2 #	<0.08 2 #
Chromium (diss.filt)	<1 µg/l	TM152			<1 2 #	<1 2 #	<1 2 #	<1 2 #
Copper (diss.filt)	<0.3 µg/l	TM152			<0.3 2 #	<0.3 2 #	<0.3 2 #	<0.3 2 #
Lead (diss.filt)	<0.2 µg/l	TM152			<0.2 2 #	<0.2 2 #	<0.2 2 #	<0.2 2 #
Manganese (diss.filt)	<3 µg/l	TM152			565 2 #	200 2 #	2590 2 #	333 2 #
Nickel (diss.filt)	<0.4 µg/l	TM152		6.14 2 #	4.31 2 #	0.938 2 #	1.39 2 #	1.65 2 #
Selenium (diss.filt)	<1 µg/l	TM152			<1 2 #	<1 2 #	<1 2 #	<1 2 #
Zinc (diss.filt)	<1 µg/l	TM152			5.27 2 #	<1 2 #	<1 2 #	<1 2 #
Sodium (Dis.Filt)	<0.076 mg/l	TM152			271 2 #	1190 2 #	98.7 2 #	1690 2 #
Magnesium (Dis.Filt)	<0.036 mg/l	TM152			39.7 2 #	203 2 #	46.5 2 #	223 2 #
Potassium (Dis.Filt)	<0.2 mg/l	TM152		18.4 2 #	16.6 2 #	50.8 2 #	19.8 2 #	59.4 2 #
Calcium (Dis.Filt)	<0.2 mg/l	TM152			121 2 #	120 2 #	144 2 #	181 2 #
Iron (Dis.Filt)	<0.019 mg/l	TM152			<0.019 2 #	0.0394 2 #	0.0249 2 #	0.0311 2 #
Hardness, Total as CaCO3	<0.65 mg/l	TM152			466 2	1140 2	552 2	1370 2
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172		316	<100	<100	<100	<100
Mercury (diss.filt)	<0.01 µg/l	TM183		<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #
Nitrite as NO2	<0.05 mg/l	TM184			<0.05 #	<0.05 #	<0.05 #	<0.05 #
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184			0.487 #	3.45 #	4.58 #	7.2 #
Sulphate	<2 mg/l	TM184			171 #	139 #	43.5 #	125 #
Chloride	<2 mg/l	TM184	286 #		351 #	2360 #	129 #	3230 #



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		Report Number:	480622
		Superseded Report:	

Results Legend			Customer Sample Ref.	C3_Asb	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)	Depth (m)	Sample Type							
	Date Sampled	Sampled Time							
	Date Received	SDG Ref							
	Lab Sample No.(s)	AGS Reference							
Component	LOD/Units	Method							
Nitrate as NO3	<0.3 mg/l	TM184				10.6	<0.3	<0.3	<0.3
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184				2.4	<0.1	<0.1	<0.1
Cyanide, Total	<0.05 mg/l	TM227			<0.05	<0.05	<0.05	<0.05	<0.05
Cyanide, Free	<0.05 mg/l	TM227			<0.05				
pH	<1 pH Units	TM256	7.99		7.65	7.9	7.98	7.73	
Phenols, Total Detected monohydric	<0.016 mg/l	TM259		<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Dibutyl tin	<5 ng/l	TM328			<5	<5	<5	<5	<15
Tributyl tin	<1 ng/l	TM328			<1	<1	<1	<1	<3
Tetrabutyl tin	<2 ng/l	TM328			<2	<2	<2	<2	<6
Triphenyl tin	<1 ng/l	TM328			<1	<1	<1	<1	<3
Surrogate	%	TM328			109	113	50.1	80.8	
Trifluralin	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
alpha-HCH	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
gamma-HCH (Lindane)	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aldrin	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
beta-HCH	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isodrin	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
delta-HCH	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor epoxide	<0.01 µg/l	TM343		<0.02	<0.01	<0.02	<0.01	<0.02	<0.02
o,p'-DDE	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan I	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-Chlordane	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cis-Chlordane	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDE	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dieldrin	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-DDD (TDE)	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-DDT	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDD (TDE)	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan II	<0.02 µg/l	TM343		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
p,p'-DDT	<0.01 µg/l	TM343		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	700124102
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	481673
		Superseded Report:	480622

Results Legend			Customer Sample Ref.	C3_Asb	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)			Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629699	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629674	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629747	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629642	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629770	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629604
Component	LOD/Units	Method							
o,p'-Methoxychlor	<0.01 µg/l	TM343			<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-Methoxychlor	<0.01 µg/l	TM343			<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan Sulphate	<0.02 µg/l	TM343			<0.02	<0.02	<0.02	<0.02	<0.02
Permethrin I	<0.01 µg/l	TM343			<0.01	<0.01	<0.01	<0.01	<0.01
Permethrin II	<0.01 µg/l	TM343			<0.01	<0.01	<0.01	<0.01	<0.01
1,3,5-Trichlorobenzene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Trichlorobenzene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Dichlorvos	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Dichlobenil	<0.01 µg/l	TM344			<0.01	0.312	<0.01	<0.01	<0.01
Mevinphos	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Tecnazene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Demeton-S-methyl	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Phorate	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.02	<0.01
Diazinon	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Triallate	<0.01 µg/l	TM344			<0.01	<0.01	0.0109	<0.01	<0.01
Atrazine	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Simazine	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Disulfoton	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Propetamphos	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos-methyl	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Dimethoate	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Pirimiphos-methyl	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Methyl Parathion	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Malathion	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Fenthion	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Triadimefon	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01
Parathion	<0.01 µg/l	TM344			<0.01	<0.01	<0.01	<0.01	<0.01



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

Results Legend		Customer Sample Ref.	GW06_37	GW06_39	GW07_07	GW07_40	GW09_31	GW09_32
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. - Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629616	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629653	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629686	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629664	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629724	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629736
Component	LOD/Units	Method						
Ionic balance	% Diff	Calulation	-9.99	-4.84		-3.45	-1.29	-3.05
Alkalinity, Total as CaCO3	<2 mg/l	TM043	1090	1040	615	670	400	295
BOD, unfiltered	<1 mg/l	TM045	28	2.22		2.98	2.19	4.21
Carbon, Organic (diss.filt)	<3 mg/l	TM090	37.5	18.4		20.7	14	23.3
Organic Carbon, Total	<3 mg/l	TM090			20.6			
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	35.3	3.97	7.85	11.7	3.23	6.56
Sulphide	<0.01 mg/l	TM101	1.16	<0.01		<0.01	0.126	<0.01
COD, unfiltered	<7 mg/l	TM107	238	97.8	64.4	52.1	56.8	73.4
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120	13.5	5.75	1.95	1.99	1.29	2.1
Arsenic (diss.filt)	<0.5 µg/l	TM152	43.9	9.48	3.14	14.1	8.27	5.2
Boron (diss.filt)	<10 µg/l	TM152	2730	1310		1650	487	444
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Chromium (diss.filt)	<1 µg/l	TM152	<1	<1	<1	<1	<1	<1
Copper (diss.filt)	<0.3 µg/l	TM152	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganese (diss.filt)	<3 µg/l	TM152	486	533	637	152	945	795
Nickel (diss.filt)	<0.4 µg/l	TM152	1.47	5.01	3.47	2.23	3.38	3.8
Selenium (diss.filt)	<1 µg/l	TM152	<1	<1		<1	<1	<1
Zinc (diss.filt)	<1 µg/l	TM152	<1	1.66	<1	1.24	<1	1.56
Sodium (Dis.Filt)	<0.076 mg/l	TM152	2380	923	246	305	126	291
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	274	141	49.5	57.6	40.7	28
Potassium (Dis.Filt)	<0.2 mg/l	TM152	88.8	46.2	18.4	29.6	17.2	25.1
Calcium (Dis.Filt)	<0.2 mg/l	TM152	85.9	160	114	43.2	120	118
Iron (Dis.Filt)	<0.019 mg/l	TM152	0.135	0.339		0.192	0.44	0.293
Hardness, Total as CaCO3	<0.65 mg/l	TM152	1350	980		345	467	411
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	<100	<100	139	<100	109	114
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrite as NO2	<0.05 mg/l	TM184	<0.05	<0.05		<0.05	<0.05	<0.05
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184	6.2	1.06		8.33	<0.05	<0.05
Sulphate	<2 mg/l	TM184	<2	84.7	<2	28.2	188	365
Chloride	<2 mg/l	TM184	5070	1580	353	320	134	300
Nitrate as NO3	<0.3 mg/l	TM184	<0.3	<0.3		<0.3	<0.3	<0.3



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

Results Legend		Customer Sample Ref.	GW06_37	GW06_39	GW07_07	GW07_40	GW09_31	GW09_32
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.		29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
				181030-11	181030-11	181030-11	181030-11	181030-11
			18629616	18629653	18629686	18629664	18629724	18629736
Component	LOD/Units	Method						
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #
Cyanide, Total	<0.05 mg/l	TM227	<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #
Cyanide, Free	<0.05 mg/l	TM227			<0.05 #			
pH	<1 pH Units	TM256	7.69 #	7.76 #	7.3 #	7.94 #	7.38 #	7.31 #
Phenols, Total Detected monohydric	<0.016 mg/l	TM259	<0.016 #	<0.016 #	<0.016 #	<0.016 #	<0.016 #	<0.016 #
Dibutyl tin	<5 ng/l	TM328	<5	<5	<5	<5	<5	<5
Tributyl tin	<1 ng/l	TM328	<1	<1	<1	<1	<1	<1
Tetrabutyl tin	<2 ng/l	TM328	<2	<2	<2	<2	<2	<2
Triphenyl tin	<1 ng/l	TM328	<1	<1	<1	<1	<1	<1
Surrogate	%	TM328	104	84.9	56.6	88.1	89.5	83.7
Trifluralin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
alpha-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aldrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
beta-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isodrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
delta-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor epoxide	<0.01 µg/l	TM343	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01
o,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cis-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dieldrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan II	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
p,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

Results Legend			Customer Sample Ref.		GW06_37	GW06_39	GW07_07	GW07_40	GW09_31	GW09_32
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference									
Component	LOD/Units	Method								
p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulphan Sulphate	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Permethrin I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Permethrin II	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3,5-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichlorvos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichlobenil	<0.01 µg/l	TM344	<0.01	0.208	0.0809	<0.01	<0.01	<0.01	<0.01	<0.01
Mevinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tecnazene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Demeton-S-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phorate	<0.01 µg/l	TM344	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Diazinon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Triallate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01
Atrazine	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Simazine	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Disulfoton	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Propetamphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dimethoate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pirimiphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Methyl Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Malathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenthion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorfenvinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

