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Attention: Anselmo Zuqui

CERTIFICATE OF ANALYSIS

Date of report Generation: 21 June 2023
Customer: Minerex Environmental
Sample Delivery Group (SDG): 230602-65
Your Reference: 1099-028-COC29
Location: 1099 Arran Chemicals
Report No: 693170
Order Number:

This report has been revised and directly supersedes 692059 in its entirety.

We received 12 samples on Friday June 02, 2023 and 12 of these samples were scheduled for analysis which was completed on Wednesday June 21, 2023. 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 Laboratories (UK) Limited 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



1291



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
28091132	AMW1		0.00 - 0.00	30/05/2023
28091121	AMW2		0.00 - 0.00	30/05/2023
28091267	AMW3		0.00 - 0.00	31/05/2023
28091244	AMW4		0.00 - 0.00	31/05/2023
28091224	AMW5		0.00 - 0.00	30/05/2023
28091208	AMW6		0.00 - 0.00	30/05/2023
28091193	AMW8		0.00 - 0.00	30/05/2023
28091182	AMW11		0.00 - 0.00	31/05/2023
28091171	BH105		0.00 - 0.00	31/05/2023
28091149	BH107		0.00 - 0.00	31/05/2023
28091160	MS1		0.00 - 0.00	31/05/2023
28091110	SW104		0.00 - 0.00	31/05/2023

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



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Superseded Report: 692059

Results Legend Test 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	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type																		
		28091132	28091121	28091267	28091244	28091224	28091208																	
		AMW1	AMW2	AMW3	AMW4	AMW5	AMW6																	
		0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00																	
		1000ml glass bottle (ALE220)	1000ml glass bottle (ALE220)	1000ml glass bottle (ALE220)	1000ml glass bottle (ALE220)	1000ml glass bottle (ALE220)	1000ml glass bottle (ALE220)																	
		GW	GW	GW	GW	GW	GW																	
Acetonitrile*	All	NDPs: 0 Tests: 12																						
Alcohols/Acetates MS (W)	All	NDPs: 0 Tests: 12																						
Ammonium Low	All	NDPs: 0 Tests: 12																						
Anions by Kone (w)	All	NDPs: 0 Tests: 12																						
COD Unfiltered	All	NDPs: 0 Tests: 12																						
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 12																						
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 12																						
GRO by GC-FID (W)	All	NDPs: 0 Tests: 12																						
Hexavalent Chromium (w)	All	NDPs: 0 Tests: 12																						
Mercury Dissolved	All	NDPs: 0 Tests: 12																						
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 12																						
pH Value	All	NDPs: 0 Tests: 12																						
Phosphate by Kone (w)	All	NDPs: 0 Tests: 12																						
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 12																						
Total EPH (aq)	All	NDPs: 0 Tests: 12																						

28091149	BH107		0.00 - 0.00	Vial (ALE297)	GW														
				HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)						
28091182	AMW11		0.00 - 0.00	Vial (ALE297)	GW		X	X											
				HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)						
28091193	AMW8		0.00 - 0.00	Vial (ALE297)	GW		X	X											
				HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)						
28091208	AMW6		0.00 - 0.00	Vial (ALE297)	GW		X	X											
				HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNCO3 Filtered (ALE204)	H2SO4 (ALE244)						



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Superseded Report: 692059

Results Legend



Test



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

Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container												Sample Type	
				1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)		Vial (ALE297)
28091208	AMW6		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
28091224	AMW5		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
28091267	AMW3		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
28091244	AMW4		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
28091132	AMW1		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
28091121	AMW2		0.00 - 0.00	1000ml glass bottle (ALE220)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	1000ml glass bottle (ALE220)	Vial (ALE297)	GW
Total Organic and Inorganic Carbon		All	NDPs: 0 Tests: 12			X				X				X			
VOC MS (W)		All	NDPs: 0 Tests: 12				X				X				X		

28091149	BH107		0.00 - 0.00	Vial (ALE297)	GW			X
				HNO3 Filtered (ALE204)	GW			
				H2SO4 (ALE244)	GW	X		
				1000ml glass bottle (ALE220)	GW			
				Vial (ALE297)	GW			X
28091171	BH105		0.00 - 0.00	HNO3 Filtered (ALE204)	GW			
				H2SO4 (ALE244)	GW	X		
				1000ml glass bottle (ALE220)	GW			
				Vial (ALE297)	GW			X
				HNO3 Filtered (ALE204)	GW			
28091182	AMW11		0.00 - 0.00	HNO3 Filtered (ALE204)	GW			
				H2SO4 (ALE244)	GW	X		
				1000ml glass bottle (ALE220)	GW			
				Vial (ALE297)	GW			X
				HNO3 Filtered (ALE204)	GW			
28091193	AMW8		0.00 - 0.00	Vial (ALE297)	GW			X
				HNO3 Filtered (ALE204)	GW			
				H2SO4 (ALE244)	GW	X		
				1000ml glass bottle (ALE220)	GW			
				Vial (ALE297)	GW			X
28091208	AMW6		0.00 - 0.00	Vial (ALE297)	GW			X
				HNO3 Filtered (ALE204)	GW			
				H2SO4 (ALE244)	GW	X		
				1000ml glass bottle (ALE220)	GW			
				Vial (ALE297)	GW			X



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SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Results Legend <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center; gap: 5px;"> X Test </div> <div style="display: flex; align-items: center; gap: 5px;"> N 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	
		28091160	MS1		0.00 - 0.00	Vial (ALE297)	SW
					0.00 - 0.00	Vial (ALE297)	SW
					0.00 - 0.00	1000ml glass bottle (ALE220)	SW
					0.00 - 0.00	H2SO4 (ALE244)	SW
					0.00 - 0.00	HNO3 Filtered (ALE204)	SW
					0.00 - 0.00	HNO3 Filtered (ALE204)	SW
Acetonitrile*	All	NDPs: 0 Tests: 12				X	
Alcohols/Acetates MS (W)	All	NDPs: 0 Tests: 12			X	X	
Ammonium Low	All	NDPs: 0 Tests: 12			X	X	
Anions by Kone (w)	All	NDPs: 0 Tests: 12			X	X	
COD Unfiltered	All	NDPs: 0 Tests: 12			X	X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 12			X	X	
EPH (DRO) (C10-C40) Aqueous (W)	All	NDPs: 0 Tests: 12			X	X	
GRO by GC-FID (W)	All	NDPs: 0 Tests: 12			X	X	
Hexavalent Chromium (w)	All	NDPs: 0 Tests: 12			X	X	
Mercury Dissolved	All	NDPs: 0 Tests: 12			X	X	
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 12			X	X	
pH Value	All	NDPs: 0 Tests: 12			X	X	
Phosphate by Kone (w)	All	NDPs: 0 Tests: 12			X	X	
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 12			X	X	
Total EPH (aq)	All	NDPs: 0 Tests: 12			X	X	



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Results Legend <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;">X Test</div> <div style="display: flex; align-items: center;">N 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)	28091160	28091110								
	Customer Sample Reference		M51	SW104							
	AGS Reference										
	Depth (m)		0.00 - 0.00	0.00 - 0.00							
	Container		Vial (ALE297)	Vial (ALE220)	1000ml glass bottle (ALE220)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	Vial (ALE297)	SW
	Sample Type		SW	SW	SW	SW	SW	SW	SW	SW	SW
			SW	SW	SW	SW	SW	SW	SW	SW	SW
Total Organic and Inorganic Carbon	All	NDPs: 0 Tests: 12			X					X	
VOC MS (W)	All	NDPs: 0 Tests: 12							X		X



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Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6	
#	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.		30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023	30/05/2023
diss.filt	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091132	28091121	28091267	28091244	28091224	28091208	28091208
(F)	Trigger breach confirmed								
1-4	Sample deviation (see appendix)								
Component	LOD/Units		Method						
Acetonitrile*	mg/l	SUB	<1	<1	<1	<1	<1	<1	
Organic Carbon, Total	<3 mg/l	TM090	<3 #	<3 #	51.4 #	24.5 #	26.6 #	<3 #	
Ammoniacal Nitrogen as N (low level)	<0.01 mg/l	TM099	<0.01 #	<0.01 #	6.2 #	4.59 #	3.39 #	<0.01 #	
COD, unfiltered	<7 mg/l	TM107	<7 #	<7 #	170 #	101 #	100 #	7.97 #	
Aluminium (diss.filt)	<10 µg/l	TM152	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #	
Antimony (diss.filt)	<1 µg/l	TM152	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #	
Arsenic (diss.filt)	<0.5 µg/l	TM152	<0.5 #	<0.5 #	23.3 #	10.4 #	11.4 #	<0.5 #	
Barium (diss.filt)	<0.2 µg/l	TM152	33.2 #	14.2 #	150 #	384 #	155 #	14.6 #	
Beryllium (diss.filt)	<0.1 µg/l	TM152	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #	
Boron (diss.filt)	<10 µg/l	TM152	20.3 #	21.7 #	56.2 #	20.5 #	48 #	13.1 #	
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 #	1.24 #	<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	<3 #	<3 #	265 #	754 #	1240 #	<3 #	
Nickel (diss.filt)	<0.4 µg/l	TM152	<0.4 #	<0.4 #	1.43 #	2.12 #	17.7 #	0.739 #	
Selenium (diss.filt)	<1 µg/l	TM152	1.17 #	1.01 #	<1 #	<1 #	<1 #	<1 #	
Zinc (diss.filt)	<1 µg/l	TM152	1.66 #	<1 #	2.2 #	3.72 #	9.87 #	4.39 #	
Sodium (Dis.Filt)	<0.076 mg/l	TM152	77.5 #	37.2 #	179 #	180 #	109 #	37.9 #	
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	12.5 #	9.2 #	13.5 #	15 #	13.3 #	25.1 #	
Potassium (Dis.Filt)	<0.2 mg/l	TM152	2.84 #	1.62 #	5.67 #	3.5 #	5 #	1.05 #	
Calcium (Dis.Filt)	<0.2 mg/l	TM152	112 #	90.6 #	172 #	61.6 #	140 #	102 #	
Iron (Dis.Filt)	<0.019 mg/l	TM152	<0.019 #	<0.019 #	17.6 #	5.36 #	6.58 #	<0.019 #	
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	<100 #	<100 #	1100 #	628 #	799 #	<100 #	
Total EPH (C6-C40) (aq)	<100 µg/l	TM172	<100 #	<100 #	5630 #	3920 #	3290 #	<100 #	
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #	
Sulphate	<2 mg/l	TM184	25.7 #	5.4 #	<2 #	<2 #	<2 #	20.7 #	
Chloride	<2 mg/l	TM184	44.2 #	42.3 #	274 #	202 #	151 #	40.3 #	
Phosphate (Ortho as P)	<0.02 mg/l	TM184	<0.02 #	<0.02 #	<0.02 #	<0.02 #	<0.02 #	<0.02 #	
Nitrate as N	<0.07 mg/l	TM184	3.63 #	0.674 #	<0.07 #	<0.07 #	<0.07 #	2.23 #	
Chromium, Hexavalent	<0.03 mg/l	TM241	<0.03 #	<0.03 #	<0.03 #	<0.03 #	<0.03 #	<0.03 #	
Alkalinity, Total as CaCO3	<3 mg/l	TM256	398 #	275 #	563 #	359 #	471 #	347 #	



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Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	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)	Surface Water (SW)	Surface Water (SW)
aq	Aqueous / settled sample.		30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
diss.filt	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091193	28091182	28091171	28091149	28091160	28091110
(F)	Trigger breach confirmed							
1-4	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Acetonitrile*	mg/l	SUB	<1	<1	<1	<1	<1	<1
Organic Carbon, Total	<3 mg/l	TM090	<3 #	9.63 #	<3 #	<3 #	<3 #	3.04 #
Ammoniacal Nitrogen as N (low level)	<0.01 mg/l	TM099	<0.01 #	1.21 #	<0.01 #	0.203 #	0.02 #	<0.01 #
COD, unfiltered	<7 mg/l	TM107	<7 #	35.4 #	<7 #	8.98 #	<7 #	7.36 #
Aluminium (diss.filt)	<10 µg/l	TM152	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
Antimony (diss.filt)	<1 µg/l	TM152	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Arsenic (diss.filt)	<0.5 µg/l	TM152	<0.5 #	4.58 #	<0.5 #	1.97 #	<0.5 #	<0.5 #
Barium (diss.filt)	<0.2 µg/l	TM152	37 #	55 #	33.1 #	51.5 #	42.8 #	42.5 #
Beryllium (diss.filt)	<0.1 µg/l	TM152	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #	<0.1 #
Boron (diss.filt)	<10 µg/l	TM152	17.3 #	27 #	15.9 #	20.2 #	17.6 #	20.6 #
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08 #	<0.08 #	<0.08 #	0.138 #	<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 #	0.816 #	<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	<3 #	66.9 #	<3 #	695 #	<3 #	10.9 #
Nickel (diss.filt)	<0.4 µg/l	TM152	0.796 #	1.7 #	0.705 #	7.13 #	1.2 #	1.3 #
Selenium (diss.filt)	<1 µg/l	TM152	1.11 #	1.15 #	<1 #	<1 #	1.02 #	1.17 #
Zinc (diss.filt)	<1 µg/l	TM152	2.64 #	2.21 #	2.54 #	5.17 #	4.82 #	2.03 #
Sodium (Dis.Filt)	<0.076 mg/l	TM152	52 #	42.9 #	25.7 #	58.6 #	56.9 #	55.2 #
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	14.2 #	14.1 #	11.4 #	10.9 #	13.4 #	13 #
Potassium (Dis.Filt)	<0.2 mg/l	TM152	2.45 #	3.02 #	2.01 #	2.21 #	2.76 #	2.62 #
Calcium (Dis.Filt)	<0.2 mg/l	TM152	122 #	135 #	119 #	116 #	115 #	111 #
Iron (Dis.Filt)	<0.019 mg/l	TM152	<0.019 #	1.87 #	<0.019 #	2.49 #	<0.019 #	<0.019 #
EPH Range >C10 - C40 (aq)	<100 µg/l	TM172	<100 #	264 #	<100 #	<100 #	<100 #	<100 #
Total EPH (C6-C40) (aq)	<100 µg/l	TM172	<100 #	793 #	<100 #	<100 #	<100 #	<100 #
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #
Sulphate	<2 mg/l	TM184	19.7 #	15.8 #	15.8 #	22.8 #	20.6 #	20.7 #
Chloride	<2 mg/l	TM184	79 #	64.8 #	44.4 #	107 #	84.6 #	82.6 #
Phosphate (Ortho as P)	<0.02 mg/l	TM184	<0.02 #	<0.02 #	<0.02 #	<0.02 #	<0.02 #	<0.02 #
Nitrate as N	<0.07 mg/l	TM184	2.89 #	1.37 #	2.12 #	1.23 #	2.35 #	2.28 #
Chromium, Hexavalent	<0.03 mg/l	TM241	<0.03 #	<0.03 #	<0.03 #	<0.03 #	<0.03 #	<0.03 #
Alkalinity, Total as CaCO3	<3 mg/l	TM256	334 #	376 #	344 #	378 #	326 #	320 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Alcohols/Acetates MS (W)

Table with columns: Component, LOD/Units, Method, AMW1, AMW2, AMW3, AMW4, AMW5, AMW6. Rows include Methanol, Ethanol, Acetone, iso-Propanol, Methyl Acetate, tert-Butyl Alcohol, n-Propanol, 2-Butanone, Ethyl Acetate, sec-Butanol, Tetrahydrofuran, iso-Butanol, iso-Propyl Acetate, n-Butanol, n-Propyl Acetate, Methyl-iso-Butyl ketone, n-Pentanol, n-Butyl Acetate, n-Hexanol, n-Heptanol.



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Alcohols/Acetates MS (W)

Table with columns: Results Legend, Customer Sample Ref., AMW8, AMW11, BH105, BH107, MS1, SW104, Component, LOD/Units, Method. Rows include Methanol, Ethanol, Acetone, iso-Propanol, Methyl Acetate, tert-Butyl Alcohol, n-Propanol, 2-Butanone, Ethyl Acetate, sec-Butanol, Tetrahydrofuran, iso-Butanol, iso-Propyl Acetate, n-Butanol, n-Propyl Acetate, Methyl-iso-Butyl ketone, n-Pentanol, n-Butyl Acetate, n-Hexanol, n-Heptanol.



