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Newport City Council
Civic Centre
Newport
NP20 4UR

Attention: Luke Embrey

CERTIFICATE OF ANALYSIS

Date of report Generation: 05 October 2021
Customer: Newport City Council
Sample Delivery Group (SDG): 210925-62
Your Reference: Sept GW 2021 Part 1 Area 2
Location: Newport landfill
Report No: 615829
Order Number:

We received 10 samples on Saturday September 25, 2021 and 10 of these samples were scheduled for analysis which was completed on Tuesday October 05, 2021. 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.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Sonia McWhan

Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
25046738	GW 03_09		0.00 - 0.00	23/09/2021
25046777	GW 06_34		0.00 - 0.00	23/09/2021
25046686	GW 06_36		0.00 - 0.00	23/09/2021
25046673	GW 06_39		0.00 - 0.00	23/09/2021
25046699	GW 07_40		0.00 - 0.00	23/09/2021
25046728	GW 09_31		0.00 - 0.00	23/09/2021
25046753	GW 09_32		0.00 - 0.00	23/09/2021
25046791	GW 09_35		0.00 - 0.00	23/09/2021
25046717	GW 12_30		0.00 - 0.00	23/09/2021
25046763	GW 12_33		0.00 - 0.00	23/09/2021

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



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Superseded Report:

Results Legend <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> Test</div> <div style="display: flex; align-items: center;"> 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																							
								Vial (ALE297)	NaOH (ALE245)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	0.5l glass bottle (ALE227)	Vial (ALE297)	NaOH (ALE245)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	0.5l glass bottle (ALE227)	Vial (ALE297)	NaOH (ALE245)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	500ml Plastic (ALE208)	250ml BOD (ALE212)	0.5l glass bottle (ALE227)	
		25046738	GW 03_09		0.00 - 0.00		GW																						
							GW																						
							GW																						
							GW																						
							GW																						
Alkalinity as CaCO3	All	NDPs: 0 Tests: 10																											
Alkalinity Filtered as CaCO3	All	NDPs: 0 Tests: 10																											
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 10																											
Anions by Kone (w)	All	NDPs: 0 Tests: 10																											
BOD True Total	All	NDPs: 0 Tests: 10																											
COD Unfiltered	All	NDPs: 0 Tests: 10																											
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 10																											
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 10																											
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 10																											
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 10																											
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 10																											
GRO by GC-FID (W)	All	NDPs: 0 Tests: 10																											
Ionic Balance	All	NDPs: 0 Tests: 10																											
Mercury Dissolved	All	NDPs: 0 Tests: 10																											
Nitrite by Kone (w)	All	NDPs: 0 Tests: 10																											



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Results Legend <div style="font-size: small;"> X Test N No Determination Possible </div> <div style="font-size: x-small;"> 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 </div>	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type																
								NaOH (ALE245)	Vial (ALE297)	0.5l glass bottle (ALE27)	250ml BOD (ALE12)	500ml Plastic (ALE208)	H2SO4 (ALE24)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	0.5l glass bottle (ALE27)	250ml BOD (ALE12)	500ml Plastic (ALE208)	H2SO4 (ALE24)	HNO3 Filtered (ALE204)	
		25046728	GW 09_31		0.00 - 0.00		GW															
		25046753	GW 09_32		0.00 - 0.00		GW															
		25046791	GW 09_35		0.00 - 0.00		GW															
		25046717	GW 12_30		0.00 - 0.00		GW															
	Alkalinity as CaCO3	All	NDPs: 0 Tests: 10									X								X		
Alkalinity Filtered as CaCO3	All	NDPs: 0 Tests: 10									X								X			
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 10										X							X			
Anions by Kone (w)	All	NDPs: 0 Tests: 10									X											
BOD True Total	All	NDPs: 0 Tests: 10								X										X		
COD Unfiltered	All	NDPs: 0 Tests: 10								X										X		
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 10									X									X		
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 10					X						X									
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 10										X							X		X	
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 10							X								X					
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 10							X											X		
GRO by GC-FID (W)	All	NDPs: 0 Tests: 10						X												X		
Ionic Balance	All	NDPs: 0 Tests: 10									X								X			
Mercury Dissolved	All	NDPs: 0 Tests: 10										X							X		X	
Nitrite by Kone (w)	All	NDPs: 0 Tests: 10					X													X		



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Superseded Report:

Results Legend		Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
#	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.		23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021
diss.filt	Dissolved / filtered sample.		25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021
tot.unfilt	Total / unfiltered sample.		210925-62	210925-62	210925-62	210925-62	210925-62	210925-62
*	Subcontracted - refer to subcontractor report for accreditation status.		25046738	25046777	25046686	25046673	25046699	25046728
**	% 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							
1-4*8@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Ionic balance	% Diff	Calculation	-1.23	2.59	-2.35	-5.79	-5.87	-6.75
Alkalinity, Total as CaCO3	<2 mg/l	TM043	1030 #	632 #	989 #	985 #	684 #	1150 #
Alkalinity, Total as CaCO3 (diss.filt)	<2 mg/l	TM043	1010	655	995	970	685	1210
Alkalinity, Bicarbonate as CaCO3 (diss.filt)	<2 mg/l	TM043	1010	655	995	970	685	1210
BOD, unfiltered	<1 mg/l	TM045	<3 #	6.1 #	<1 #	<1 #	<3 #	8.9 #
Carbon, Organic (diss.filt)	<3 mg/l	TM090	12.4	7.65	12.7	15.5	16.6	58.6
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	12.1 #	8.18 #	11.3 #	4.65 #	11.4 #	45.4 #
Sulphide	<0.01 mg/l	TM101	<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #
COD, unfiltered	<7 mg/l	TM107	85.5 #	72 #	121 #	74.7 #	46.9 #	187 #
Conductivity @ 20 deg.C	<0.02 mS/cm	TM120	10.2 #	5.91 #	9.28 #	6.36 #	1.71 #	3.21 #
Arsenic (diss.filt)	<0.5 µg/l	TM152	8.07 #	1.12 #	0.577 #	10.8 #	18 #	11.3 #
Boron (diss.filt)	<10 µg/l	TM152	1460 #	1010 #	1230 #	1070 #	1320 #	2110 #
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 #	1.07 #	10.1 #
Copper (diss.filt)	<0.3 µg/l	TM152	<0.3 #	<0.3 #	<0.3 #	1.19 #	<0.3 #	<0.3 #
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2 #	<0.2 #	<0.2 #	0.461 #	<0.2 #	<0.2 #
Manganese (diss.filt)	<3 µg/l	TM152	562 #	1810 #	192 #	393 #	129 #	2180 #
Nickel (diss.filt)	<0.4 µg/l	TM152	0.558 #	0.541 #	0.945 #	2.26 #	1.33 #	9.52 #
Selenium (diss.filt)	<1 µg/l	TM152	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc (diss.filt)	<1 µg/l	TM152	2.26 #	<1 #	<1 #	5.48 #	1.3 #	3.43 #
Sodium (Dis.Filt)	<0.076 mg/l	TM152	2090 #	1080 #	1860 #	1000 #	264 #	302 #
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	203 #	166 #	192 #	158 #	47 #	92.1 #
Potassium (Dis.Filt)	<0.2 mg/l	TM152	58.9 #	42.3 #	56.9 #	51.8 #	25.8 #	55.1 #
Calcium (Dis.Filt)	<0.2 mg/l	TM152	112 #	160 #	131 #	171 #	35.8 #	268 #
Iron (Dis.Filt)	<0.019 mg/l	TM152	5.66 #	0.465 #	0.445 #	6.61 #	2.12 #	16.3 #
Hardness, Total as CaCO3	<0.65 mg/l	TM152	1040 #	1010 #	1120 #	1080 #	283 #	1050 #
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	<100 #	339 #	131 #	<100 #	<100 #	324 #
Total EPH (C6-C40) (aq)	<100 µg/l	TM172	<100 #	339 #	131 #	<100 #	<100 #	324 #
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 #	<0.05 #
Sulphate	<2 mg/l	TM184	224 #	151 #	23.6 #	43.1 #	<2 #	333 #
Chloride	<2 mg/l	TM184	3320 #	1790 #	3190 #	1940 #	257 #	468 #



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Results Legend			Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
# ISO17025 accredited. M mCERTS accredited. sq Aqueous / settled sample. dis.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1-4-5@ Sample deviation (see appendix)	Depth (m)	Sample Type	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)
Date Sampled	Date Sampled	Date Sampled	23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021
Sampled Time	Sampled Time	Sampled Time
Date Received	Date Received	Date Received	25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021
SDG Ref	SDG Ref	SDG Ref	210925-62	210925-62	210925-62	210925-62	210925-62	210925-62	210925-62
Lab Sample No.(s)	Lab Sample No.(s)	Lab Sample No.(s)	25046738	25046777	25046686	25046673	25046699	25046728	25046728
AGS Reference	AGS Reference	AGS Reference							
Component	LOD/Units	Method							
Nitrate as NO3	<0.3 mg/l	TM184	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	<0.1	<0.1	<0.1	<0.1	<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	<0.05
pH	<1 pH Units	TM256	7.81	7.53	7.74	7.66	7.97	7.45	
Phenol	<0.002 mg/l	TM259	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cresols	<0.006 mg/l	TM259	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Xylenols	<0.008 mg/l	TM259	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Phenols, Total Detected monohydric	<0.016 mg/l	TM259	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Dibutyl tin	<5 ng/l	TM328	<5	<5	<5	<5	<5	<5	<30
Tributyl tin	<1 ng/l	TM328	<1	<1	<1	<1	<1	<1	<6
Tetrabutyl tin	<2 ng/l	TM328	<2	<2	<2	<2	<2	<2	<12
Triphenyl tin	<1 ng/l	TM328	<1	<1	<1	<1	<1	<1	<6
Surrogate**	%	TM328	109	98.2	110	113	94	54.1	
Trifluralin	<0.01 µg/l	TM343	<0.01	<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	<0.01
gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01	<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	<0.01
Aldrin	<0.01 µg/l	TM343	<0.01	<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	<0.01
Isodrin	<0.01 µg/l	TM343	<0.01	<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	<0.01
Heptachlor epoxide	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o,p'-DDE	<0.01 µg/l	TM343	<0.01	<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	<0.01
trans-Chlordane	<0.01 µg/l	TM343	<0.01	<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	<0.01
p,p'-DDE	<0.01 µg/l	TM343	<0.01	<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	<0.01
o,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<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	<0.01
o,p'-DDT	<0.01 µg/l	TM343	<0.03	<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	<0.01



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Results Legend		Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
# ISO17025 accredited. M mCERTS accredited. sq Aqueous / settled sample. disc.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1.4.4.6@ 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) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021
Component	LOD/Units	Method						
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	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02
o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02
Endosulphan Sulphate	<0.02 µg/l	TM343	<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
Permethrin II	<0.01 µg/l	TM343	<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
Hexachlorobutadiene	<0.01 µg/l	TM344	<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
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<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
Dichlobenil	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	0.0547	<0.01	<0.01
Mevinphos	<0.01 µg/l	TM344	<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
Hexachlorobenzene	<0.01 µg/l	TM344	<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
Phorate	<0.01 µg/l	TM344	<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
Triallate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Atrazine	<0.01 µg/l	TM344	<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
Disulfoton	<0.01 µg/l	TM344	<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
Chlorpyrifos-methyl	<0.01 µg/l	TM344	<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
Pirimiphos-methyl	<0.01 µg/l	TM344	<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
Methyl Parathion	<0.01 µg/l	TM344	<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
Fenthion	<0.01 µg/l	TM344	<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