Results Legend		Customer Sample Ref.	GW09_35	GW12_30	GW12_33	GW12_38	SW_23	SW_24
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. - Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629593	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629713	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629757	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629626	0.00 - 0.00 Surface Water (SW) 29/10/2018 30/10/2018 181030-11 18629588	0.00 - 0.00 Surface Water (SW) 29/10/2018 30/10/2018 181030-11 18629705
Component	LOD/Units	Method						
Ionic balance	% Diff	Calulation	-5.29	-1.98	-4	-3.93		
Alkalinity, Total as CaCO3	<2 mg/l	TM043	870	840	980	710		
BOD, unfiltered	<1 mg/l	TM045	<1	2.55	9.82	8.12	4.49	6.46
Carbon, Organic (diss.filt)	<3 mg/l	TM090	12.2	26.1	29.4	17.7		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	12.3	0.572	14.5	5.23	39.8	<0.2
Sulphide	<0.01 mg/l	TM101	<0.01	<0.01	<0.01	<0.01		
COD, unfiltered	<7 mg/l	TM107	139	76	87.2	110	64.4	33.2
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120	11.2	2.57	4.04	6.04	2.92	0.452
Arsenic (diss.filt)	<0.5 µg/l	TM152	3.11	2.53	136	2.09		
Boron (diss.filt)	<10 µg/l	TM152	1340	849	1620	1390		
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08	<0.08	<0.08	<0.08		
Chromium (diss.filt)	<1 µg/l	TM152	<1	<1	<1	<1		
Copper (diss.filt)	<0.3 µg/l	TM152	<0.3	<0.3	<0.3	2.07		
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2	<0.2	<0.2	<0.2		
Manganese (diss.filt)	<3 µg/l	TM152	598	2190	651	697		
Nickel (diss.filt)	<0.4 µg/l	TM152	1.24	4.43	1.17	3.98		
Selenium (diss.filt)	<1 µg/l	TM152	<1	<1	<1	<1		
Zinc (diss.filt)	<1 µg/l	TM152	<1	1.12	1.48	7.75		
Sodium (Dis.Filt)	<0.076 mg/l	TM152	1860	395	568	942		
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	272	64.4	122	136		
Potassium (Dis.Filt)	<0.2 mg/l	TM152	63.7	11.1	44.5	43.5		
Calcium (Dis.Filt)	<0.2 mg/l	TM152	239	113	115	254		
Iron (Dis.Filt)	<0.019 mg/l	TM152	0.129	0.0693	3.61	<0.019		
Hardness, Total as CaCO3	<0.65 mg/l	TM152	1720	549	789	1200		
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	<100	<100	<100	<100		
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01	<0.01	<0.01	<0.01		
Nitrite as NO2	<0.05 mg/l	TM184	<0.05	0.11	<0.05	1.85		
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184	9.42	<0.05	0.359	0.131		
Sulphate	<2 mg/l	TM184	133	74.9	26.8	780		
Chloride	<2 mg/l	TM184	3920	393	916	1450	593	39.4
Nitrate as NO3	<0.3 mg/l	TM184	<0.3	<0.3	<0.3	<0.3		
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	<0.1	<0.1	<0.1	0.609		



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

Results Legend			Customer Sample Ref.							
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	GW09_35 0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629593	GW12_30 0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629713	GW12_33 0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629757	GW12_38 0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629626	SW_23 0.00 - 0.00 Surface Water (SW) 29/10/2018 30/10/2018 181030-11 18629588	SW_24 0.00 - 0.00 Surface Water (SW) 29/10/2018 30/10/2018 181030-11 18629705			
Component	LOD/Units	Method								
Cyanide, Total	<0.05 mg/l	TM227	<0.05 #	<0.05 #	<0.05 #	<0.05 #				
pH	<1 pH Units	TM256	7.64 #	7.29 #	7.47 #	7.45 #	7.72 #		7.89 #	
Phenols, Total Detected monohydric	<0.016 mg/l	TM259	<0.016 #	<0.016 #	<0.016 #	<0.016 #				
Dibutyl tin	<5 ng/l	TM328	<5	<5	<5	<5				
Tributyl tin	<1 ng/l	TM328	<1	<1	<1	<1				
Tetrabutyl tin	<2 ng/l	TM328	<2	<2	<2	<2				
Triphenyl tin	<1 ng/l	TM328	<1	<1	<1	<1				
Surrogate	%	TM328	104	97.7	82.9	99.6				
Trifluralin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
alpha-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Heptachlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Aldrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
beta-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Isodrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
delta-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Heptachlor epoxide	<0.01 µg/l	TM343	<0.02	<0.01	<0.01	<0.01				
o,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Endosulphan I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
trans-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
cis-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
p,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Dieldrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
o,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Endrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
o,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
p,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Endosulphan II	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02				
p,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01				
Endosulphan Sulphate	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02				



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	480622

Results Legend			Customer Sample Ref.	GW09_35	GW12_30	GW12_33	GW12_38	SW_23	SW_24
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		GW09_35	GW12_30	GW12_33	GW12_38	SW_23	SW_24	
			0.00 - 0.00 Ground Water (GW) 29/10/2018	0.00 - 0.00 Ground Water (GW) 29/10/2018	0.00 - 0.00 Ground Water (GW) 29/10/2018	0.00 - 0.00 Ground Water (GW) 29/10/2018	0.00 - 0.00 Surface Water (SW) 29/10/2018	0.00 - 0.00 Surface Water (SW) 29/10/2018	
			30/10/2018 181030-11 18629593	30/10/2018 181030-11 18629713	30/10/2018 181030-11 18629757	30/10/2018 181030-11 18629626	30/10/2018 181030-11 18629588	30/10/2018 181030-11 18629705	
Component	LOD/Units	Method							
Permethrin I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01		
Permethrin II	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01		
1,3,5-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Hexachlorobutadiene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
1,2,4-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Dichlorvos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Dichlobenil	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Mevinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Tecnazene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Hexachlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Demeton-S-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Phorate	<0.01 µg/l	TM344	<0.01	<0.02	<0.02	<0.01			
Diazinon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Triallate	<0.01 µg/l	TM344	0.0136	<0.01	<0.01	<0.01			
Atrazine	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	0.0147			
Simazine	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Disulfoton	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Propetamphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Chlorpyrifos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Dimethoate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Pirimiphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Chlorpyrifos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Methyl Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Malathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Fenthion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Fenitrothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			
Chlorfenvinphos	<0.01 µg/l	TM344	<0.01			<0.01			
cis-Chlordane	<0.01 µg/l	TM344		<0.01	<0.01				
Ethion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01			



CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11
Location: Docksway Landfill Site

Client Reference:
Order Number: 700124102

Report Number: 481673
Superseded Report: 480622

SVOC MS (W) - Aqueous

Results Legend			Customer Sample Ref.	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36	GW06_37	
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
M	mCERTS accredited.			Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.			29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.									
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery									
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chloroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Azobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Acenaphthylene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Acenaphthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<4 #	<2 #	<2 #	<2 #	<2 #	<2 #	<2 #	
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	



CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11
Location: Docksway Landfill Site

Client Reference:
Order Number: 700124102

Report Number: 481673
Superseded Report: 480622

SVOC MS (W) - Aqueous

Results Legend			Customer Sample Ref.	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36	GW06_37	
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
M	mCERTS accredited.			Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.			29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.									
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery									
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Carbazole (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Chrysene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Dibenzofuran (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Diethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Dimethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #	<5 #	
Fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Fluorene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Hexachlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Pentachlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Phenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Hexachloroethane (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Nitrobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Naphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Isophorone (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Phenanthrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

SVOC MS (W) - Aqueous

Results Legend			Customer Sample Ref.	GW06_39	GW07_07	GW07_40	GW09_31	GW09_32	GW09_35	
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
M	mCERTS accredited.			Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.			29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
-	Subcontracted test.									
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery									
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dimethylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Chloronaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Chlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Methylnaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
2-Nitrophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
3-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Bromophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chloroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
4-Nitrophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Azobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Acenaphthylene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Acenaphthene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Anthracene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176		<2 #	<2 #	<2 #	<2 #	<2 #	<2 #	
Butylbenzyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	GW12_30	GW12_33	GW12_38			
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. - Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery. (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629713	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629757	0.00 - 0.00 Ground Water (GW) 29/10/2018 30/10/2018 181030-11 18629626			
Component	LOD/Units	Method						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Chloroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
4-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
Azobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
Acenaphthylene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
Acenaphthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
Anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<2 #	<2 #	<2 #			
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<1 #			



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

VOC MS (W)

Results Legend			Customer Sample Ref.	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36	GW06_37	
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
M	mCERTS accredited.			Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.			29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.			30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
-	Subcontracted test.			181030-11	181030-11	181030-11	181030-11	181030-11	181030-11	181030-11
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery			18629674	18629747	18629642	18629770	18629604	18629616	
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
Dibromofluoromethane**	%	TM208	106	106	99.7	108	101	113		
Toluene-d8**	%	TM208	98.9	97.6	98.4	102	98.7	99.9		
4-Bromofluorobenzene**	%	TM208	93.3	93.6	94.7	95.2	92.6	102		
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Chloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Bromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Chloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Carbon disulphide	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Dichloromethane	<3 µg/l	TM208	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #	<30 #	
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
2,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Bromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Chloroform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Dibromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Bromodichloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
Toluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<10 #	



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

VOC MS (W)

Results Legend			Customer Sample Ref.		GP07_05	GW03_09	GW06_13	GW06_34	GW06_36	GW06_37
#	ISO17025 accredited.		Depth (m)		0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
M	mCERTS accredited.		Sample Type		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.		Date Sampled		29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.		Sampled Time							
tot.unfilt	Total / unfiltered sample.		Date Received		30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
*	Subcontracted test.		SDG Ref		181030-11	181030-11	181030-11	181030-11	181030-11	181030-11
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		Lab Sample No.(s)		18629674	18629747	18629642	18629770	18629604	18629616
(F)	Trigger breach confirmed		AGS Reference							
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,3-Dichloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Tetrachloroethene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Dibromochloromethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dibromoethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Chlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Ethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
m,p-Xylene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
o-Xylene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Styrene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Bromoform	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Isopropylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,3-Trichloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Bromobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Propylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
2-Chlorotoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
4-Chlorotoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
tert-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
sec-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
4-iso-Propyltoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,3-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
n-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Hexachlorobutadiene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Naphthalene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

VOC MS (W)

Results Legend			Customer Sample Ref.		GW06_39	GW07_07	GW07_40	GW09_31	GW09_32	GW09_35
#	M	ISO17025 accredited.	Depth (m)	Sample Type	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
aq	diss.filt	Aqueous / settled sample.	Date Sampled	Ground Water (GW)	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
tot.unfilt	*	Dissolved / filtered sample.	Date Received	Ground Water (GW)	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
**	(F)	Total / unfiltered sample.	SDG Ref	Subcontracted test.	181030-11	181030-11	181030-11	181030-11	181030-11	181030-11
		% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	Lab Sample No.(s)	Trigger breach confirmed	18629653	18629686	18629664	18629724	18629736	18629593
		1-5&*\$@ Sample deviation (see appendix)	AGS Reference							
Component	LOD/Units	Method								
Dibromofluoromethane**	%	TM208	99.2	104	104	110	108	101		
Toluene-d8**	%	TM208	99.2	97.4	99.7	100	97.9	99		
4-Bromofluorobenzene**	%	TM208	94.7	94.8	93.4	92	93.9	95.8		
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Carbon disulphide	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Dichloromethane	<3 µg/l	TM208	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
2,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloroform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Dibromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromodichloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Toluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

VOC MS (W)

Results Legend			Customer Sample Ref.		GW06_39	GW07_07	GW07_40	GW09_31	GW09_32	GW09_35
#	ISO17025 accredited.		Depth (m)		0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
M	mCERTS accredited.		Sample Type		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
aq	Aqueous / settled sample.		Date Sampled		29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018	29/10/2018
diss.filt	Dissolved / filtered sample.		Sampled Time							
tot.unfilt	Total / unfiltered sample.		Date Received		30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018	30/10/2018
*	Subcontracted test.		SDG Ref		181030-11	181030-11	181030-11	181030-11	181030-11	181030-11
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		Lab Sample No.(s)		18629653	18629686	18629664	18629724	18629736	18629593
(F)	Trigger breach confirmed		AGS Reference							
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,3-Dichloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Tetrachloroethene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Dibromochloromethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dibromoethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Chlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Ethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
m,p-Xylene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
o-Xylene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Styrene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Bromoform	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Isopropylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,3-Trichloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Bromobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Propylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
2-Chlorotoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
4-Chlorotoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
tert-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
sec-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
4-iso-Propyltoluene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,3-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
n-Butylbenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Hexachlorobutadiene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#
Naphthalene	<1 µg/l	TM208	<1	#	<1	#	<1	#	<1	#



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	881673
Location:	Docksway Landfill Site	Order Number:	480622
		Report Number:	881673
		Superseded Report:	480622

VOC MS (W)

Results Legend			Customer Sample Ref.	GW12_30	GW12_33	GW12_38			
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted test. ** % recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery. (F) Trigger breach confirmed 1-5&*\$@ Sample deviation (see appendix)			Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00 Ground Water (GW) 29/10/2018 . 30/10/2018 181030-11 18629713	0.00 - 0.00 Ground Water (GW) 29/10/2018 . 30/10/2018 181030-11 18629757	0.00 - 0.00 Ground Water (GW) 29/10/2018 . 30/10/2018 181030-11 18629626			
Component	LOD/Units	Method							
Dibromofluoromethane**	%	TM208	105	104	115				
Toluene-d8**	%	TM208	98.4	98.7	102				
4-Bromofluorobenzene**	%	TM208	95.9	95.8	94.8				
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Chloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Bromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Chloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Carbon disulphide	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Dichloromethane	<3 µg/l	TM208	<3 #	<3 #	<3 #				
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 #	<1 #				
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
2,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Bromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Chloroform	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Dibromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Bromodichloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
Toluene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #				
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #				



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	481673
Location:	Docksway Landfill Site	Order Number:	700124102
		Report Number:	480622
		Superseded Report:	

VOC MS (W)

Results Legend		Customer Sample Ref.	GW12_30	GW12_33	GW12_38			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00			
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)			
aq	Aqueous / settled sample.		29/10/2018	29/10/2018	29/10/2018			
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
1,3-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Tetrachloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Dibromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2-Dibromoethane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Chlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Ethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
m,p-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Styrene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Bromoform	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Isopropylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Bromobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Propylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
2-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
4-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
tert-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
sec-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
n-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #			
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Hexachlorobutadiene	<1 µg/l	TM208	<1 #	<1 #	<1 #			
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #			
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #			



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Table of Results - Appendix

Method No	Reference	Description
Calculation		
SUB (ASB)		
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM259	by HPLC	Determination of Phenols in Waters and Leachates by HPLC
TM328		
TM343	EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM344	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite II) by GCMS
TM345	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite III) by GCMS

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).



CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11
Location: Docksway Landfill Site

Client Reference:
Order Number: 700124102

Report Number: 481673
Superseded Report: 480622

Test Completion Dates

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	18629699	18629674	18629747	18629642	18629770	18629604	18629616	18629653	18629686	18629664
	C3_Asb	GP07_05	GW03_09	GW06_13	GW06_34	GW06_36	GW06_37	GW06_39	GW07_07	GW07_40
	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Alkalinity as CaCO3			06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018
Alkalinity Filtered as CaCO3			31-Oct-2018	02-Nov-2018	01-Nov-2018	01-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018	01-Nov-2018
Ammoniacal Nitrogen	07-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	06-Nov-2018	06-Nov-2018	05-Nov-2018	07-Nov-2018	06-Nov-2018	07-Nov-2018
Anions by Kone (w)	02-Nov-2018		07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018
Asbestos in Water*	19-Nov-2018									
BOD True Total	05-Nov-2018		04-Nov-2018	04-Nov-2018	05-Nov-2018	04-Nov-2018	05-Nov-2018	04-Nov-2018		05-Nov-2018
COD Unfiltered	07-Nov-2018		07-Nov-2018	07-Nov-2018	07-Nov-2018	06-Nov-2018	06-Nov-2018	07-Nov-2018	07-Nov-2018	06-Nov-2018
Conductivity (at 20 deg.C)	08-Nov-2018		08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018
Cyanide Comp/Free/Total/Thiocyanate		12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	06-Nov-2018	12-Nov-2018
Dissolved Metals by ICP-MS		07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018
Dissolved Organic/Inorganic Carbon			05-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	06-Nov-2018	06-Nov-2018		06-Nov-2018
EPH (DRO) (C10-C40) Aqueous (W)		01-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018	01-Nov-2018	02-Nov-2018	01-Nov-2018	01-Nov-2018	01-Nov-2018
Ionic Balance			07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018		07-Nov-2018
Mercury Dissolved		08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018
Nitrite by Kone (w)			01-Nov-2018	01-Nov-2018	01-Nov-2018	01-Nov-2018	31-Oct-2018	31-Oct-2018		31-Oct-2018
Organotins in Aqueous Samples			05-Nov-2018	05-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018
Pesticides (Suite I) by GCMS		06-Nov-2018	12-Nov-2018	06-Nov-2018	12-Nov-2018	06-Nov-2018	12-Nov-2018	06-Nov-2018	12-Nov-2018	06-Nov-2018
Pesticides (Suite II) by GCMS		05-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	05-Nov-2018	06-Nov-2018	05-Nov-2018	06-Nov-2018	05-Nov-2018
Pesticides (Suite III) by GCMS		07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018
pH Value	06-Nov-2018		07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018
Phenols by HPLC (W)		01-Nov-2018	06-Nov-2018	07-Nov-2018	01-Nov-2018	07-Nov-2018	01-Nov-2018	01-Nov-2018	01-Nov-2018	01-Nov-2018
Phosphate by Kone (w)			31-Oct-2018	01-Nov-2018	31-Oct-2018	01-Nov-2018	01-Nov-2018	31-Oct-2018		31-Oct-2018
Sulphide			31-Oct-2018	02-Nov-2018	31-Oct-2018	02-Nov-2018	02-Nov-2018	31-Oct-2018		31-Oct-2018
SVOC MS (W) - Aqueous		08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018
Total Organic and Inorganic Carbon									02-Nov-2018	
VOC MS (W)		05-Nov-2018	06-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	18629724	18629736	18629593	18629713	18629757	18629626	18629588	18629705	18629709
	GW09_31	GW09_32	GW09_35	GW12_30	GW12_33	GW12_38	SW_23	SW_24	SW_1A
	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Surface Water	Surface Water	Surface Water	
Alkalinity as CaCO3	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018			
Alkalinity Filtered as CaCO3	01-Nov-2018	01-Nov-2018	01-Nov-2018	01-Nov-2018	06-Nov-2018	01-Nov-2018			
Ammoniacal Nitrogen	06-Nov-2018	05-Nov-2018	05-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	05-Nov-2018	06-Nov-2018	06-Nov-2018
Anions by Kone (w)	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018
BOD True Total	04-Nov-2018	04-Nov-2018	04-Nov-2018	04-Nov-2018	05-Nov-2018	04-Nov-2018	04-Nov-2018	04-Nov-2018	04-Nov-2018
COD Unfiltered	08-Nov-2018	07-Nov-2018	08-Nov-2018	06-Nov-2018	07-Nov-2018	06-Nov-2018	08-Nov-2018	07-Nov-2018	08-Nov-2018
Conductivity (at 20 deg.C)	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018
Cyanide Comp/Free/Total/Thiocyanate	06-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018			
Dissolved Metals by ICP-MS	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018			
Dissolved Organic/Inorganic Carbon	06-Nov-2018	06-Nov-2018	05-Nov-2018	05-Nov-2018	06-Nov-2018	05-Nov-2018			
EPH (DRO) (C10-C40) Aqueous (W)	01-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018	02-Nov-2018			
Ionic Balance	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018			
Mercury Dissolved	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018			
Nitrite by Kone (w)	31-Oct-2018	01-Nov-2018	31-Oct-2018	01-Nov-2018	31-Oct-2018	01-Nov-2018			
Organotins in Aqueous Samples	05-Nov-2018	07-Nov-2018	05-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018			
Pesticides (Suite I) by GCMS	12-Nov-2018	12-Nov-2018	06-Nov-2018	12-Nov-2018	12-Nov-2018	12-Nov-2018			
Pesticides (Suite II) by GCMS	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018	06-Nov-2018			
Pesticides (Suite III) by GCMS	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018			
pH Value	07-Nov-2018	07-Nov-2018	07-Nov-2018	06-Nov-2018	07-Nov-2018	06-Nov-2018	07-Nov-2018	07-Nov-2018	07-Nov-2018
Phenols by HPLC (W)	01-Nov-2018	07-Nov-2018	01-Nov-2018	06-Nov-2018	01-Nov-2018	01-Nov-2018			
Phosphate by Kone (w)	31-Oct-2018	01-Nov-2018	31-Oct-2018	01-Nov-2018	31-Oct-2018	01-Nov-2018			
Sulphide	31-Oct-2018	02-Nov-2018	31-Oct-2018	02-Nov-2018	31-Oct-2018	02-Nov-2018			
SVOC MS (W) - Aqueous	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018	08-Nov-2018			
VOC MS (W)	06-Nov-2018	05-Nov-2018	05-Nov-2018	05-Nov-2018	06-Nov-2018	05-Nov-2018			



CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Chromatogram

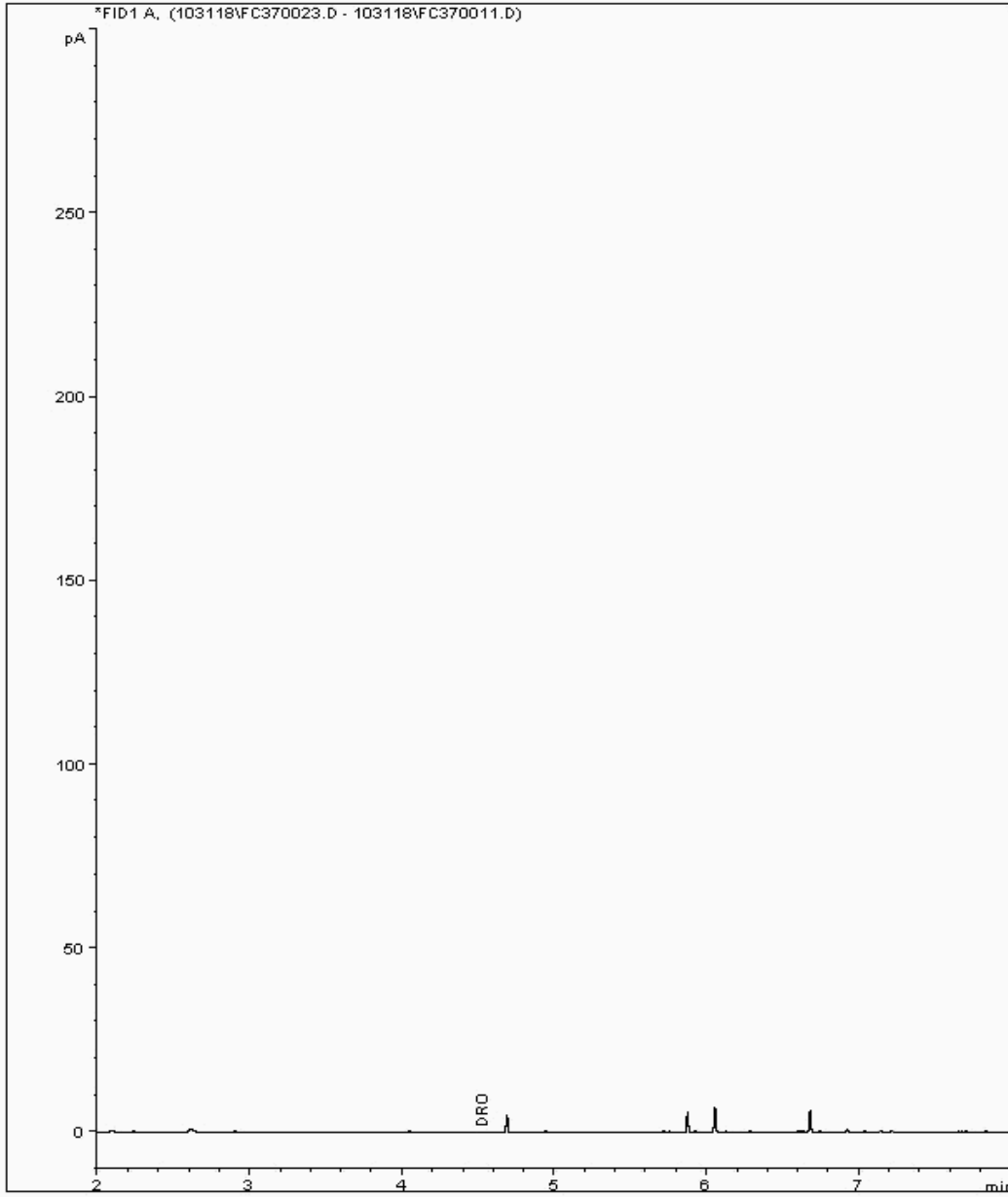
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18631571
Sample ID : GW06_39