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

GRO by GC-FID (W)

Table with columns: Results Legend, Customer Sample Ref., AMW1, AMW2, AMW3, AMW4, AMW5, AMW6, Component, LOD/Units, Method. Data rows include GRO >C5-C10 and EPH (C6-C10).



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

GRO by GC-FID (W)

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	ISO17025 accredited.							
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	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
tot.unfilt	Total / unfiltered sample.	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Surface Water (SW)	Surface Water (SW)
*	Subcontracted - refer to subcontractor report for accreditation status.	Date Sampled	30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
**	% 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	Sampled Time	00:00	00:00	00:00	00:00	00:00	00:00
(F)	Trigger breach confirmed	Date Received	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
1.4.3.2	Sample deviation (see appendix)	SDG Ref	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
		Lab Sample No.(s)	28091193	28091182	28091171	28091149	28091160	28091110
		AGS Reference						
Component	LOD/Units	Method						
GRO >C5-C10	<10 µg/l	TM245	17	2290	<10	113	11	<10
EPH (C6-C10)	<100 µg/l	TM245	<100	529	<100	<100	<100	<100



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

PAH Spec MS - Aqueous (W)

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6	
#	IS017025 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.		30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023	30/05/2023
diss.fit	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091132	28091121	28091267	28091244	28091224	28091208	28091208
(F)	Trigger breach confirmed								
14439	Sample deviation (see appendix)								
Component	LOD/Units		Method						
Naphthalene (aq)	<0.01 µg/l	TM178	<0.01 #	<0.01 #	0.1 #	0.0376 #	0.0649 #	<0.01 #	
Acenaphthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	0.0107 #	0.00669 #	<0.005 #	<0.005 #	
Acenaphthylene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Phenanthrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	0.00547 #	
Fluorene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Chrysene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Pyrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Benzo(a)anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Benzo(b)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Benzo(k)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Benzo(a)pyrene (aq)	<0.002 µg/l	TM178	<0.002 #	<0.002 #	<0.002 #	<0.002 #	<0.002 #	<0.002 #	
Dibenzo(a,h)anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Benzo(g,h,i)perylene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
Indeno(1,2,3-cd)pyrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	
PAH, Total Detected USEPA 16 (aq)	<0.082 µg/l	TM178	<0.082 #	<0.082 #	0.111 #	<0.082 #	<0.082 #	<0.082 #	



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

PAH Spec MS - Aqueous (W)

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	IS017025 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)	Surface Water (SW)	Surface Water (SW)
aq	Aqueous / settled sample.	Date Sampled	30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
diss.fit	Dissolved / filtered sample.	Sampled Time	00:00	00:00	00:00	00:00	00:00	00:00
tot.unfit	Total / unfiltered sample.	Date Received	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.	SDG Ref	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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)	28091193	28091182	28091171	28091149	28091160	28091110
(F)	Trigger breach confirmed	AGS Reference						
1-4*3@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Naphthalene (aq)	<0.01 µg/l	TM178	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #
Acenaphthene (aq)	<0.005 µg/l	TM178	<0.005 #	0.0179 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Acenaphthylene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	0.00607 #	<0.005 #	<0.005 #
Anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Phenanthrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Fluorene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Chrysene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Pyrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Benzo(a)anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Benzo(b)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Benzo(k)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Benzo(a)pyrene (aq)	<0.002 µg/l	TM178	<0.002 #	<0.002 #	<0.002 #	<0.002 #	<0.002 #	<0.002 #
Dibenzo(a,h)anthracene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Benzo(g,h,i)perylene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
Indeno(1,2,3-cd)pyrene (aq)	<0.005 µg/l	TM178	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #	<0.005 #
PAH, Total Detected USEPA 16 (aq)	<0.082 µg/l	TM178	<0.082 #	<0.082 #	<0.082 #	<0.082 #	<0.082 #	<0.082 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6
#	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)	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)
M	mCERTS accredited.		0.00	0.00	0.00	0.00	0.00	0.00
aq	Aqueous / settled sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
diss.fit	Dissolved / filtered sample.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
tot.unfit	Total / unfiltered sample.		28091132	28091121	28091267	28091244	28091224	28091208
*	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)							
Component	LOD/Units		Method					
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Chloroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
4-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Azobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Acenaphthylene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Acenaphthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<2 #	<2 #	<16 #	<4 #	<8 #	<4 #
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6
#	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.		30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023
dis.filt	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
..	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)							
Component	LOD/Units	Method						
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Carbazole (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Chrysene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Dibenzofuran (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Diethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Dimethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<5 #	<5 #	<40 #	<10 #	<20 #	<10 #
Fluoranthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Fluorene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Hexachlorobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Pentachlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Phenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Hexachloroethane (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Nitrobenzene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Naphthalene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Isophorone (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Phenanthrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #
Pyrene (aq)	<1 µg/l	TM176	<1 #	<1 #	<8 #	<2 #	<4 #	<2 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	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)	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 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)
M	mCERTS accredited.		0.00	0.00	0.00	0.00	0.00	0.00
aq	Aqueous / settled sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
diss.fit	Dissolved / filtered sample.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
tot.unfit	Total / unfiltered sample.		28091193	28091182	28091171	28091149	28091160	28091110
*	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)							
Component	LOD/Units		Method					
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Chloroaniline (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Methylphenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Nitroaniline (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
4-Nitrophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Azobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Acenaphthylene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Acenaphthene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Anthracene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<2 #	<4 #	<2 #	<4 #	<4 #	<2 #
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

SVOC MS (W) - Aqueous

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	IS017025 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)	Surface Water (SW)	Surface Water (SW)
aq	Aqueous / settled sample.		30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
dis.filt	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
..	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)							
Component	LOD/Units	Method						
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Carbazole (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Chrysene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Dibenzofuran (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Diethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Dimethyl phthalate (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<5 #	<10 #	<5 #	<10 #	<10 #	<5 #
Fluoranthene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Fluorene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Hexachlorobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Pentachlorophenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Phenol (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Hexachloroethane (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Nitrobenzene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Naphthalene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Isophorone (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Phenanthrene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #
Pyrene (aq)	<1 µg/l	TM176	<1 #	<2 #	<1 #	<2 #	<2 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6	
#	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.		30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023	30/05/2023
diss.fit	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091132	28091121	28091267	28091244	28091224	28091208	28091208
(F)	Trigger breach confirmed								
1-4	Sample deviation (see appendix)								
Component	LOD/Units		Method						
Dibromofluoromethane**	%	TM208	97.6	96.7	93.8	93.3	93.7	91.1	
Toluene-d8**	%	TM208	96.6	96.4	96.7	94.4	97	96	
4-Bromofluorobenzene**	%	TM208	99.1	97.8	102	97.6	101	96.9	
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 #	<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 #	5450 #	2540 #	8760 #	27.3 #	
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	1.24 #	<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	2.16 #	<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 #	1.01 #	<1 #	<1 #	
Trichloroethene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	1.05 #	<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 #	74.2 #	2.7 #	1.12 #	<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: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6
#	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)
sq	Aqueous / settled sample.		30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023
disc.filt	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
+	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091132	28091121	28091267	28091244	28091224	28091208
(F)	Trigger breach confirmed							
1.4.4.6@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
1,3-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	6.43 #	12.4 #	3.61 #	<1 #
Tetrachloroethene	<1 µg/l	TM208	<1 #	532 #	<1 #	<1 #	1.82 #	<1 #
Dibromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromoethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chlorobenzene	<1 µg/l	TM208	<1 #	<1 #	1.56 #	3.07 #	<1 #	<1 #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Ethylbenzene	<1 µg/l	TM208	<1 #	<1 #	44.7 #	25 #	14.9 #	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #	<1 #	121 #	98.9 #	22 #	<1 #
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	5.82 #	<1 #	<1 #	<1 #
Styrene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromoform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Isopropylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Propylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
2-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
sec-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
n-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Hexachlorobutadiene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Results Legend		Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6
#	ISO17025 accredited.		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.	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
diss.fit	Dissolved / filtered sample.	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)
tot.unfilt	Total / unfiltered sample.	Date Sampled	30/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023
*	Subcontracted - refer to subcontractor report for accreditation status.	Sampled Time	00:00	00:00	00:00	00:00	00:00	00:00
**	% 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	Date Received	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
(F)	Trigger breach confirmed	SDG Ref	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
1.4.4.5.6	Sample deviation (see appendix)	Lab Sample No.(s)	28091132	28091121	28091267	28091244	28091224	28091208
		AGS Reference						
Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1	<1	<1
Sum of BTEX	<5 µg/l	TM208	<5	<5	246	128	38	<5



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	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)	Surface Water (SW)	Surface Water (SW)
aq	Aqueous / settled sample.		30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
diss.fit	Dissolved / filtered sample.		00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.		02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.		230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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		28091193	28091182	28091171	28091149	28091160	28091110
(F)	Trigger breach confirmed							
1-4	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Dibromofluoromethane**	%	TM208	98.6	90.7	100	92.8	98.7	97.1
Toluene-d8**	%	TM208	96.6	94.9	96.8	97.1	96.6	96.8
4-Bromofluorobenzene**	%	TM208	98.3	96.8	98.7	101	100	97.4
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 #	<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 #	1370 #	<1 #	103 #	<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	8.78 #	<1 #	<1 #	<1 #	2.19 #	1.58 #
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	1.07 #	<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	1.48 #	<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: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Results Legend		Customer Sample Ref.	AMW8	AMW11	BH105	BH107	MS1	SW104
#	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)	Surface Water (SW)	Surface Water (SW)
sq	Aqueous / settled sample.	Date Sampled	30/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023	31/05/2023
disc.filt	Dissolved / filtered sample.	Sampled Time	00:00	00:00	00:00	00:00	00:00	00:00
tot.unfilt	Total / unfiltered sample.	Date Received	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023	02/06/2023
*	Subcontracted - refer to subcontractor report for accreditation status.	SDG Ref	230602-65	230602-65	230602-65	230602-65	230602-65	230602-65
**	% 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)	28091193	28091182	28091171	28091149	28091160	28091110
(F)	Trigger breach confirmed	AGS Reference						
1.4.4.6@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
1,3-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Tetrachloroethene	<1 µg/l	TM208	180 #	<1 #	<1 #	<1 #	35.9 #	20.1 #
Dibromochloromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromoethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Chlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Ethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #	2.85 #	<1 #	<1 #	<1 #	<1 #
o-Xylene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Styrene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromoform	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Isopropylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Bromobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Propylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
2-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-Chlorotoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
sec-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
n-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Hexachlorobutadiene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Naphthalene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

VOC MS (W)

Table with columns: Results Legend, Customer Sample Ref., AMW8, AMW11, BH105, BH107, MS1, SW104. Rows include VOC components like 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene with associated LOD/Units and Method information.



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SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Table of Results - Appendix

Method No	Description
SUB	Subcontracted Test
TM090	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	Determination of Ammonium in Water Samples using the Kone Analyser
TM107	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM152	Analysis of Aqueous Samples by ICP-MS
TM172	EPH in Waters
TM176	Determination of SVOCs in Water by GCMS
TM178	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM183	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM208	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM232	Determination of Volatile Alcohols, Acetates and Ketones in Waters by Headspace GC-MS
TM241	The Determination of Hexavalent Chromium in Waters and Leachates using the Kone Analyser
TM245	Determination of GRO by Headspace in waters
TM256	Determination of pH, EC, TDS and Alkalinity in Aqueous samples

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Test Completion Dates

Lab Sample No(s)	28091132	28091121	28091267	28091244	28091224	28091208	28091193	28091182	28091171	28091149
Customer Sample Ref.	AMW1	AMW2	AMW3	AMW4	AMW5	AMW6	AMW8	AMW11	BH105	BH107
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
Acetonitrile*	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023	21-Jun-2023
Alcohols/Acetates MS (W)	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023	09-Jun-2023
Ammonium Low	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
Anions by Kone (w)	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
COD Unfiltered	08-Jun-2023	06-Jun-2023	08-Jun-2023	06-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023
Dissolved Metals by ICP-MS	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
EPH (DRO) (C10-C40) Aqueous (W)	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023
GRO by GC-FID (W)	06-Jun-2023	06-Jun-2023	07-Jun-2023	06-Jun-2023	07-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
Hexavalent Chromium (w)	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
Mercury Dissolved	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
Nitrite by Kone (w)	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023	05-Jun-2023
PAH Spec MS - Aqueous (W)	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023
pH Value	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023
Phosphate by Kone (w)	07-Jun-2023	06-Jun-2023	07-Jun-2023	06-Jun-2023	07-Jun-2023	07-Jun-2023	07-Jun-2023	06-Jun-2023	07-Jun-2023	07-Jun-2023
SVOC MS (W) - Aqueous	06-Jun-2023	06-Jun-2023	08-Jun-2023	07-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	07-Jun-2023	06-Jun-2023	06-Jun-2023
Total EPH (aq)	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023	08-Jun-2023
Total Organic and Inorganic Carbon	03-Jun-2023	04-Jun-2023	03-Jun-2023	03-Jun-2023	03-Jun-2023	03-Jun-2023	03-Jun-2023	03-Jun-2023	04-Jun-2023	04-Jun-2023
VOC MS (W)	07-Jun-2023	07-Jun-2023	09-Jun-2023	08-Jun-2023	09-Jun-2023	07-Jun-2023	07-Jun-2023	08-Jun-2023	07-Jun-2023	08-Jun-2023

Lab Sample No(s)	28091160	28091110
Customer Sample Ref.	MS1	SW104
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Type	Surface Water	Surface Water
Acetonitrile*	21-Jun-2023	21-Jun-2023
Alcohols/Acetates MS (W)	09-Jun-2023	09-Jun-2023
Ammonium Low	06-Jun-2023	06-Jun-2023
Anions by Kone (w)	06-Jun-2023	06-Jun-2023
COD Unfiltered	08-Jun-2023	08-Jun-2023
Dissolved Metals by ICP-MS	06-Jun-2023	06-Jun-2023
EPH (DRO) (C10-C40) Aqueous (W)	08-Jun-2023	08-Jun-2023
GRO by GC-FID (W)	06-Jun-2023	06-Jun-2023
Hexavalent Chromium (w)	06-Jun-2023	06-Jun-2023
Mercury Dissolved	06-Jun-2023	06-Jun-2023
Nitrite by Kone (w)	05-Jun-2023	05-Jun-2023
PAH Spec MS - Aqueous (W)	08-Jun-2023	08-Jun-2023
pH Value	06-Jun-2023	06-Jun-2023
Phosphate by Kone (w)	07-Jun-2023	07-Jun-2023
SVOC MS (W) - Aqueous	06-Jun-2023	06-Jun-2023
Total EPH (aq)	08-Jun-2023	08-Jun-2023
Total Organic and Inorganic Carbon	04-Jun-2023	04-Jun-2023
VOC MS (W)	07-Jun-2023	07-Jun-2023



CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

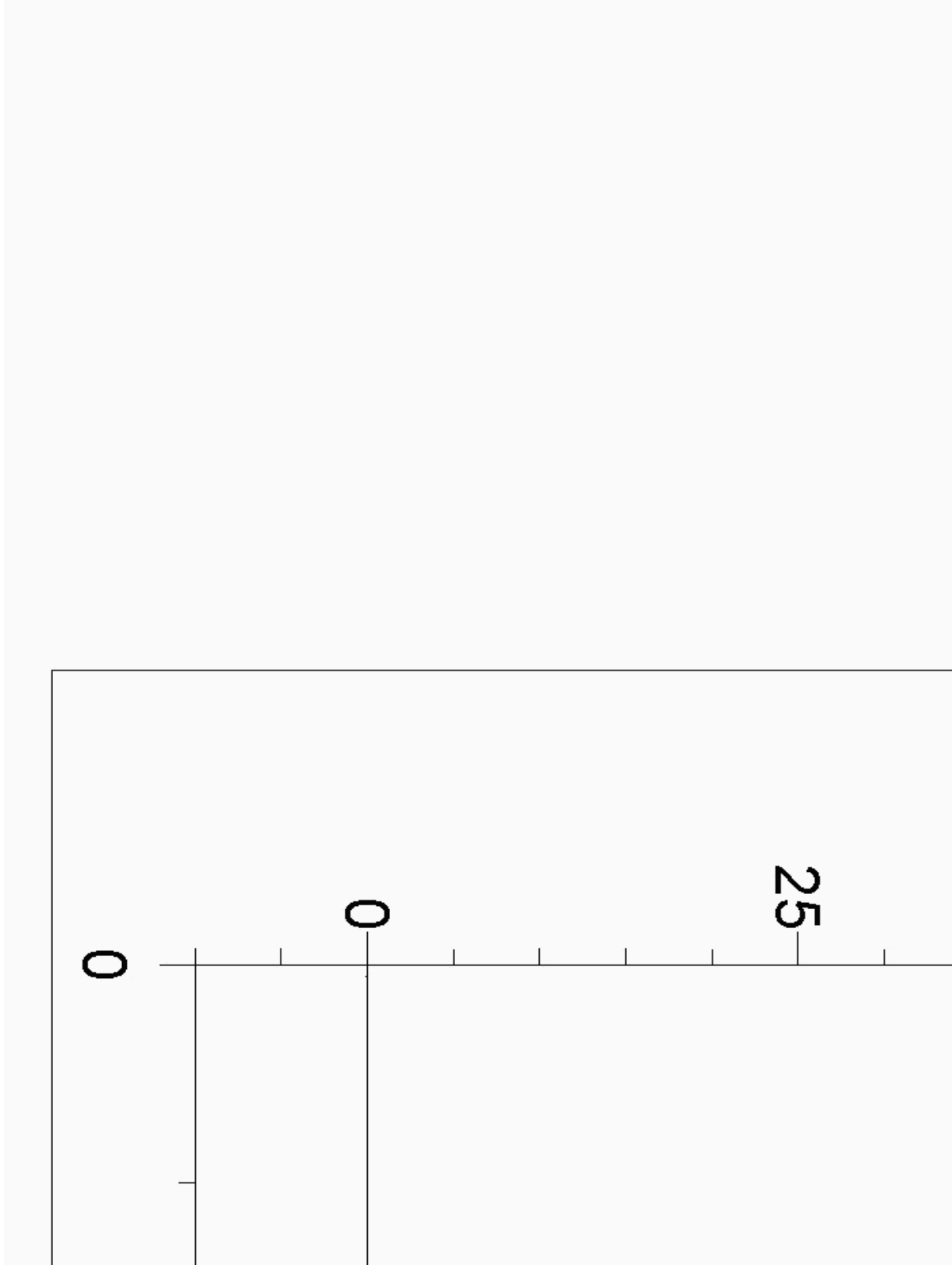
Superseded Report: 692059

Chromatogram

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

Sample No : 28092524
Sample ID : SW104

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

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Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

