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CERTIFICATE OF ANALYSIS

Date of report Generation:	15 September 2021
Customer:	WSP UK Limited
Sample Delivery Group (SDG):	210907-69
Your Reference:	70057126
Location:	Windy Arbor
Report No:	613204
Order Number:	70057126

We received 8 samples on Monday September 06, 2021 and 8 of these samples were scheduled for analysis which was completed on Wednesday September 15, 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.

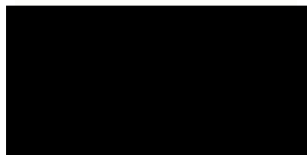
Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden.

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: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
24934478	TP1		0.00 - 0.40	06/09/2021
24934465	TP2		0.00 - 0.30	06/09/2021
24934469	TP3		0.00 - 0.35	06/09/2021
24934474	TP4		0.00 - 0.30	06/09/2021
24934460	TP5		0.00 - 0.30	06/09/2021
24934484	TP6		0.00 - 0.40	06/09/2021
24934488	TP7		0.00 - 0.40	06/09/2021
24934492	TP8		0.00 - 0.40	06/09/2021

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



CERTIFICATE OF ANALYSIS

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SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

Results Legend X Test N No Determination Possible Sample Types - S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container		Sample Type	
	24934488		TP7				0.00 - 0.40		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
	24934484		TP6				0.00 - 0.40		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
	24934460		TP5				0.00 - 0.30		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
	24934474		TP4				0.00 - 0.30		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
	24934469		TP3				0.00 - 0.35		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
	24934465		TP2				0.00 - 0.30		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S	
24934478		TP1				0.00 - 0.40		60g VOC (ALE215) 250g Amber Jar (ALE210) 1kg TUB with Handle (ALE260)		S		
Anions by Kone (w)	All	NDPs: 0 Tests: 8	X		X		X		X		X	
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 8	X		X		X		X		X	
CEN Readings	All	NDPs: 0 Tests: 8	X		X		X		X		X	
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 16	X	X	X	X	X	X	X	X	X	X
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 8	X		X		X		X		X	
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 8	X		X		X		X		X	
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 8	X		X		X		X		X	
EPH CWG GC (S)	All	NDPs: 0 Tests: 8		X		X		X		X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 8			X		X		X		X	
GRO by GC-FID (W)	All	NDPs: 0 Tests: 8	X		X		X		X		X	
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 8		X		X		X		X		X
Mercury Dissolved	All	NDPs: 0 Tests: 8	X		X		X		X		X	
Metals in solid samples by OES	All	NDPs: 0 Tests: 8		X		X		X		X		X
PAH by GCMS	All	NDPs: 0 Tests: 8		X		X		X		X		X
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 8	X		X		X		X		X	



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	24934488		TP7				0.00 - 0.40		60g VOC (ALE215)	S	S	
	24934484		TP6				0.00 - 0.40		1kg TUB with Handle (ALE280)	S	S	
	24934465		TP2				0.00 - 0.30		250g Amber Jar (ALE210)	S	S	
	24934469		TP3				0.00 - 0.35		60g VOC (ALE215)	S	S	
	24934474		TP4				0.00 - 0.30		1kg TUB with Handle (ALE280)	S	S	
	24934460		TP5				0.00 - 0.30		250g Amber Jar (ALE210)	S	S	
PCBs by GCMS	All	NDPs: 0 Tests: 8										
pH	All	NDPs: 0 Tests: 8										
pH Value	All	NDPs: 0 Tests: 8										
Phenols by HPLC (S)	All	NDPs: 0 Tests: 8										
Phenols by HPLC (W)	All	NDPs: 0 Tests: 8										
Sample description	All	NDPs: 0 Tests: 8										
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 8										
Sulphide	All	NDPs: 0 Tests: 8										
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 8										
Total Organic Carbon	All	NDPs: 0 Tests: 8										
TPH CWG (W)	All	NDPs: 0 Tests: 8										
TPH CWG GC (S)	All	NDPs: 0 Tests: 8										
VOC MS (S)	All	NDPs: 0 Tests: 8										
VOC MS (W)	All	NDPs: 0 Tests: 8										



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Superseded Report:

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
24934478	TP1	0.00 - 0.40	Dark Brown	Loamy Sand	Stones	Vegetation
24934465	TP2	0.00 - 0.30	Black	Loamy Sand	Stones	Brick
24934469	TP3	0.00 - 0.35	Dark Brown	Loamy Sand	Brick	Plastic
24934474	TP4	0.00 - 0.30	Dark Brown	Loamy Sand	Stones	Plastic
24934460	TP5	0.00 - 0.30	Dark Brown	Loamy Sand	Glass & Stones	Vegetation
24934484	TP6	0.00 - 0.40	Dark Brown	Loamy Sand	Vegetation	Brick
24934488	TP7	0.00 - 0.40	Dark Brown	Loamy Sand	Vegetation	Brick
24934492	TP8	0.00 - 0.40	Dark Brown	Sandy Clay Loam	None	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

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 materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



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Superseded Report:

Results Legend		Customer Sample Ref.	TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40	0.00 - 0.30	0.00 - 0.35	0.00 - 0.30	0.00 - 0.30	0.00 - 0.40
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
aq	Aqueous / settled sample.		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
diss.filt	Dissolved / filtered sample.		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
tot.unfilt	Total / unfiltered sample.		210907-69	210907-69	210907-69	210907-69	210907-69	210907-69
*	Subcontracted - refer to subcontractor report for accreditation status.		24934478	24934465	24934469	24934474	24934460	24934484
**	% 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						
Moisture Content Ratio (% of as received sample)	%	PM024	12	13	14	9.8	15	12
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	0.0116 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M
Soil Organic Matter (SOM)	<0.35 %	TM132	17.6 #	21.9 #	10.6 #	23.1 #	16.4 #	25.5 #
pH	1 pH Units	TM133	7.31 M	7.78 M	7.29 M	7.81 M	7.73 M	6.71 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Complex	<1 mg/kg	TM153	<1	<1	<1	<1	<1	<1
PCB congener 118	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 81	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 77	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 123	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 114	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 105	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 126	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 167	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 156	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 157	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 169	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
PCB congener 189	<0.003 mg/kg	TM168	<0.06 M	<0.06 M	<0.03 M	<0.015 M	<0.03 M	<0.003 M
Sum of detected WHO 12 PCBs	<0.036 mg/kg	TM168	<0.72	<0.72	<0.36	<0.18	<0.36	<0.036
Arsenic	<0.6 mg/kg	TM181	21.3 M	34.4 M	31.5 M	15.6 M	26 M	26.8 M
Cadmium	<0.02 mg/kg	TM181	1.02 M	1.54 M	0.685 M	0.881 M	1.32 M	1.14 M
Chromium	<0.9 mg/kg	TM181	17.4 M	9.78 M	7.54 M	8.56 M	10.7 M	10.4 M
Copper	<1.4 mg/kg	TM181	78.7 M	144 M	81.3 M	86.1 M	165 M	132 M
Lead	<0.7 mg/kg	TM181	103 M	397 M	166 M	112 M	201 M	142 M
Mercury	<0.1 mg/kg	TM181	<0.1 M	2.07 M	0.628 M	<0.1 M	0.168 M	0.189 M
Nickel	<0.2 mg/kg	TM181	20.1 M	36.7 M	17.9 M	20.9 M	30.7 M	33.1 M
Selenium	<1 mg/kg	TM181	<1 #	4.77 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181	143 M	124 M	119 M	173 M	728 M	223 M



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

Results Legend		Customer Sample Ref.	TP7	TP8				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40	0.00 - 0.40				
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)				
aq	Aqueous / settled sample.		06/09/2021	06/09/2021				
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.		06/09/2021	06/09/2021				
*	Subcontracted - refer to subcontractor report for accreditation status.		210907-69	210907-69				
**	% 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		24934488	24934492				
(F)	Trigger breach confirmed							
1-4*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	11	13				
Phenol	<0.01 mg/kg	TM062 (S)	0.0113 M	<0.01 M				
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	0.0115 M				
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M				
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M				
Soil Organic Matter (SOM)	<0.35 %	TM132	8.81 #	10.8 #				
pH	1 pH Units	TM133	7.55 M	7.45 M				
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #				
Cyanide, Complex	<1 mg/kg	TM153	<1	<1				
PCB congener 118	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 81	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 77	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 123	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 114	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 105	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 126	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 167	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 156	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 157	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 169	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
PCB congener 189	<0.003 mg/kg	TM168	<0.06 M	<0.03 M				
Sum of detected WHO 12 PCBs	<0.036 mg/kg	TM168	<0.72	<0.36				
Arsenic	<0.6 mg/kg	TM181	20.8 M	22 M				
Cadmium	<0.02 mg/kg	TM181	0.902 M	0.347 M				
Chromium	<0.9 mg/kg	TM181	9.87 M	6.77 M				
Copper	<1.4 mg/kg	TM181	96.3 M	112 M				
Lead	<0.7 mg/kg	TM181	110 M	104 M				
Mercury	<0.1 mg/kg	TM181	<0.1 M	0.294 M				
Nickel	<0.2 mg/kg	TM181	26.6 M	18.3 M				
Selenium	<1 mg/kg	TM181	<1 #	<1 #				
Zinc	<1.9 mg/kg	TM181	201 M	149 M				



CERTIFICATE OF ANALYSIS

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SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

Semi Volatile Organic Compounds

Results Legend			Customer Sample Ref.	TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.35 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.40 Soil/Solid (S) 06/09/2021
M	mCERTS accredited.								
aq	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)								
Component	LOD/Units	Method							
Phenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Pentachlorophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
n-Nitroso-n-dipropylamine	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Nitrobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Isophorone	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Hexachloroethane	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Hexachlorocyclopentadiene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Hexachlorobutadiene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Hexachlorobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
n-Dioctyl phthalate	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Dimethyl phthalate	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Diethyl phthalate	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
n-Dibutyl phthalate	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Dibenzofuran	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Carbazole	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Butylbenzyl phthalate	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
bis(2-Ethylhexyl) phthalate	<0.1 mg/kg	TM157		<1	<2	<2	0.255	<1	<0.1
bis(2-Chloroethoxy)methane	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
bis(2-Chloroethyl)ether	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Azobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Nitrophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Nitroaniline	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Methylphenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Chlorophenylphenylether	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Chloroaniline	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Chloro-3-methylphenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
4-Bromophenylphenylether	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
3-Nitroaniline	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2-Nitrophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2-Nitroaniline	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2-Methylphenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
1,2,4-Trichlorobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1



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Validated

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Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Semi Volatile Organic Compounds

Results Legend			Customer Sample Ref.	TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.35 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.40 Soil/Solid (S) 06/09/2021
M	mCERTS accredited.								
dis.filt	Aqueous / settled sample.								
tot.unfilt	Dissolved / filtered sample.								
*	Total / unfiltered sample.								
**	Subcontracted - refer to subcontractor report for accreditation status.			06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
	% 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			210907-69	210907-69	210907-69	210907-69	210907-69	210907-69
(F)	Trigger breach confirmed			24934478	24934465	24934469	24934474	24934460	24934484
1-4-5@	Sample deviation (see appendix)								
Component	LOD/Units	Method							
2-Chlorophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,6-Dinitrotoluene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,4-Dinitrotoluene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,4-Dimethylphenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,4-Dichlorophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,4,6-Trichlorophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2,4,5-Trichlorophenol	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
1,4-Dichlorobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
1,3-Dichlorobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
1,2-Dichlorobenzene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2-Chloronaphthalene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
2-Methylnaphthalene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	0.114
Acenaphthylene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Acenaphthene	<0.1 mg/kg	TM157		<1	3.16	3.21	<0.2	<1	<0.1
Anthracene	<0.1 mg/kg	TM157		<1	5.81	4.06	<0.2	<1	<0.1
Benzo(a)anthracene	<0.1 mg/kg	TM157		8.62	20.2	9.41	0.666	2.8	0.49
Benzo(b)fluoranthene	<0.1 mg/kg	TM157		6.33	9.84	4.49	0.599	2.54	0.456
Benzo(k)fluoranthene	<0.1 mg/kg	TM157		6.01	12.5	4.33	0.5	2.46	0.342
Benzo(a)pyrene	<0.1 mg/kg	TM157		9.92	20.6	7.76	0.81	4.13	0.49
Benzo(g,h,i)perylene	<0.1 mg/kg	TM157		4.37	7.91	2.53	0.389	1.93	0.239
Chrysene	<0.1 mg/kg	TM157		7.58	21.1	10.7	0.833	2.53	0.513
Fluoranthene	<0.1 mg/kg	TM157		14.1	48.8	23.8	1.19	3.59	0.901
Fluorene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Indeno(1,2,3-cd)pyrene	<0.1 mg/kg	TM157		8.44	17	7.04	0.799	4.26	0.502
Phenanthrene	<0.1 mg/kg	TM157		2.11	25.8	19.8	0.477	<1	0.57
Pyrene	<0.1 mg/kg	TM157		12.9	42.9	18.4	1.05	3.6	0.775
Naphthalene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Dibenzo(a,h)anthracene	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1
Bis(2-chloroisopropyl) ether	<0.1 mg/kg	TM157		<1	<2	<2	<0.2	<1	<0.1



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Semi Volatile Organic Compounds

Results Legend			Customer Sample Ref.	TP7	TP8			
#	ISO17025 accredited.							
M	mCERTS accredited.							
aq	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&@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Phenol	<0.1 mg/kg	TM157	<2	<0.5				
Pentachlorophenol	<0.1 mg/kg	TM157	<2	<0.5				
n-Nitroso-n-dipropylamine	<0.1 mg/kg	TM157	<2	<0.5				
Nitrobenzene	<0.1 mg/kg	TM157	<2	<0.5				
Isophorone	<0.1 mg/kg	TM157	<2	<0.5				
Hexachloroethane	<0.1 mg/kg	TM157	<2	<0.5				
Hexachlorocyclopentadiene	<0.1 mg/kg	TM157	<2	<0.5				
Hexachlorobutadiene	<0.1 mg/kg	TM157	<2	<0.5				
Hexachlorobenzene	<0.1 mg/kg	TM157	<2	<0.5				
n-Dioctyl phthalate	<0.1 mg/kg	TM157	<2	<0.5				
Dimethyl phthalate	<0.1 mg/kg	TM157	<2	<0.5				
Diethyl phthalate	<0.1 mg/kg	TM157	<2	<0.5				
n-Dibutyl phthalate	<0.1 mg/kg	TM157	<2	<0.5				
Dibenzofuran	<0.1 mg/kg	TM157	<2	<0.5				
Carbazole	<0.1 mg/kg	TM157	<2	<0.5				
Butylbenzyl phthalate	<0.1 mg/kg	TM157	<2	<0.5				
bis(2-Ethylhexyl) phthalate	<0.1 mg/kg	TM157	<2	<0.5				
bis(2-Chloroethoxy)methane	<0.1 mg/kg	TM157	<2	<0.5				
bis(2-Chloroethyl)ether	<0.1 mg/kg	TM157	<2	<0.5				
Azobenzene	<0.1 mg/kg	TM157	<2	<0.5				
4-Nitrophenol	<0.1 mg/kg	TM157	<2	<0.5				
4-Nitroaniline	<0.1 mg/kg	TM157	<2	<0.5				
4-Methylphenol	<0.1 mg/kg	TM157	<2	<0.5				
4-Chlorophenylphenylether	<0.1 mg/kg	TM157	<2	<0.5				
4-Chloroaniline	<0.1 mg/kg	TM157	<2	<0.5				
4-Chloro-3-methylphenol	<0.1 mg/kg	TM157	<2	<0.5				
4-Bromophenylphenylether	<0.1 mg/kg	TM157	<2	<0.5				
3-Nitroaniline	<0.1 mg/kg	TM157	<2	<0.5				
2-Nitrophenol	<0.1 mg/kg	TM157	<2	<0.5				
2-Nitroaniline	<0.1 mg/kg	TM157	<2	<0.5				
2-Methylphenol	<0.1 mg/kg	TM157	<2	<0.5				
1,2,4-Trichlorobenzene	<0.1 mg/kg	TM157	<2	<0.5				