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500174-
Date Acquired : 31/10/2018 18:12:34 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

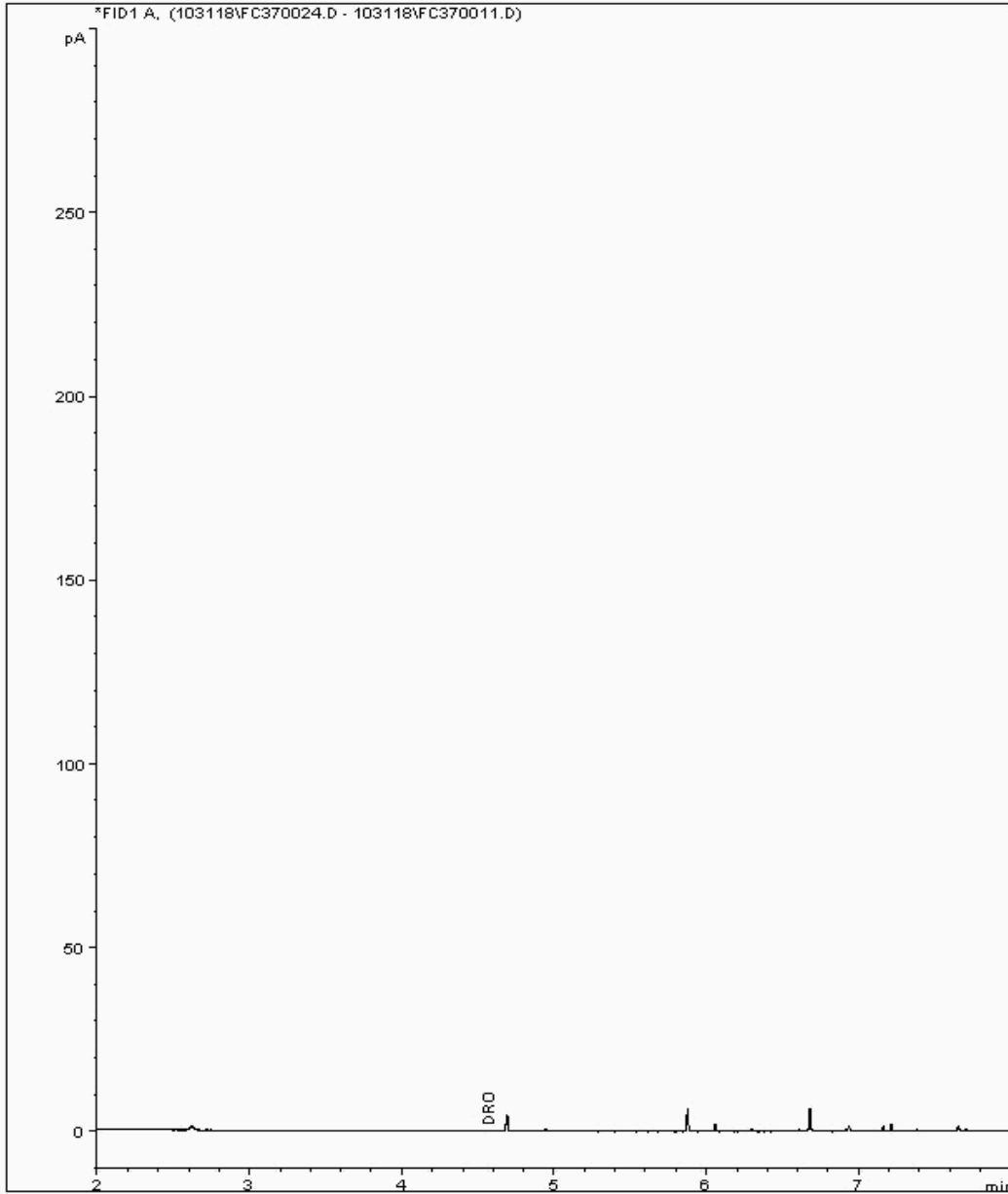
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18631711
Sample ID : GW07_07

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500234-
Date Acquired : 31/10/2018 18:36:48 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Chromatogram

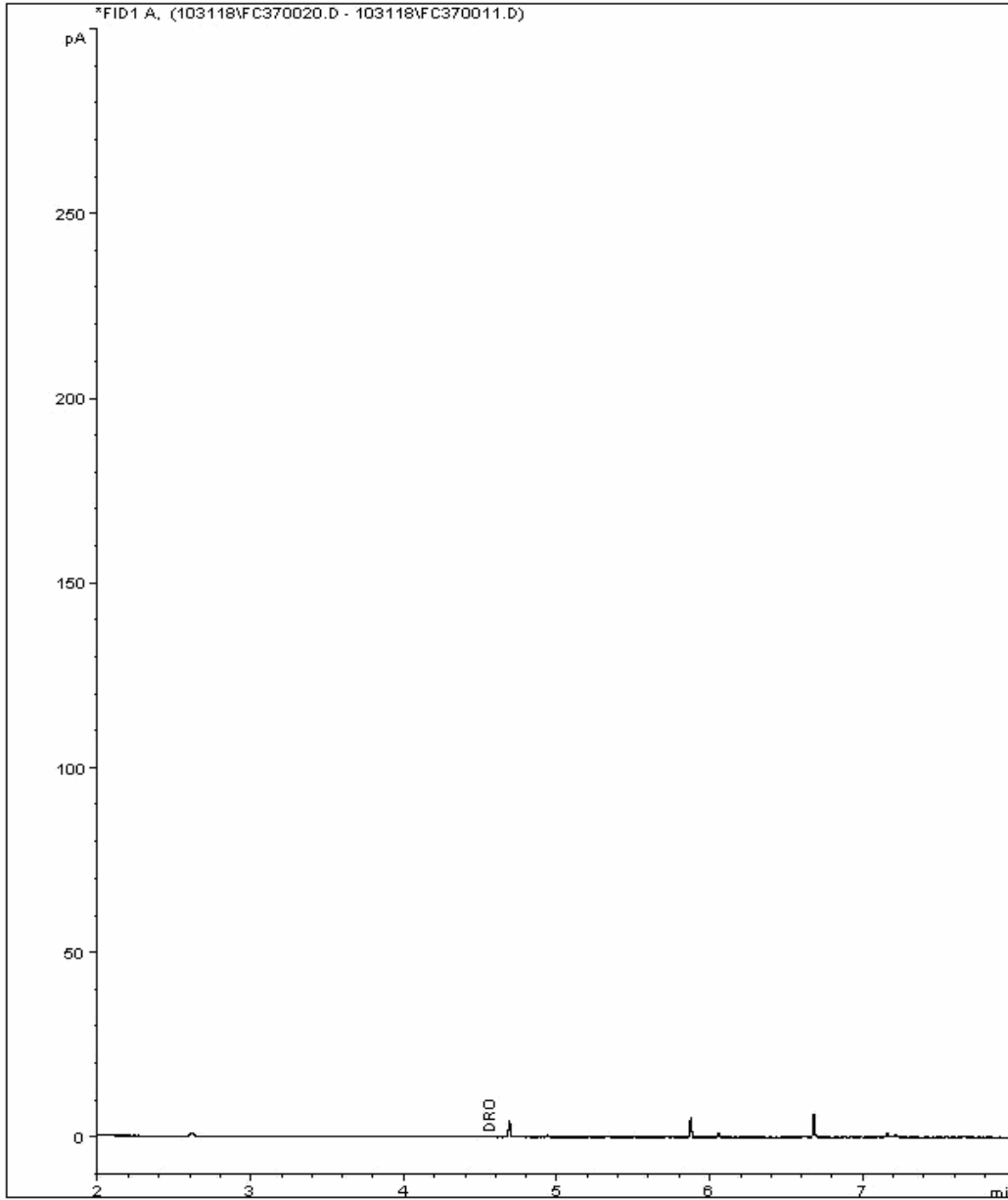
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18631721
Sample ID : GW07_40

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500198-
Date Acquired : 31/10/2018 17:00:22 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

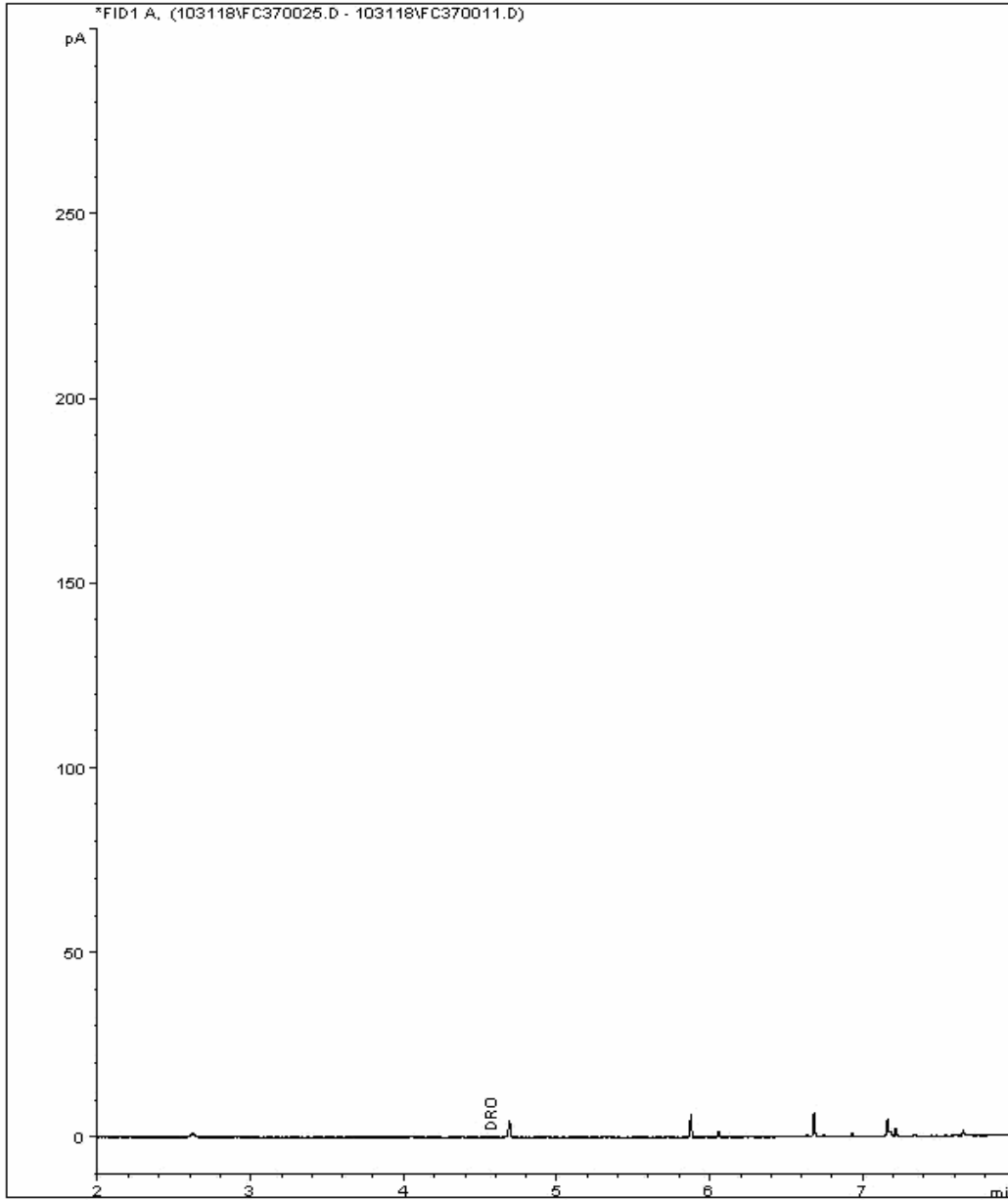
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18632881
Sample ID : GP07_05

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500220-
Date Acquired : 31/10/2018 19:00:45 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Chromatogram