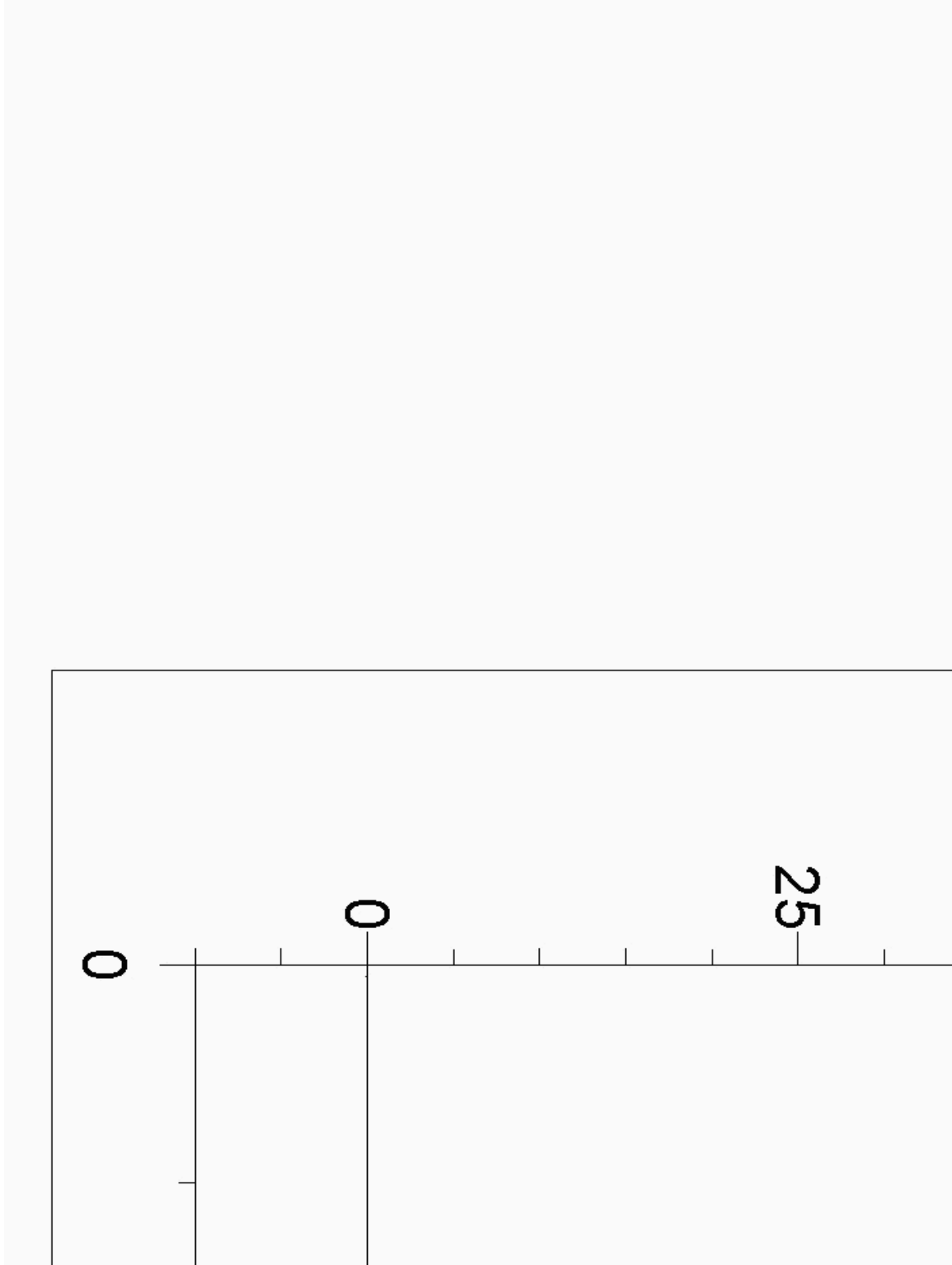
Superseded Report: 692059

Chromatogram

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

Sample No : 28092539
Sample ID : BH107

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

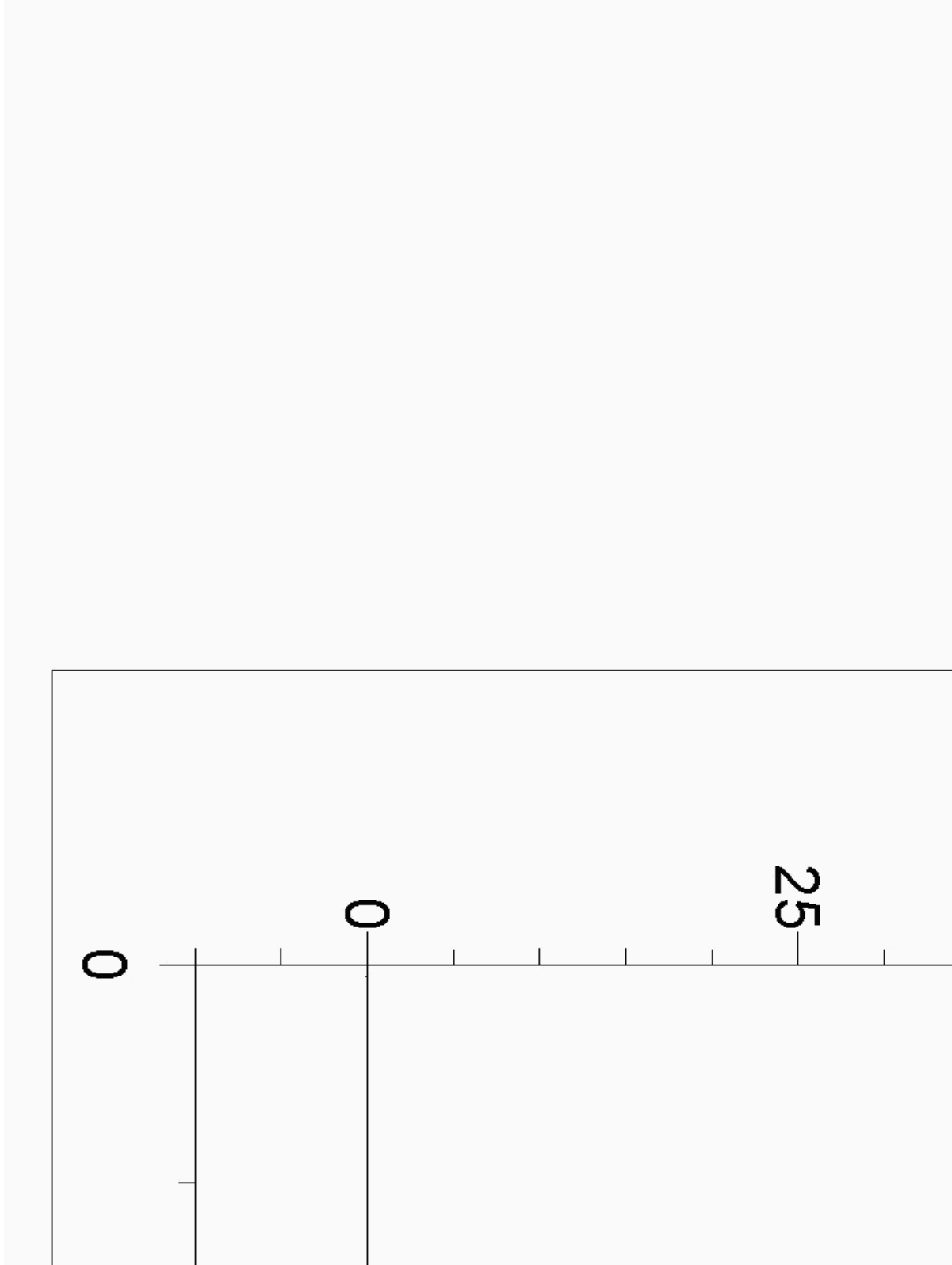
Superseded Report: 692059

Chromatogram

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

Sample No : 28092554
Sample ID : BH105

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

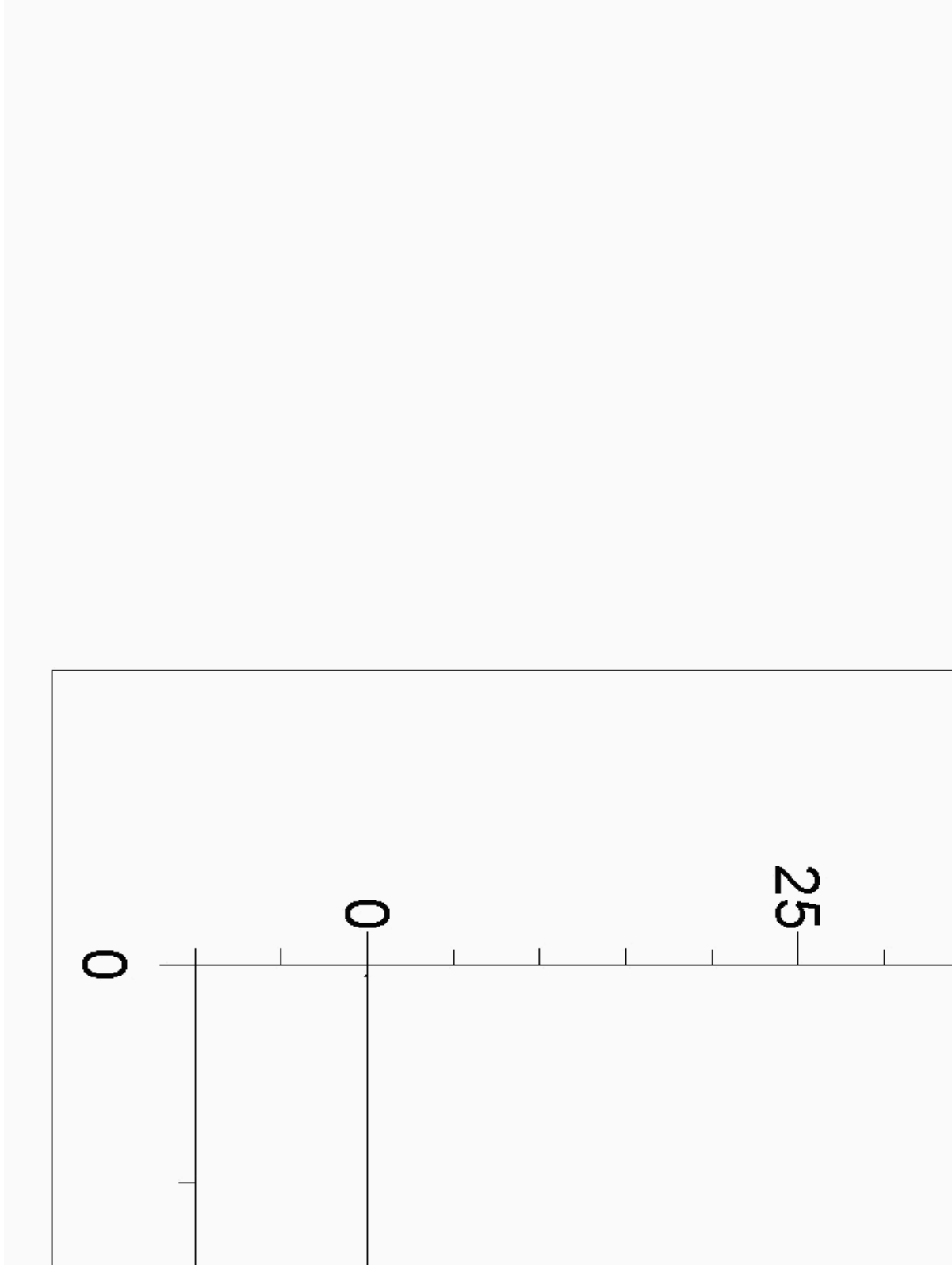
Superseded Report: 692059

Chromatogram

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

Sample No : 28092565
Sample ID : MS1

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

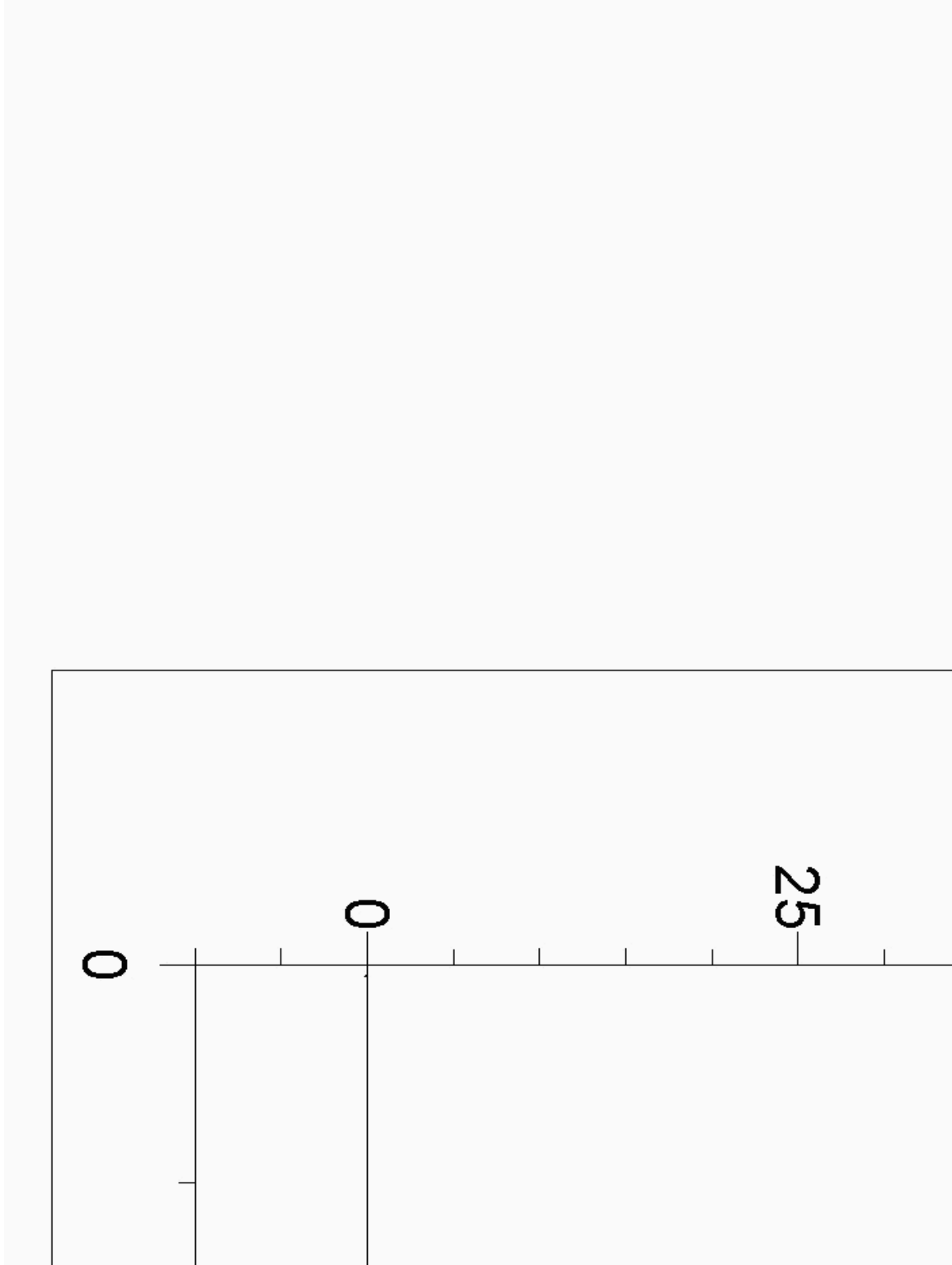
Superseded Report: 692059

Chromatogram

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

Sample No : 28092613
Sample ID : AMW5

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

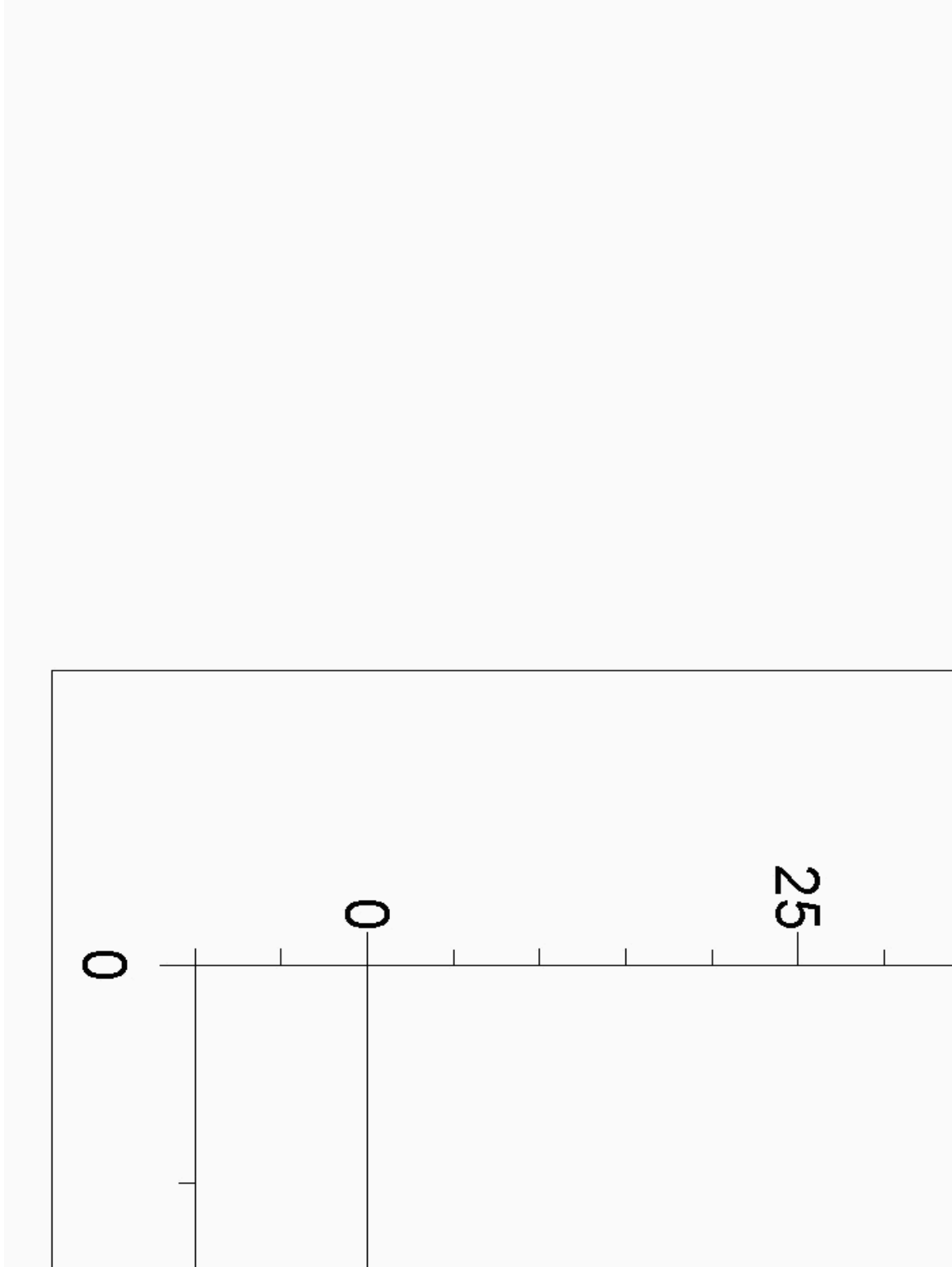
Superseded Report: 692059

Chromatogram

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

Sample No : 28092632
Sample ID : AMW8

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

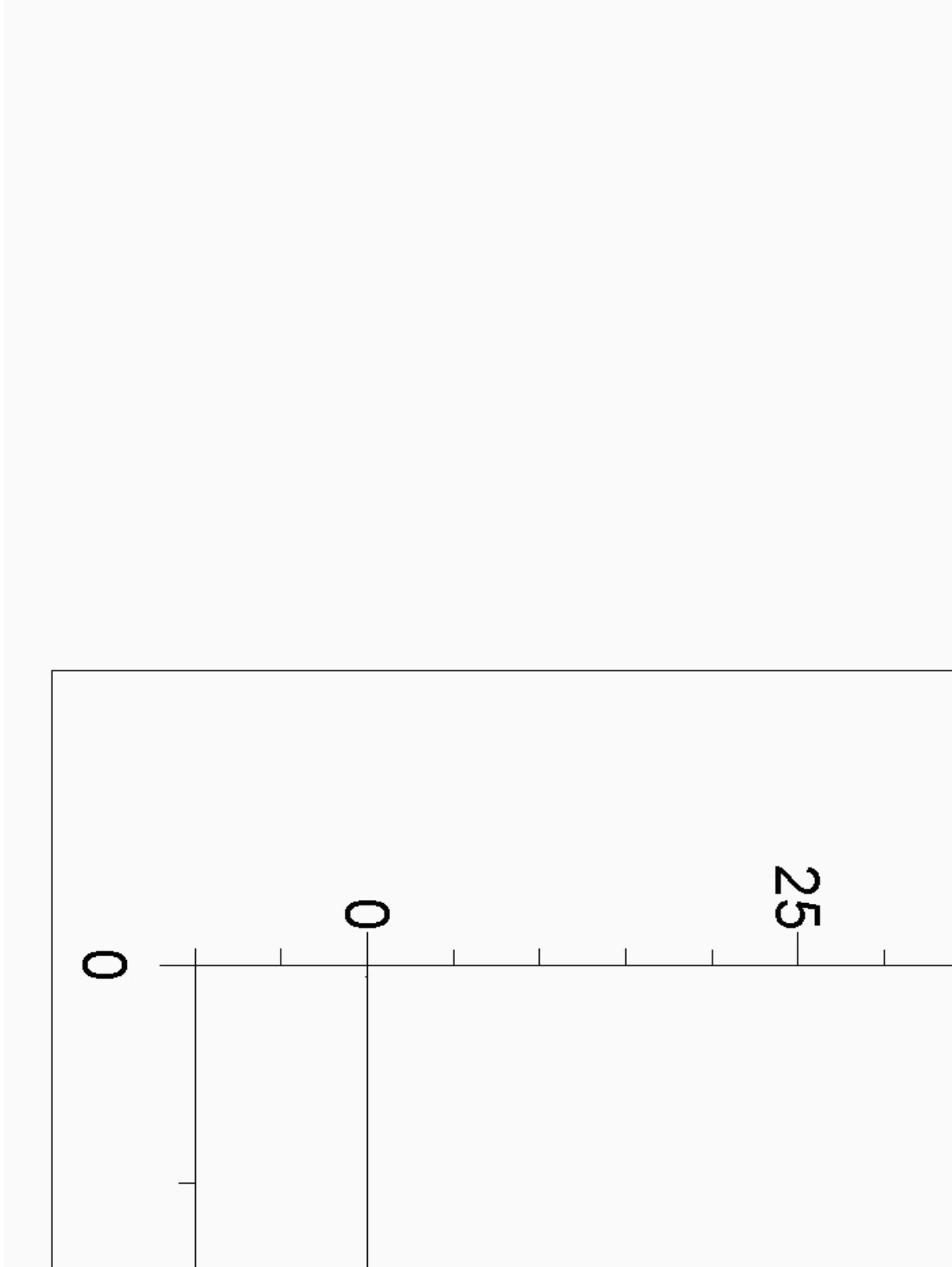
Superseded Report: 692059

Chromatogram

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

Sample No : 28092650
Sample ID : AMW11