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Results Legend			Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
# ISO17025 accredited. M mCERTS accredited. sq Aqueous / settled sample. disc.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1.4.4.6@ 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) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021
Component	LOD/Units	Method							
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pendimethalin	<0.01 µg/l	TM344	<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
Chlorfenvinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cis-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carbophenothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Triazophos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phosalone	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Azinphos methyl	<0.02 µg/l	TM344	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Azinphos ethyl	<0.02 µg/l	TM344	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Etridiazole	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pentachlorobenzene	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Propachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Quintozene (PCNB)	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Omethoate	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Propazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Propyzamide	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Alachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Prometryn	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Telodrin	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Terbutryn	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019
Chlorothalonil	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Etrimphos	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metazachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trietazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Coumaphos	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phosphamidon I	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phosphamidon II	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	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		
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
aq	Aqueous / settled sample.		23/09/2021	23/09/2021	23/09/2021	23/09/2021		
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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		25/09/2021	25/09/2021	25/09/2021	25/09/2021		
(F)	Trigger breach confirmed		210925-62	210925-62	210925-62	210925-62		
1-4*\$@	Sample deviation (see appendix)		25046753	25046791	25046717	25046763		
Component	LOD/Units		Method					
Ionic balance		Calculation	-11.9	-3.71	-2.86	-4.85		
Alkalinity, Total as CaCO3	<2 mg/l	TM043	650 #	960 #	735 #	1180 #		
Alkalinity, Total as CaCO3 (diss.filt)	<2 mg/l	TM043	645	985	740	1130		
Alkalinity, Bicarbonate as CaCO3 (diss.filt)	<2 mg/l	TM043	645	985	740	1130		
BOD, unfiltered	<1 mg/l	TM045	<3 #	<3 #	<3 #	<1 #		
Carbon, Organic (diss.filt)	<3 mg/l	TM090	8.31	11.5	21.6	25.2		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	18.5 #	15.2 #	3.41 #	54.5 #		
Sulphide	<0.01 mg/l	TM101	<0.01 2 #	<0.01 2 #	<0.01 2 #	<0.01 2 #		
COD, unfiltered	<7 mg/l	TM107	156 #	132 #	62.9 #	260 #		
Conductivity @ 20 deg.C	<0.02 mS/cm	TM120	15.1 #	12.6 #	2.17 #	16.3 #		
Arsenic (diss.filt)	<0.5 µg/l	TM152	7.41 #	0.546 #	20 #	13.4 #		
Boron (diss.filt)	<10 µg/l	TM152	1500 #	1370 #	640 #	2730 #		
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 #	<0.3 #		
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2 #	<0.2 #	<0.2 #	<0.2 #		
Manganese (diss.filt)	<3 µg/l	TM152	712 #	274 #	3400 #	185 #		
Nickel (diss.filt)	<0.4 µg/l	TM152	0.572 #	<0.4 #	2.38 #	<0.4 #		
Selenium (diss.filt)	<1 µg/l	TM152	<1 #	<1 #	<1 #	<1 #		
Zinc (diss.filt)	<1 µg/l	TM152	<1 #	2.24 #	4.98 #	<1 #		
Sodium (Dis.Filt)	<0.076 mg/l	TM152	2470 #	2330 #	280 #	3180 #		
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	329 #	311 #	71.7 #	415 #		
Potassium (Dis.Filt)	<0.2 mg/l	TM152	83 #	71.2 #	15.5 #	108 #		
Calcium (Dis.Filt)	<0.2 mg/l	TM152	182 #	236 #	121 #	110 #		
Iron (Dis.Filt)	<0.019 mg/l	TM152	8.91 #	4.41 #	14.1 #	5.03 #		
Hardness, Total as CaCO3	<0.65 mg/l	TM152	1810	1930	591	1910		
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	285 #	<100 #	108 #	106 #		
Total EPH (C6-C40) (aq)	<100 µg/l	TM172	285	<100	108	106		
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 #	<0.05 #	<0.05 #	<0.05 #		
Sulphate	<2 mg/l	TM184	391 #	106 #	68.5 #	73.9 #		
Chloride	<2 mg/l	TM184	5860 #	4630 #	353 #	6350 #		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Results Legend			Customer Sample Ref.			
# ISO17025 accredited. M mCERTS accredited. sq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1-4-5@ Sample deviation (see appendix)	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	GW 09_32 0.00 - 0.00 Ground Water (GW) 23/09/2021 . 25/09/2021 210925-62 25046753	GW 09_35 0.00 - 0.00 Ground Water (GW) 23/09/2021 . 25/09/2021 210925-62 25046791	GW 12_30 0.00 - 0.00 Ground Water (GW) 23/09/2021 . 25/09/2021 210925-62 25046717	GW 12_33 0.00 - 0.00 Ground Water (GW) 23/09/2021 . 25/09/2021 210925-62 25046763	
Component	LOD/Units	Method				
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 #	<0.1 #
Cyanide, Total	<0.05 mg/l	TM227	<0.05 #	<0.05 #	<0.05 #	<0.05 #
pH	<1 pH Units	TM256	7.56 #	7.8 #	7.14 #	7.56 #
Phenol	<0.002 mg/l	TM259	<0.002 #	<0.002 #	<0.002 #	<0.002 #
Cresols	<0.006 mg/l	TM259	<0.006 #	<0.006 #	<0.006 #	<0.006 #
Xylenols	<0.008 mg/l	TM259	<0.008 #	<0.008 #	<0.008 #	<0.008 #
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	105	114	106	94
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	<0.01	<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



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	ISO17025 accredited.							
M	mCERTS accredited.							
sq	Aqueous / settled sample.							
dis.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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							
1-4&@	Sample deviation (see appendix)							
		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
		Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
		Date Sampled	23/09/2021	23/09/2021	23/09/2021	23/09/2021		
		Sampled Time						
		Date Received	25/09/2021	25/09/2021	25/09/2021	25/09/2021		
		SDG Ref	210925-62	210925-62	210925-62	210925-62		
		Lab Sample No.(s)	25046753	25046791	25046717	25046763		
		AGS Reference						
Component	LOD/Units	Method						
Endosulphan II	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02		
p,p'-DDT	<0.01 µg/l	TM343	<0.02	<0.02	<0.02	<0.02		
o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01		
p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.02	<0.02	<0.02	<0.02		
Endosulphan Sulphate	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02		
Permethrin I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01		
Permethrin II	<0.01 µg/l	TM343	<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	<0.01	<0.01	<0.01		
Diazinon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Triallate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Atrazine	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
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		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	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		
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
sq	Aqueous / settled sample.		23/09/2021	23/09/2021	23/09/2021	23/09/2021		
dis.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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		25/09/2021	25/09/2021	25/09/2021	25/09/2021		
(F)	Trigger breach confirmed		210925-62	210925-62	210925-62	210925-62		
1-4&@	Sample deviation (see appendix)		25046753	25046791	25046717	25046763		
Component	LOD/Units		Method					
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Pendimethalin	<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	<0.01	<0.01		
trans-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
cis-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Ethion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Carbophenothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Triazophos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Phosalone	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01		
Azinphos methyl	<0.02 µg/l	TM344	<0.02	<0.02	<0.02	<0.02		
Azinphos ethyl	<0.02 µg/l	TM344	<0.02	<0.02	<0.02	<0.02		
Etridiazole	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Pentachlorobenzene	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Propachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Quintozene (PCNB)	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Omethoate	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Propazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Propyzamide	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Alachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Prometryn	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Telodrin	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Terbutryn	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Chlorothalonil	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Etrimphos	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Metazachlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Cyanazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Trietazine	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Coumaphos	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Phosphamidon I	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		
Phosphamidon II	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
#	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.		23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021	23/09/2021
diss.fit	Dissolved / filtered sample.							
tot.unfit	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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		25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021	25/09/2021
(F)	Trigger breach confirmed		210925-62	210925-62	210925-62	210925-62	210925-62	210925-62
1-4-5@	Sample deviation (see appendix)		25046738	25046777	25046686	25046673	25046699	25046728
Component	LOD/Units		Method					
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Chlorophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Methylphenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
2-Nitrophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
3-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Chloroaniline (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Methylphenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
4-Nitrophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
Azobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
Acenaphthylene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
Acenaphthene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
Anthracene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<16 #	<4 #	<4 #	<8 #	<2 #	<16 #
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

SVOC MS (W) - Aqueous

Results Legend			Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
# ISO17025 accredited. M mCERTS accredited. sq Aqueous / settled sample. dis.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1-4*6@ 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) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021
Component	LOD/Units	Method							
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Carbazole (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Chrysene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Dibenzofuran (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	65.7 #	206 #	222 #	201 #	127 #	278 #	
Diethyl phthalate (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Dimethyl phthalate (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<40 #	<10 #	<10 #	<20 #	<5 #	<40 #	
Fluoranthene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Fluorene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Hexachlorobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Pentachlorophenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Phenol (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Hexachloroethane (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Nitrobenzene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Naphthalene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Isophorone (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Phenanthrene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
Pyrene (aq)	<1 µg/l	TM176	<8 #	<2 #	<2 #	<4 #	<1 #	<8 #	
SVOC TIC (aq)		TM176	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected	
Total SVOC TIC	<10 µg/l	TM176	<80	<20	<20	<40	<10	1060	
2(3H)-Benzo[thiazolone	µg/l	TM176						203	
Triisopropylphosphate	µg/l	TM176						715	



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	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		
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
aq	Aqueous / settled sample.		23/09/2021	23/09/2021	23/09/2021	23/09/2021		
diss.fit	Dissolved / filtered sample.							
tot.unfit	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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		25/09/2021	25/09/2021	25/09/2021	25/09/2021		
(F)	Trigger breach confirmed		210925-62	210925-62	210925-62	210925-62		
1-4	Sample deviation (see appendix)		25046753	25046791	25046717	25046763		
Component	LOD/Units	Method						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Chlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Methylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Nitroaniline (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
2-Nitrophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
3-Nitroaniline (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Chloroaniline (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Methylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Nitroaniline (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
4-Nitrophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
Azobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
Acenaphthylene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
Acenaphthene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
Anthracene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<8 #	<8 #	<8 #	<8 #		
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

SVOC MS (W) - Aqueous

Results Legend			Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	ISO17025 accredited.		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) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021		
M	mCERTS accredited.			25/09/2021 210925-62 25046753	25/09/2021 210925-62 25046791	25/09/2021 210925-62 25046717	25/09/2021 210925-62 25046763		
sq	Aqueous / filtered sample.								
dis.filt	Dissolved / filtered sample.								
tot.unfilt	Total / unfiltered sample.								
**	Subcontracted - refer to subcontractor report for accreditation status.								
**	% 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								
1-4*6@	Sample deviation (see appendix)								
Component	LOD/Units	Method							
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Carbazole (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Chrysene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Dibenzofuran (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
n-Butyl phthalate (aq)	<1 µg/l	TM176	212 #	222 #	224 #	195 #			
Diethyl phthalate (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Dimethyl phthalate (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<20 #	<20 #	<20 #	<20 #	<20 #		
Fluoranthene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Fluorene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Hexachlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Pentachlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Phenol (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Hexachloroethane (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Nitrobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Naphthalene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Isophorone (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Phenanthrene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
Pyrene (aq)	<1 µg/l	TM176	<4 #	<4 #	<4 #	<4 #	<4 #		
SVOC TIC (aq)		TM176	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected		
Total SVOC TIC	<10 µg/l	TM176	<40	<40	<40	<40	<40		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

VOC MS (W)

Results Legend # ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.fit Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1-4*§@ Sample deviation (see appendix)		Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
Component	LOD/Units	Method	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046738	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046777	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046686	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046673	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046699	0.00 - 0.00 Ground Water (GW) 23/09/2021 25/09/2021 210925-62 25046728
Dibromofluoromethane**	%	TM208	110	104	101	103	102	101
Toluene-d8**	%	TM208	89	89.7	89.5	90	89.6	88.4
4-Bromofluorobenzene**	%	TM208	92.7	92.1	90.8	91.2	91.2	91.2
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Carbon disulphide	<1 µg/l	TM208	<1 #	1.02 #	<1 #	<1 #	<1 #	<1 #
Dichloromethane	<3 µg/l	TM208	<3 #	<3 #	<3 #	<3 #	<3 #	<3 #
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
2,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chloroform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Dibromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromodichloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Toluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

VOC MS (W)

Results Legend			Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31
# ISO17025 accredited. M mCERTS accredited. AQ Aqueous / settled sample. dis.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report for accreditation status. ** % 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 1.4# 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) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021	0.00 - 0.00 Ground Water (GW) 23/09/2021
Component	LOD/Units	Method							
1,3-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Tetrachloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Dibromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromoethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Ethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Styrene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromoform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Isopropylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Propylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
2-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
sec-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
n-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Hexachlorobutadiene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

VOC MS (W)

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	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		
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
aq	Aqueous / settled sample.		23/09/2021	23/09/2021	23/09/2021	23/09/2021		
diss.fit	Dissolved / filtered sample.							
tot.unfit	Total / unfiltered sample.		25/09/2021	25/09/2021	25/09/2021	25/09/2021		
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% 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		210925-62	210925-62	210925-62	210925-62		
(F)	Trigger breach confirmed		25046753	25046791	25046717	25046763		
1-4	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Dibromofluoromethane**	%	TM208	103	103	104	100		
Toluene-d8**	%	TM208	90.8	90	90.2	90.2		
4-Bromofluorobenzene**	%	TM208	93.2	93.5	92.6	90.3		
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Chloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Bromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Chloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Carbon disulphide	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Dichloromethane	<3 µg/l	TM208	<3 #	<3 #	<3 #	<3 #		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
2,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Bromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Chloroform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Benzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Dibromomethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Bromodichloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Toluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

VOC MS (W)

Results Legend		Customer Sample Ref.	GW 09_32	GW 09_35	GW 12_30	GW 12_33		
#	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		
M	mCERTS accredited.		Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
sq	Aqueous / settled sample.		23/09/2021	23/09/2021	23/09/2021	23/09/2021		
dis.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
**	Subcontracted - refer to subcontractor report for accreditation status.		25/09/2021	25/09/2021	25/09/2021	25/09/2021		
**	% 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		210925-62	210925-62	210925-62	210925-62		
(F)	Trigger breach confirmed		25046753	25046791	25046717	25046763		
1.4.5@	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 #		
1,1,1,2-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: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Table of Results - Appendix

Method No	Reference	Description
Calculation		
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
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
TM245	By GC-FID	Determination of GRO by Headspace in waters
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: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Test Completion Dates