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Semi Volatile Organic Compounds

Results Legend			Customer Sample Ref.		TP7	TP8			
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40 Soil/Solid (S) 06/09/2021 06/09/2021 210907-69 24934488	0.00 - 0.40 Soil/Solid (S) 06/09/2021 06/09/2021 210907-69 24934492				
M	mCERES 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)								
Component	LOD/Units	Method							
2-Chlorophenol	<0.1 mg/kg	TM157	<2	<0.5					
2,6-Dinitrotoluene	<0.1 mg/kg	TM157	<2	<0.5					
2,4-Dinitrotoluene	<0.1 mg/kg	TM157	<2	<0.5					
2,4-Dimethylphenol	<0.1 mg/kg	TM157	<2	<0.5					
2,4-Dichlorophenol	<0.1 mg/kg	TM157	<2	<0.5					
2,4,6-Trichlorophenol	<0.1 mg/kg	TM157	<2	<0.5					
2,4,5-Trichlorophenol	<0.1 mg/kg	TM157	<2	<0.5					
1,4-Dichlorobenzene	<0.1 mg/kg	TM157	<2	<0.5					
1,3-Dichlorobenzene	<0.1 mg/kg	TM157	<2	<0.5					
1,2-Dichlorobenzene	<0.1 mg/kg	TM157	<2	<0.5					
2-Chloronaphthalene	<0.1 mg/kg	TM157	<2	<0.5					
2-Methylnaphthalene	<0.1 mg/kg	TM157	<2	<0.5					
Acenaphthylene	<0.1 mg/kg	TM157	<2	<0.5					
Acenaphthene	<0.1 mg/kg	TM157	<2	<0.5					
Anthracene	<0.1 mg/kg	TM157	<2	<0.5					
Benzo(a)anthracene	<0.1 mg/kg	TM157	<2	0.598					
Benzo(b)fluoranthene	<0.1 mg/kg	TM157	<2	0.759					
Benzo(k)fluoranthene	<0.1 mg/kg	TM157	<2	0.575					
Benzo(a)pyrene	<0.1 mg/kg	TM157	<2	1.07					
Benzo(g,h,i)perylene	<0.1 mg/kg	TM157	<2	0.587					
Chrysene	<0.1 mg/kg	TM157	<2	0.598					
Fluoranthene	<0.1 mg/kg	TM157	3.15	0.782					
Fluorene	<0.1 mg/kg	TM157	<2	<0.5					
Indeno(1,2,3-cd)pyrene	<0.1 mg/kg	TM157	2.9	1.41					
Phenanthrene	<0.1 mg/kg	TM157	3.19	<0.5					
Pyrene	<0.1 mg/kg	TM157	2.98	0.736					
Naphthalene	<0.1 mg/kg	TM157	<2	<0.5					
Dibenzo(a,h)anthracene	<0.1 mg/kg	TM157	<2	<0.5					
Bis(2-chloroisopropyl) ether	<0.1 mg/kg	TM157	<2	<0.5					



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-29
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample Ref.		TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		0.00 - 0.40 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.35 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.40 Soil/Solid (S)
M	mCERTS accredited.				06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
aq	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				06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
(F)	Trigger breach confirmed				210907-69	210907-69	210907-69	210907-69	210907-69	210907-69
1-4+5@	Sample deviation (see appendix)				24934478	24934465	24934469	24934474	24934460	24934484
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089			70.5	76.2	75.7	80.8	70.7	72.5
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414			<1	<1	<1	<1	<1	<1
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414			2.88	2.37	1.14	2.92	3.54	4.01
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414			2.85	1.86	1.4	3.38	2.76	3.63
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414			13	6.82	7.82	17.6	16	13
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414			<1	<1	3.18	1.89	<1	<1
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414			19.7	11.1	13.5	25.7	23.2	22.4
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414			141	638	294	87.3	204	50.6
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414			<1	<1	<1	<1	<1	<1
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414			<1	21.5	3.22	2.02	3.29	2.14
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414			19.5	157	51.6	8.34	26.1	3.65
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414			86.5	362	203	41.3	139	17.7
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414			14	86.1	22.9	9.82	12.7	4.68
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414			2.44	27.1	4.49	1.77	2.62	<1
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414			121	626	281	61.5	181	28.1
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414			141	638	294	87.3	204	50.6
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample Ref.	TP7	TP8			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40	0.00 - 0.40			
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)			
aq	Aqueous / settled sample.		06/09/2021	06/09/2021			
diss.filt	Dissolved / filtered sample.						
tot.unfilt	Total / unfiltered sample.		06/09/2021	06/09/2021			
*	Subcontracted - refer to subcontractor report for accreditation status.		210907-69	210907-69			
**	% 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		24934488	24934492			
(F)	Trigger breach confirmed						
1-4*\$@	Sample deviation (see appendix)						
Component	LOD/Units	Method					
GRO Surrogate % recovery**	%	TM089	74.7	73.8			
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #			
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	3.48 #	3.26 #			
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	1.77 #	1.84 #			
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	7.94 #	5.92 #			
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	<1			
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	13.7	11.9			
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	189	70.5			
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	1.25 #	<1 #			
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	7.08 #	4.29 #			
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	17.4 #	6.67 #			
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	107 #	37.9 #			
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	43.2	9.74			
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	14.1	2.76			
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	176	58.7			
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	189	70.5			
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05			
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05			
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02			



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

VOC MS (S)

Results Legend		Customer Sample Ref.	TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.35 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.30 Soil/Solid (S)	0.00 - 0.40 Soil/Solid (S)
M	mCERTS accredited.		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
aq	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)							
Component	LOD/Units	Method						
Dibromofluoromethane**	%	TM116	109	108	109	105	110	109
Toluene-d8**	%	TM116	97.6	98.1	96.4	96.6	96.3	96.7
4-Bromofluorobenzene**	%	TM116	94.1	88.7	86.9	86.1	93.5	91.6
Dichlorodifluoromethane	<0.006 mg/kg	TM116	<0.12 M	<0.12 M	<0.12 M	<0.006 M	<0.12 M	<0.12 M
Chloromethane	<0.007 mg/kg	TM116	<0.14 #	<0.14 #	<0.14 #	<0.007 #	<0.14 #	<0.14 #
Vinyl Chloride	<0.006 mg/kg	TM116	<0.12 ♦ M	<0.12 ♦ M	<0.12 ♦ M	<0.006 M	<0.12 ♦ M	<0.12 ♦ M
Bromomethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Chloroethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Trichlorofluoromethane	<0.006 mg/kg	TM116	<0.12 M	<0.12 M	<0.12 M	<0.006 M	<0.12 M	<0.12 M
1,1-Dichloroethene	<0.01 mg/kg	TM116	<0.2 #	<0.2 #	<0.2 #	<0.01 #	<0.2 #	<0.2 #
Carbon Disulphide	<0.007 mg/kg	TM116	<0.14 M	<0.14 M	<0.14 M	<0.007 M	<0.14 M	<0.14 M
Dichloromethane	<0.01 mg/kg	TM116	<0.2 #	<0.2 #	<0.2 #	<0.01 #	<0.2 #	<0.2 #
Methyl Tertiary Butyl Ether	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
trans-1,2-Dichloroethene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
1,1-Dichloroethane	<0.008 mg/kg	TM116	<0.16 M	<0.16 M	<0.16 M	<0.008 M	<0.16 M	<0.16 M
cis-1,2-Dichloroethene	<0.006 mg/kg	TM116	<0.12 M	<0.12 M	<0.12 M	<0.006 M	<0.12 M	<0.12 M
2,2-Dichloropropane	<0.01 mg/kg	TM116	<0.2	<0.2	<0.2	<0.01	<0.2	<0.2
Bromochloromethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Chloroform	<0.008 mg/kg	TM116	<0.16 M	<0.16 M	<0.16 M	<0.008 M	<0.16 M	<0.16 M
1,1,1-Trichloroethane	<0.007 mg/kg	TM116	<0.14 3 M	<0.14 3 M	<0.14 3 M	<0.007 M	<0.14 3 M	<0.14 3 M
1,1-Dichloropropene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Carbontetrachloride	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
1,2-Dichloroethane	<0.005 mg/kg	TM116	<0.1 3 M	<0.1 3 M	<0.1 3 M	<0.005 M	<0.1 3 M	<0.1 3 M
Benzene	<0.009 mg/kg	TM116	<0.18 M	<0.18 M	<0.18 M	<0.009 M	<0.18 M	<0.18 M
Trichloroethene	<0.009 mg/kg	TM116	<0.18 #	<0.18 #	<0.18 #	<0.009 #	<0.18 #	<0.18 #
1,2-Dichloropropane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Dibromomethane	<0.009 mg/kg	TM116	<0.18 3 M	<0.18 3 M	<0.18 3 M	<0.009 M	<0.18 3 M	<0.18 3 M
Bromodichloromethane	<0.007 mg/kg	TM116	<0.14 M	<0.14 M	<0.14 M	<0.007 M	<0.14 M	<0.14 M
cis-1,3-Dichloropropene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M
Toluene	<0.007 mg/kg	TM116	<0.14 M	<0.14 M	<0.14 M	<0.007 M	<0.14 M	<0.14 M
trans-1,3-Dichloropropene	<0.01 mg/kg	TM116	<0.2	<0.2	<0.2	<0.01	<0.2	<0.2
1,1,2-Trichloroethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M	<0.2 M	<0.01 M	<0.2 M	<0.2 M



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

VOC MS (S)

Results Legend			Customer Sample Ref.		TP1	TP2	TP3	TP4	TP5	TP6
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		0.00 - 0.40 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.35 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.30 Soil/Solid (S) 06/09/2021	0.00 - 0.40 Soil/Solid (S) 06/09/2021
M	mCERES 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									
1-4-5@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,3-Dichloropropane	<0.007 mg/kg	TM116	<0.14	M	<0.14	M	<0.14	M	<0.14	M
Tetrachloroethene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M	<0.005	M	<0.1	M
Dibromochloromethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
1,2-Dibromoethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
Chlorobenzene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M	<0.005	M	<0.1	M
1,1,1,2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
Ethylbenzene	<0.004 mg/kg	TM116	<0.08	M	<0.08	M	<0.004	M	<0.08	M
p/m-Xylene	<0.01 mg/kg	TM116	<0.2	#	<0.2	#	<0.01	#	<0.2	#
o-Xylene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
Styrene	<0.01 mg/kg	TM116	<0.2	◆ #	<0.2	◆ #	<0.01	#	<0.2	◆ #
Bromoform	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
Isopropylbenzene	<0.005 mg/kg	TM116	<0.1	#	<0.1	#	<0.005	#	<0.1	#
1,1,2,2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.2	#	<0.2	#	<0.01	#	<0.2	#
1,2,3-Trichloropropane	<0.016 mg/kg	TM116	<0.32	M	<0.32	M	<0.016	M	<0.32	M
Bromobenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
Propylbenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
2-Chlorotoluene	<0.009 mg/kg	TM116	<0.18	M	<0.18	M	<0.009	M	<0.18	M
1,3,5-Trimethylbenzene	<0.008 mg/kg	TM116	<0.16	M	<0.16	M	<0.008	M	<0.16	M
4-Chlorotoluene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
tert-Butylbenzene	<0.014 mg/kg	TM116	<0.28	M	<0.28	M	<0.014	M	<0.28	M
1,2,4-Trimethylbenzene	<0.009 mg/kg	TM116	<0.18	#	<0.18	#	<0.009	#	<0.18	#
sec-Butylbenzene	<0.01 mg/kg	TM116	<0.2		<0.2		<0.01		<0.2	
4-Isopropyltoluene	<0.01 mg/kg	TM116	<0.2		<0.2		<0.01		<0.2	
1,3-Dichlorobenzene	<0.008 mg/kg	TM116	<0.16	M	<0.16	M	<0.008	M	<0.16	M
1,4-Dichlorobenzene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M	<0.005	M	<0.1	M
n-Butylbenzene	<0.011 mg/kg	TM116	<0.22		<0.22		<0.011		<0.22	
1,2-Dichlorobenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M	<0.01	M	<0.2	M
1,2-Dibromo-3-chloropropane	<0.014 mg/kg	TM116	<0.28	M	<0.28	M	<0.014	M	<0.28	M
Tert-amyl methyl ether	<0.01 mg/kg	TM116	<0.2	#	<0.2	#	<0.01	#	<0.2	#
1,2,4-Trichlorobenzene	<0.02 mg/kg	TM116	<0.4		<0.4		<0.02		<0.4	
Hexachlorobutadiene	<0.02 mg/kg	TM116	<0.4		<0.4		<0.02		<0.4	
Naphthalene	<0.013 mg/kg	TM116	<0.26	M	<0.26	M	<0.013	M	<0.26	M



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

VOC MS (S)