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

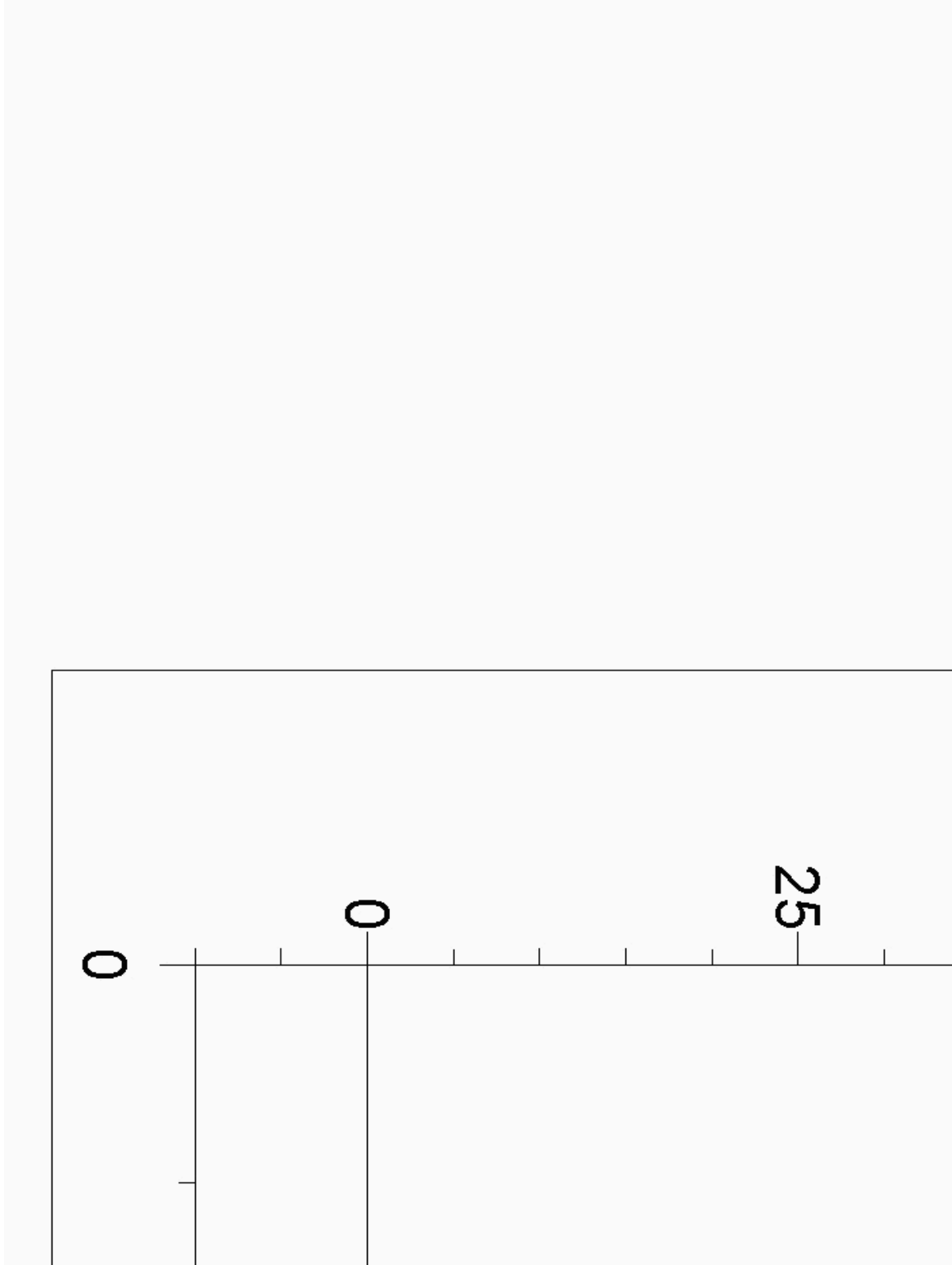
Superseded Report: 692059

Chromatogram

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

Sample No : 28092667
Sample ID : AMW6

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

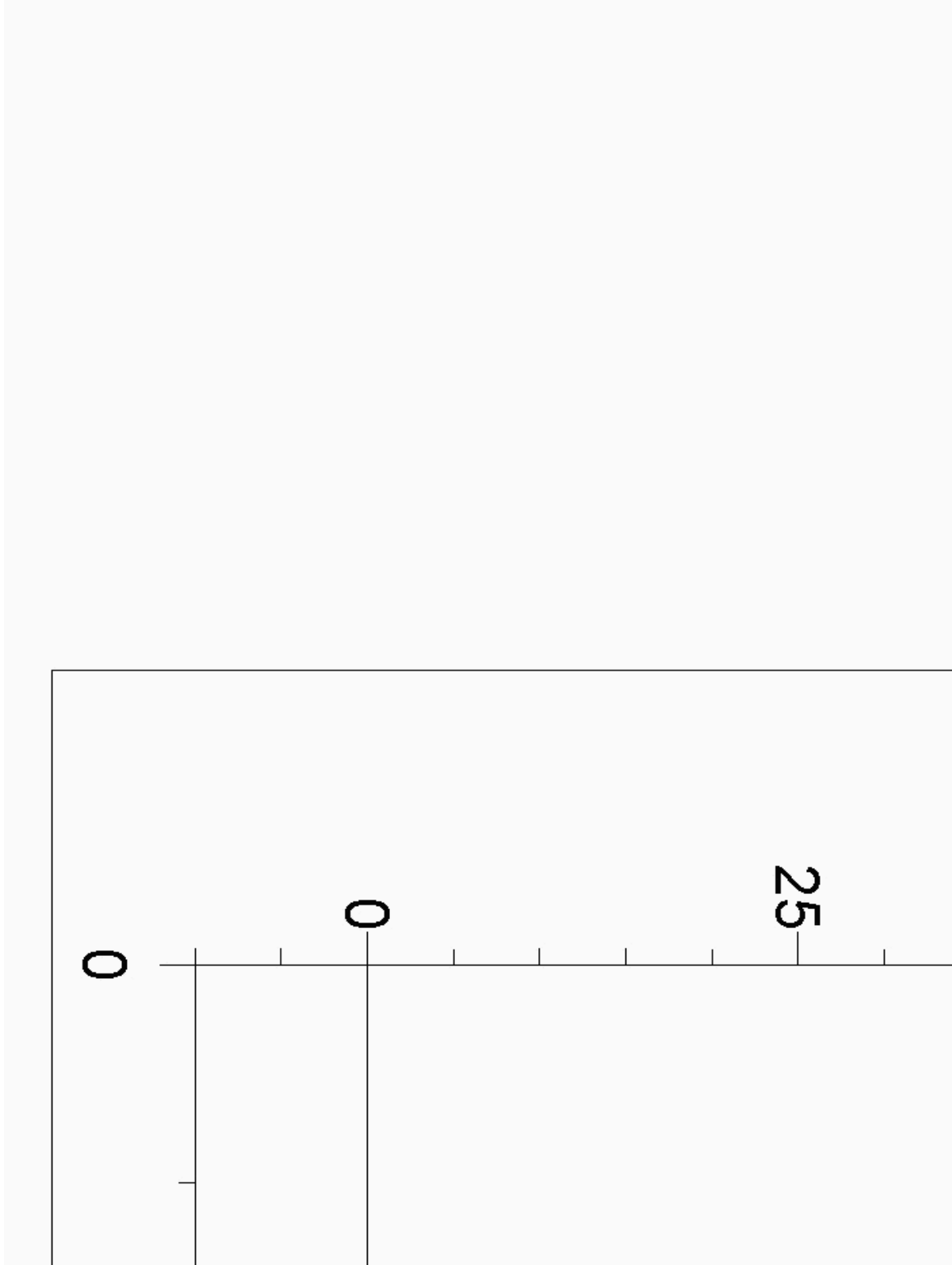
Superseded Report: 692059

Chromatogram

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

Sample No : 28093296
Sample ID : AMW2

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

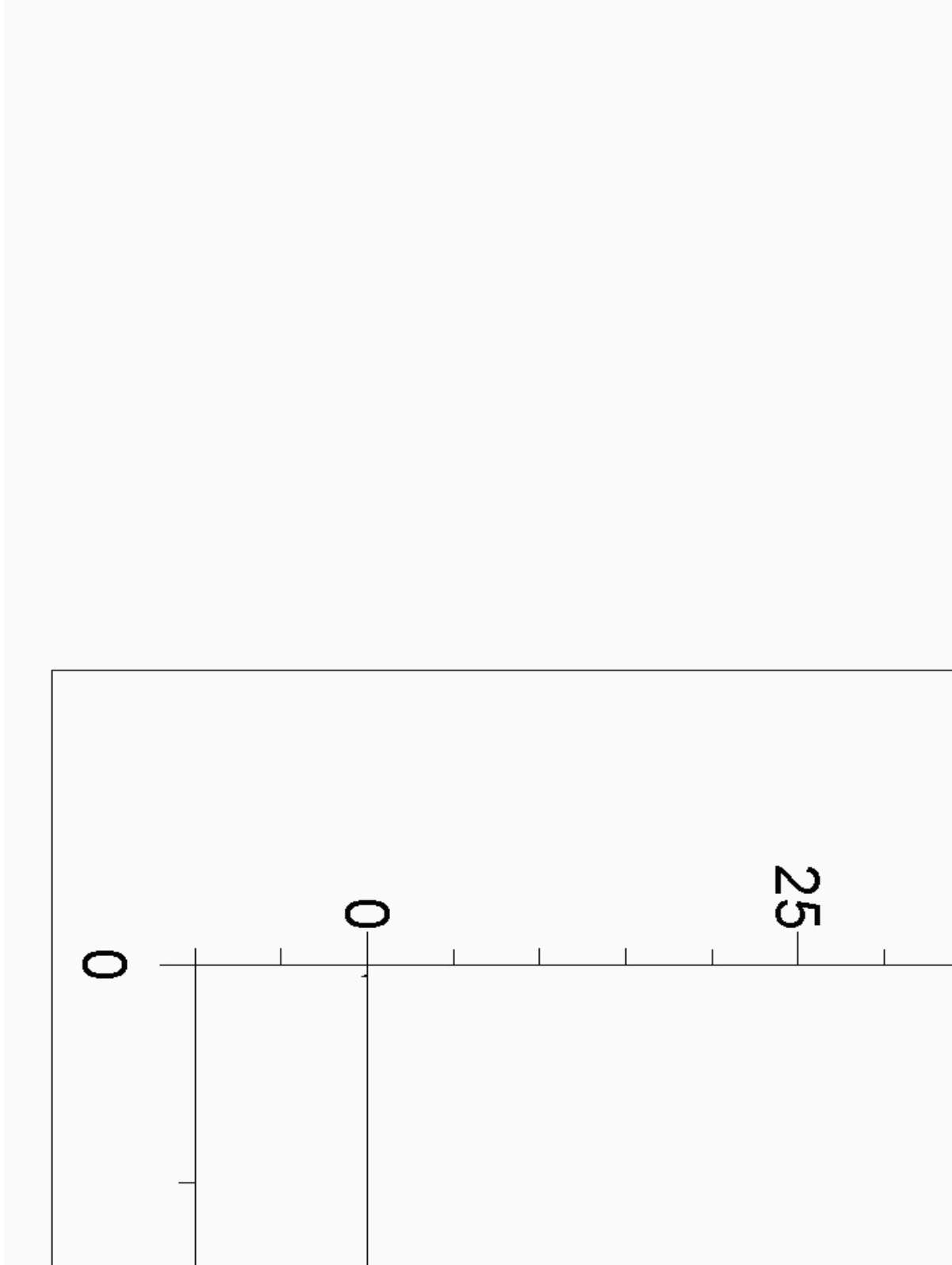
Superseded Report: 692059

Chromatogram

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

Sample No : 28093344
Sample ID : AMW3

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

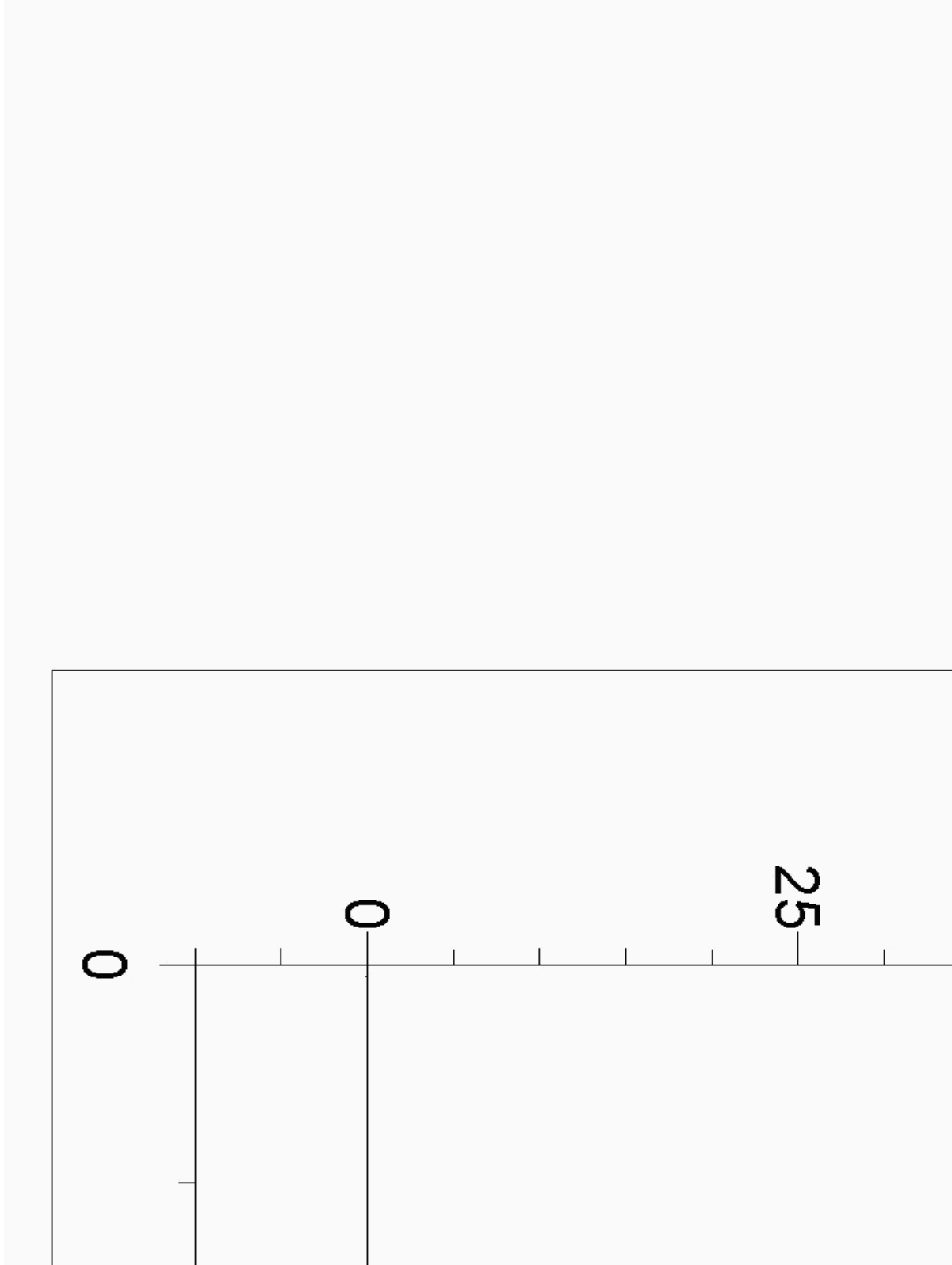
Superseded Report: 692059

Chromatogram

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

Sample No : 28093359
Sample ID : AMW4

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

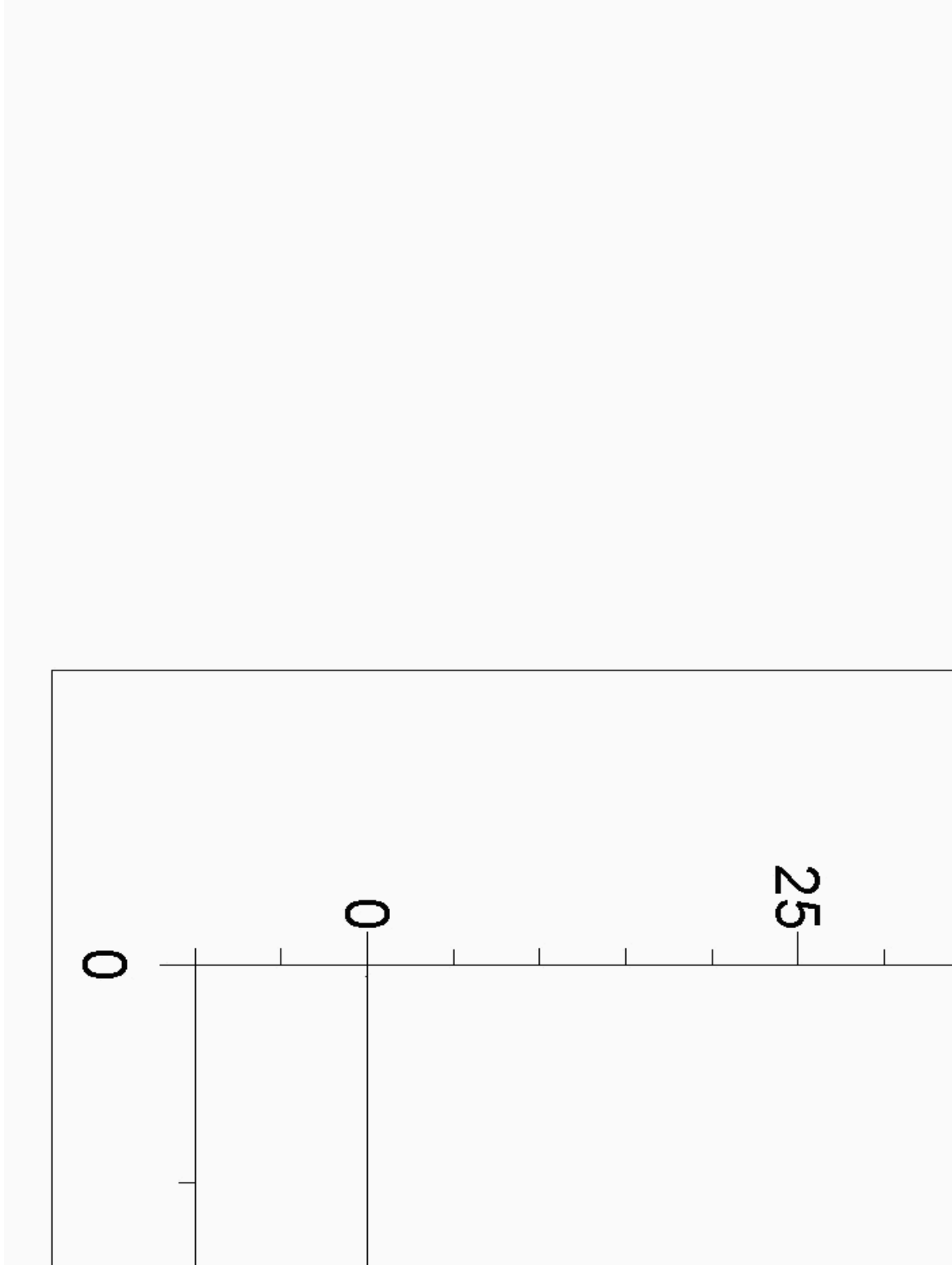
Superseded Report: 692059

Chromatogram

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

Sample No : 28093425
Sample ID : AMW1

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

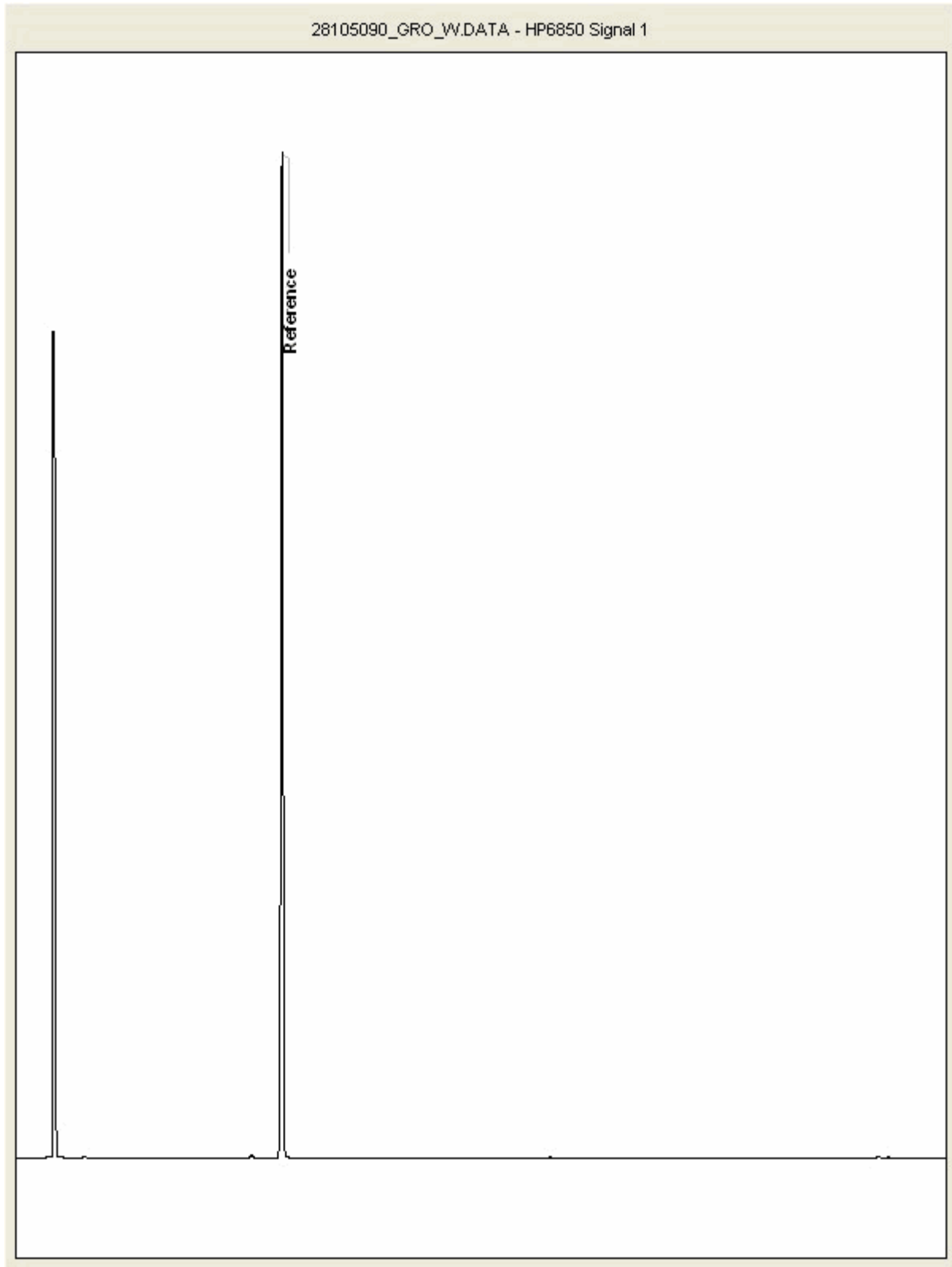
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105090
Sample ID : MS1