Lab Sample No(s)	25046738	25046777	25046686	25046673	25046699	25046728	25046753	25046791	25046717	25046763
Customer Sample Ref.	GW 03_09	GW 06_34	GW 06_36	GW 06_39	GW 07_40	GW 09_31	GW 09_32	GW 09_35	GW 12_30	GW 12_33
AGS Ref.										
Depth	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
Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Alkalinity as CaCO3	29-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	30-Sep-2021	01-Oct-2021	29-Sep-2021
Alkalinity Filtered as CaCO3	01-Oct-2021	29-Sep-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	29-Sep-2021	01-Oct-2021	01-Oct-2021
Ammoniacal Nitrogen	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021
Anions by Kone (w)	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021
BOD True Total	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021
COD Unfiltered	29-Sep-2021	29-Sep-2021	28-Sep-2021	28-Sep-2021	29-Sep-2021	29-Sep-2021	29-Sep-2021	28-Sep-2021	29-Sep-2021	29-Sep-2021
Conductivity (at 20 deg.C)	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021
Cyanide Comp/Free/Total/Thiocyanate	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021
Dissolved Metals by ICP-MS	30-Sep-2021	30-Sep-2021	30-Sep-2021	29-Sep-2021	30-Sep-2021	30-Sep-2021	29-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021
Dissolved Organic/Inorganic Carbon	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	03-Oct-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	01-Oct-2021
EPH (DRO) (C10-C40) Aqueous (W)	03-Oct-2021	29-Sep-2021	03-Oct-2021	03-Oct-2021	03-Oct-2021	03-Oct-2021	29-Sep-2021	03-Oct-2021	29-Sep-2021	03-Oct-2021
GRO by GC-FID (W)	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021
Ionic Balance	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021
Mercury Dissolved	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	30-Sep-2021	30-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021
Nitrite by Kone (w)	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021	27-Sep-2021
Organotins in Aqueous Samples	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021
Pesticides (Suite I) by GCMS	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021
Pesticides (Suite II) by GCMS	30-Sep-2021	30-Sep-2021	30-Sep-2021	05-Oct-2021	30-Sep-2021	05-Oct-2021	05-Oct-2021	30-Sep-2021	30-Sep-2021	05-Oct-2021
Pesticides (Suite III) by GCMS	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021
pH Value	28-Sep-2021	27-Sep-2021	28-Sep-2021	27-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	27-Sep-2021	28-Sep-2021	28-Sep-2021
Phenols by HPLC (W)	28-Sep-2021	30-Sep-2021	30-Sep-2021	28-Sep-2021	30-Sep-2021	30-Sep-2021	04-Oct-2021	30-Sep-2021	28-Sep-2021	30-Sep-2021
Sulphide	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021	28-Sep-2021
SVOC MS (W) - Aqueous	01-Oct-2021	30-Sep-2021	30-Sep-2021	30-Sep-2021	01-Oct-2021	01-Oct-2021	01-Oct-2021	29-Sep-2021	01-Oct-2021	30-Sep-2021
Total EPH (aq)	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021
VOC MS (W)	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021	04-Oct-2021



CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

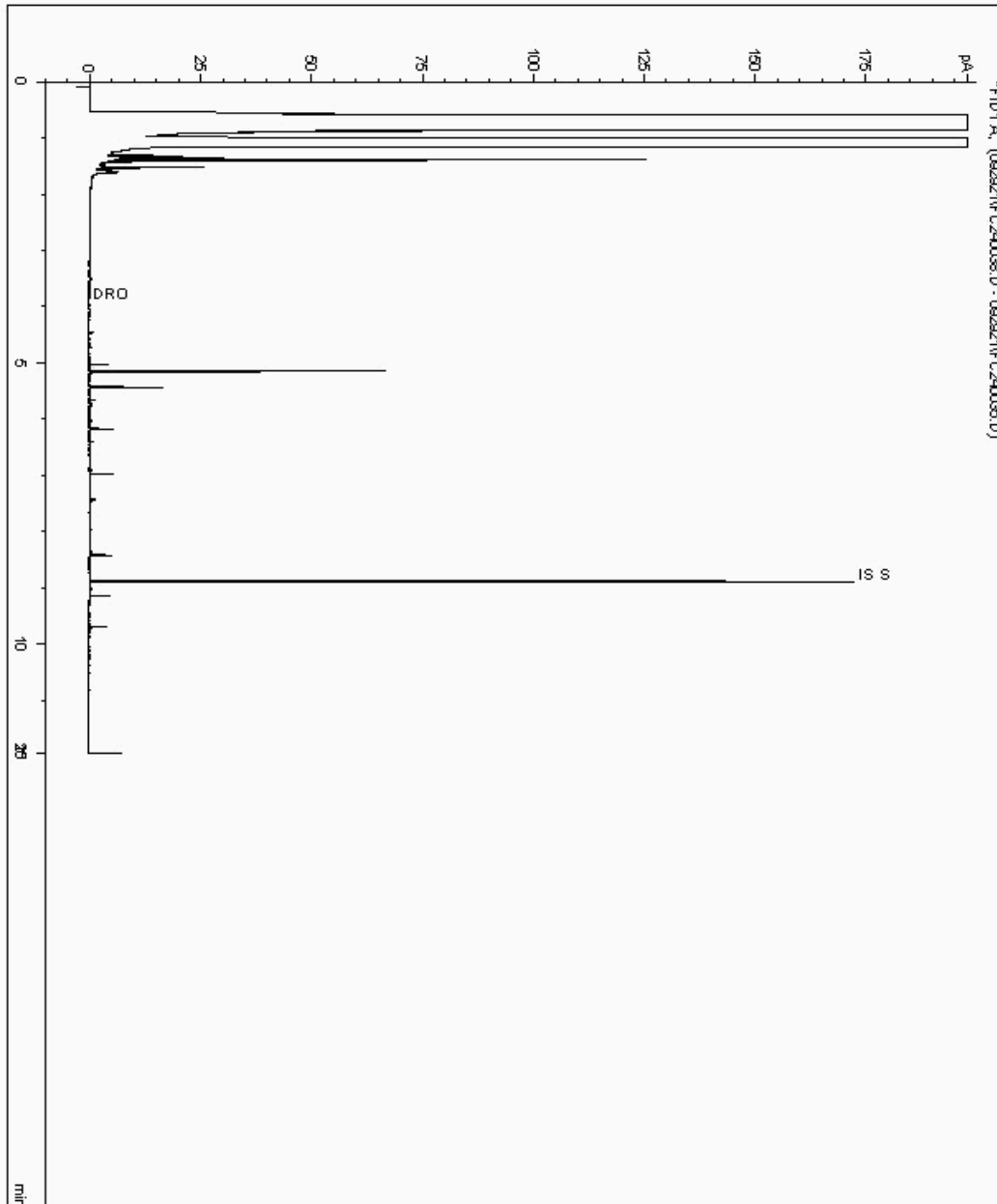
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047477
Sample ID : GW 09_31

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416399-
Date Acquired : 30/09/2021 19:20:14 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

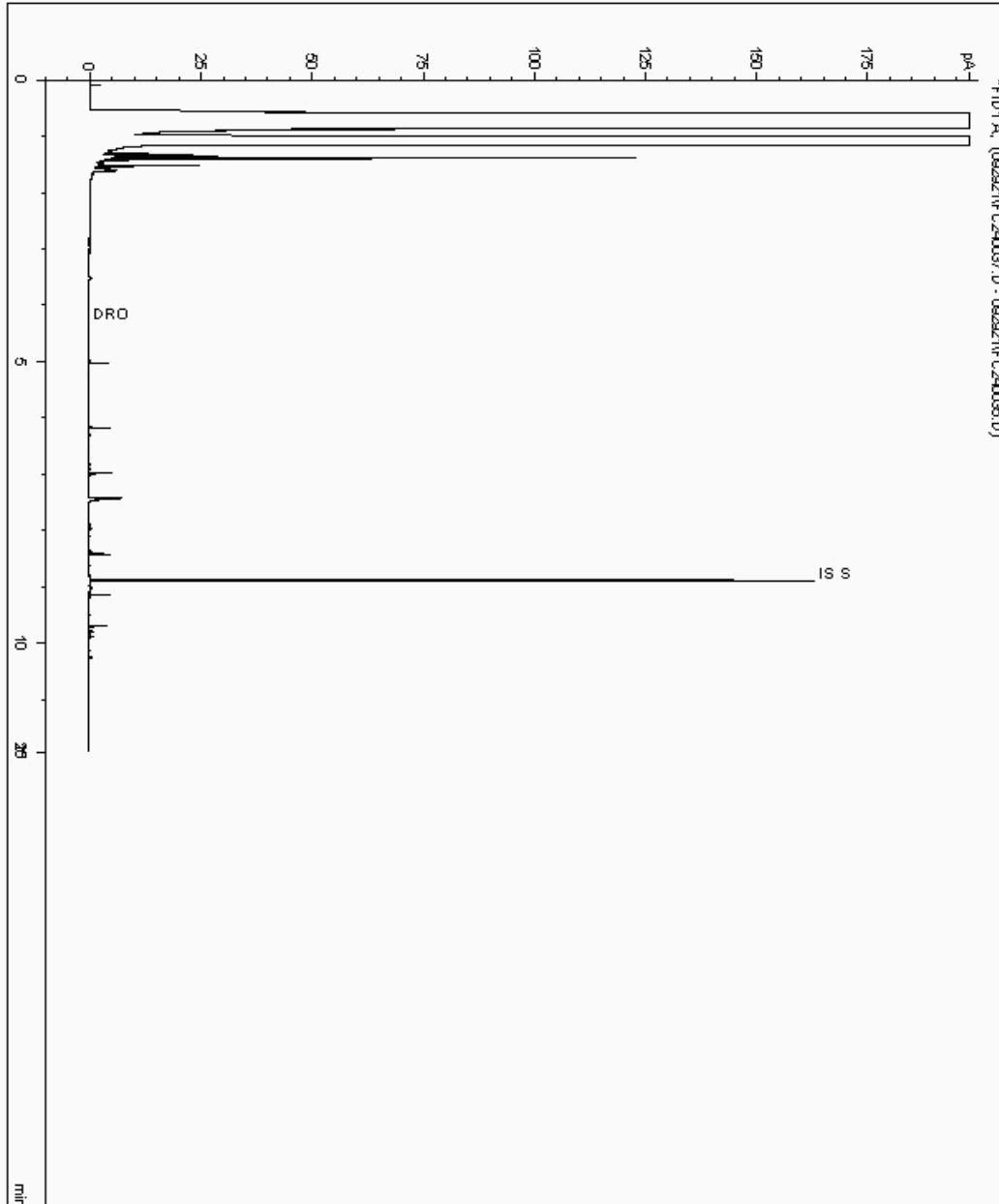
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047494
Sample ID : GW_06_36

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416321-
Date Acquired : 30/09/2021 18:56:06 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

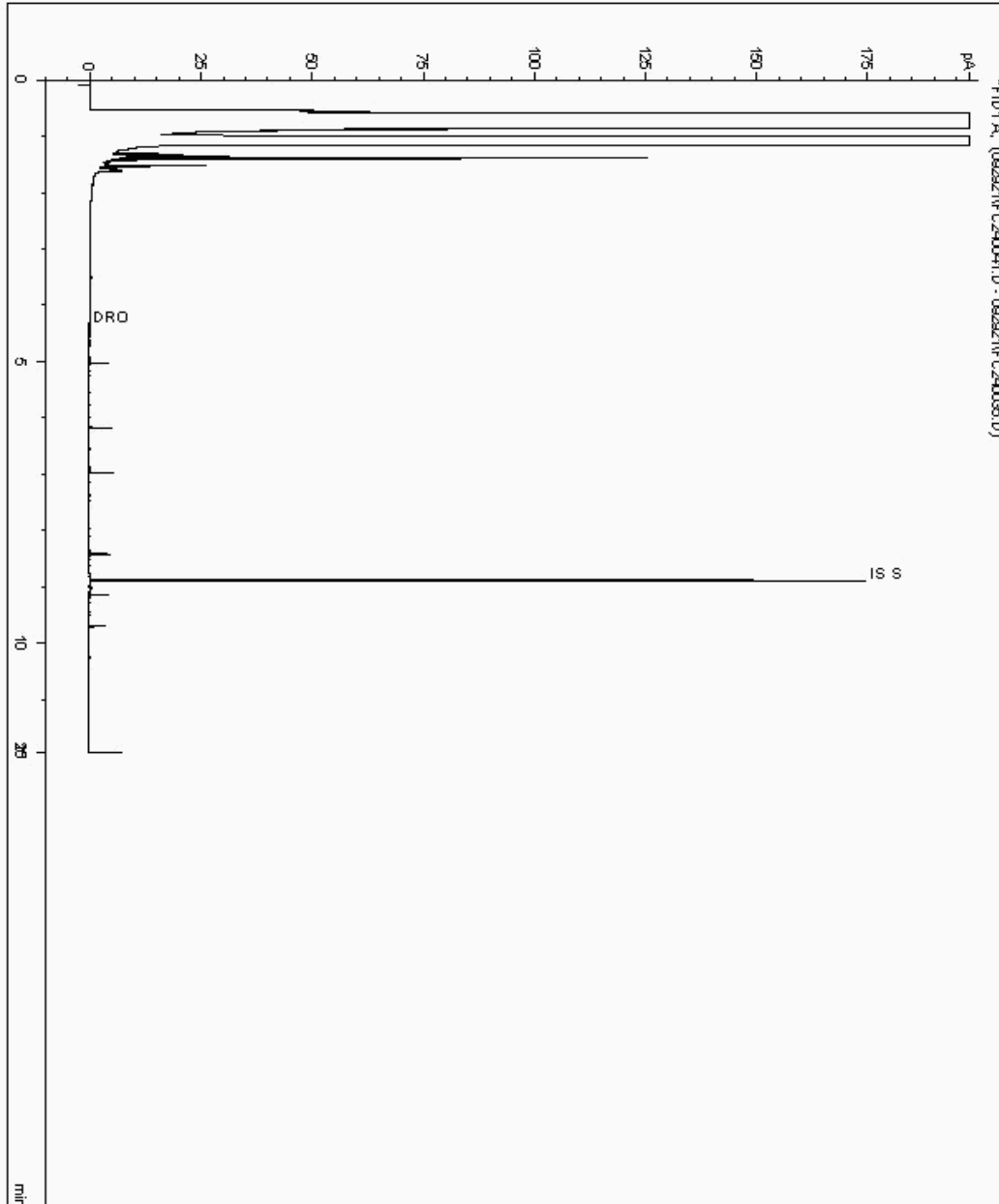
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047733
Sample ID : GW_09_35