Results Legend		Customer Sample Ref.	TP7	TP8			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.00 - 0.40	0.00 - 0.40			
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)			
aq	Aqueous / settled sample.		06/09/2021	06/09/2021			
diss.filt	Dissolved / filtered sample.						
tot.unfilt	Total / unfiltered sample.		06/09/2021	06/09/2021			
*	Subcontracted - refer to subcontractor report for accreditation status.		210907-69	210907-69			
**	% 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		24934488	24934492			
(F)	Trigger breach confirmed						
1-4%	Sample deviation (see appendix)						
Component	LOD/Units	Method					
Dibromofluoromethane**	%	TM116	107	107			
Toluene-d8**	%	TM116	94.4	98.2			
4-Bromofluorobenzene**	%	TM116	88.5	94			
Dichlorodifluoromethane	<0.006 mg/kg	TM116	<0.12 M	<0.12 M			
Chloromethane	<0.007 mg/kg	TM116	<0.14 #	<0.14 #			
Vinyl Chloride	<0.006 mg/kg	TM116	<0.12 ♦ M	<0.12 ♦ M			
Bromomethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Chloroethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Trichlorofluoromethane	<0.006 mg/kg	TM116	<0.12 M	<0.12 M			
1,1-Dichloroethene	<0.01 mg/kg	TM116	<0.2 #	<0.2 #			
Carbon Disulphide	<0.007 mg/kg	TM116	<0.14 M	<0.14 M			
Dichloromethane	<0.01 mg/kg	TM116	<0.2 #	<0.2 #			
Methyl Tertiary Butyl Ether	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
trans-1,2-Dichloroethene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
1,1-Dichloroethane	<0.008 mg/kg	TM116	<0.16 M	<0.16 M			
cis-1,2-Dichloroethene	<0.006 mg/kg	TM116	<0.12 M	<0.12 M			
2,2-Dichloropropane	<0.01 mg/kg	TM116	<0.2	<0.2			
Bromochloromethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Chloroform	<0.008 mg/kg	TM116	<0.16 M	<0.16 M			
1,1,1-Trichloroethane	<0.007 mg/kg	TM116	<0.14 3 M	<0.14 3 M			
1,1-Dichloropropene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Carbontetrachloride	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
1,2-Dichloroethane	<0.005 mg/kg	TM116	<0.1 3 M	<0.1 3 M			
Benzene	<0.009 mg/kg	TM116	<0.18 M	<0.18 M			
Trichloroethene	<0.009 mg/kg	TM116	<0.18 #	<0.18 #			
1,2-Dichloropropane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Dibromomethane	<0.009 mg/kg	TM116	<0.18 3 M	<0.18 3 M			
Bromodichloromethane	<0.007 mg/kg	TM116	<0.14 M	<0.14 M			
cis-1,3-Dichloropropene	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			
Toluene	<0.007 mg/kg	TM116	<0.14 M	<0.14 M			
trans-1,3-Dichloropropene	<0.01 mg/kg	TM116	<0.2	<0.2			
1,1,2-Trichloroethane	<0.01 mg/kg	TM116	<0.2 M	<0.2 M			



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

VOC MS (S)

Results Legend			Customer Sample Ref.		TP7	TP8				
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		0.00 - 0.40	0.00 - 0.40				
M	mCERES accredited.				Soil/Solid (S)	Soil/Solid (S)				
sq	Aqueous / settled sample.				06/09/2021	06/09/2021				
dis.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.				06/09/2021	06/09/2021				
+	Subcontracted - refer to subcontractor report for accreditation status.				210907-69	210907-69				
**	% 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				24934488	24934492				
(F)	Trigger breach confirmed									
1-4&5@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
1,3-Dichloropropane	<0.007 mg/kg	TM116	<0.14	M	<0.14	M				
Tetrachloroethene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M				
Dibromochloromethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
1,2-Dibromoethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
Chlorobenzene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M				
1,1,1,2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
Ethylbenzene	<0.004 mg/kg	TM116	<0.08	M	<0.08	M				
p/m-Xylene	<0.01 mg/kg	TM116	<0.2	#	<0.2	#				
o-Xylene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
Styrene	<0.01 mg/kg	TM116	<0.2	◆ #	<0.2	◆ #				
Bromoform	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
Isopropylbenzene	<0.005 mg/kg	TM116	<0.1	#	<0.1	#				
1,1,2,2-Tetrachloroethane	<0.01 mg/kg	TM116	<0.2	#	<0.2	#				
1,2,3-Trichloropropane	<0.016 mg/kg	TM116	<0.32	M	<0.32	M				
Bromobenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
Propylbenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
2-Chlorotoluene	<0.009 mg/kg	TM116	<0.18	M	<0.18	M				
1,3,5-Trimethylbenzene	<0.008 mg/kg	TM116	<0.16	M	<0.16	M				
4-Chlorotoluene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
tert-Butylbenzene	<0.014 mg/kg	TM116	<0.28	M	<0.28	M				
1,2,4-Trimethylbenzene	<0.009 mg/kg	TM116	<0.18	#	<0.18	#				
sec-Butylbenzene	<0.01 mg/kg	TM116	<0.2		<0.2					
4-Isopropyltoluene	<0.01 mg/kg	TM116	<0.2		<0.2					
1,3-Dichlorobenzene	<0.008 mg/kg	TM116	<0.16	M	<0.16	M				
1,4-Dichlorobenzene	<0.005 mg/kg	TM116	<0.1	M	<0.1	M				
n-Butylbenzene	<0.011 mg/kg	TM116	<0.22		<0.22					
1,2-Dichlorobenzene	<0.01 mg/kg	TM116	<0.2	M	<0.2	M				
1,2-Dibromo-3-chloropropane	<0.014 mg/kg	TM116	<0.28	M	<0.28	M				
Tert-amyl methyl ether	<0.01 mg/kg	TM116	<0.2	#	<0.2	#				
1,2,4-Trichlorobenzene	<0.02 mg/kg	TM116	<0.4		<0.4					
Hexachlorobutadiene	<0.02 mg/kg	TM116	<0.4		<0.4					
Naphthalene	<0.013 mg/kg	TM116	<0.26	M	<0.26	M				



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Asbestos Identification - Solid Samples

Results Legend

ISO17025 accredited.
M mCERTS accredited.
* Subcontracted test.
(F) Trigger breach confirmed
1-5&S@ Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref.	TP1 0.00 - 0.40 SOLID	09.09.21	Emily Anderton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934478										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP2 0.00 - 0.30 SOLID	10/09/2021	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934465										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP3 0.00 - 0.35 SOLID	10.09.21	Emily Anderton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934469										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP4 0.00 - 0.30 SOLID	09.09.21	Emily Anderton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934474										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP5 0.00 - 0.30 SOLID	09/09/2021	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934460										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP6 0.00 - 0.40 SOLID	10/09/2021	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934484										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP7 0.00 - 0.40 SOLID	10/09/2021	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934488										
Original Sample	TM048										
Method Number											
Cust. Sample Ref.	TP8 0.00 - 0.40 SOLID	09/09/2021	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)											
Sample Type	06/09/2021 00:00:00										
Date Sampled	06/09/2021 16:00:00										
Date Received	210907-69										
SDG	24934492										
Original Sample	TM048										
Method Number											



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.108	Natural Moisture Content (%)	19.4
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	83.8
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934460
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP5
Depth (m)	0.00 - 0.30

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	0.0000177	<0.00001	0.000177	<0.0001	-	-	-
Arsenic	0.00307	<0.0005	0.0307	<0.005	-	-	-
Cadmium	0.0000867	<0.00008	0.000867	<0.0008	-	-	-
Chromium	0.0072	<0.001	0.072	<0.01	-	-	-
Copper	0.0153	<0.0003	0.153	<0.003	-	-	-
Lead	0.00651	<0.0002	0.0651	<0.002	-	-	-
Nickel	0.00763	<0.0004	0.0763	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.0275	<0.001	0.275	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	0.0459	<0.01	0.459	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benz(a)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.0000117	<0.000002	0.000117	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000196	<0.000005	0.000196	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.0000193	<0.000005	0.000193	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	0.00000632	<0.000005	0.0000632	<0.00005	-	-	-
Chrysene by GCMS	0.00000568	<0.000005	0.0000568	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	0.00000919	<0.000005	0.0000919	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	0.0000138	<0.000005	0.000138	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	0.0000939	<0.000082	0.000939	<0.00082	-	-	-
Phenanthrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Pyrene by GCMS	0.00000836	<0.000005	0.0000836	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.12
Conductivity (µS/cm)	120.00
Temperature (°C)	20.30
Volume Leachant (Litres)	0.883

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.108
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	19.4
Dry Matter Content (%)	83.8

Case

SDG	210907-69
Lab Sample Number(s)	24934460
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP5
Depth (m)	0.00 - 0.30

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.12
Conductivity (µS/cm)	120.00
Temperature (°C)	20.30
Volume Leachant (Litres)	0.883

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.108	Natural Moisture Content (%)	19.4
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	83.8
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934460
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP5
Depth (m)	0.00 - 0.30

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.12
Conductivity (µS/cm)	120.00
Temperature (°C)	20.30
Volume Leachant (Litres)	0.883

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.108	Natural Moisture Content (%)		19.4	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		83.8	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934460
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP5
Depth (m)	0.00 - 0.30

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.12
Conductivity (µS/cm)	120.00
Temperature (°C)	20.30
Volume Leachant (Litres)	0.883

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.104	Natural Moisture Content (%)	14.8
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	87.1
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934465
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP2
Depth (m)	0.00 - 0.30

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	0.0000631	<0.00001	0.000631	<0.0001	-	-	-
Arsenic	0.00405	<0.0005	0.0405	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00257	<0.0003	0.0257	<0.003	-	-	-
Lead	0.00261	<0.0002	0.0261	<0.002	-	-	-
Nickel	0.00119	<0.0004	0.0119	<0.004	-	-	-
Selenium	0.00717	<0.001	0.0717	<0.01	-	-	-
Zinc	0.00186	<0.001	0.0186	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	0.000384	<0.000005	0.00384	<0.00005	-	-	-
Acenaphthylene by GCMS	0.0000217	<0.000005	0.000217	<0.00005	-	-	-
Anthracene by GCMS	0.0000919	<0.000005	0.000919	<0.00005	-	-	-
Benz(a)anthracene by GCMS	0.0000475	<0.000005	0.000475	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.0000685	<0.000002	0.000685	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000865	<0.000005	0.000865	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.0000828	<0.000005	0.000828	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	0.0000347	<0.000005	0.000347	<0.00005	-	-	-
Chrysene by GCMS	0.0000614	<0.000005	0.000614	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	0.0000154	<0.000005	0.000154	<0.00005	-	-	-
Fluoranthene by GCMS	0.000312	<0.000005	0.00312	<0.00005	-	-	-
Fluorene by GCMS	0.000115	<0.000005	0.00115	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	0.0000567	<0.000005	0.000567	<0.00005	-	-	-
Naphthalene by GCMS	0.0000463	<0.00001	0.000463	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	0.00207	<0.000082	0.0207	<0.00082	-	-	-
Phenanthrene by GCMS	0.000423	<0.000005	0.00423	<0.00005	-	-	-
Pyrene by GCMS	0.000222	<0.000005	0.00222	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.08
Conductivity (µS/cm)	167.00
Temperature (°C)	20.60
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.104
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	14.8
Dry Matter Content (%)	87.1

Case

SDG	210907-69
Lab Sample Number(s)	24934465
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP2
Depth (m)	0.00 - 0.30

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.08
Conductivity (µS/cm)	167.00
Temperature (°C)	20.60
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg) 0.104

Mass of dry sample (kg) 0.090

Particle Size <4mm >95%

Site Location

Windy Arbor

Natural Moisture Content (%) 14.8

Dry Matter Content (%) 87.1

Case

SDG 210907-69

Lab Sample Number(s) 24934465

Sampled Date 06-Sep-2021

Customer Sample Ref. TP2

Depth (m) 0.00 - 0.30

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-

TPH CWG (W)

Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.08
Conductivity (µS/cm)	167.00
Temperature (°C)	20.60
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.104	Natural Moisture Content (%)		14.8	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		87.1	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934465
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP2
Depth (m)	0.00 - 0.30

Eluate Analysis	C2Conc ⁿ in 10:1 eluate (mg/l)		A210:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.08
Conductivity (µS/cm)	167.00
Temperature (°C)	20.60
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg) 0.099

Mass of dry sample (kg) 0.090

Particle Size <4mm >95%

Site Location

Windy Arbor

Natural Moisture Content (%) 10.6

Dry Matter Content (%) 90.4

Case

SDG 210907-69

Lab Sample Number(s) 24934469

Sampled Date 06-Sep-2021

Customer Sample Ref. TP3

Depth (m) 0.00 - 0.35

Eluate Analysis

	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	0.0000178	<0.00001	0.000178	<0.0001	-	-	-
Arsenic	0.00458	<0.0005	0.0458	<0.005	-	-	-
Cadmium	0.000131	<0.00008	0.00131	<0.0008	-	-	-
Chromium	0.00802	<0.001	0.0802	<0.01	-	-	-
Copper	0.00886	<0.0003	0.0886	<0.003	-	-	-
Lead	0.00334	<0.0002	0.0334	<0.002	-	-	-
Nickel	0.00809	<0.0004	0.0809	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.112	<0.001	1.12	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	0.000181	<0.000005	0.00181	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	0.0000624	<0.000005	0.000624	<0.00005	-	-	-
Benz(a)anthracene by GCMS	0.0000265	<0.000005	0.000265	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.0000138	<0.000002	0.000138	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000224	<0.000005	0.000224	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.0000207	<0.000005	0.000207	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	0.00000738	<0.000005	0.0000738	<0.00005	-	-	-
Chrysene by GCMS	0.0000287	<0.000005	0.000287	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	0.000171	<0.000005	0.00171	<0.00005	-	-	-
Fluorene by GCMS	0.0000634	<0.000005	0.000634	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	0.0000184	<0.000005	0.000184	<0.00005	-	-	-
Naphthalene by GCMS	0.0000759	<0.00001	0.000759	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	0.00113	<0.000082	0.0113	<0.00082	-	-	-
Phenanthrene by GCMS	0.000317	<0.000005	0.00317	<0.00005	-	-	-
Pyrene by GCMS	0.000123	<0.000005	0.00123	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.40
Conductivity (µS/cm)	184.00
Temperature (°C)	20.50
Volume Leachant (Litres)	0.890

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.099
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	10.6
Dry Matter Content (%)	90.4

Case

SDG	210907-69
Lab Sample Number(s)	24934469
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP3
Depth (m)	0.00 - 0.35

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.40
Conductivity (µS/cm)	184.00
Temperature (°C)	20.50
Volume Leachant (Litres)	0.890

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg) 0.099

Mass of dry sample (kg) 0.090

Particle Size <4mm >95%

Site Location

Windy Arbor

Natural Moisture Content (%) 10.6

Dry Matter Content (%) 90.4

Case

SDG 210907-69

Lab Sample Number(s) 24934469

Sampled Date 06-Sep-2021

Customer Sample Ref. TP3

Depth (m) 0.00 - 0.35

Eluate Analysis

C₂Concⁿ in 10:1 eluate (mg/l)A₂10:1 concⁿ leached (mg/kg)