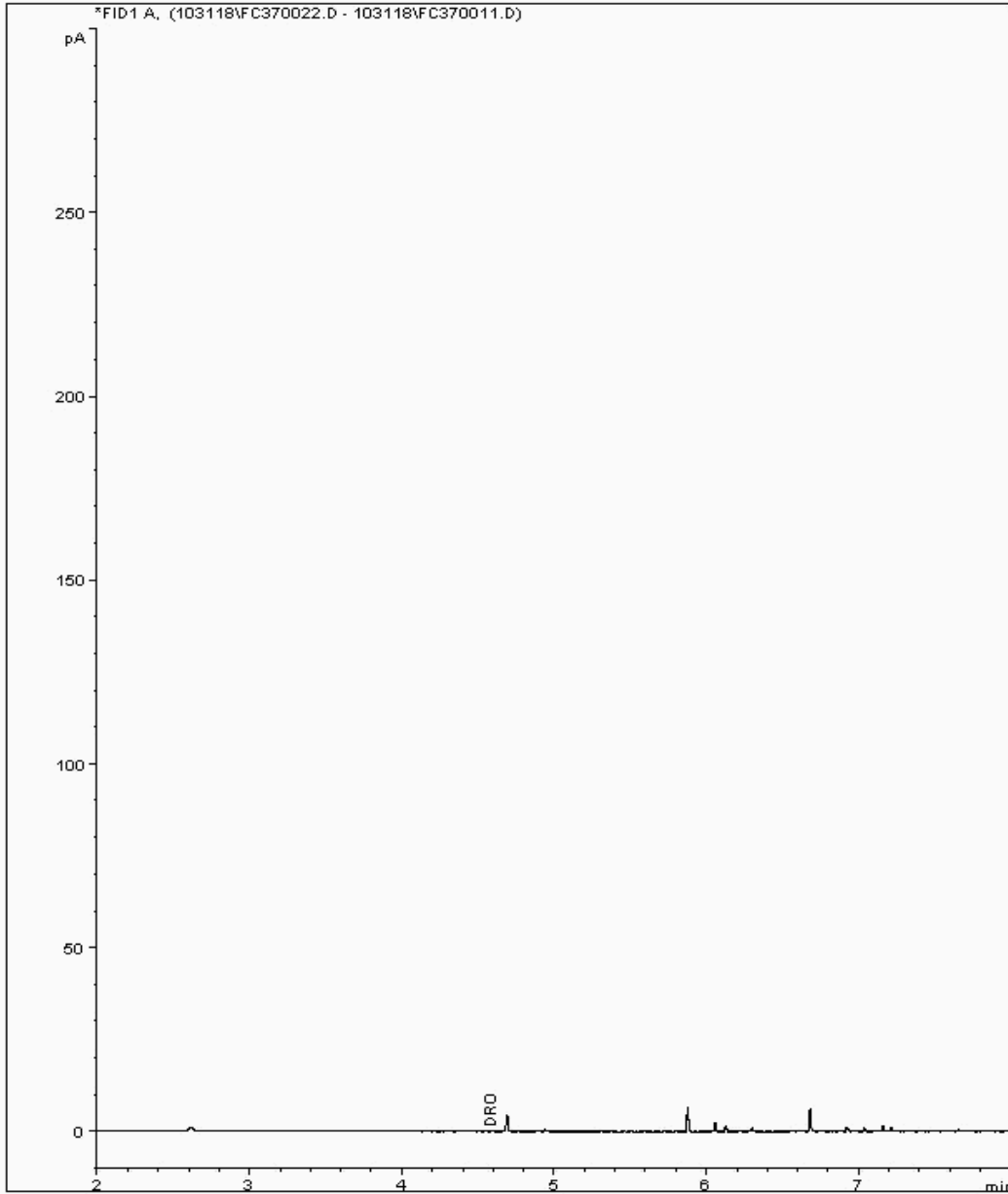
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18633025
Sample ID : GW09_31

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500301-
Date Acquired : 31/10/2018 17:48:37 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Chromatogram

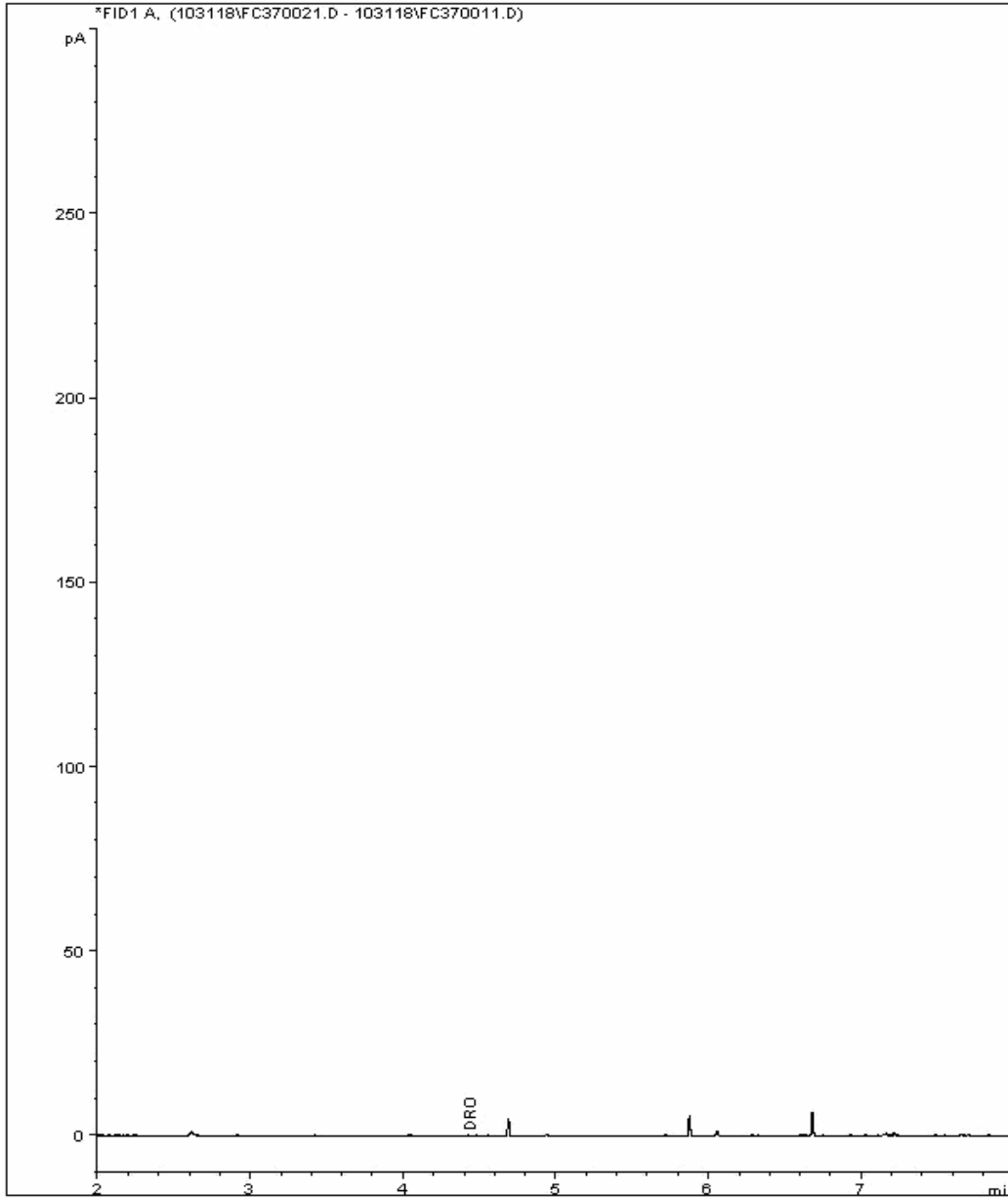
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18634139
Sample ID : GW06_36

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500046-
Date Acquired : 31/10/2018 17:24:37 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11 Client Reference: Report Number: 481673
Location: Docksway Landfill Site Order Number: 700124102 Superseded Report: 480622

Chromatogram

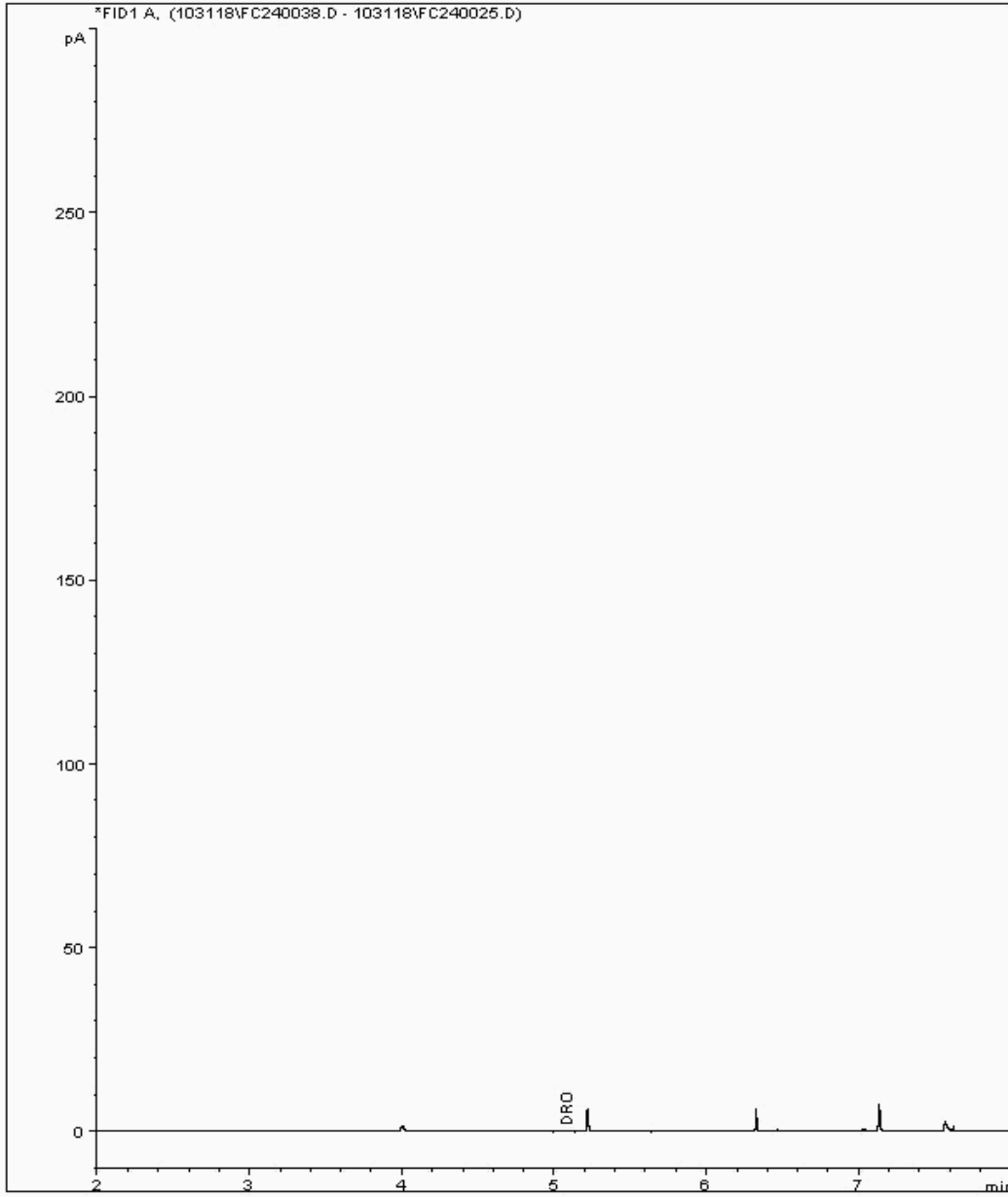
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642347
Sample ID : GW12_30

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500277-
Date Acquired : 01/11/2018 15:30:31 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