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416529-
Date Acquired : 30/09/2021 20:32:27 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

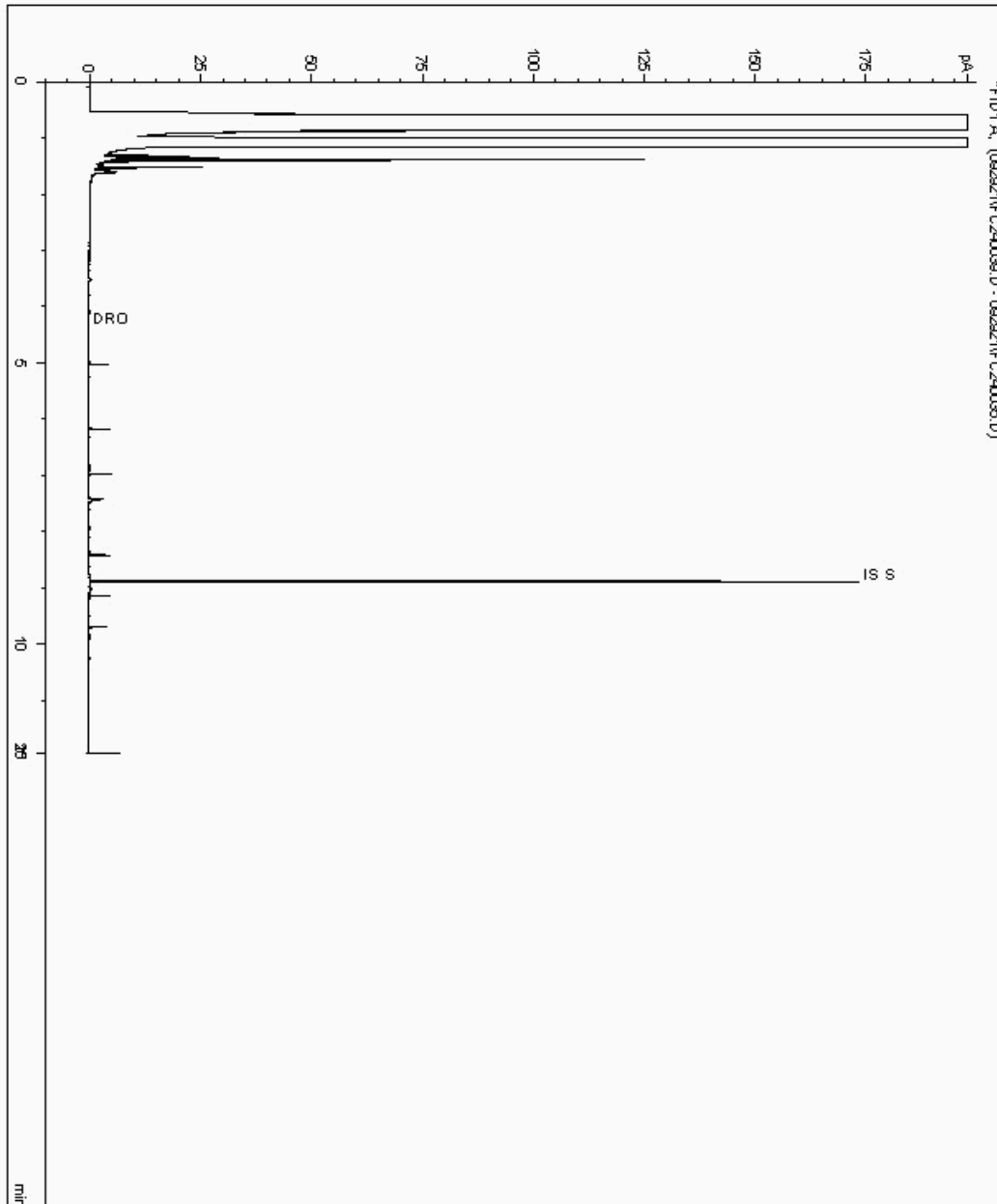
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047741
Sample ID : GW_12_33

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416477-
Date Acquired : 30/09/2021 19:44:15 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

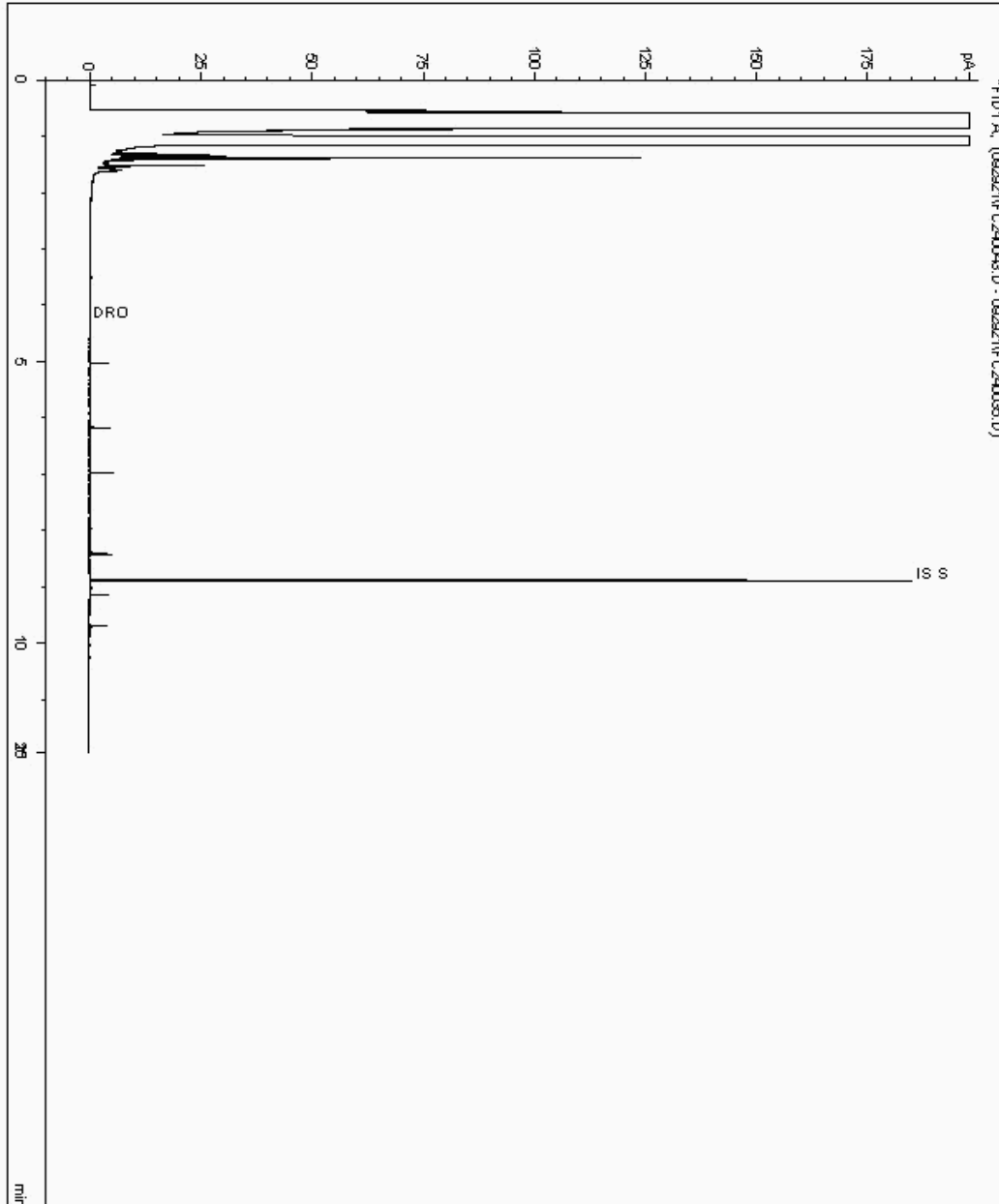
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047762
Sample ID : GW_06_39

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416278-
Date Acquired : 30/09/2021 21:20:25 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

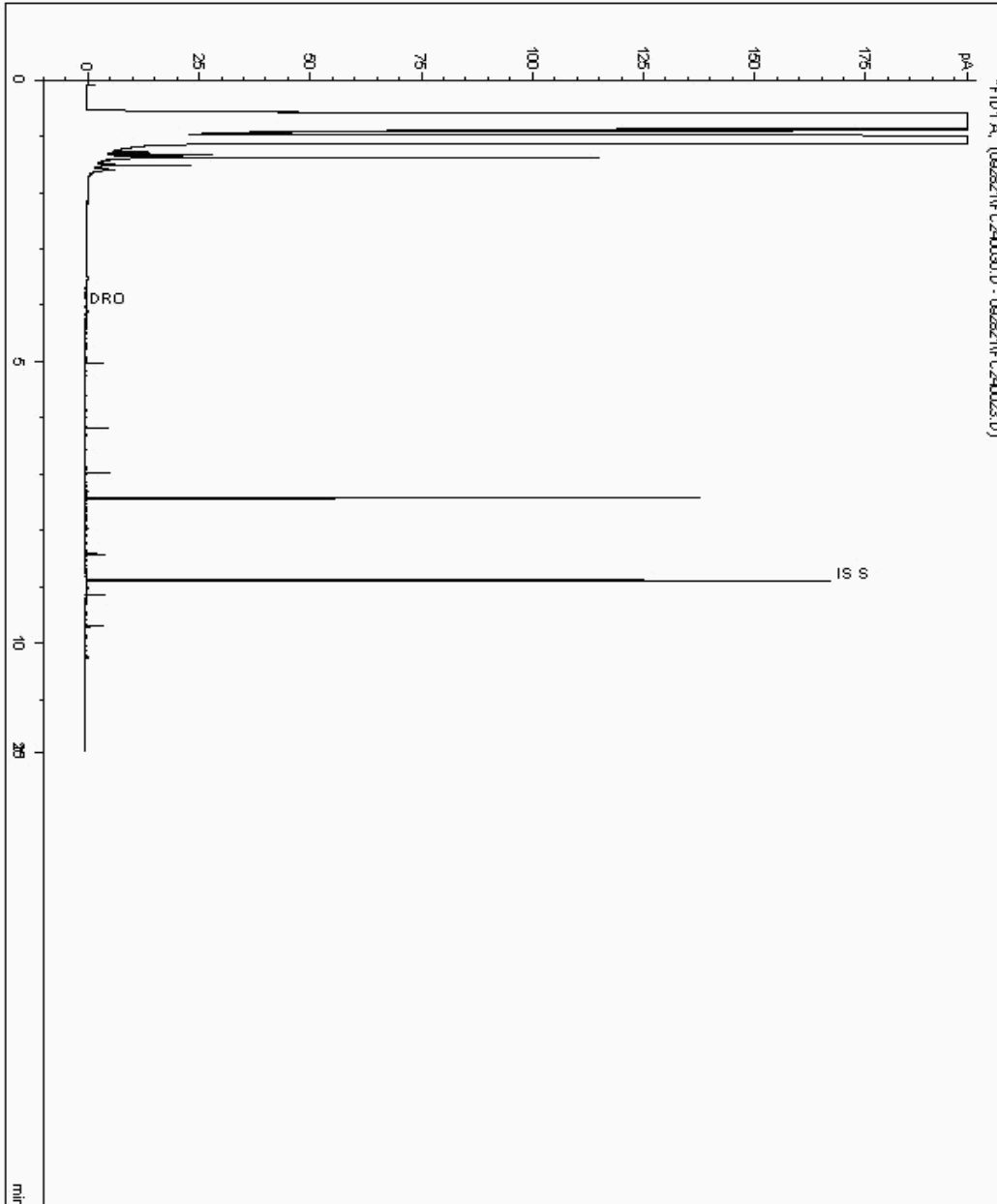
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047793
Sample ID : GW_06_34

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416503-
Date Acquired : 28/09/2021 23:09:07 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