Result

Limit of Detection

Result

Limit of Detection

SVOC MS (W) - Aqueous

Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-

TPH CWG (W)

Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.40
Conductivity (µS/cm)	184.00
Temperature (°C)	20.50
Volume Leachant (Litres)	0.890

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.099	Natural Moisture Content (%)	10.6
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	90.4
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934469
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP3
Depth (m)	0.00 - 0.35

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.40
Conductivity (µS/cm)	184.00
Temperature (°C)	20.50
Volume Leachant (Litres)	0.890

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.102	Natural Moisture Content (%)	13.8
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	87.9
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934474
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP4
Depth (m)	0.00 - 0.30

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Arsenic	0.00217	<0.0005	0.0217	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00616	<0.0003	0.0616	<0.003	-	-	-
Lead	0.000754	<0.0002	0.00754	<0.002	-	-	-
Nickel	0.00122	<0.0004	0.0122	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.0222	<0.001	0.222	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	0.0116	<0.01	0.116	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benz(a)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chrysene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
Phenanthrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.35
Conductivity (µS/cm)	167.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.888

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.102	Natural Moisture Content (%)		13.8	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		87.9	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934474
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP4
Depth (m)	0.00 - 0.30

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.35
Conductivity (µS/cm)	167.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.888

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.102
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	13.8
Dry Matter Content (%)	87.9

Case

SDG	210907-69
Lab Sample Number(s)	24934474
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP4
Depth (m)	0.00 - 0.30

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-

TPH CWG (W)

Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.35
Conductivity (µS/cm)	167.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.888

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.102	Natural Moisture Content (%)	13.8
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	87.9
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934474
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP4
Depth (m)	0.00 - 0.30

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.35
Conductivity (µS/cm)	167.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.888

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)	17.7
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	85
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934478
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP1
Depth (m)	0.00 - 0.40

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Arsenic	0.00212	<0.0005	0.0212	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00572	<0.001	0.0572	<0.01	-	-	-
Copper	0.0117	<0.0003	0.117	<0.003	-	-	-
Lead	0.000586	<0.0002	0.00586	<0.002	-	-	-
Nickel	0.00535	<0.0004	0.0535	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.0128	<0.001	0.128	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	0.00000809	<0.000005	0.0000809	<0.00005	-	-	-
Benz(a)anthracene by GCMS	0.0000214	<0.000005	0.000214	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.0000414	<0.000002	0.000414	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000612	<0.000005	0.000612	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.0000529	<0.000005	0.000529	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	0.0000247	<0.000005	0.000247	<0.00005	-	-	-
Chrysene by GCMS	0.000034	<0.000005	0.00034	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	0.0000767	<0.000005	0.000767	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	0.000043	<0.000005	0.00043	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	0.000473	<0.000082	0.00473	<0.00082	-	-	-
Phenanthrene by GCMS	0.000042	<0.000005	0.00042	<0.00005	-	-	-
Pyrene by GCMS	0.000068	<0.000005	0.00068	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.04
Conductivity (µS/cm)	127.00
Temperature (°C)	21.00
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)	17.7
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	85
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934478
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP1
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.04
Conductivity (µS/cm)	127.00
Temperature (°C)	21.00
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)	17.7
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	85
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934478
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP1
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.04
Conductivity (µS/cm)	127.00
Temperature (°C)	21.00
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)	17.7
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	85
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934478
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP1
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.04
Conductivity (µS/cm)	127.00
Temperature (°C)	21.00
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.106
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)

18.2

Dry Matter Content (%)

84.6

Case

SDG	210907-69
Lab Sample Number(s)	24934484
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP6
Depth (m)	0.00 - 0.40

Eluate Analysis

	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	0.0000361	<0.00001	0.000361	<0.0001	-	-	-
Arsenic	0.00354	<0.0005	0.0354	<0.005	-	-	-
Cadmium	0.0000837	<0.00008	0.000837	<0.0008	-	-	-
Chromium	0.00219	<0.001	0.0219	<0.01	-	-	-
Copper	0.021	<0.0003	0.21	<0.003	-	-	-
Lead	0.00655	<0.0002	0.0655	<0.002	-	-	-
Nickel	0.00459	<0.0004	0.0459	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.00671	<0.001	0.0671	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benz(a)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chrysene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
Phenanthrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	7.56
Conductivity (µS/cm)	27.40
Temperature (°C)	20.50
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.106
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	18.2
Dry Matter Content (%)	84.6

Case

SDG	210907-69
Lab Sample Number(s)	24934484
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP6
Depth (m)	0.00 - 0.40

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

SVOC MS (W) - Aqueous

1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	7.56
Conductivity (µS/cm)	27.40
Temperature (°C)	20.50
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)	18.2
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	84.6
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934484
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP6
Depth (m)	0.00 - 0.40

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	7.56
Conductivity (µS/cm)	27.40
Temperature (°C)	20.50
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.106	Natural Moisture Content (%)		18.2	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		84.6	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934484
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP6
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	7.56
Conductivity (µS/cm)	27.40
Temperature (°C)	20.50
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.103
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)

15.6

Dry Matter Content (%)

86.5

Case

SDG	210907-69
Lab Sample Number(s)	24934488
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP7
Depth (m)	0.00 - 0.40

Eluate Analysis

	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Arsenic	0.00209	<0.0005	0.0209	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.0019	<0.0003	0.019	<0.003	-	-	-
Lead	0.000987	<0.0002	0.00987	<0.002	-	-	-
Nickel	0.00203	<0.0004	0.0203	<0.004	-	-	-
Selenium	0.00104	<0.001	0.0104	<0.01	-	-	-
Zinc	0.0015	<0.001	0.015	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	0.0572	<0.01	0.572	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benz(a)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.0000109	<0.000002	0.000109	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000143	<0.000005	0.000143	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.000012	<0.000005	0.00012	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	0.00000532	<0.000005	0.0000532	<0.00005	-	-	-
Chrysene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	0.00000861	<0.000005	0.0000861	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
Phenanthrene by GCMS	0.00000694	<0.000005	0.0000694	<0.00005	-	-	-
Pyrene by GCMS	0.00000778	<0.000005	0.0000778	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.05
Conductivity (µS/cm)	192.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.103	Natural Moisture Content (%)	15.6
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	86.5
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934488
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP7
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.05
Conductivity (µS/cm)	192.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.103	Natural Moisture Content (%)	15.6
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	86.5
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934488
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP7
Depth (m)	0.00 - 0.40

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			

SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-

TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.05
Conductivity (µS/cm)	192.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.887

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.103	Natural Moisture Content (%)		15.6	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		86.5	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934488
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP7
Depth (m)	0.00 - 0.40

Eluate Analysis	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			

TPH CWG (W)							
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-

VOC MS (W)							
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.05
Conductivity (µS/cm)	192.00
Temperature (°C)	21.10
Volume Leachant (Litres)	0.887



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg) 0.105

Mass of dry sample (kg) 0.090

Particle Size <4mm >95%

Site Location

Windy Arbor

Natural Moisture Content (%) 15.6

Dry Matter Content (%) 86.5

Case

SDG 210907-69

Lab Sample Number(s) 24934492

Sampled Date 06-Sep-2021

Customer Sample Ref. TP8

Depth (m) 0.00 - 0.40

Eluate Analysis

	C ₂ Conc ⁿ in 10:1 eluate (mg/l)		A ₂ 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Mercury Dissolved (CVAf)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Arsenic	0.00197	<0.0005	0.0197	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00162	<0.001	0.0162	<0.01	-	-	-
Copper	0.0152	<0.0003	0.152	<0.003	-	-	-
Lead	0.00315	<0.0002	0.0315	<0.002	-	-	-
Nickel	0.00174	<0.0004	0.0174	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.00164	<0.001	0.0164	<0.01	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Cresols by HPLC (W)	<0.006	<0.006	<0.06	<0.06	-	-	-
Phenol by HPLC (W)	<0.002	<0.002	<0.02	<0.02	-	-	-
Total Monohydric Phenols (W)	<0.016	<0.016	<0.16	<0.16	-	-	-
Xylenols by HPLC (W)	<0.008	<0.008	<0.08	<0.08	-	-	-
Sulphide	0.134	<0.01	1.34	<0.1	-	-	-

PAH Spec MS - Aqueous (W)

Acenaphthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Acenaphthylene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benz(a)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene by GCMS	0.00000511	<0.000002	0.0000511	<0.00002	-	-	-
Benzo(b)fluoranthene by GCMS	0.0000085	<0.000005	0.000085	<0.00005	-	-	-
Benzo(ghi)perylene by GCMS	0.0000139	<0.000005	0.000139	<0.00005	-	-	-
Benzo(k)fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chrysene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Dibenzo(ah)anthracene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluoranthene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Fluorene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(123cd)pyrene by GCMS	0.0000128	<0.000005	0.000128	<0.00005	-	-	-
Naphthalene by GCMS	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PAH 16 EPA Total by GCMS	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
Phenanthrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Pyrene by GCMS	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-

SVOC MS (W) - Aqueous

1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.19
Conductivity (µS/cm)	135.00
Temperature (°C)	20.40
Volume Leachant (Litres)	0.885

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16:47:40 15/09/2021



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location	Windy Arbor
Mass Sample taken (kg)	0.105	Natural Moisture Content (%)	15.6
Mass of dry sample (kg)	0.090	Dry Matter Content (%)	86.5
Particle Size <4mm	>95%		

Case

SDG	210907-69
Lab Sample Number(s)	24934492
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP8
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(ghi)perylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.19
Conductivity (µS/cm)	135.00
Temperature (°C)	20.40
Volume Leachant (Litres)	0.885

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		Site Location		Windy Arbor	
Mass Sample taken (kg)	0.105	Natural Moisture Content (%)		15.6	
Mass of dry sample (kg)	0.090	Dry Matter Content (%)		86.5	
Particle Size <4mm	>95%				

Case

SDG	210907-69
Lab Sample Number(s)	24934492
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP8
Depth (m)	0.00 - 0.40

Eluate Analysis	C2 Conc ⁿ in 10:1 eluate (mg/l)		A2 10:1 conc ⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Fluoranthene	<0.001	<0.001	<0.01	<0.01	-	-	-
Fluorene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno (1,2,3-cd) Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenanthrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Pyrene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.19
Conductivity (µS/cm)	135.00
Temperature (°C)	20.40
Volume Leachant (Litres)	0.885

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126Report Number: 613204
Location: Windy Arbor

Superseded Report:

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference

Mass Sample taken (kg)	0.105
Mass of dry sample (kg)	0.090
Particle Size <4mm	>95%

Site Location

Windy Arbor

Natural Moisture Content (%)	15.6
Dry Matter Content (%)	86.5

Case

SDG	210907-69
Lab Sample Number(s)	24934492
Sampled Date	06-Sep-2021
Customer Sample Ref.	TP8
Depth (m)	0.00 - 0.40

Eluate Analysis

C ₂	Conc ⁿ in 10:1 eluate (mg/l)		A ₂	10:1 conc ⁿ leached (mg/kg)	
	Result	Limit of Detection		Result	Limit of Detection

TPH CWG (W)

Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics)	<0.01	<0.01	<0.1	<0.1	-	-	-
>C5-C35							
Aliphatics >C16-C35	<0.01	<0.01	<0.1	<0.1	-	-	-

VOC MS (W)

Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sum of BTEX	<0.005	<0.005	<0.05	<0.05	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Total Xylenes	<0.002	<0.002	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	08-Sep-2021
pH (pH Units)	8.19
Conductivity (µS/cm)	135.00
Temperature (°C)	20.40
Volume Leachant (Litres)	0.885

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CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Table of Results - Appendix

Method No	Reference	Description
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM062 (S)	National Grid Property Holdings Methods for the Collection & Analysis of Samples from National Grid Sites version 1 Sec 3.9	Determination of Phenols in Soils by HPLC
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990/BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM151	Method 3500D, AWWA/APHA, 20th Ed., 1999	Determination of Hexavalent Chromium using Kone analyser
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
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
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
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
TM414	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GCxGC-FID

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: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Test Completion Dates

Lab Sample No(s)	24934478	24934465	24934469	24934474	24934460	24934484	24934488	24934492
Customer Sample Ref.	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8
AGS Ref.								
Depth	0.00 - 0.40	0.00 - 0.30	0.00 - 0.35	0.00 - 0.30	0.00 - 0.30	0.00 - 0.40	0.00 - 0.40	0.00 - 0.40
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (w)	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021
Asbestos ID in Solid Samples	09-Sep-2021	10-Sep-2021	10-Sep-2021	09-Sep-2021	09-Sep-2021	10-Sep-2021	10-Sep-2021	09-Sep-2021
CEN 10:1 Leachate (1 Stage)	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021
CEN Readings	12-Sep-2021	12-Sep-2021	12-Sep-2021	12-Sep-2021	12-Sep-2021	12-Sep-2021	12-Sep-2021	12-Sep-2021
Cyanide Comp/Free/Total/Thiocyanate	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
Dissolved Metals by ICP-MS	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
EPH CWG (Aliphatic) Aqueous GC (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
EPH CWG (Aromatic) Aqueous GC (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
EPH CWG GC (S)	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021
GRO by GC-FID (S)	13-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	13-Sep-2021
GRO by GC-FID (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
Hexavalent Chromium (s)	10-Sep-2021	10-Sep-2021	10-Sep-2021	10-Sep-2021	10-Sep-2021	10-Sep-2021	10-Sep-2021	10-Sep-2021
Mercury Dissolved	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
Metals in solid samples by OES	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	14-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021
Moisture at 105C	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021
PAH by GCMS	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021
PAH Spec MS - Aqueous (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
PCBs by GCMS	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021
pH	08-Sep-2021	09-Sep-2021	08-Sep-2021	09-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021	08-Sep-2021
pH Value	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021
Phenols by HPLC (S)	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	10-Sep-2021	09-Sep-2021	10-Sep-2021	09-Sep-2021
Phenols by HPLC (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
Sample description	07-Sep-2021	07-Sep-2021	07-Sep-2021	07-Sep-2021	07-Sep-2021	07-Sep-2021	07-Sep-2021	07-Sep-2021
Semi Volatile Organic Compounds	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021	09-Sep-2021
Sulphide	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021	13-Sep-2021
SVOC MS (W) - Aqueous	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
Total Organic Carbon	14-Sep-2021	15-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	15-Sep-2021	15-Sep-2021
TPH CWG (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
TPH CWG GC (S)	13-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	13-Sep-2021
VOC MS (S)	14-Sep-2021	14-Sep-2021	14-Sep-2021	13-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021
VOC MS (W)	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021	14-Sep-2021



CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

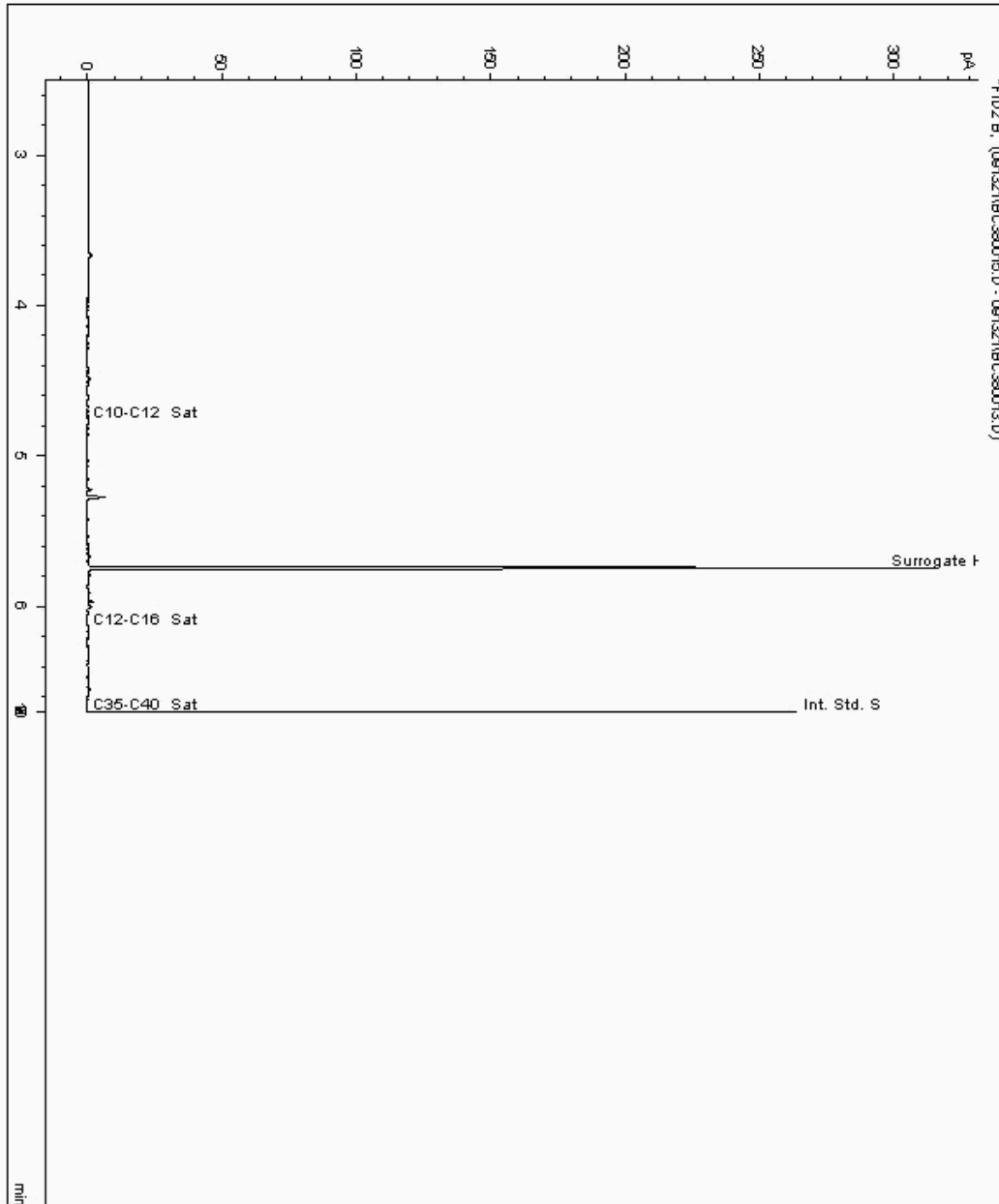
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24960968
Sample ID : TP3

Depth : 0.00 - 0.35

Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316871-
Date Acquired : 13/09/21 21:30:48 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.026





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

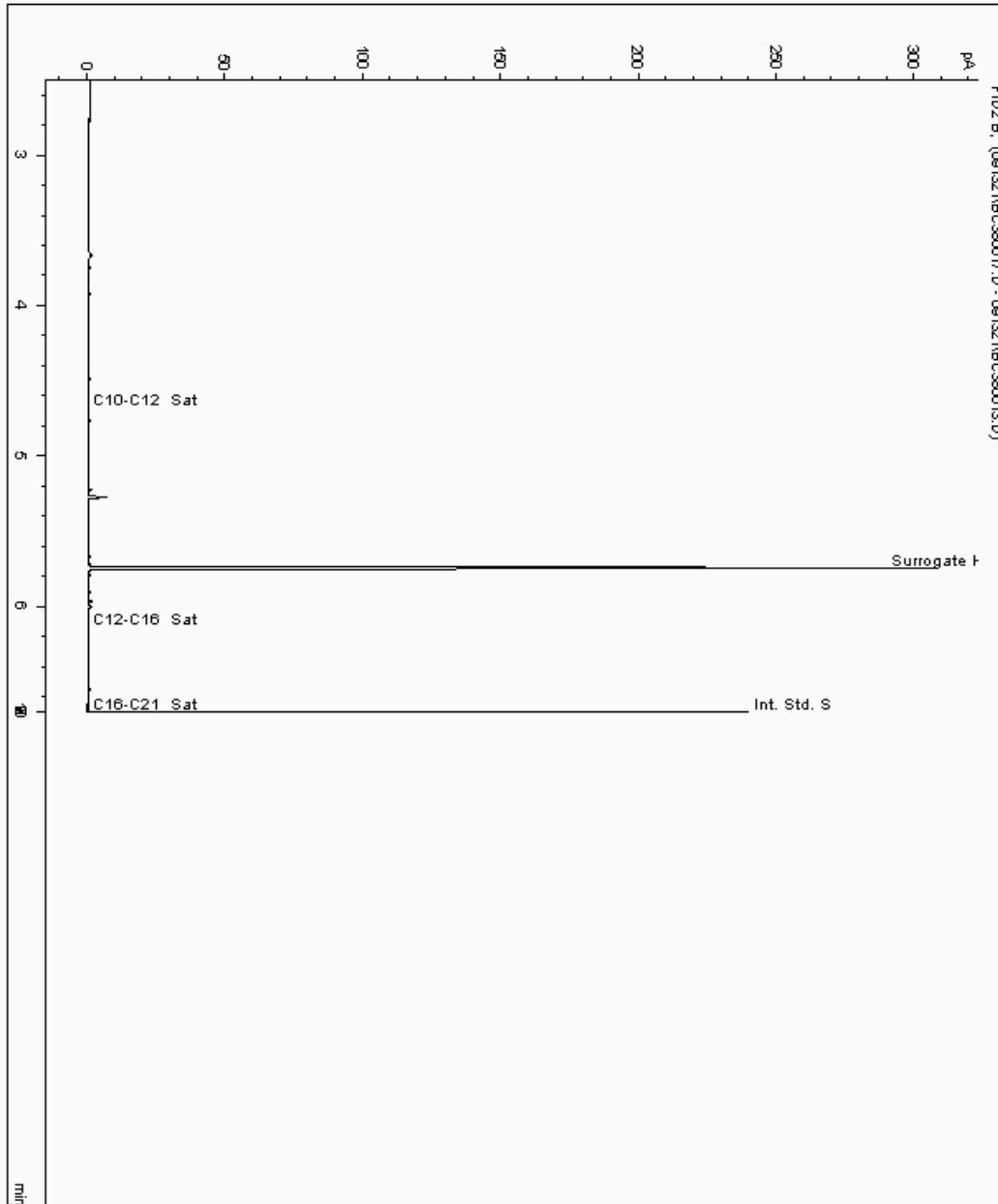
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24960970
Sample ID : TP8

Depth : 0.00 - 0.40

Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316953-
Date Acquired : 13/09/21 22:16:59 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

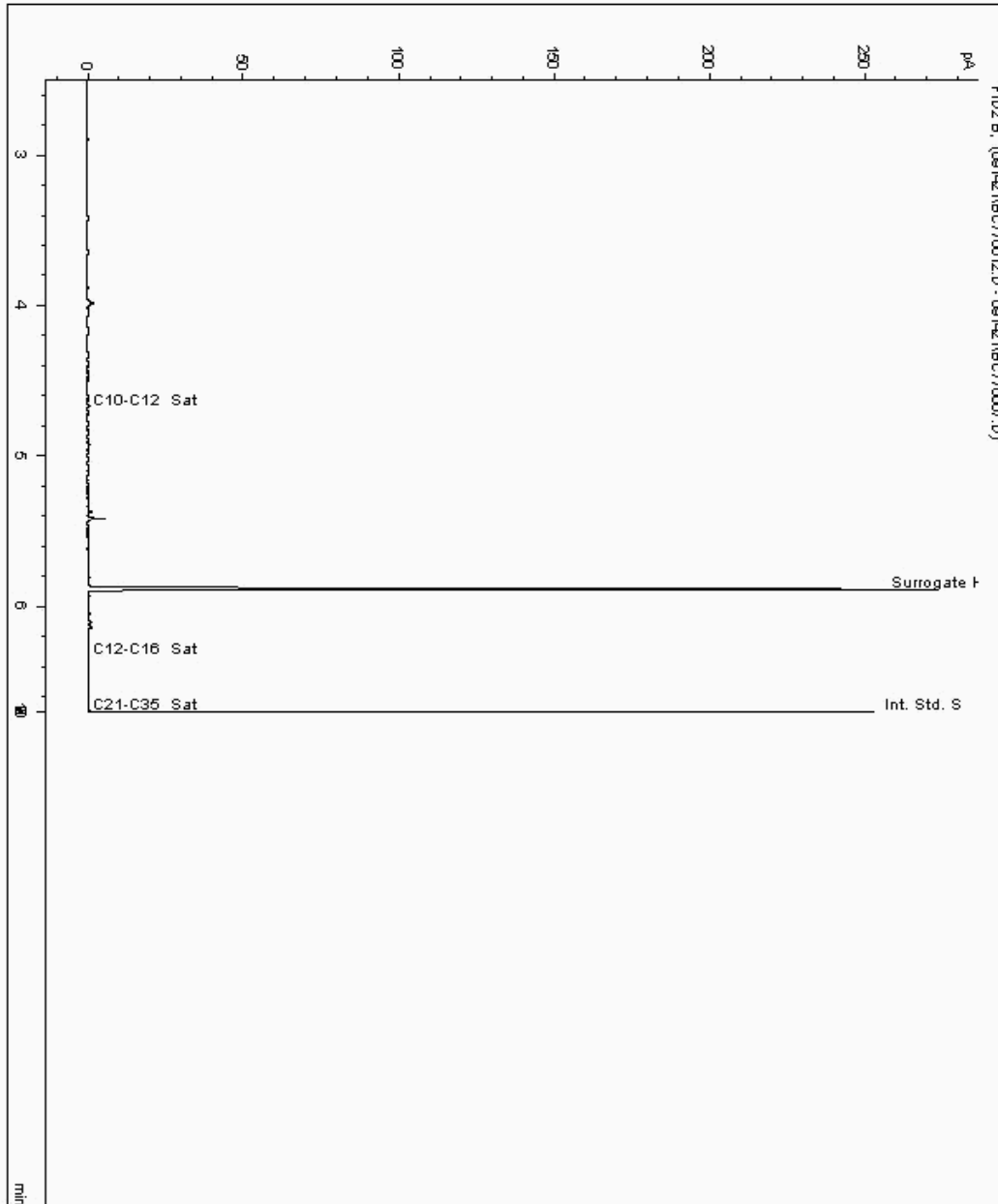
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24960984
Sample ID : TP6

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316922-
Date Acquired : 9/14/2021 1:51:18 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.027





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

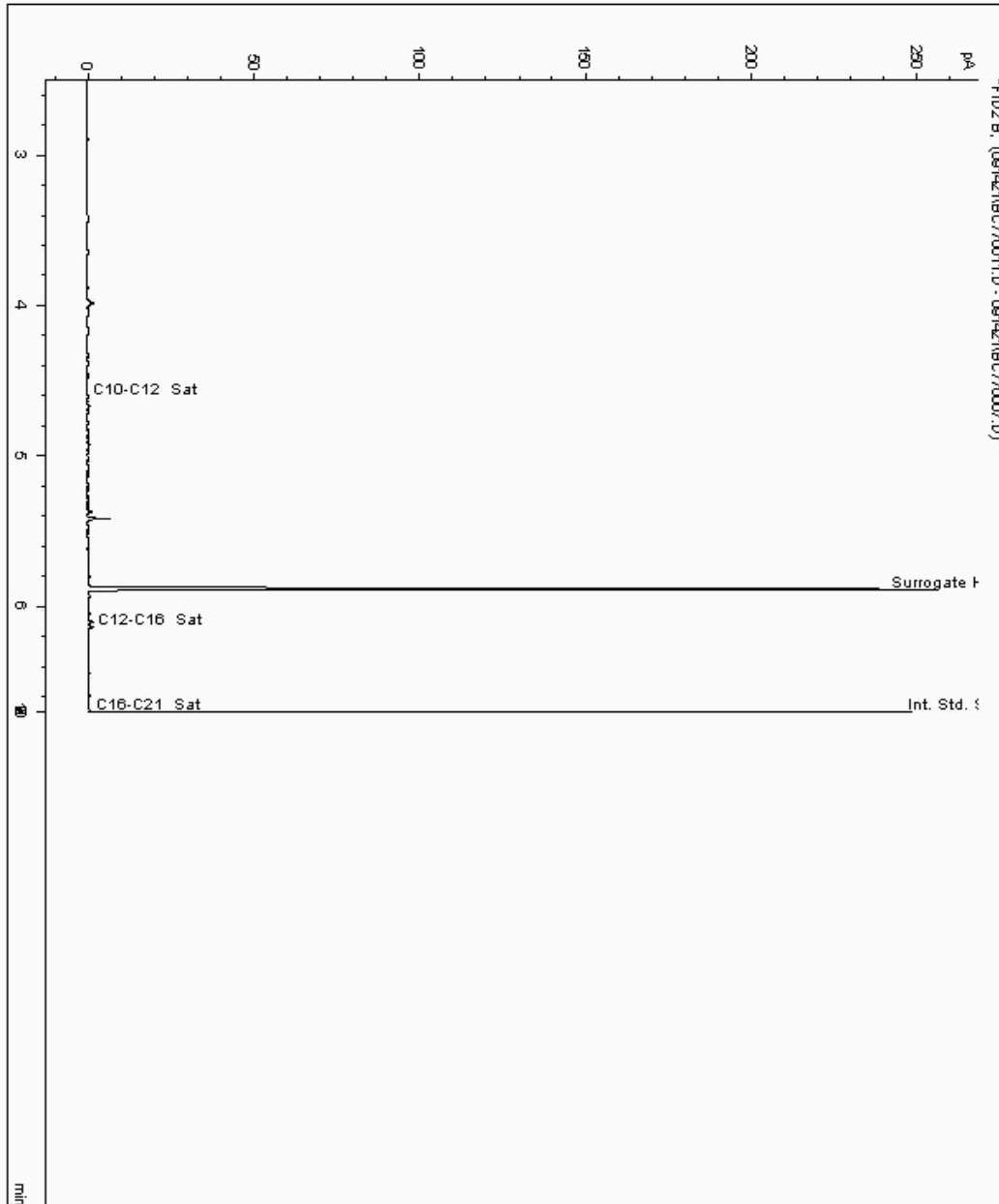
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24960993
Sample ID : TP1