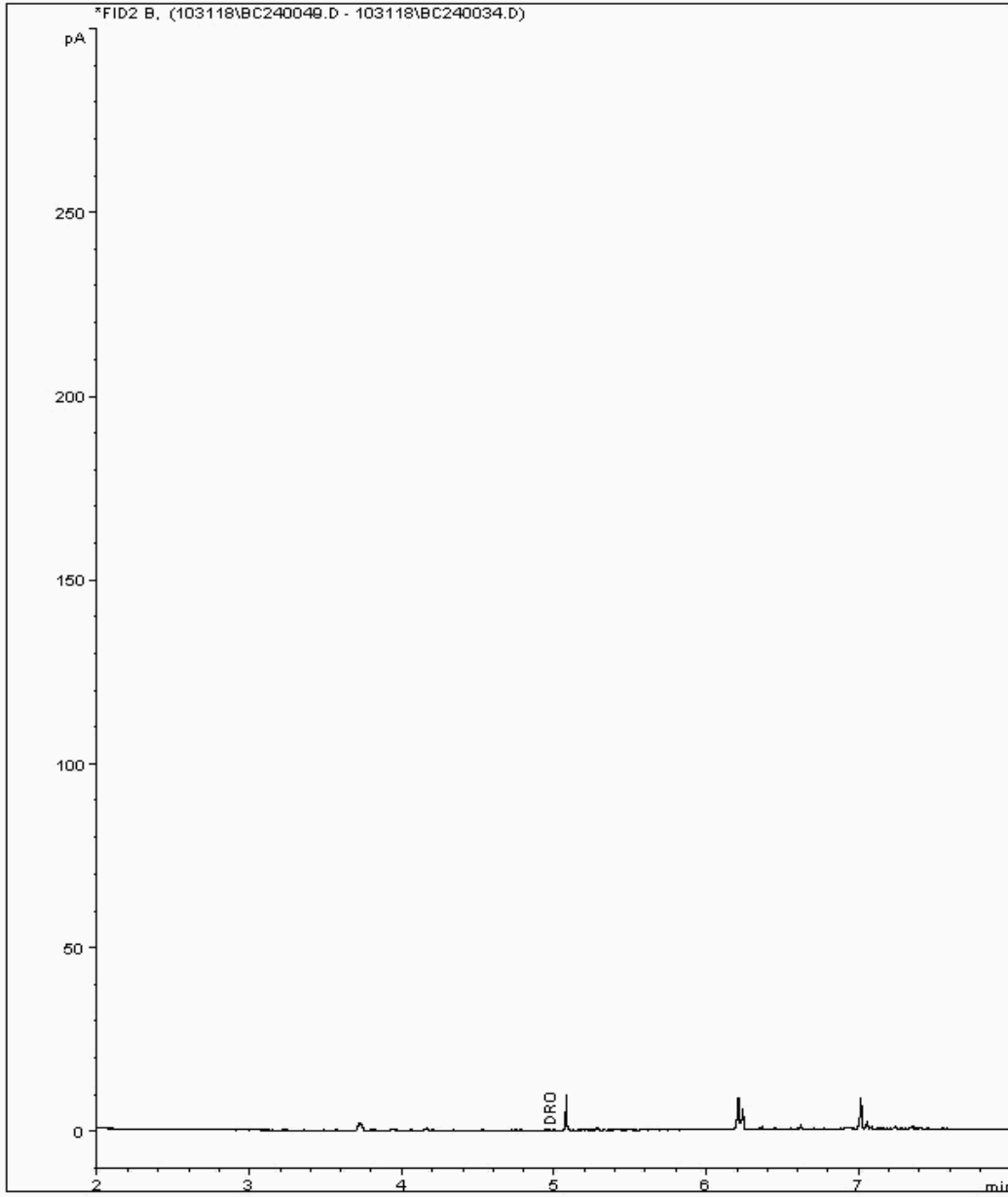
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642440
Sample ID : GW09_32

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500325-
Date Acquired : 01/11/2018 19:56:07 PM
Units : mg/l





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:		Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	700124102	Superseded Report:	480622

Chromatogram

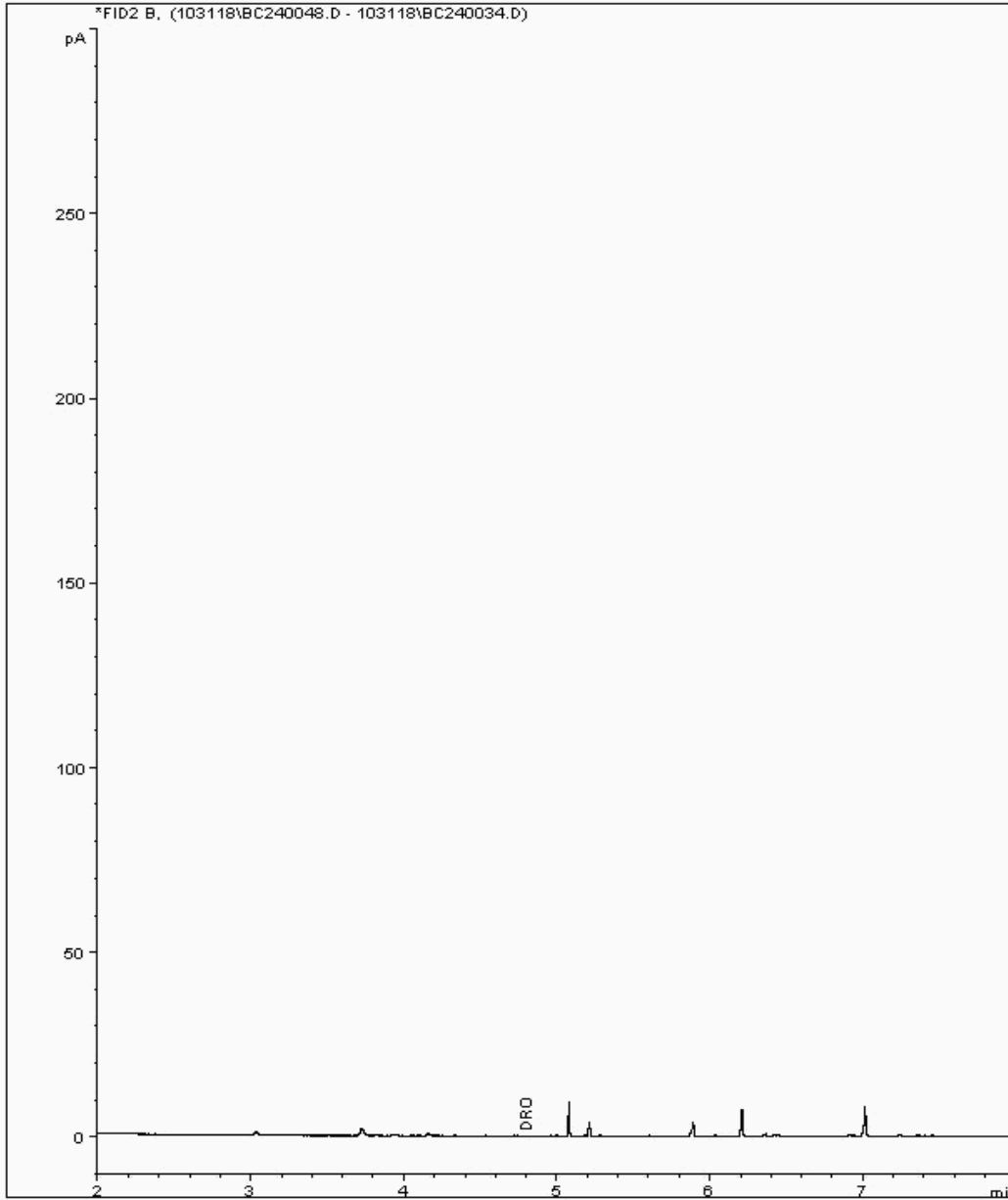
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642464
Sample ID : GW03_09

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500352-
Date Acquired : 01/11/2018 19:32:06 PM
Units : mg/l





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

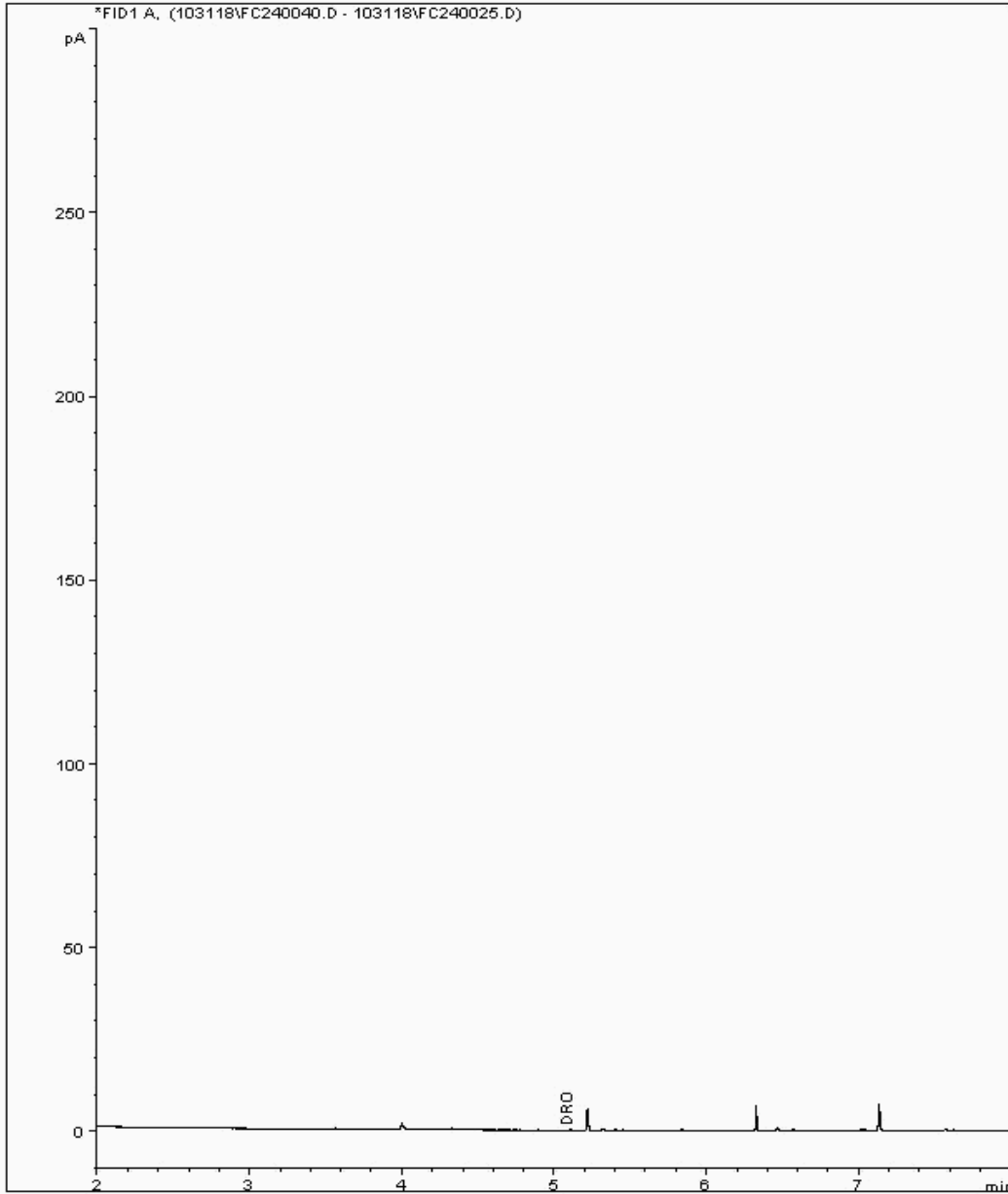
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642476
Sample ID : GW09_35

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500022-
Date Acquired : 01/11/2018 16:18:55 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