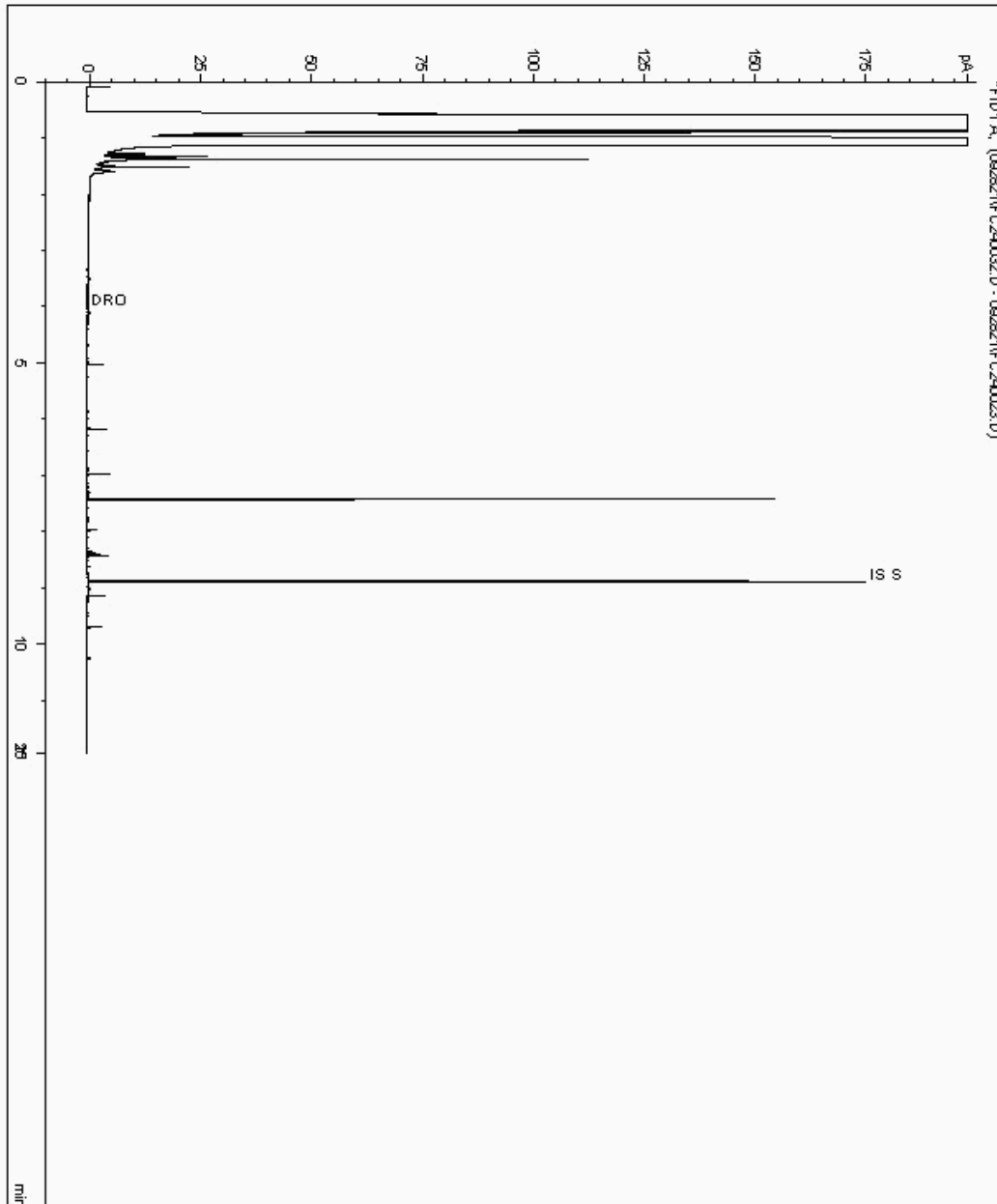
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047902
Sample ID : GW_09_32

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416451-
Date Acquired : 28/09/2021 23:57:58 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

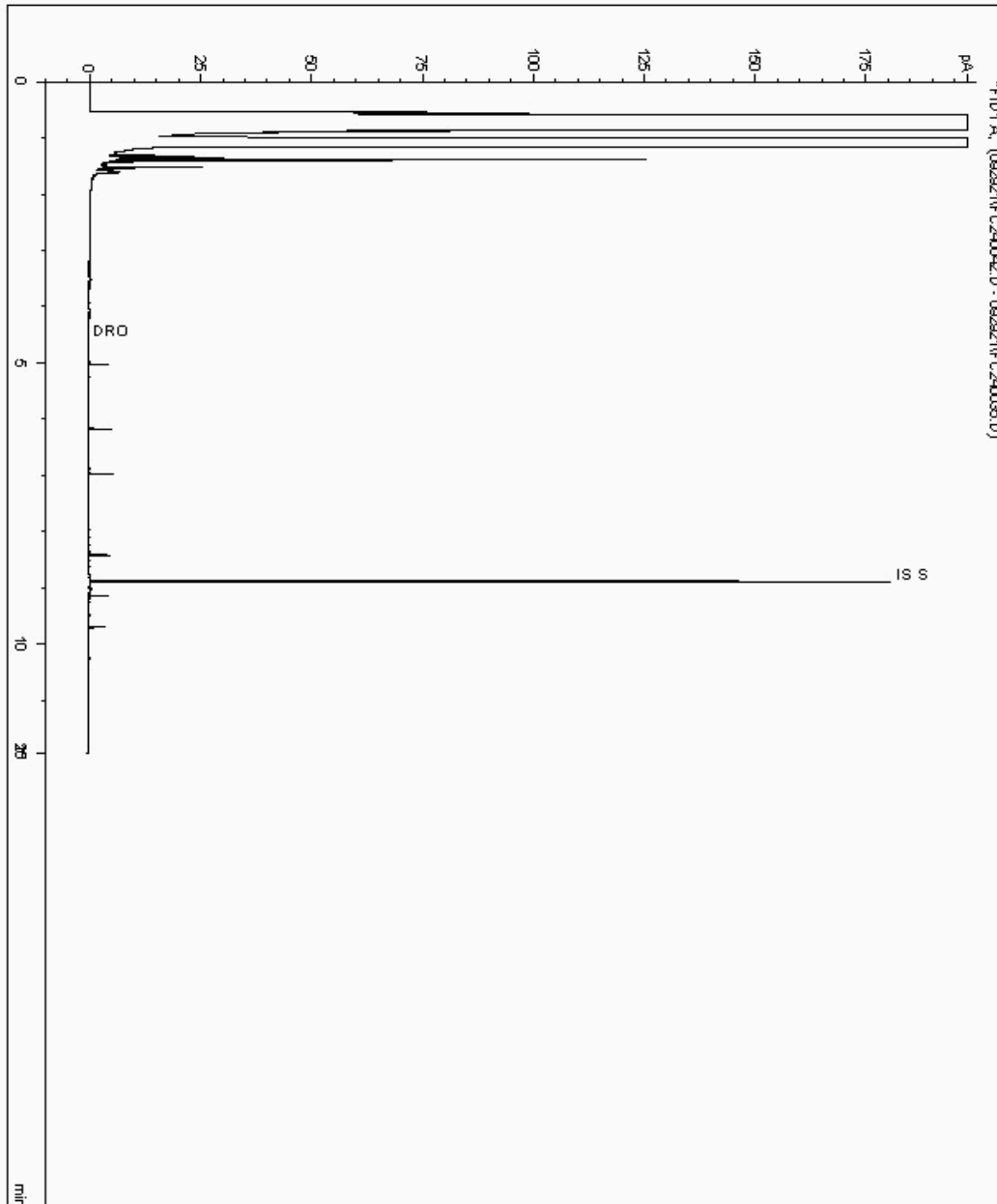
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25047916
Sample ID : GW_03_09

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416425-
Date Acquired : 30/09/2021 20:56:22 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

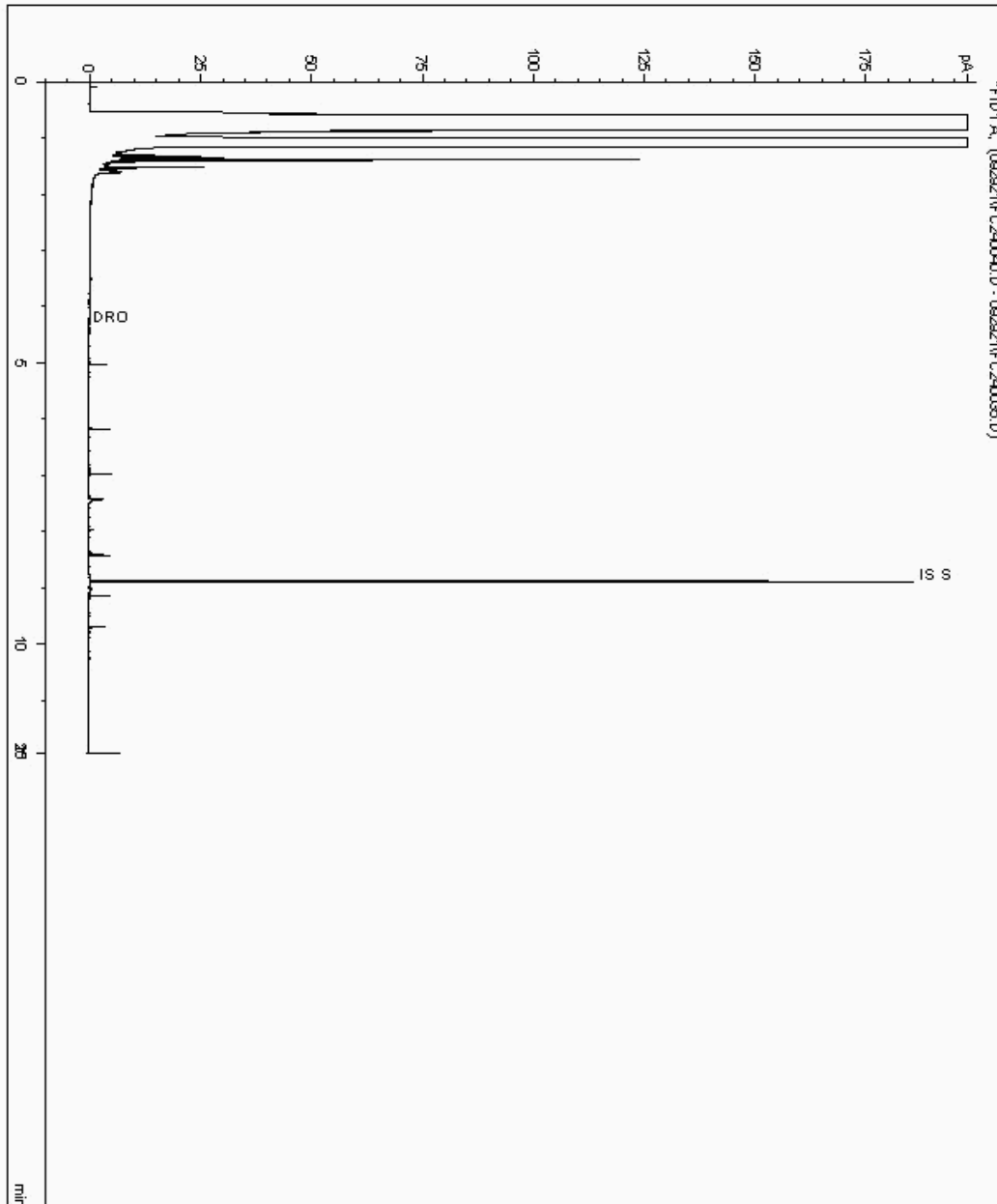
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25048335
Sample ID : GW 07_40

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416347-
Date Acquired : 30/09/2021 20:08:22 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

Superseded Report:

Chromatogram

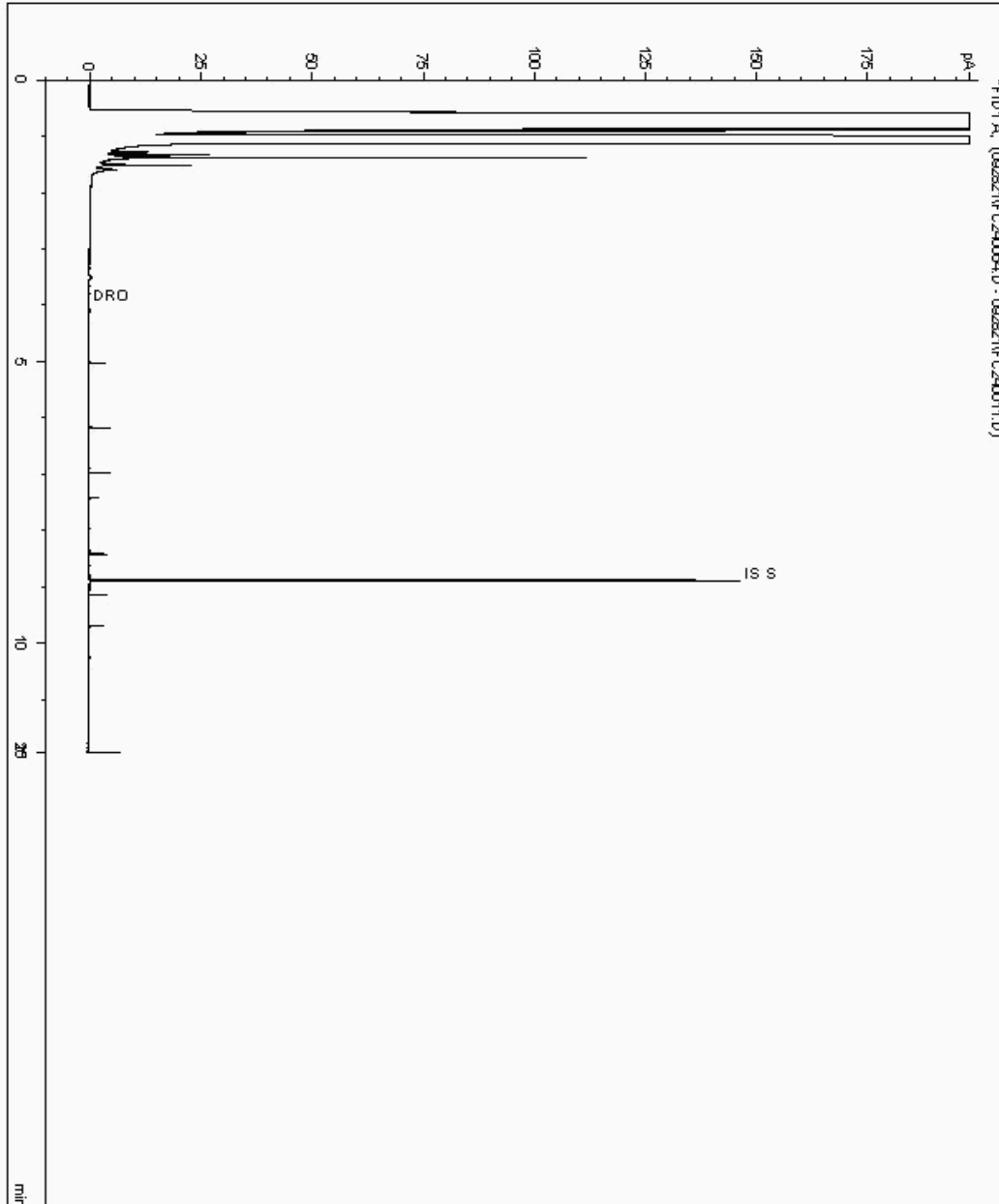
Analysis: EPH (DRO) (C10-C40) Aqueous (W)