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316907-
Date Acquired : 9/14/2021 1:27:02 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

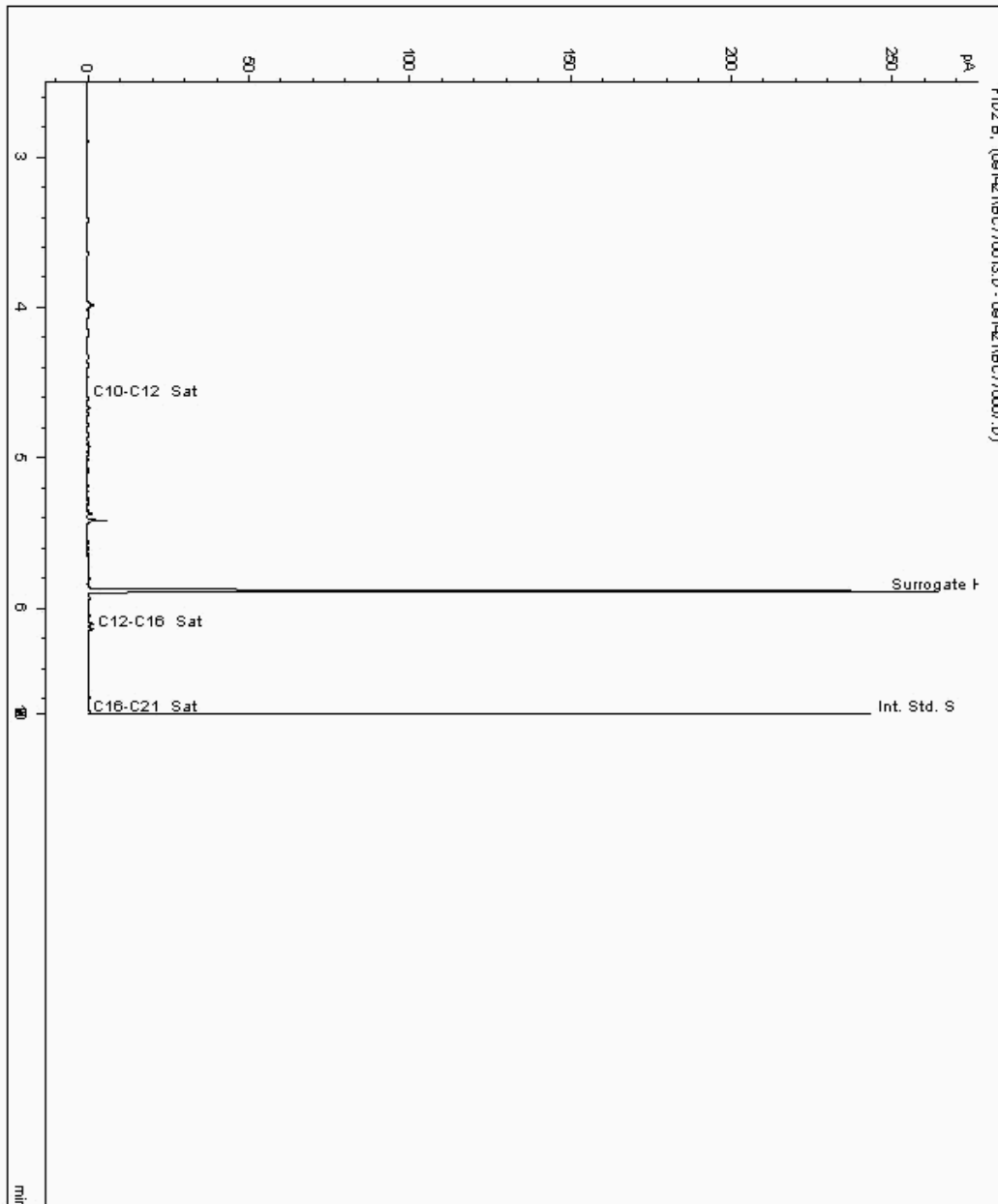
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24960996
Sample ID : TP4

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316886-
Date Acquired : 9/14/2021 2:15:39 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

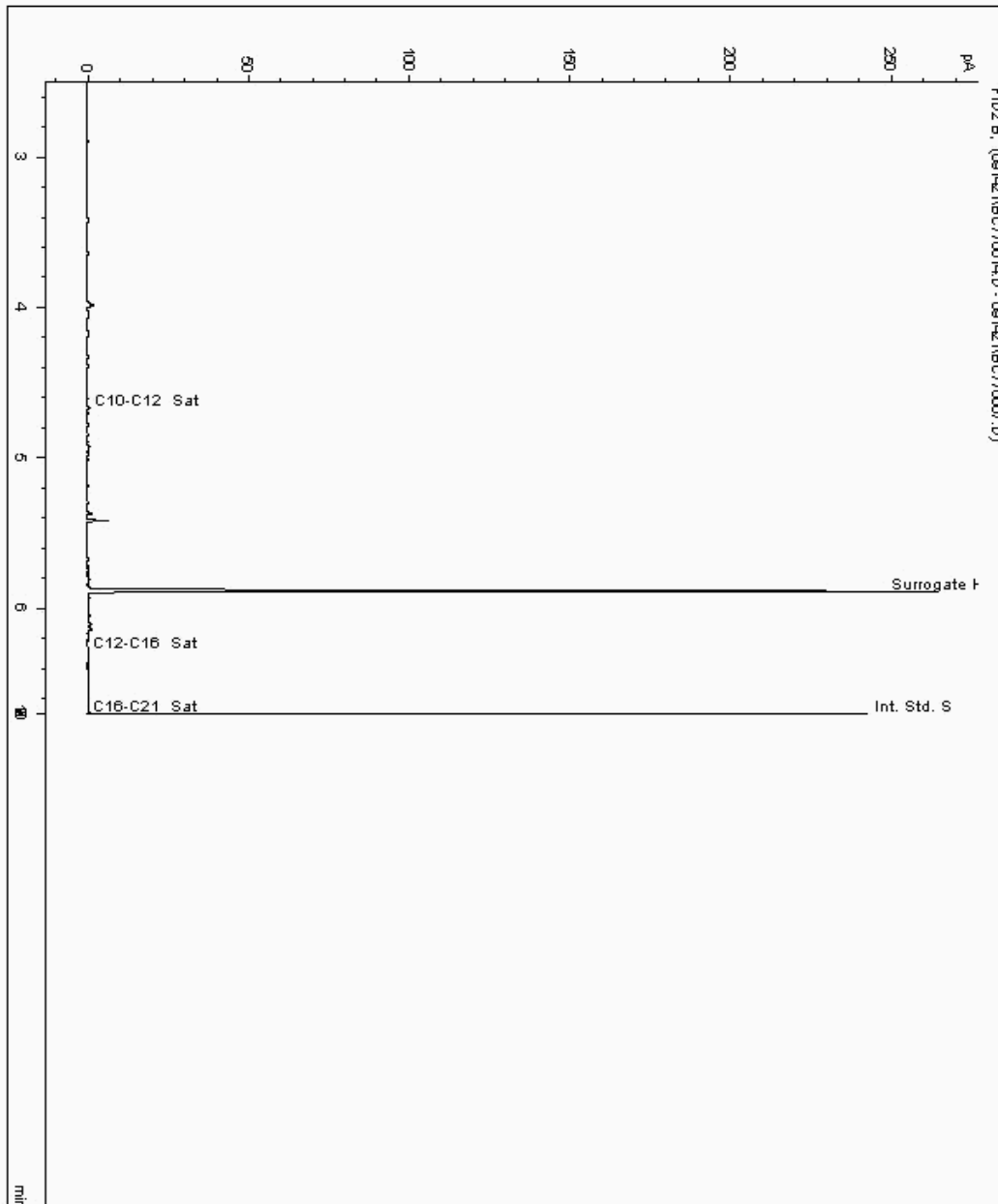
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24961005
Sample ID : TP5

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316832-
Date Acquired : 9/14/2021 2:40:00 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.026





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

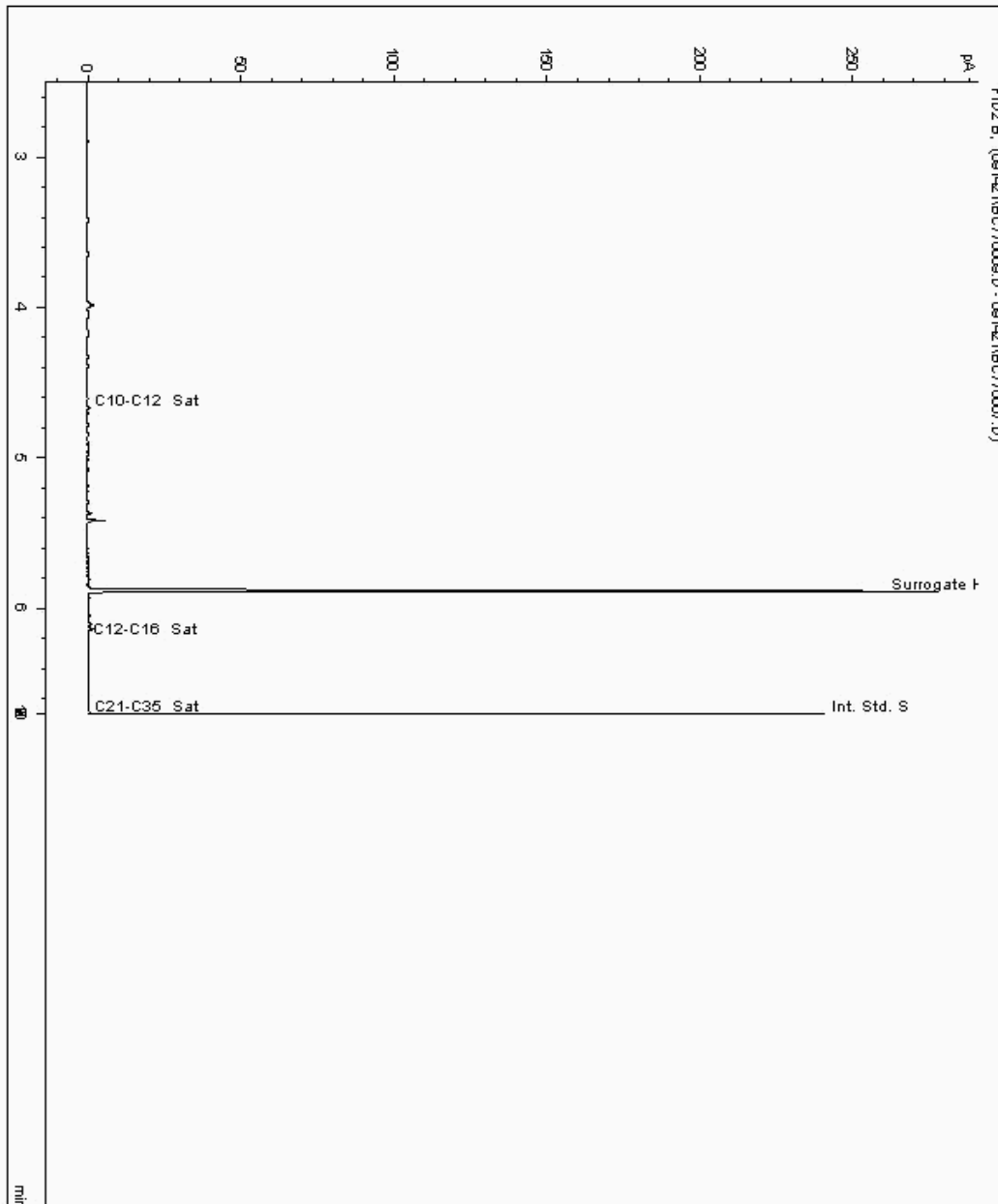
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24961013
Sample ID : TP7

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316937-
Date Acquired : 9/14/2021 12:38:40 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

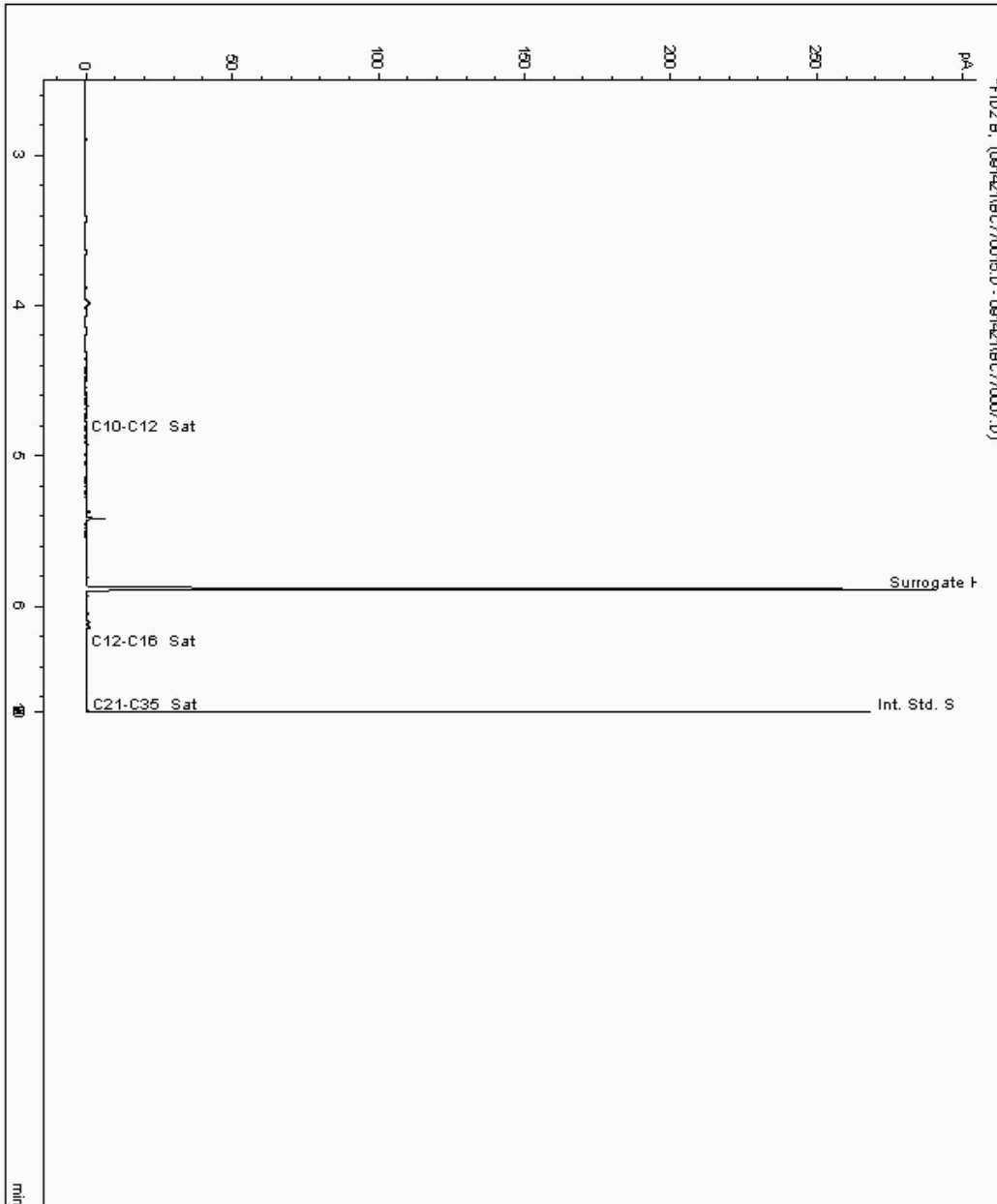
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 24961018
Sample ID : TP2