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

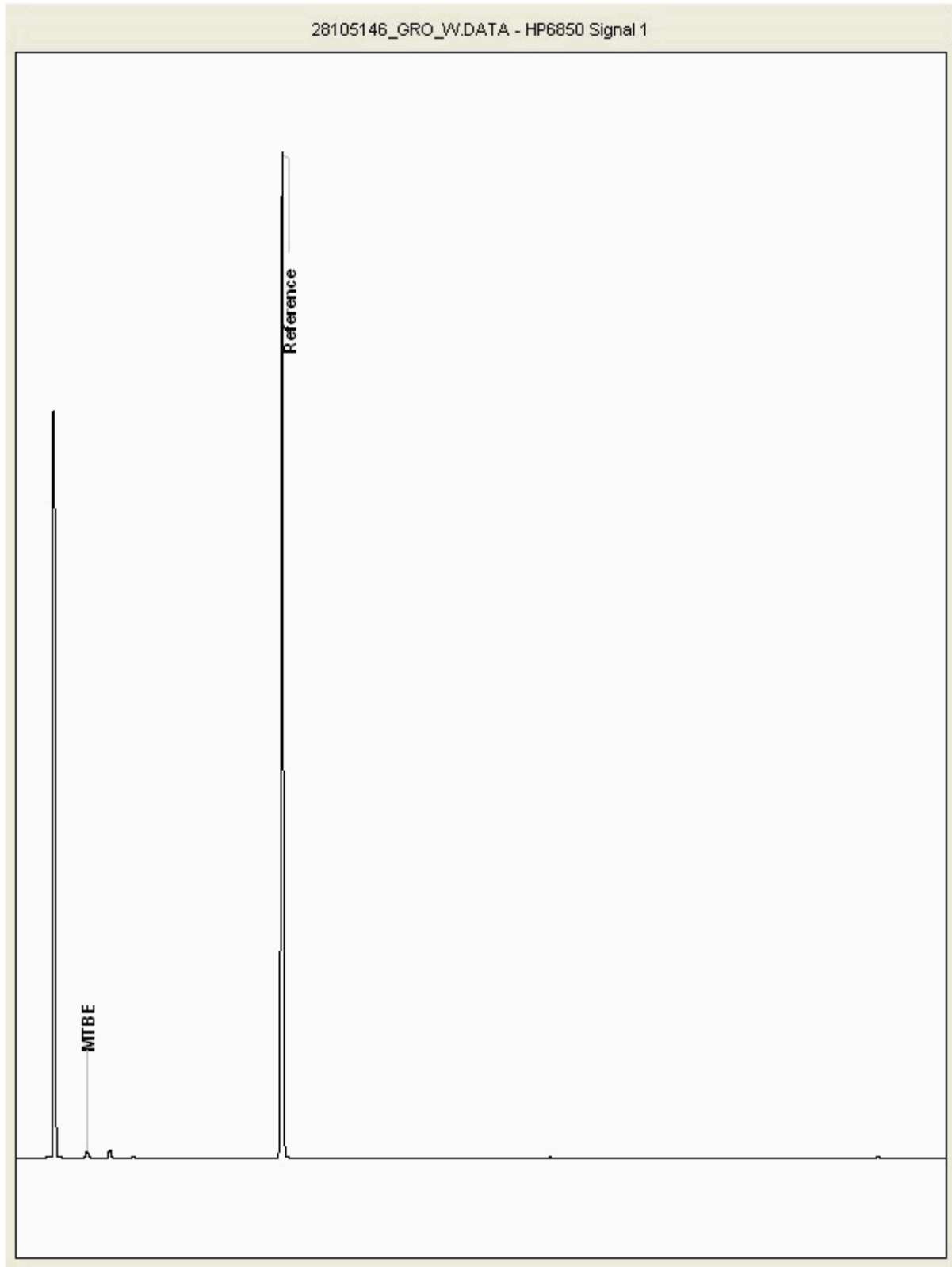
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105146
Sample ID : AMW6

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

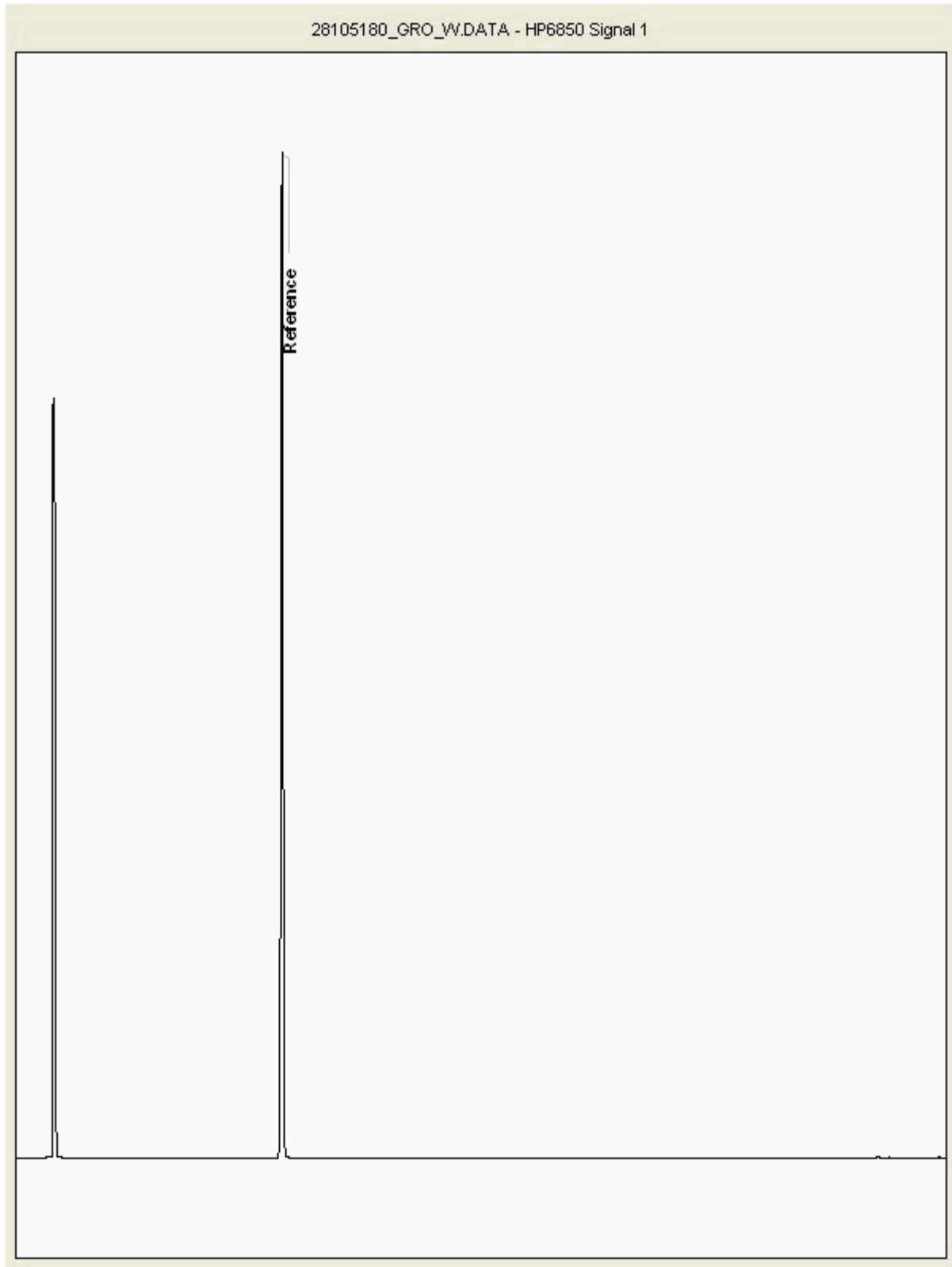
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105180
Sample ID : BH105

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

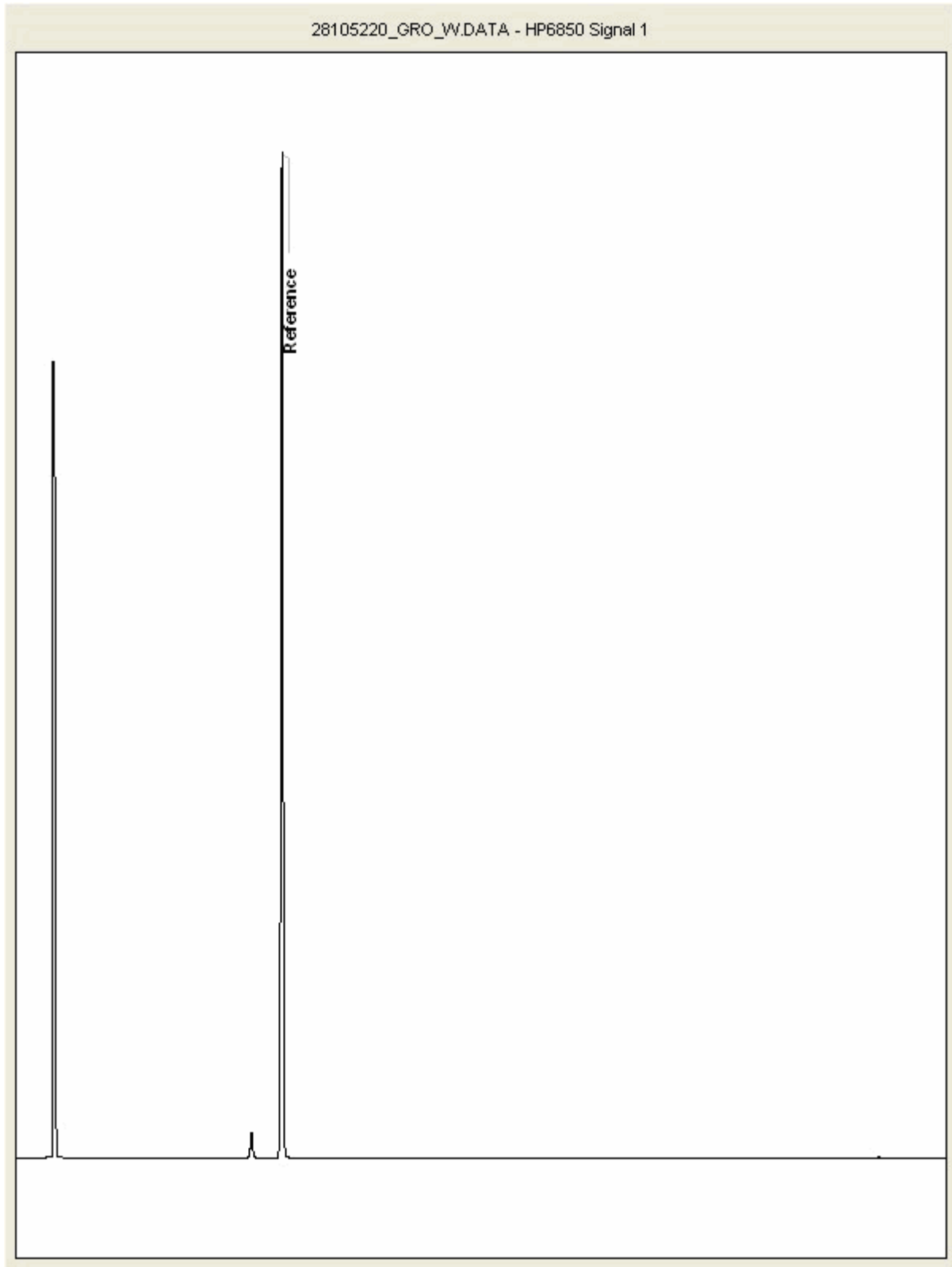
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105220
Sample ID : AMW2

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

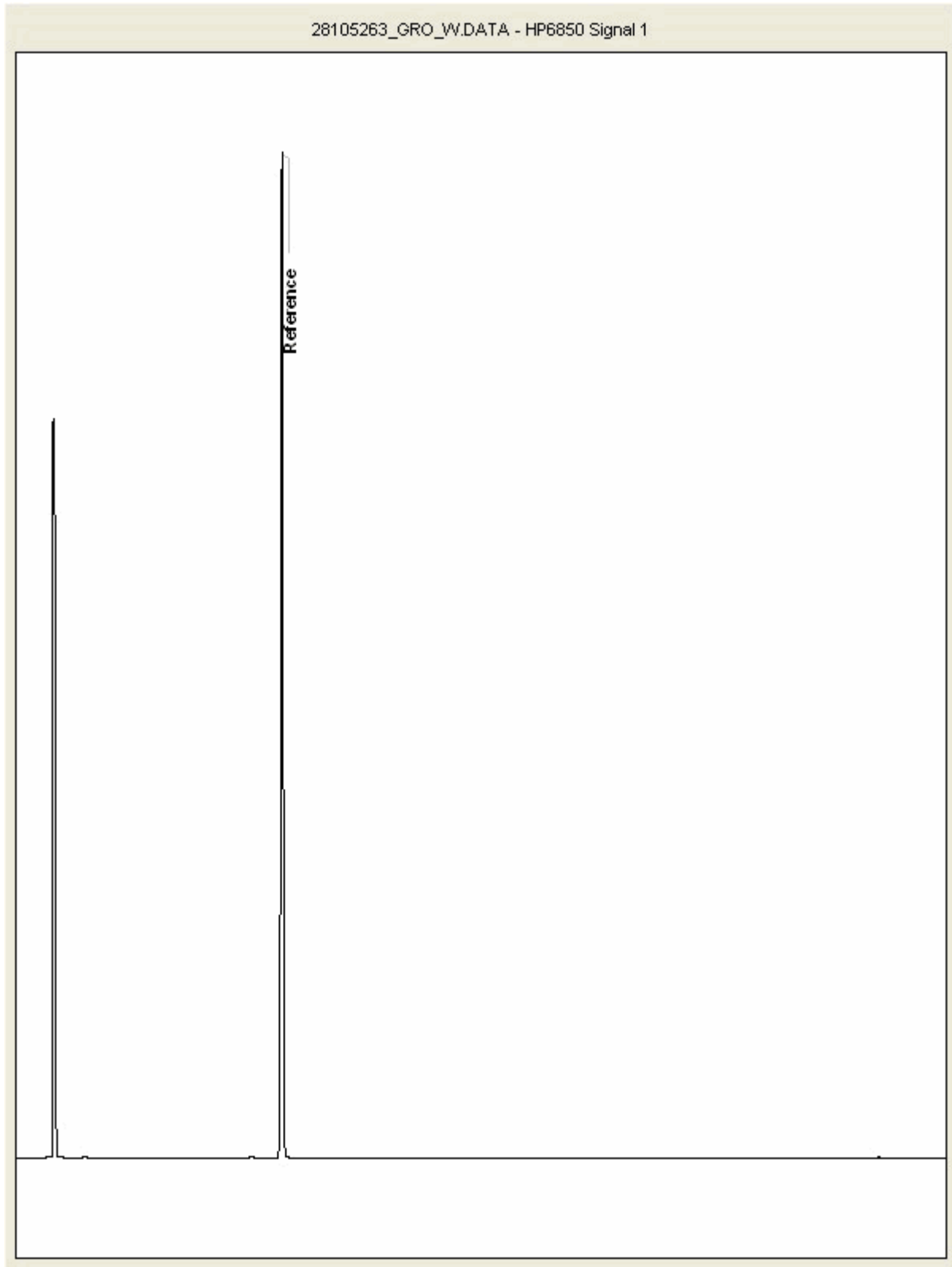
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105263
Sample ID : SW104