Sample No : 25048352
Sample ID : GW 12_30

Depth : 0.00 - 0.00

EPH Range Organics (C10 - C40)

Sample Identity: 23416373-
Date Acquired : 29/09/2021 18:03:00 PM
Units : ppm





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

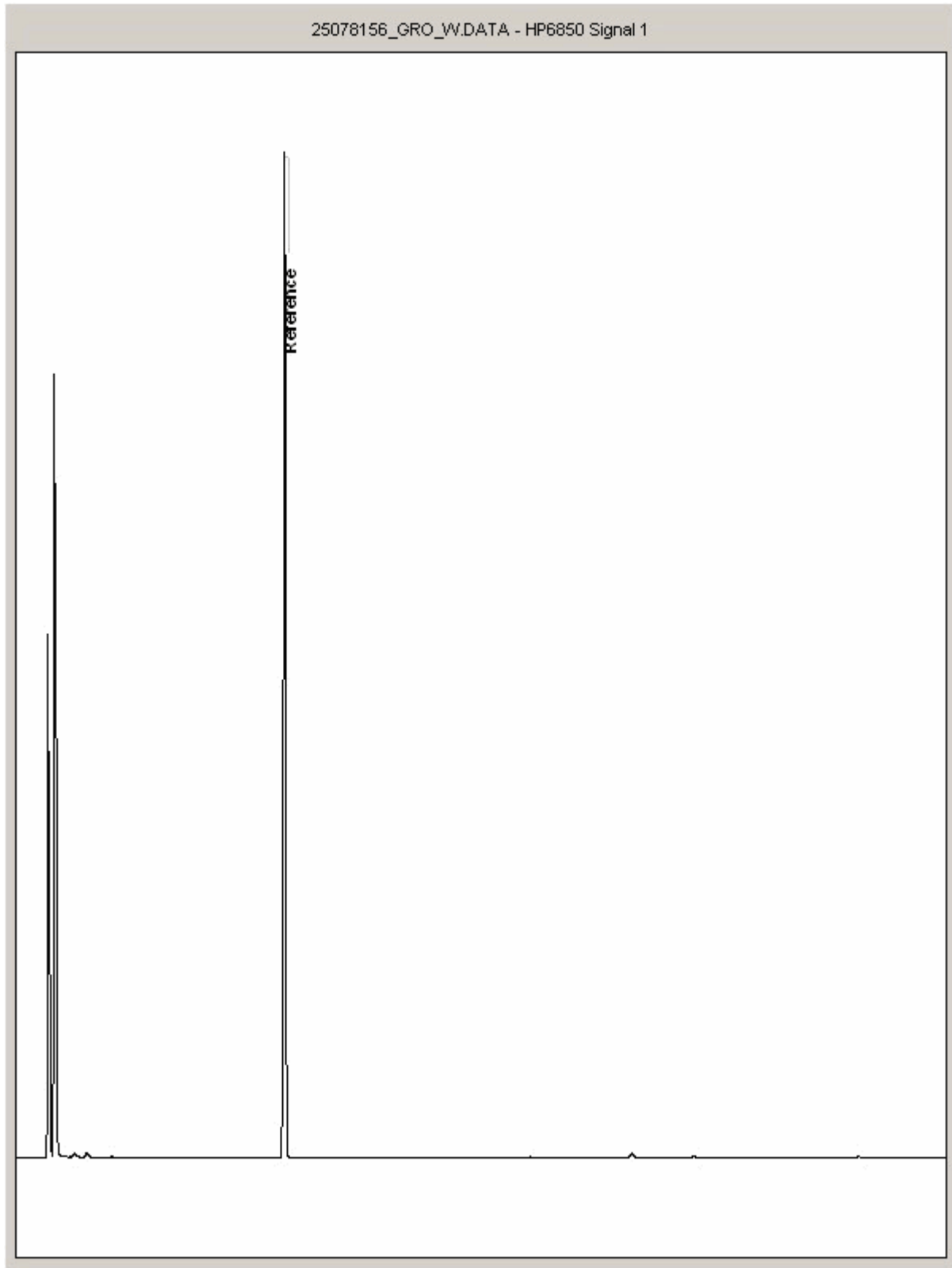
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25078156
Sample ID : GW_09_31

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

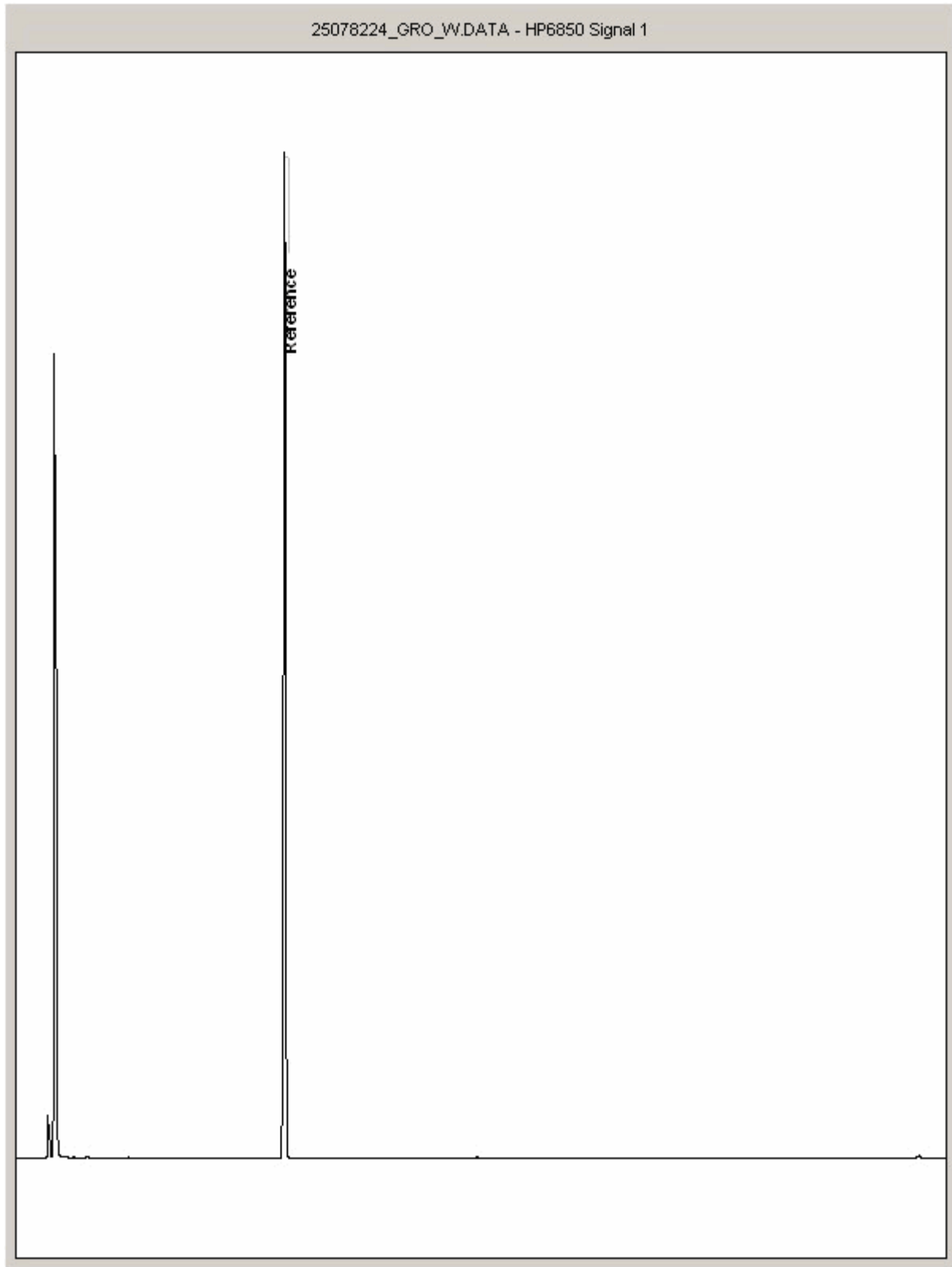
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25078224
Sample ID : GW 06_39

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

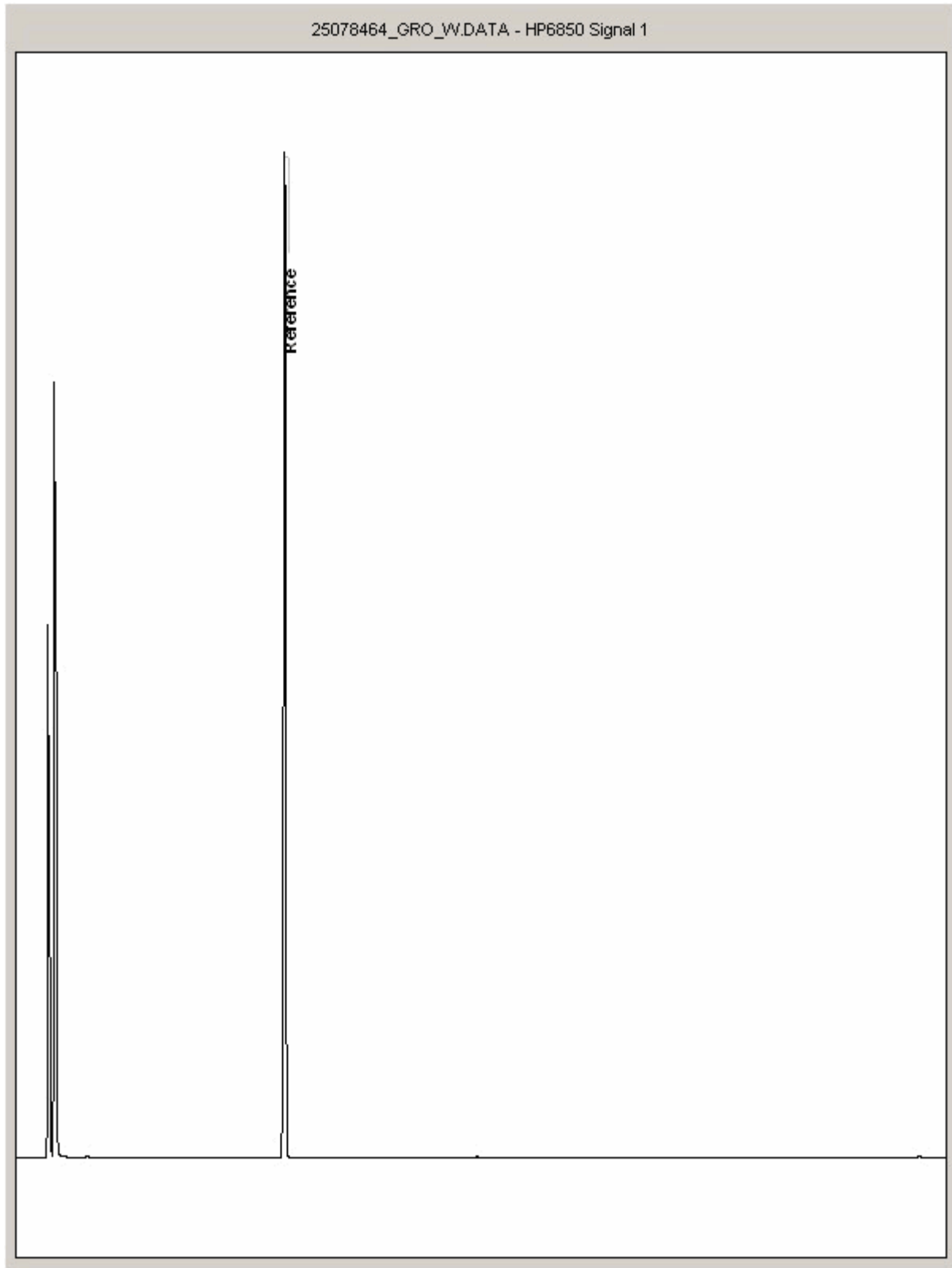
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25078464
Sample ID : GW_06_36