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316851-
Date Acquired : 9/14/2021 3:04:13 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

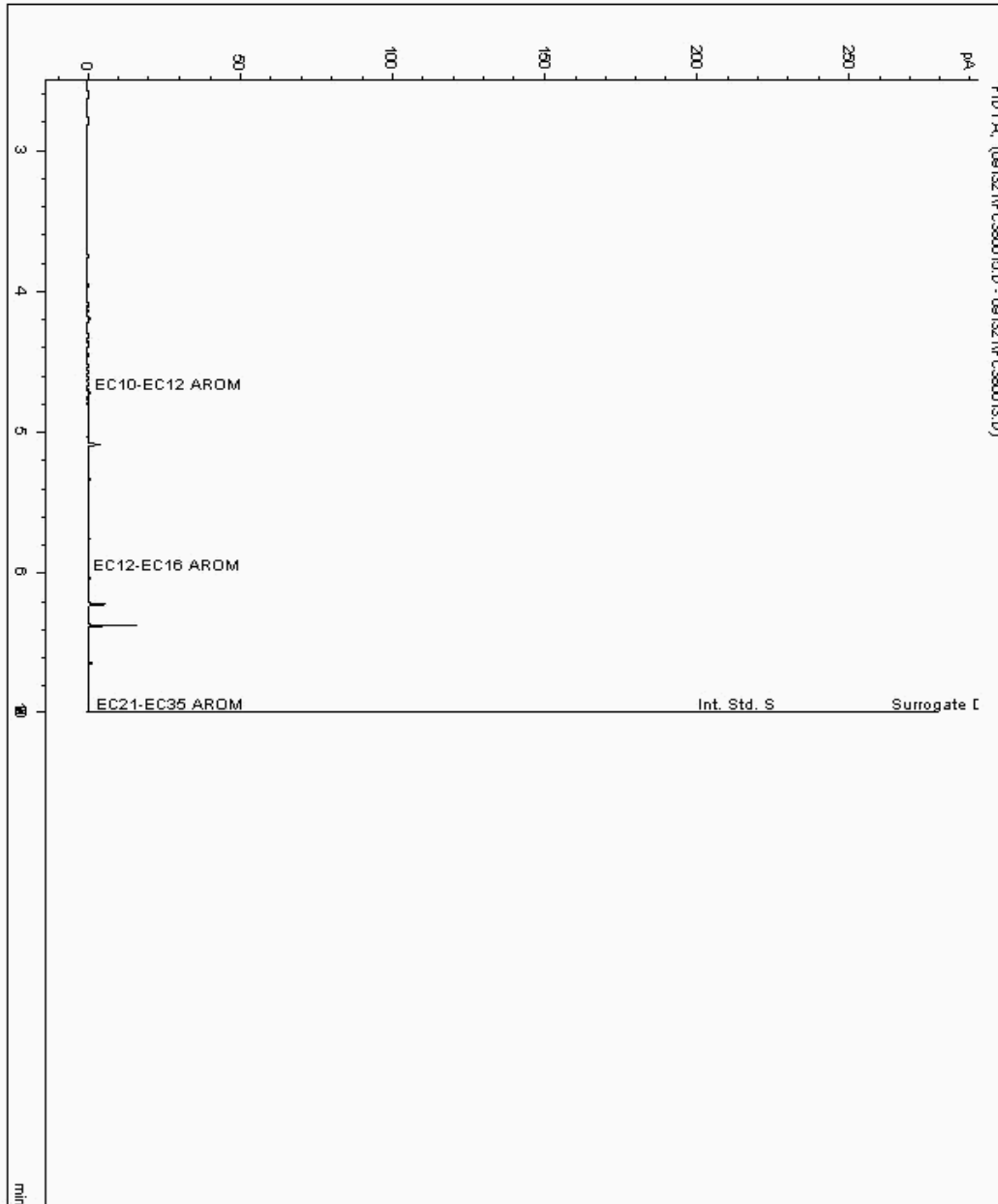
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24960968
Sample ID : TP3

Depth : 0.00 - 0.35

Speciated TPH - AROM (C12 - C40)

Sample Identity: 23316872-
Date Acquired : 13/09/21 21:30:48 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.026





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

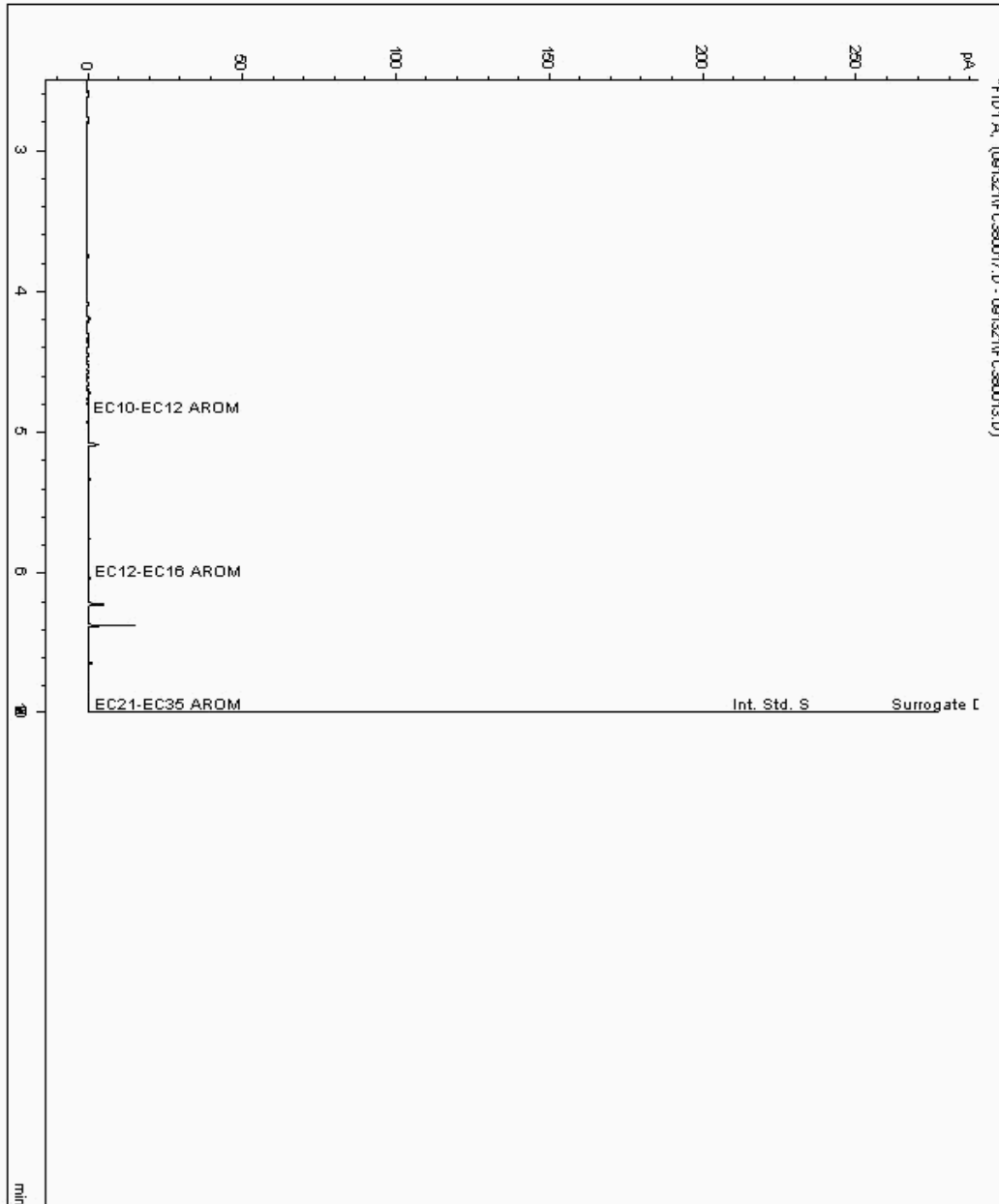
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24960970
Sample ID : TP8

Depth : 0.00 - 0.40

Speciated TPH - AROM (C12 - C40)

Sample Identity: 23316954-
Date Acquired : 13/09/21 22:16:59 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

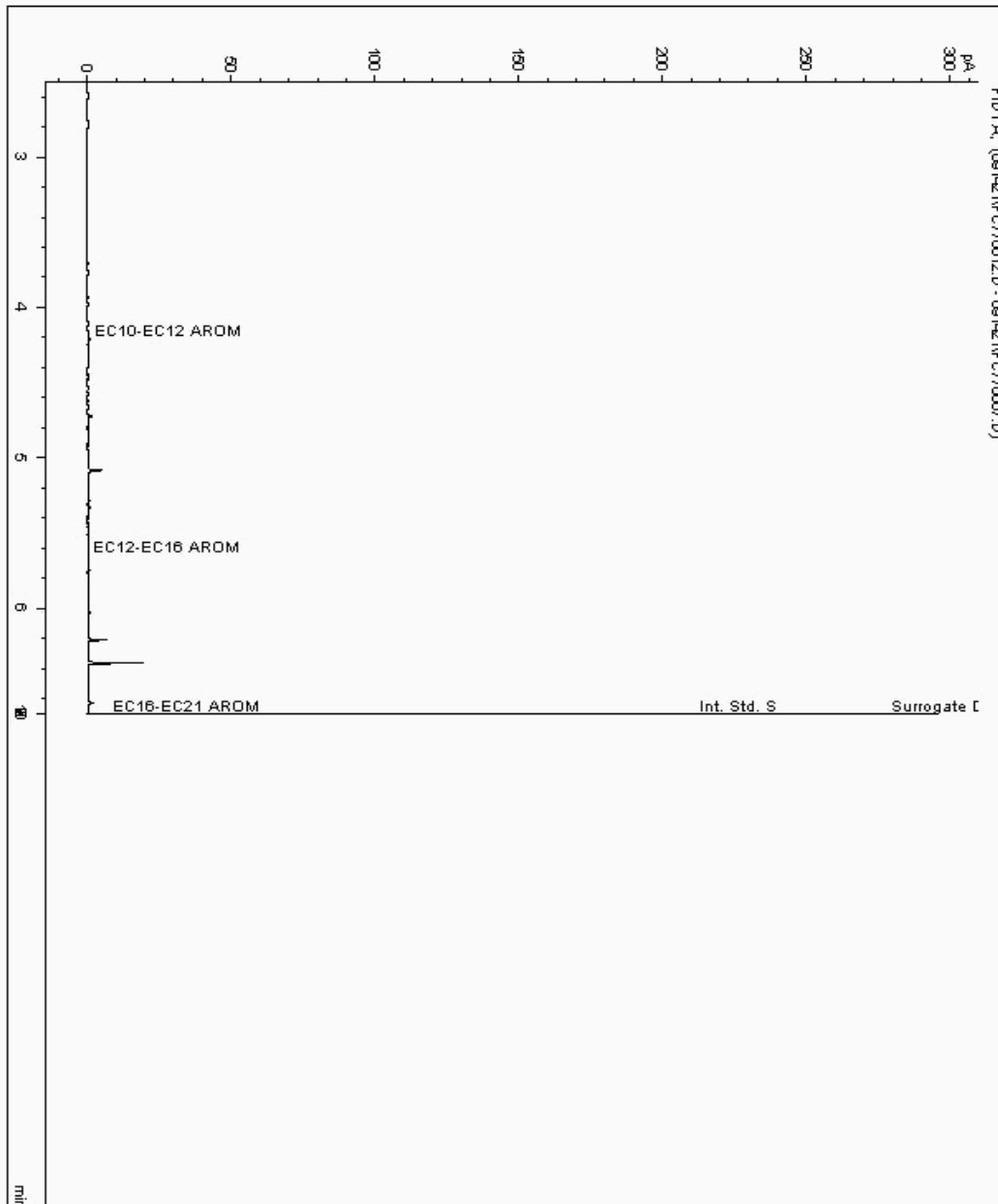
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24960984
Sample ID : TP6

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316923-
Date Acquired : 9/14/2021 1:51:19 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.027