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

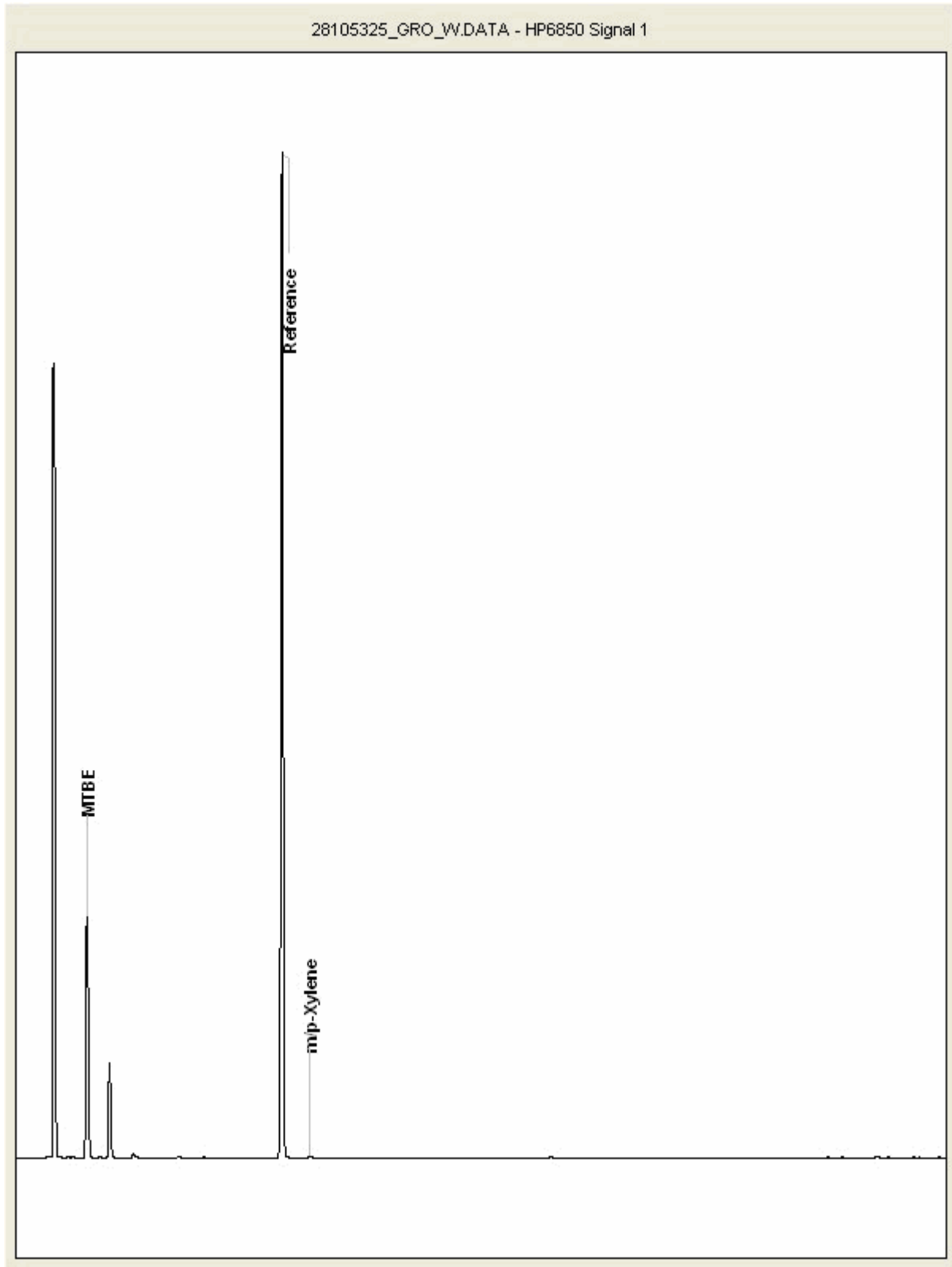
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105325
Sample ID : AMW11

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

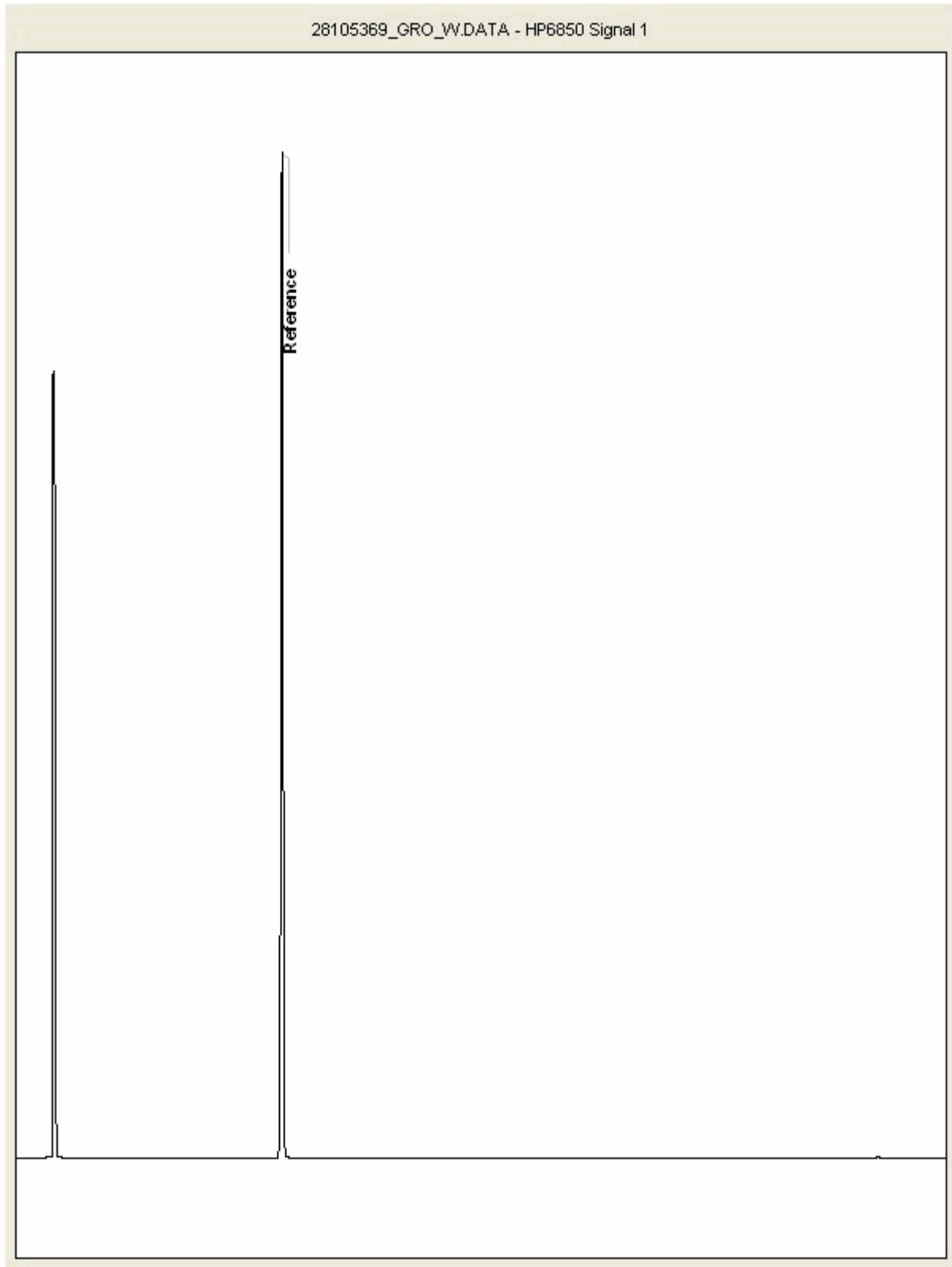
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105369
Sample ID : AMW1

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

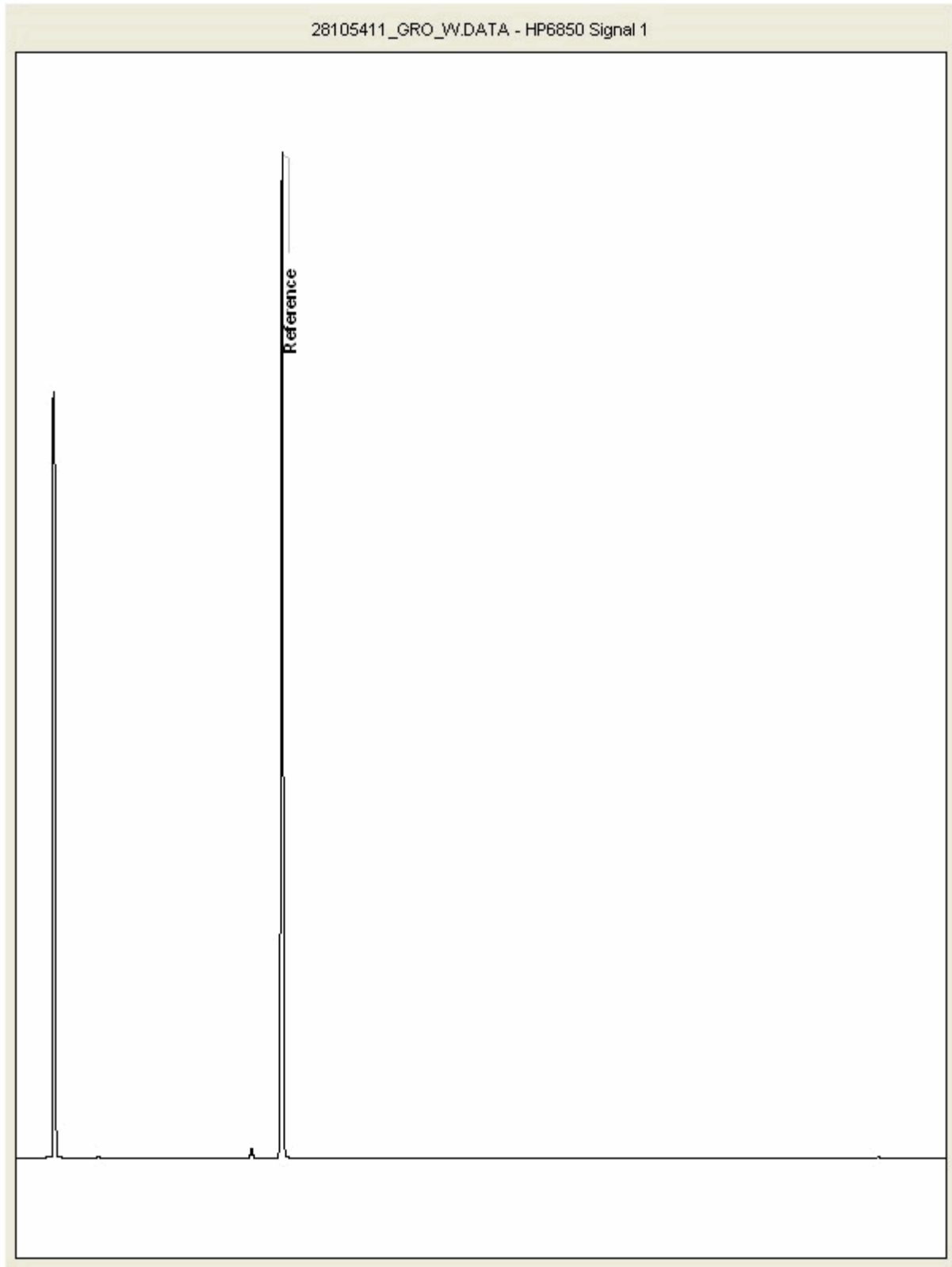
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105411
Sample ID : AMW8

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

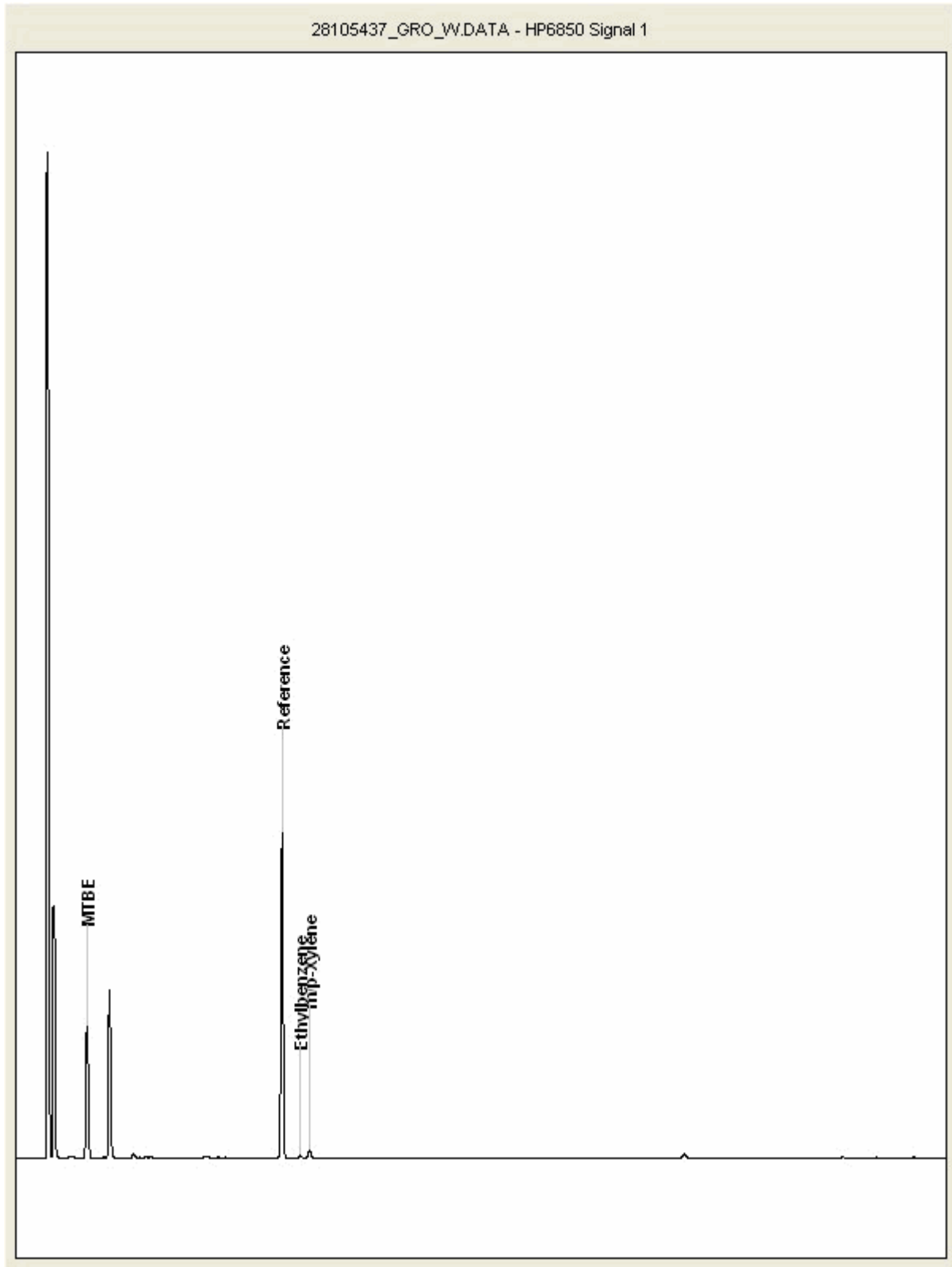
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105437
Sample ID : AMW4