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

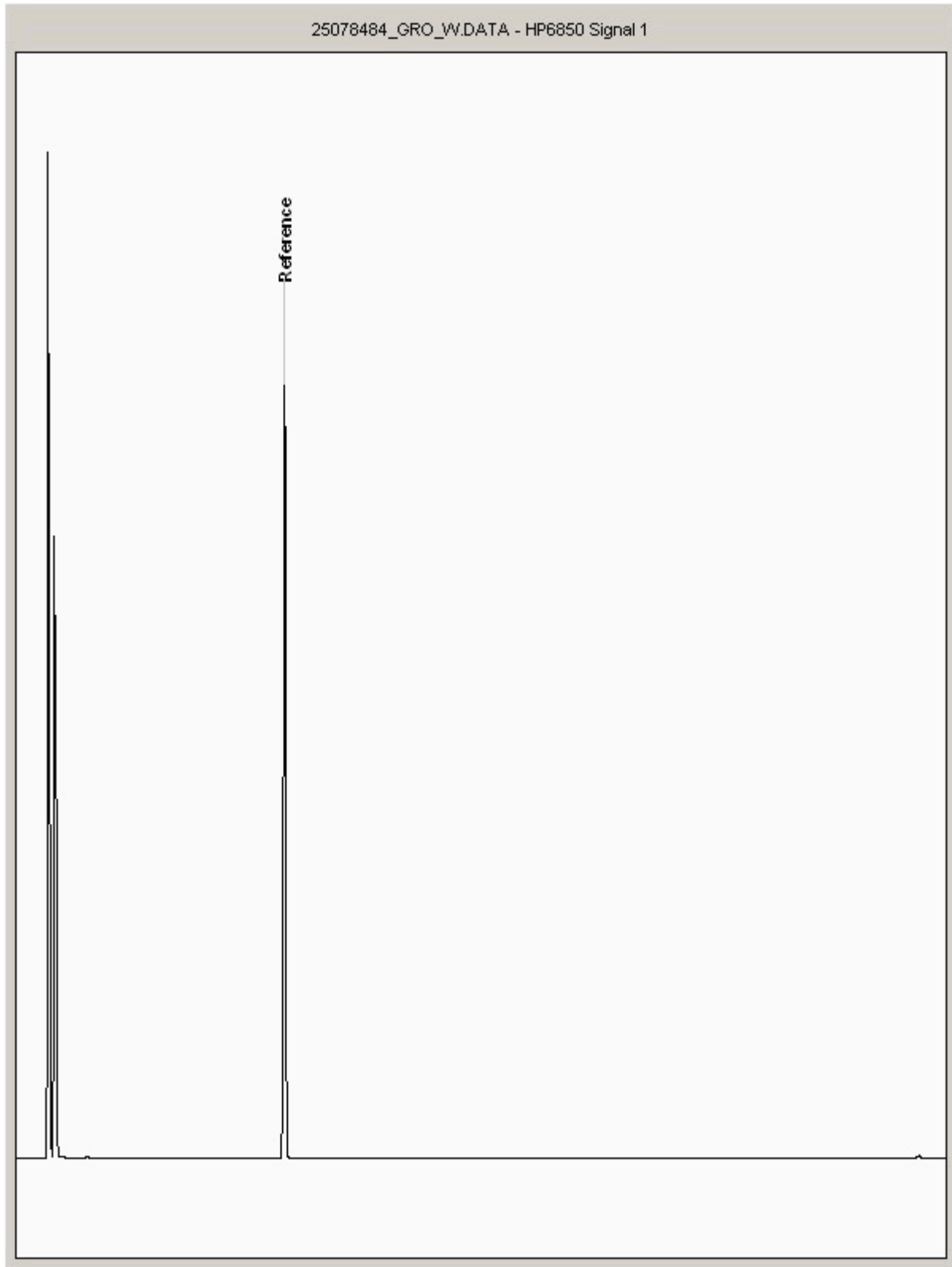
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25078484
Sample ID : GW 12_33

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

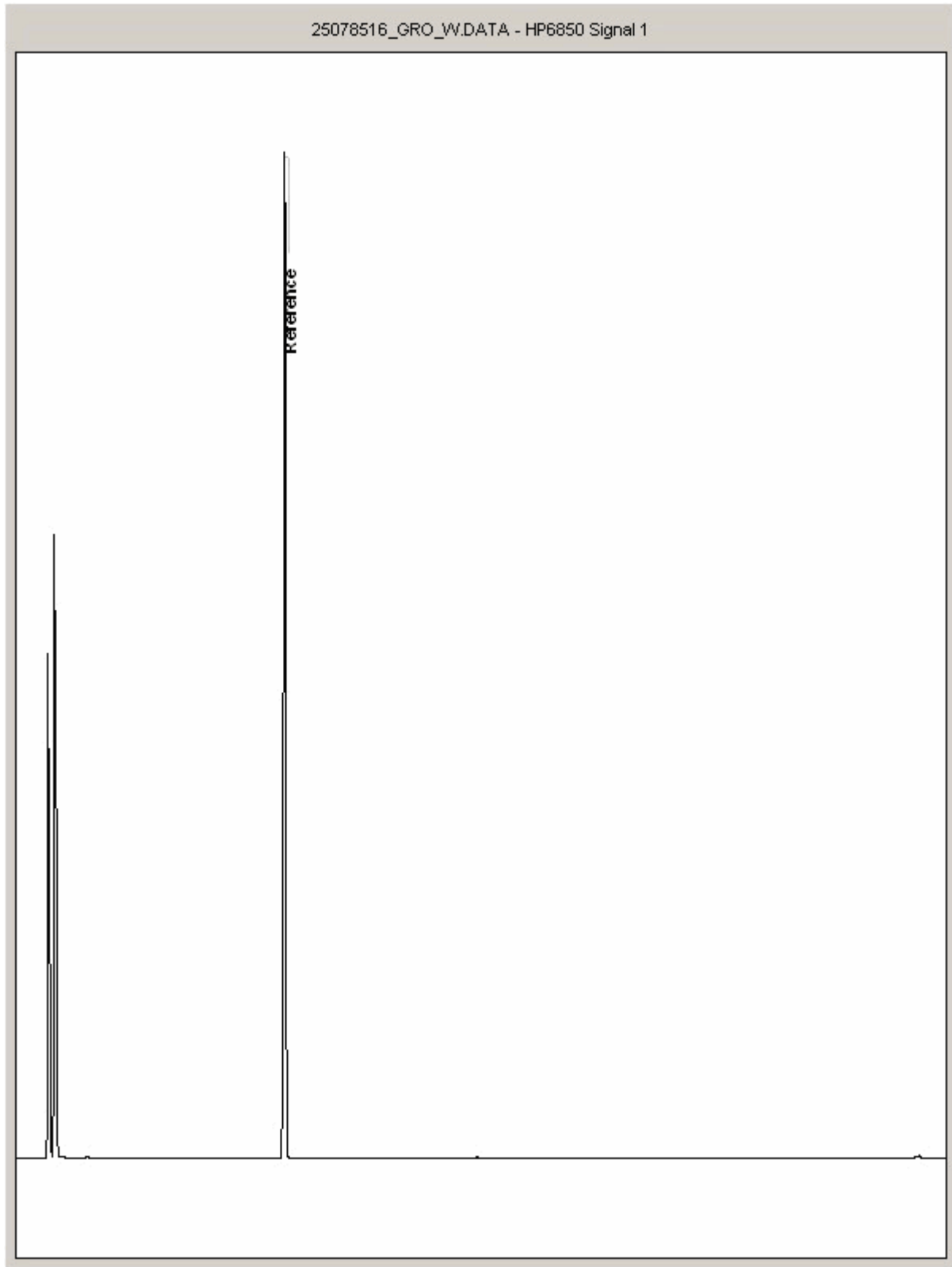
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25078516
Sample ID : GW_07_40

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

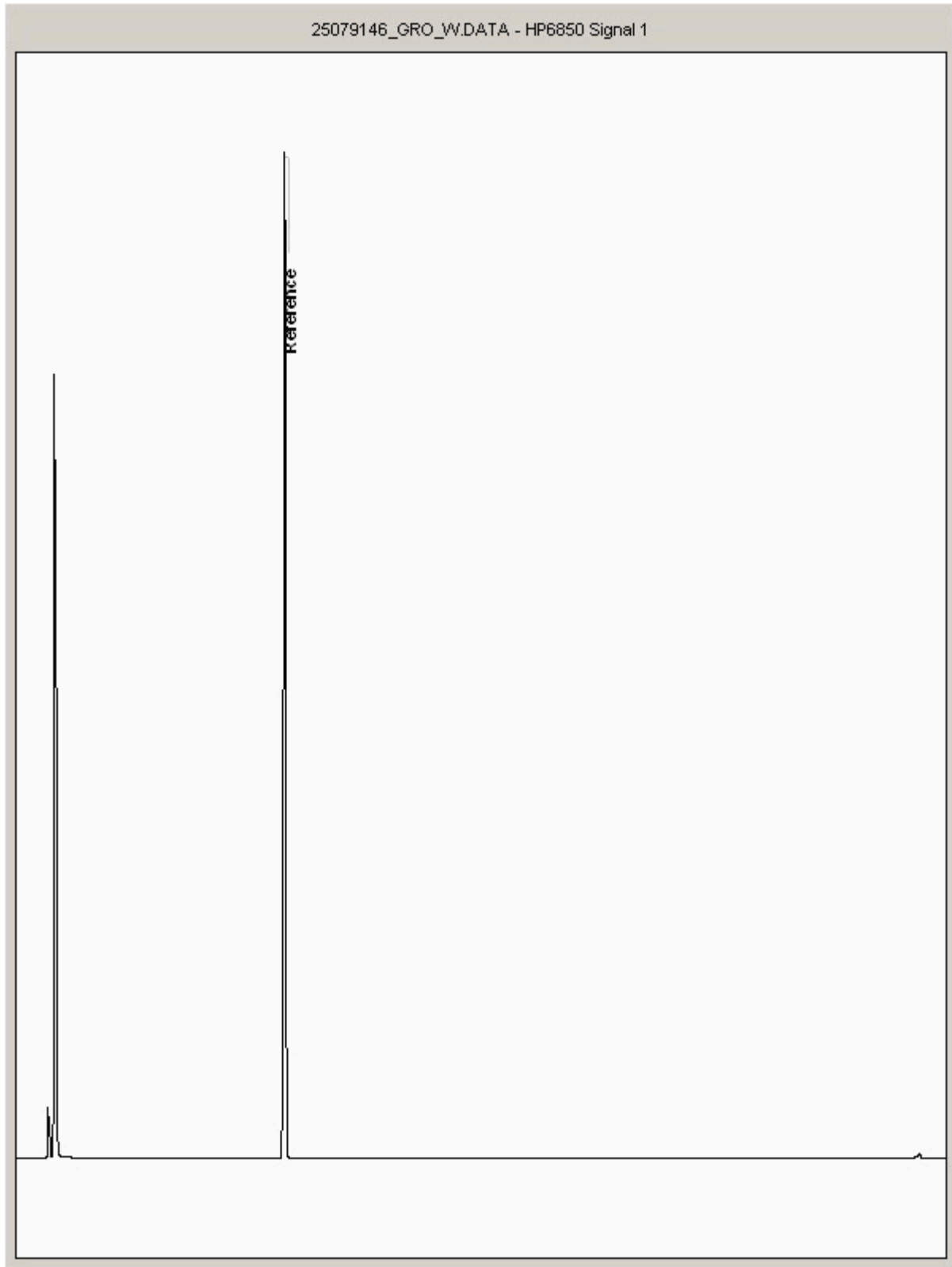
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25079146
Sample ID : GW_09_35

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

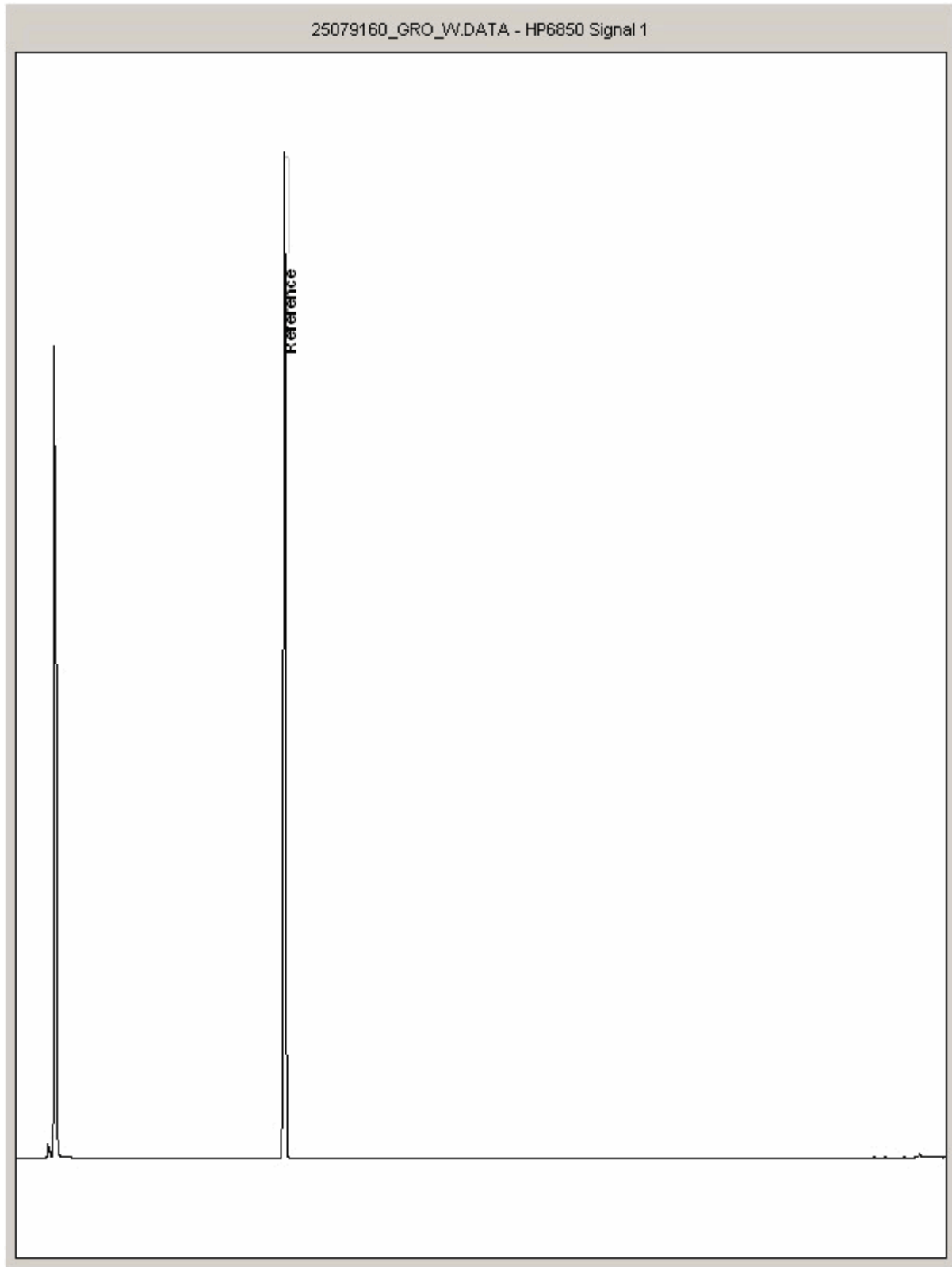
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25079160
Sample ID : GW_03_09