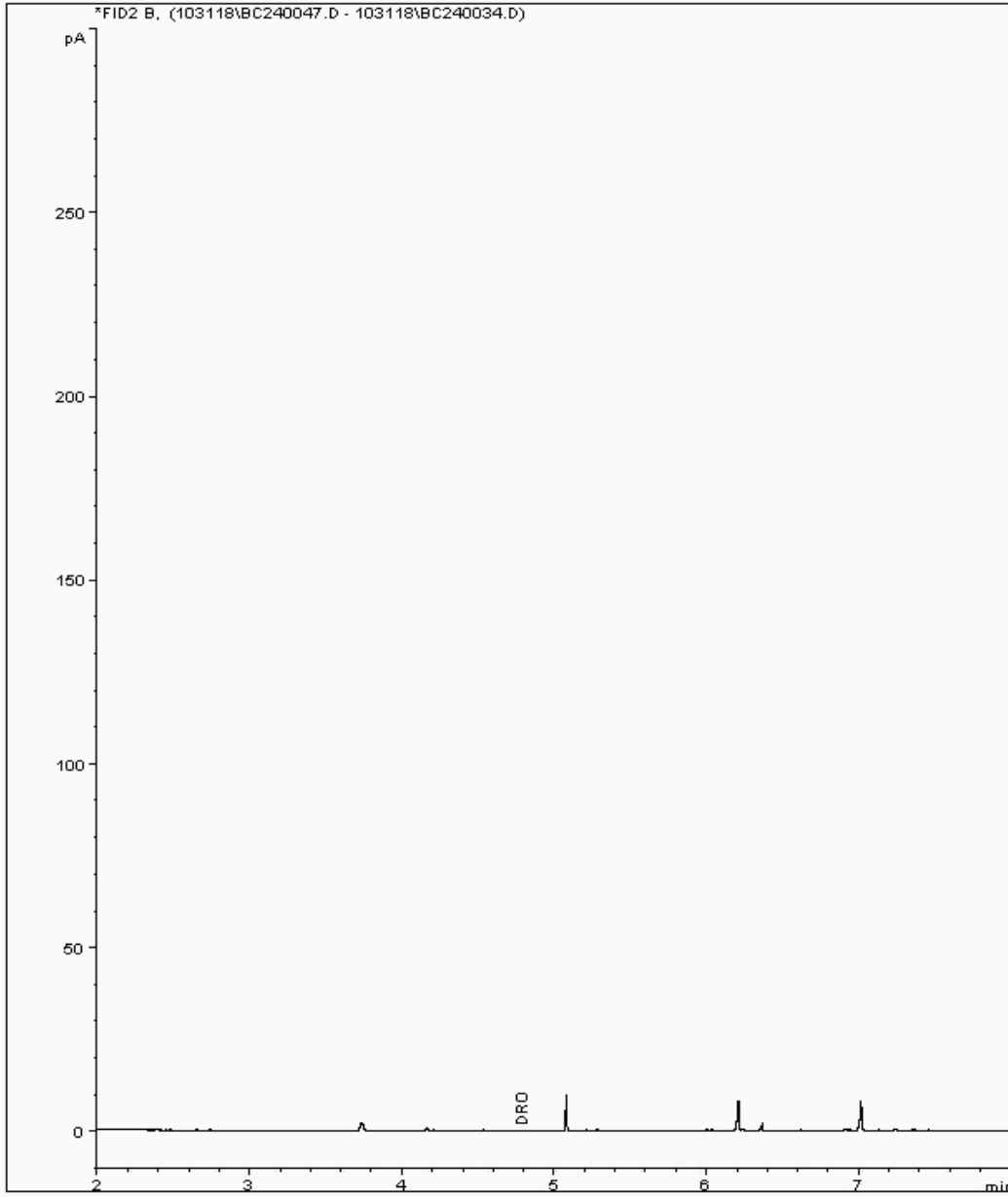
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642489
Sample ID : GW12_33

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500376-
Date Acquired : 01/11/2018 19:08:06 PM
Units : mg/l





CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11 Client Reference: Report Number: 481673
Location: Docksway Landfill Site Order Number: 700124102 Superseded Report: 480622

Chromatogram

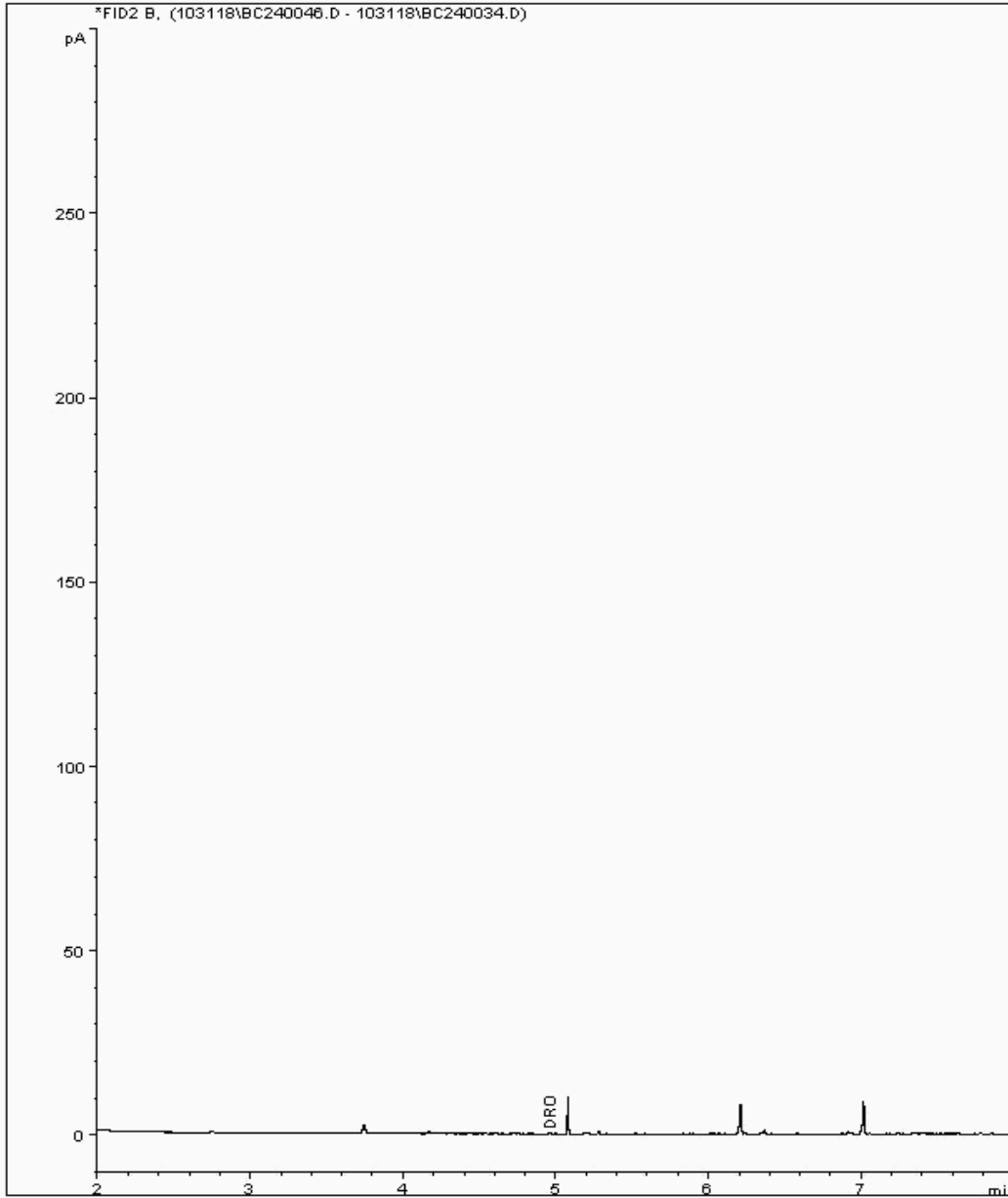
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642540
Sample ID : GW06_34

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500400-
Date Acquired : 01/11/2018 18:43:52 PM
Units : mg/l





CERTIFICATE OF ANALYSIS

Validated

SDG:	181030-11	Client Reference:	Report Number:	481673
Location:	Docksway Landfill Site	Order Number:	Superseded Report:	480622

Chromatogram

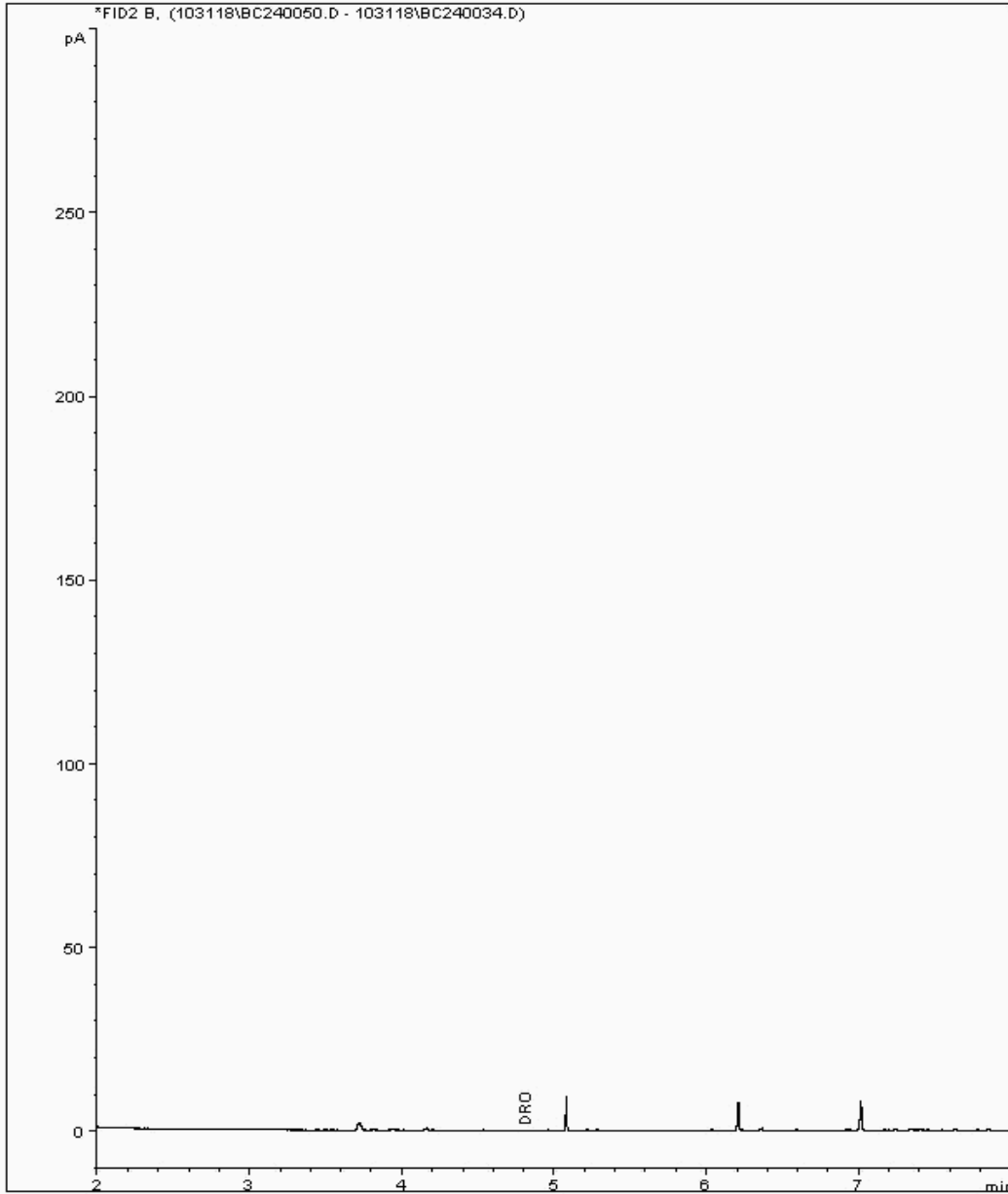
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642589
Sample ID : GW06_37

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500074-
Date Acquired : 01/11/2018 20:20:19 PM
Units : mg/l





CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11
Location: Docksway Landfill Site

Client Reference:
Order Number: 700124102

Report Number: 481673
Superseded Report: 480622

Chromatogram

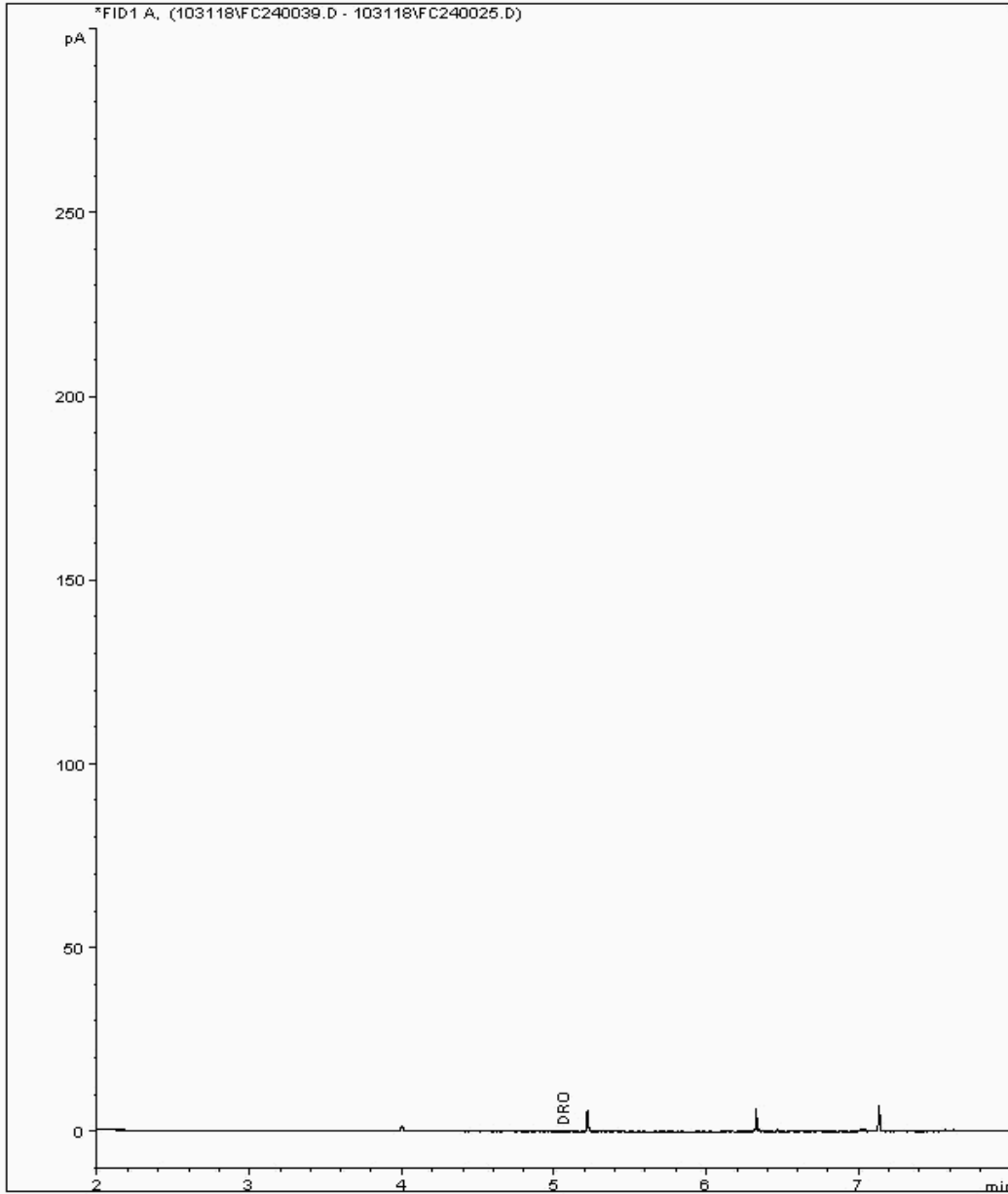
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642605
Sample ID : GW06_13

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500128-
Date Acquired : 01/11/2018 15:54:43 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 181030-11 Client Reference: Report Number: 481673
Location: Docksway Landfill Site Order Number: 700124102 Superseded Report: 480622

Chromatogram

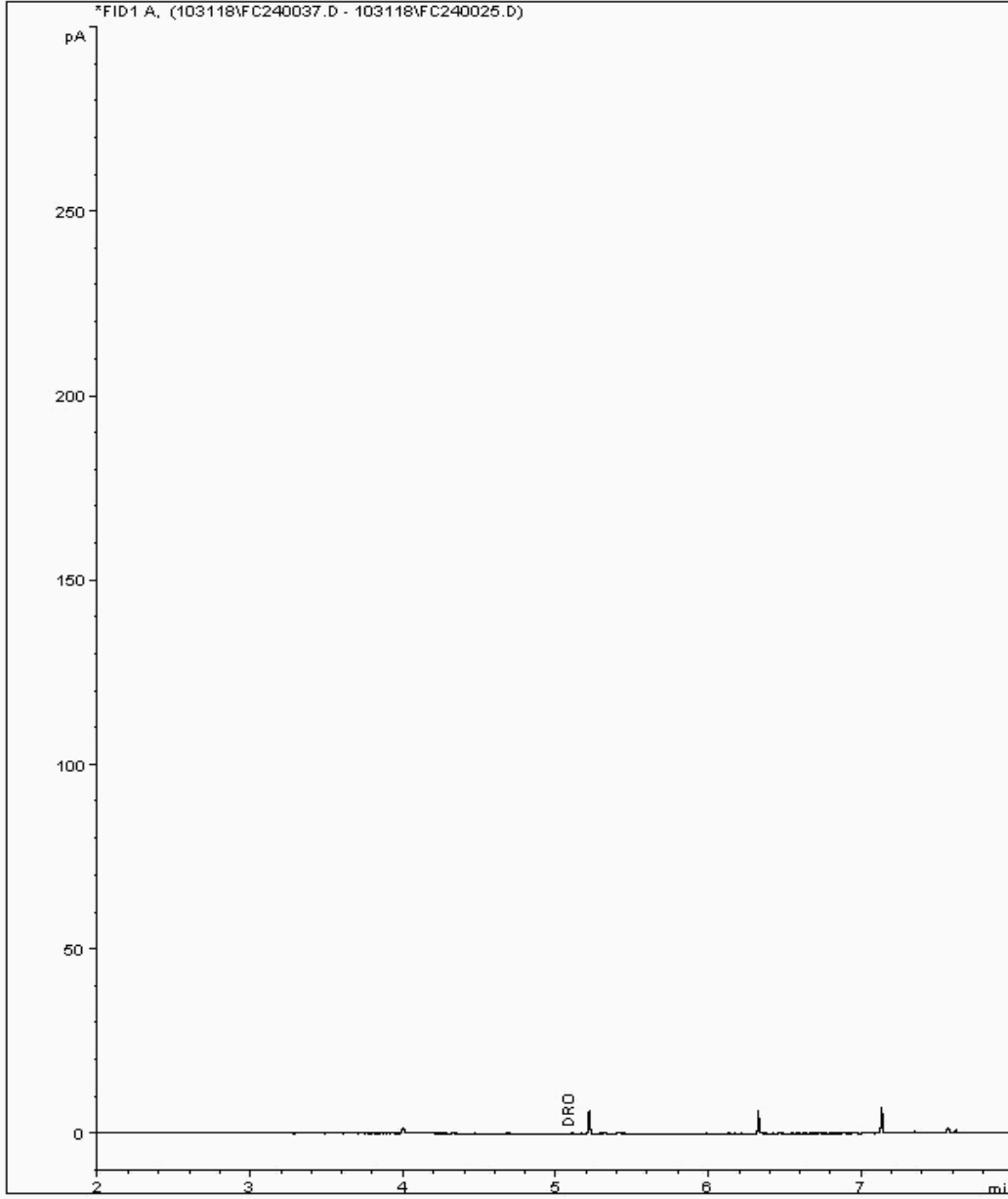
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 18642614
Sample ID : GW12_38

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 17500104-
Date Acquired : 01/11/2018 15:06:03 PM
Units : ppm



ALS Environmental Ltd
Torrington Avenue
Coventry
CV4 9GU

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F: +44 (0)24 7685 6575
www.alsenvironmental.co.uk

Subcon Results
ALS Life Sciences Limited
Torrington Avenue
Tile Hill CV4 9GU

15 November 2018

Test Report: COV/1630636/2018

Dear Subcon Results

Analysis of your sample(s) submitted on 01 November 2018 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using ALS Environmental Ltd and we look forward to receiving your next samples.

Yours Sincerely,

Signed:



Name:

D. Lewis

Title:

Inorganic Team Leader



Report Summary

ANALYSED BY

**Hawarden Subcon Results
ALS Life Sciences Limited
Torrington Avenue
Tile Hill
CV4 9GU**



Date of Issue: **15 November 2018**

Report Number: **COV/1630636/2018**

Issue **1**

This issue replaces
all previous issues

Job Description: 2017-2018 Analysis

Number of Samples
included in this report **1**

Job Received: **01 November 2018**

Number of Test Results
included in this report **2**

Analysis Commenced: **07 November 2018**

Signed:

Name: **D. Lewis**

Date: **15 November 2018**

Title: **Inorganic Team Leader**

ALS Environmental Ltd was not responsible for sampling unless otherwise stated.

Information on the methods of analysis and performance characteristics are available on request.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested.

Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory.

This communication has been sent to you by ALS Environmental Ltd. Registered in England and Wales. Registration No. 02148934. Registered Office: ALS Environmental Limited, Torrington Avenue, Coventry, CV4 9GU.

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ALS Environmental Ltd

Torrington Avenue, Coventry, CV4 9GU
Tel:+44 (0)24 7642 1213 Fax:+44 (0)24 7685 6575

Page 1 of 4

Certificate of Analysis

ANALYSED BY



Report Number: **COV/1630636/2018**
Laboratory Number: **17643164**
Sample Source: **ALS Life Sciences Limited**
Sample Point Description:
Sample Description: **18633352**
Sample Matrix: **Not Specified**
Sample Date/Time: **29 October 2018**
Sample Received: **01 November 2018**
Analysis Complete: **07 November 2018**

Issue **1**
Sample **1** of **1**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Description of Sample	Analyst Com	Text	07/11/2018	N Cov	70
Asbestos Identification	Analyst Com	Text	07/11/2018	N Cov	70

Analyst Comments for 17643164:

ASBESTOS COMMENTS Asbestos ID: Non Detected, Description of Sample: Water

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: CHE = Chester(CH5 3US), CTD = Coatbridge(ML5 4FR), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2SW), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **D. Lewis**

Date: **15 November 2018**

Title: **Inorganic Team Leader**

ALS Environmental Ltd

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ANALYST COMMENTS FOR REPORT COV/1630636/2018

Issue 1 This issue replaces all previous issues

Date of Issue: **15 November 2018**

Sample No	Analysis Comments
17643164	ASBESTOS COMMENTS Asbestos ID: Non Detected, Description of Sample: Water

Signed: *D. Lewis*

Name: **D. Lewis** Date: **15 November 2018**

Title: **Inorganic Team Leader**

DETERMINAND COMMENTS FOR REPORT COV/1630636/2018

ISSUE 1

Date of Issue: 15 November 2018

This issue replaces
all previous issues

Sample No	Description	Determinand	Comments
17643164	18633352	Asbestos Identification	{*}Non Detected{*/}
17643164	18633352	Description of Sample	{*}Water{*/}

Signed: 

Name: **D. Lewis**

Date: **15 November 2018**

Title: **Inorganic Team Leader**



CERTIFICATE OF ANALYSIS

SDG: 181030-11	Client Reference:	Report Number: 481673
Location: Docksway Landfill Site	Order Number: 700124102	Superseded Report: 480622

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
§	Sampled on date not provided
◆	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Astestost Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.