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

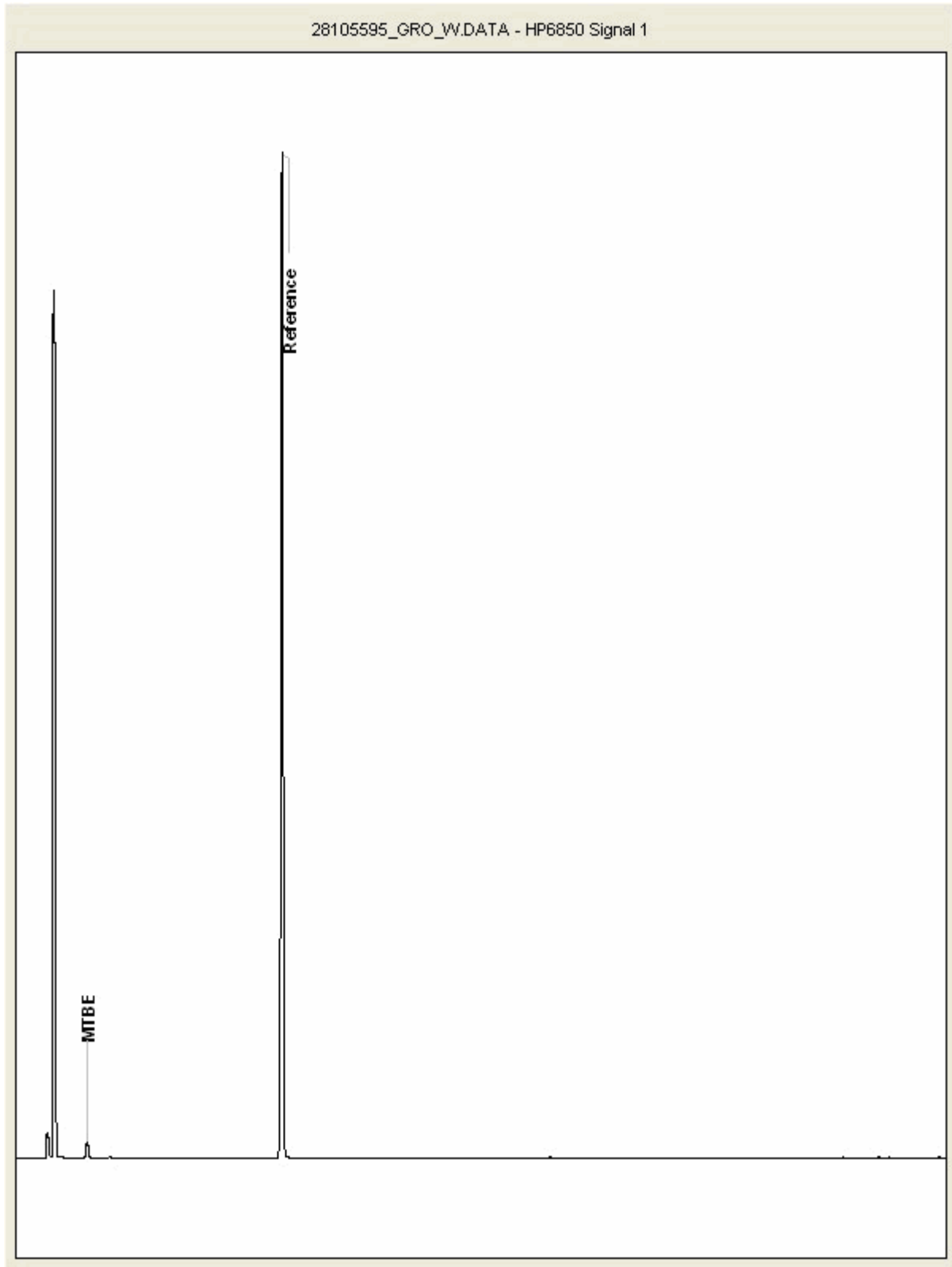
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28105595
Sample ID : BH107

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

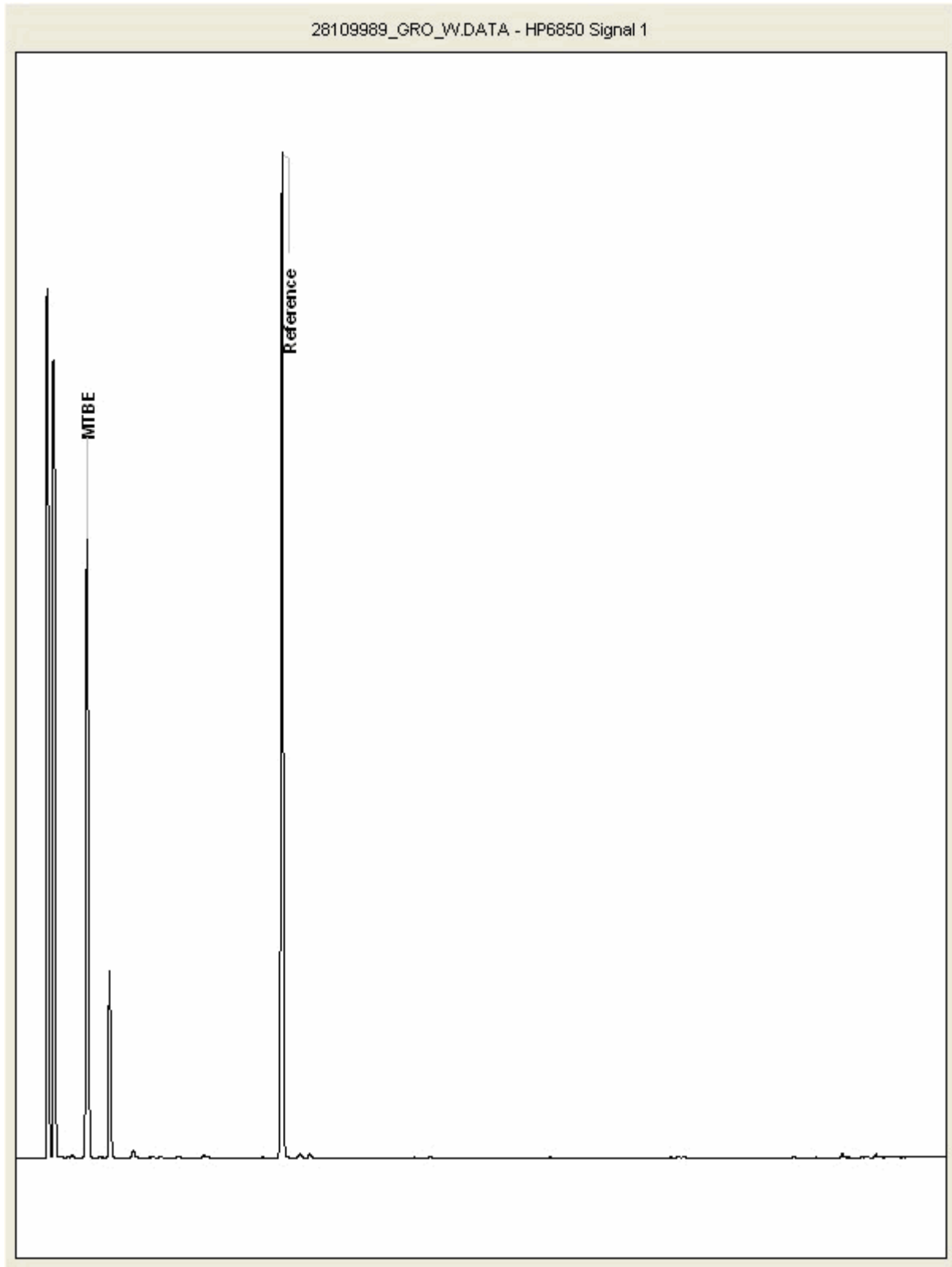
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28109989
Sample ID : AMW5

Depth : 0.00 - 0.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 230602-65
Client Ref.: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

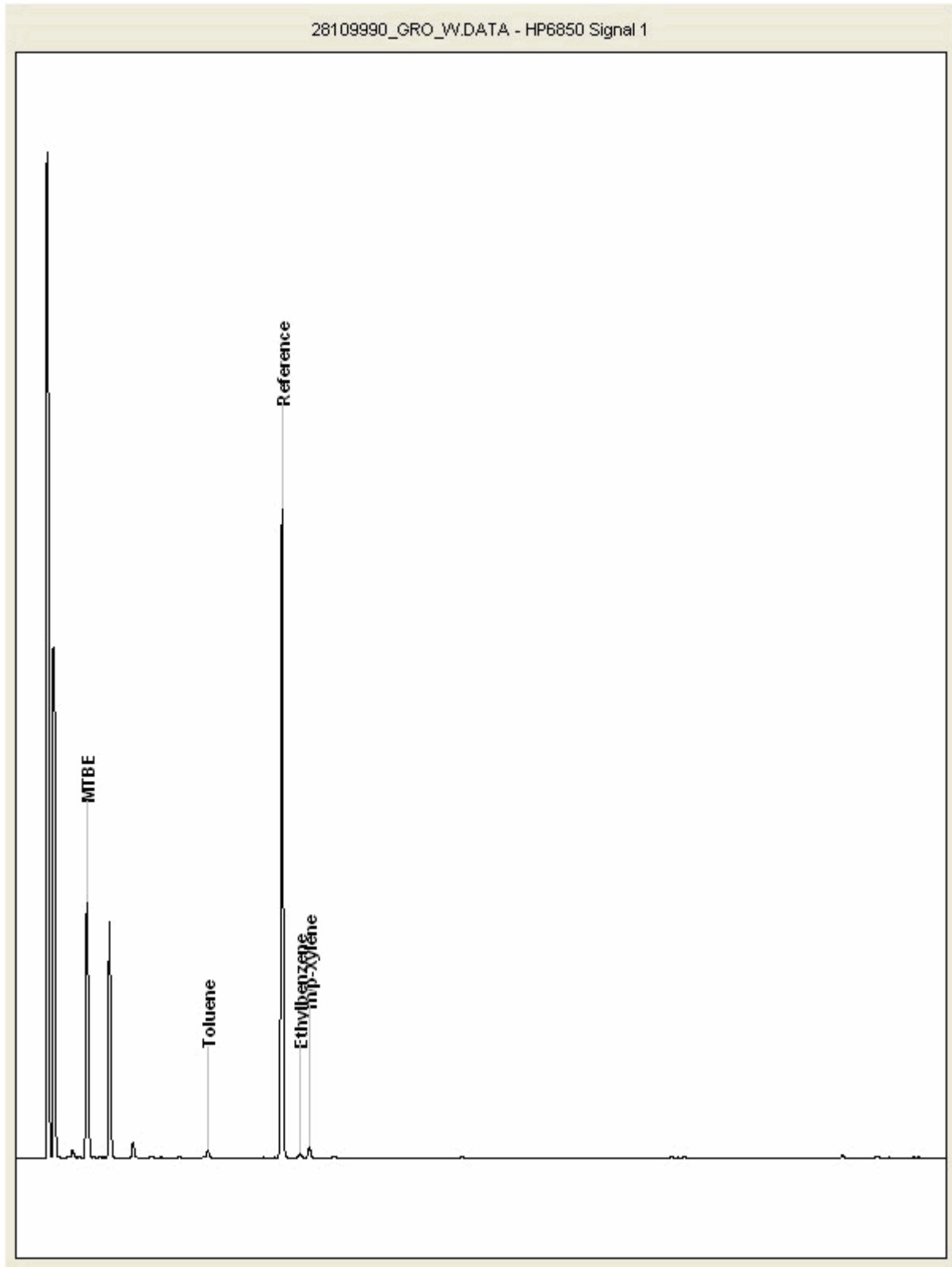
Superseded Report: 692059

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 28109990
Sample ID : AMW3

Depth : 0.00 - 0.00



Certificate of Analysis

Report No.: 23-03989-1

Issue No.: 1

Date of Issue 20/06/2023

Customer Details: ALS Laboratories (UK) Ltd, Unit7-8, Hawarden Business Park, Manor Road, Hawarden, Deeside, Flintshire, CH5 3US, United Kingdom

Customer Contact: Results mailbox

Customer Order No.: 230602-65

Customer Reference: Not Supplied

Quotation Reference: Q23-00645 (Issue: 7)

Description: 12 water samples

Date Received: 07/06/2023

Date Started: 12/06/2023

Date Completed: 20/06/2023

Test Methods: Details available on request (refer to SOP code against relevant result/s)

Notes: None



Approved By: David Long, LIMS Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.

This certificate shall not be reproduced except in full without the prior written approval of the laboratory.

Observations and interpretations are outside of the scope of UKAS accreditation.

Results reported herein relate only to the items supplied to the laboratory for testing.

Results on an Interim Report are not dry-weight corrected.

Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.

The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

rpsgroup.com

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13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400

A member of the RPS Group plc. Terms and conditions apply - copy on request

Results Summary

Report No.: 23-03989-1

Customer Reference: Not Supplied

Customer Order No: 230602-65

Customer Sample No	28100361	28100387	28100363	28100377	28100373	28100385	28100372	28100394	28100398	28100400
RPS Sample No	24069	24070	24071	24072	24073	24074	24075	24076	24077	24078
Sample Type	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Sample Matrix	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Sampling Date	30/05/2023	31/05/2023	30/05/2023	31/05/2023	31/05/2023	30/05/2023	30/05/2023	30/05/2023	31/05/2023	31/05/2023

Determinand	CAS No	Codes	SOP	RL	Units									
acetonitrile (ACN)	75-05-8	N	G040	1	mg/L	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)	< 1.0 (T)

Results Summary

Report No.: 23-03989-1

Customer Reference: Not Supplied

Customer Order No: 230602-65

Customer Sample No	28101748	28100366
RPS Sample No	24079	24080
Sample Type	WATER	WATER
Sample Matrix	SW	SW
Sampling Date	31/05/2023	31/05/2023

Determinand	CAS No	Codes	SOP	RL	Units		
acetonitrile (ACN)	75-05-8	N	G040	1	mg/L	< 1.0 (T)	< 1.0 (T)

Deviating Samples

Report No.: 23-03989-1

Customer Reference: Not Supplied

Customer Order No: 230602-65

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).

RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.

Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.

Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.

Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submission may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
24069	28100361		30/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24070	28100387		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24071	28100363		30/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24072	28100377		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24073	28100373		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24074	28100385		30/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24075	28100372		30/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24076	28100394		30/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24077	28100398		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24078	28100400		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24079	28101748		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.
24080	28100366		31/05/2023	GAV40 40 mL amber glass vial	Yes	No sampling time provided.

Report No.: 23-03989-1

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	PACKAGING	Packaging material
Solid	PLANT	Plant (vegetation)
Solid	SWAB	Swab
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Water

Report No.: 23-03989-1

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal RPS Group laboratory not accredited for the test
SIU	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
SIM	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
L (in results)	Result is outside normal limits
DW (in units)	Results are expressed on a dry weight basis

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.



CERTIFICATE OF ANALYSIS

SDG: 230602-65
Client Ref: 1099-028-COC29

Report Number: 693170
Location: 1099 Arran Chemicals

Superseded Report: 692059

Appendix

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 15 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.

General

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 (2021), 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 and soils are obtained from supplied bulk materials and soils 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 (2021).

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 Anorthophyllite	-
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.