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

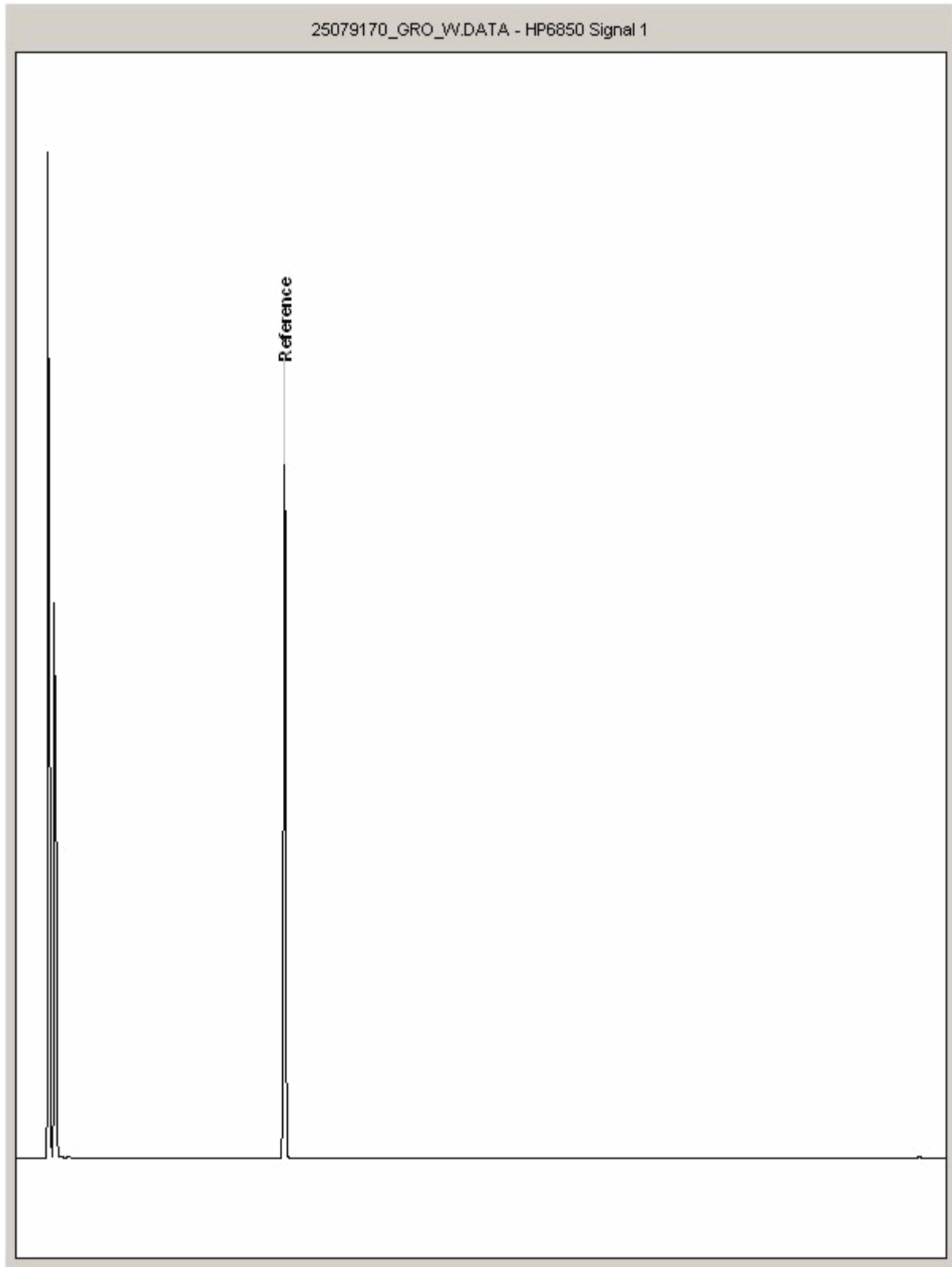
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25079170
Sample ID : GW_06_34

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

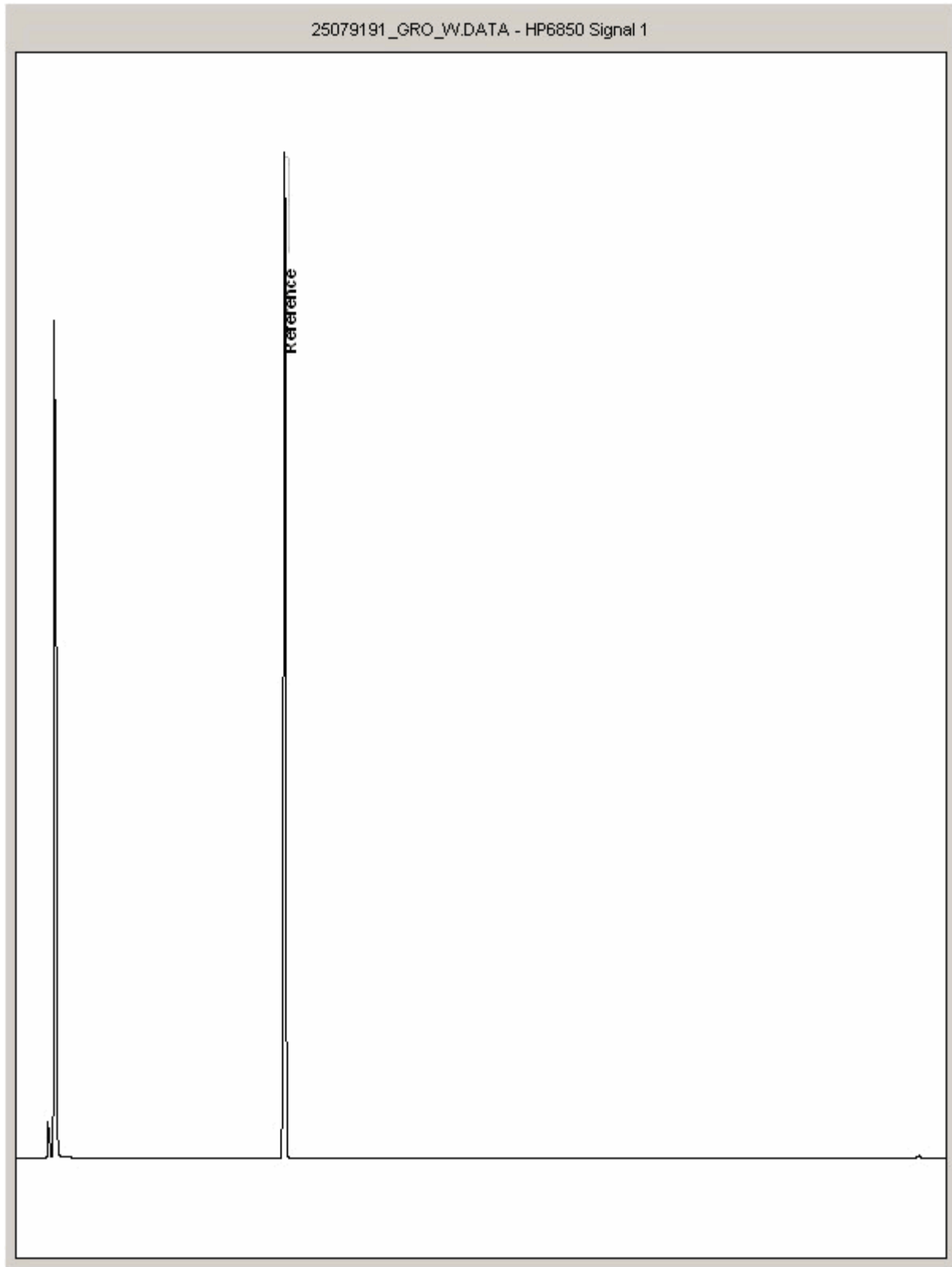
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25079191
Sample ID : GW_09_32

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 210925-62
Client Ref.: Sept GW 2021 Part 1 Area 2

Report Number: 615829
Location: Newport landfill

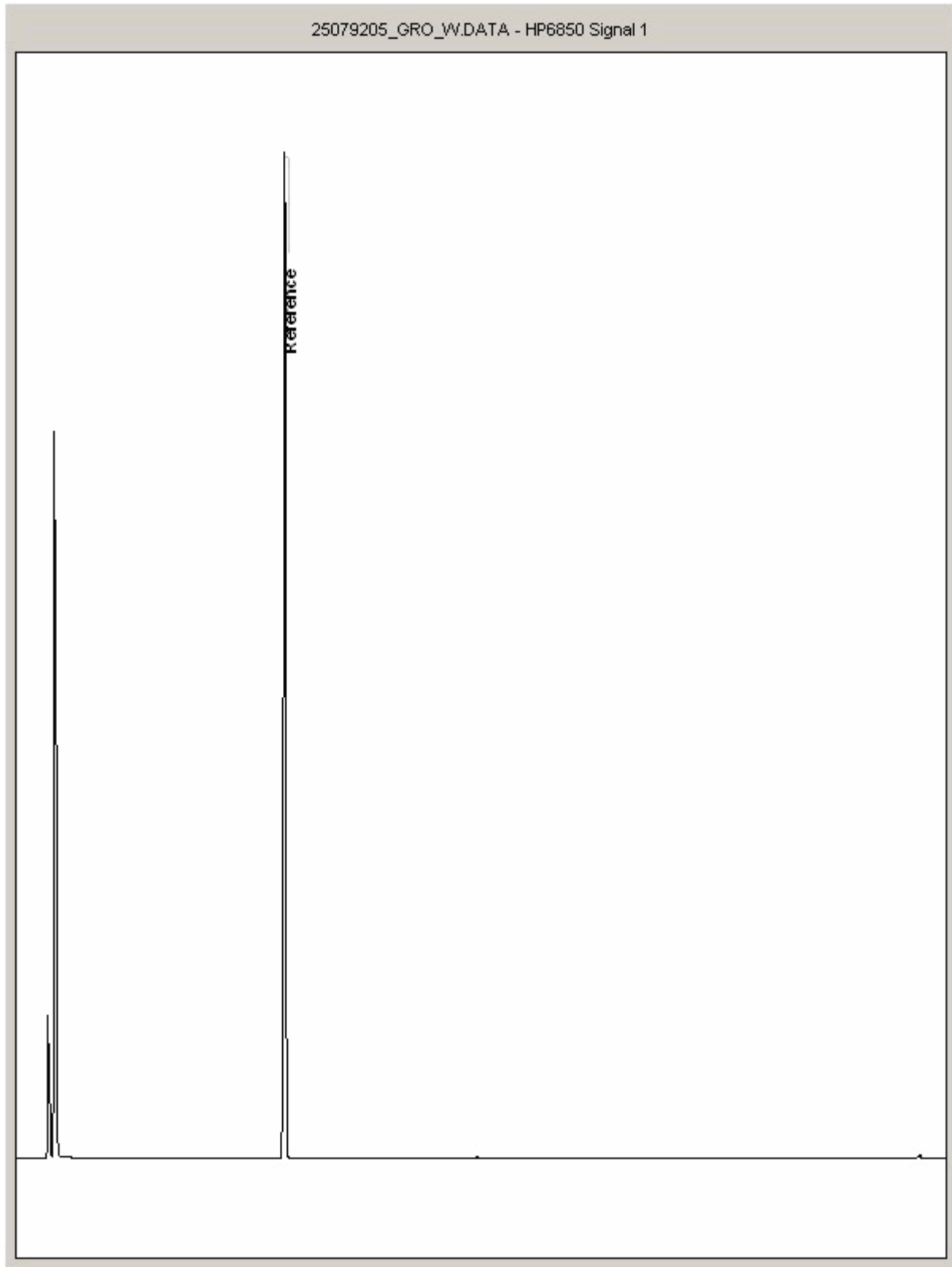
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 25079205
Sample ID : GW 12_30

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

SDG: 210925-62 Client Reference: Sept GW 2021 Part 1 Area Report Number: 615829
 Location: Newport landfill Order Number: Superseded Report:

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. 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.

3. 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.

4. 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.

5. 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.

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

7. Results relate only to the items tested.

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

9. **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.

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

11. 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.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury.

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

14. 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.

15. 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.

16. 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.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **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.

19. 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	Matrix interference
◆	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
§	Sampled on date not provided

20. Asbestos

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.

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.

Asbestos 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.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

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.