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

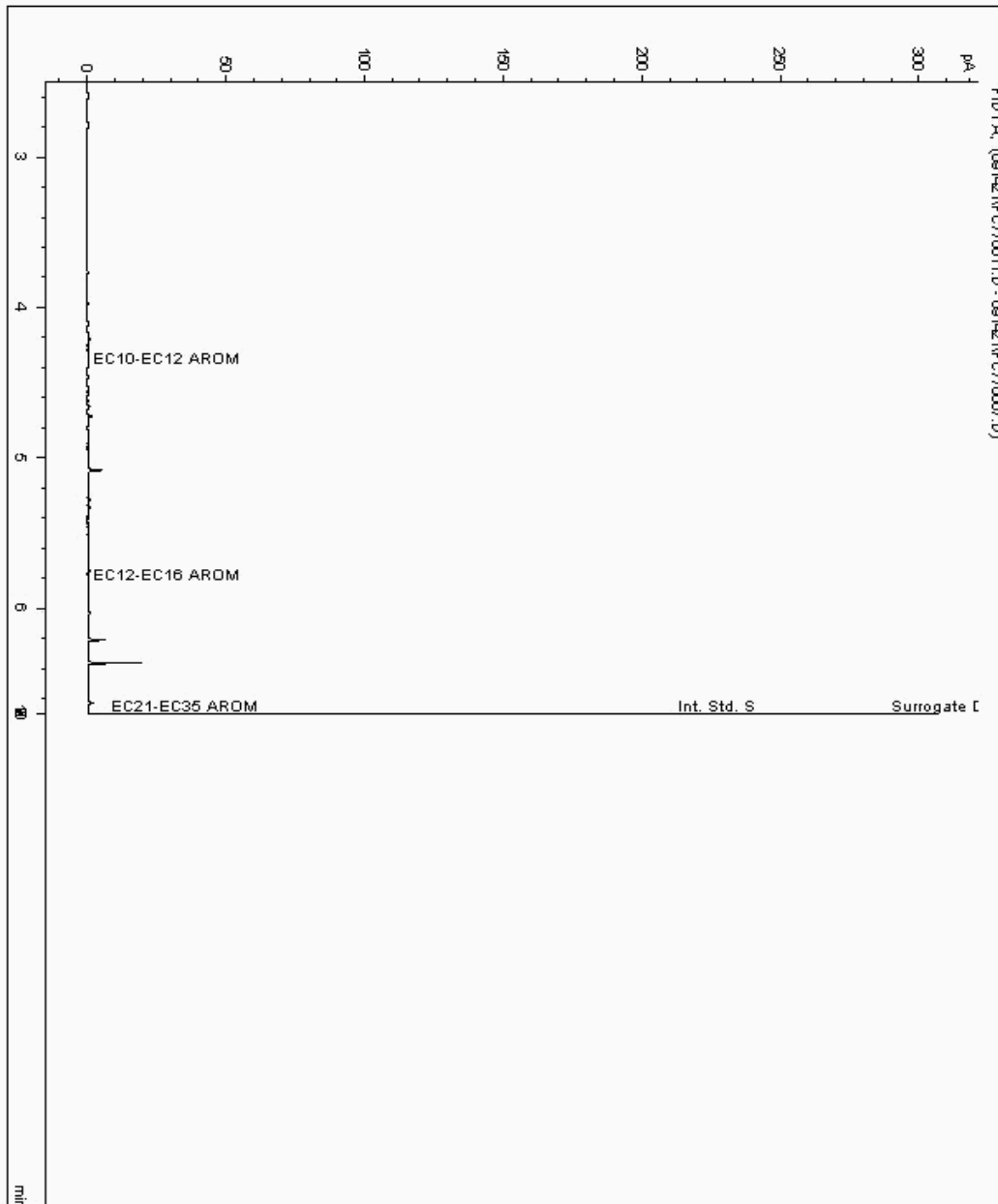
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24960993
Sample ID : TP1

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316908-
Date Acquired : 9/14/2021 1:27:03 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

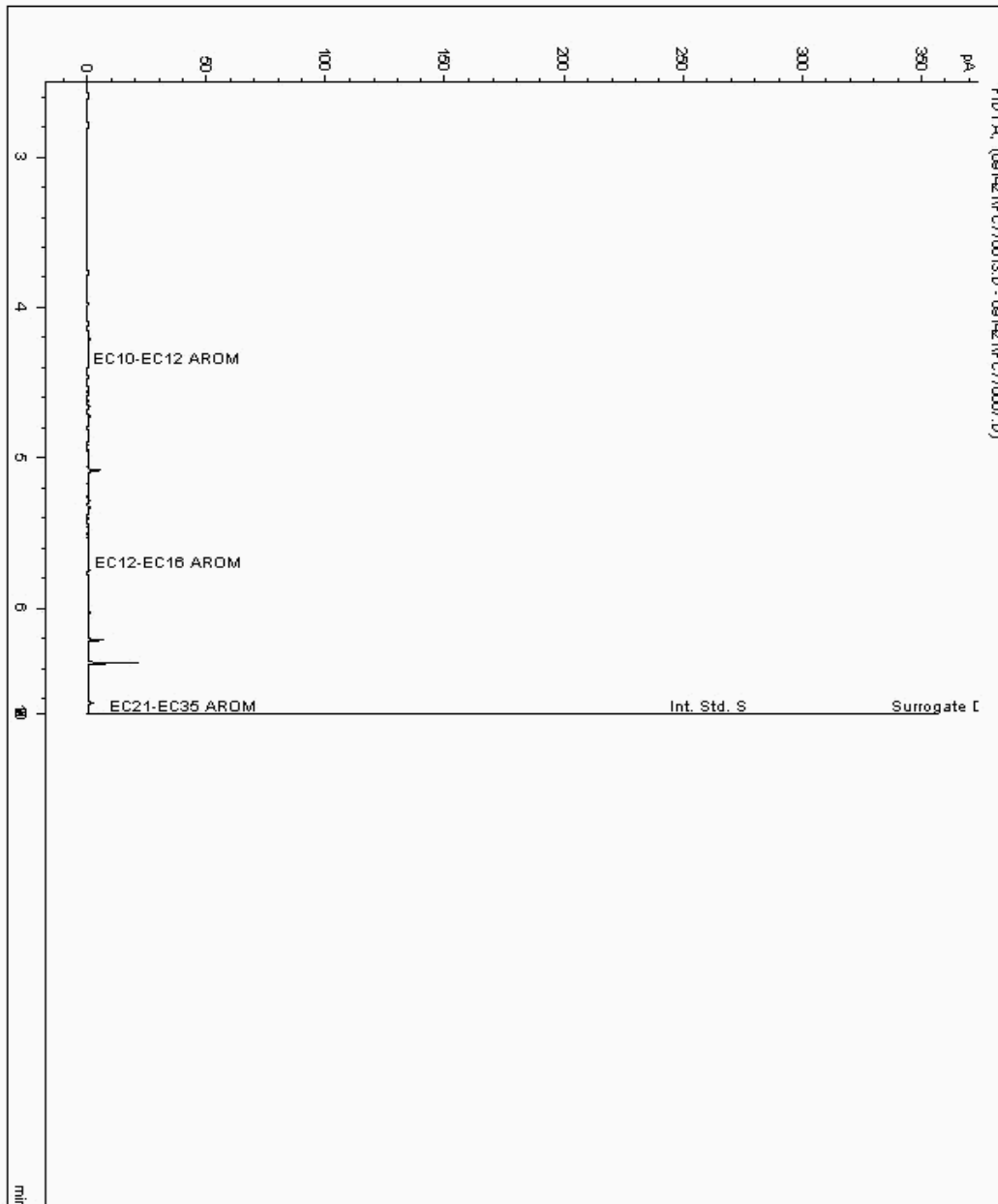
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24960996
Sample ID : TP4

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316887-
Date Acquired : 9/14/2021 2:15:40 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

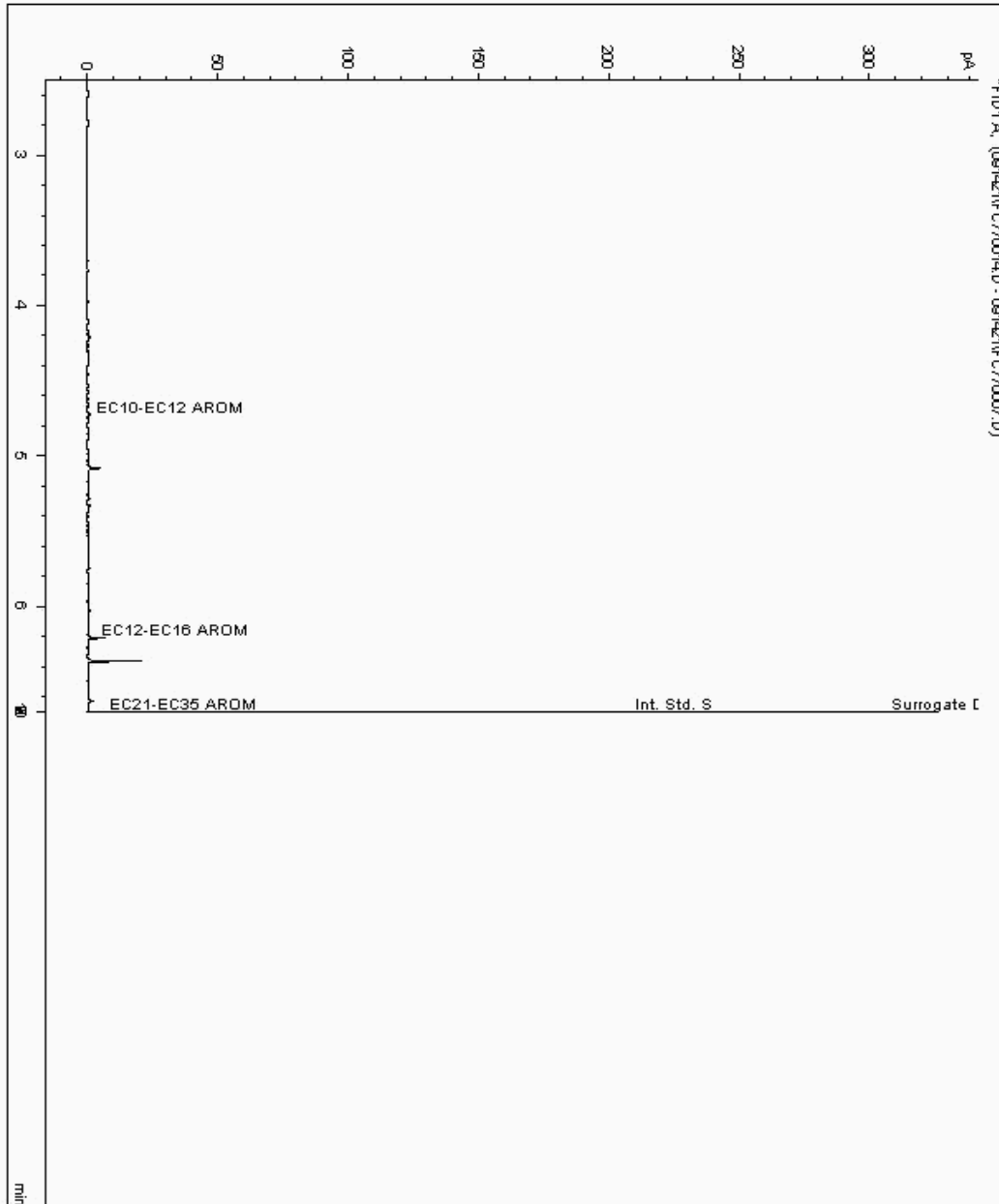
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24961005
Sample ID : TP5

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316833-
Date Acquired : 9/14/2021 2:40:00 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.026





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

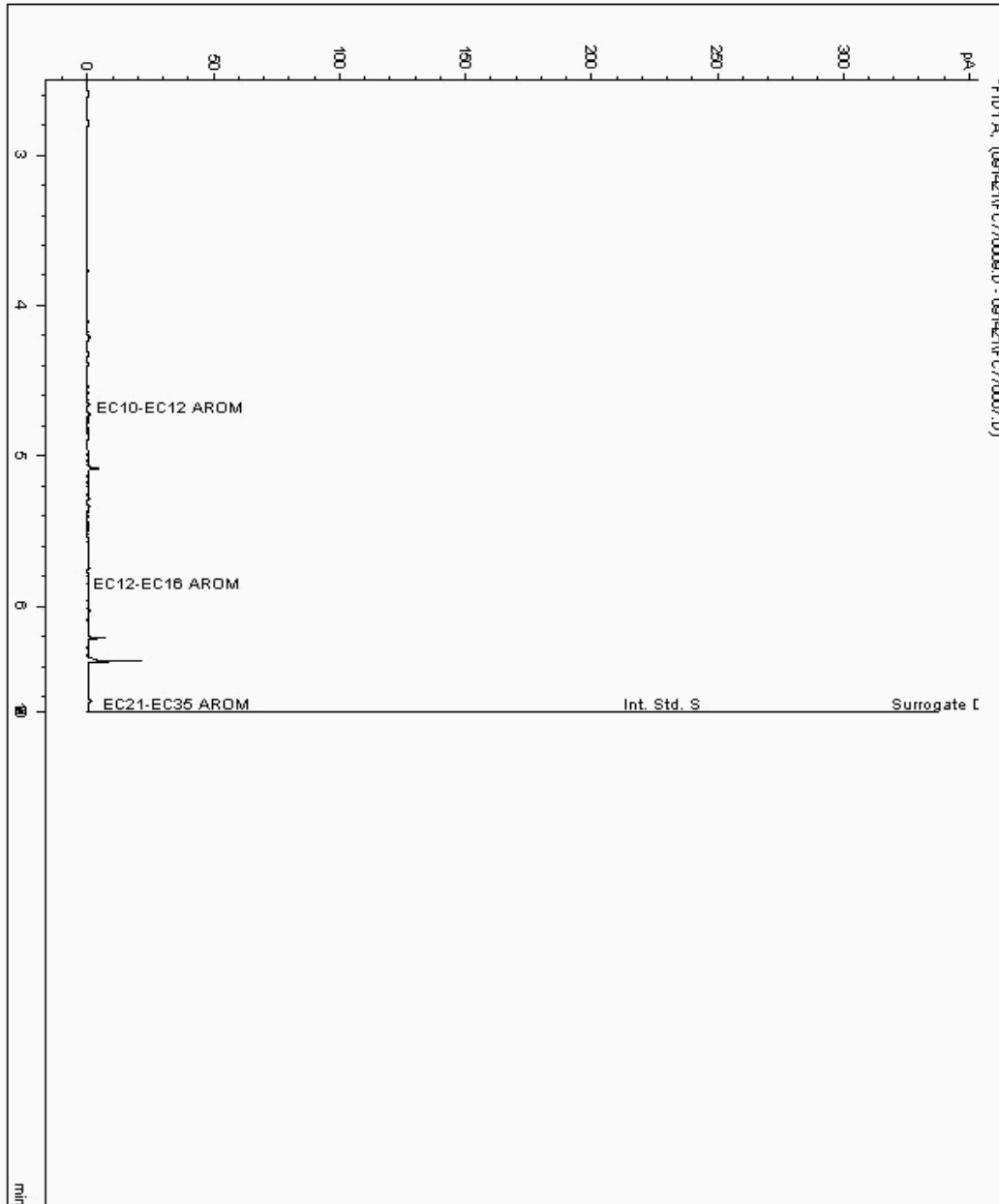
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24961013
Sample ID : TP7

Depth : 0.00 - 0.40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316938-
Date Acquired : 9/14/2021 12:38:40 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

Superseded Report:

Chromatogram

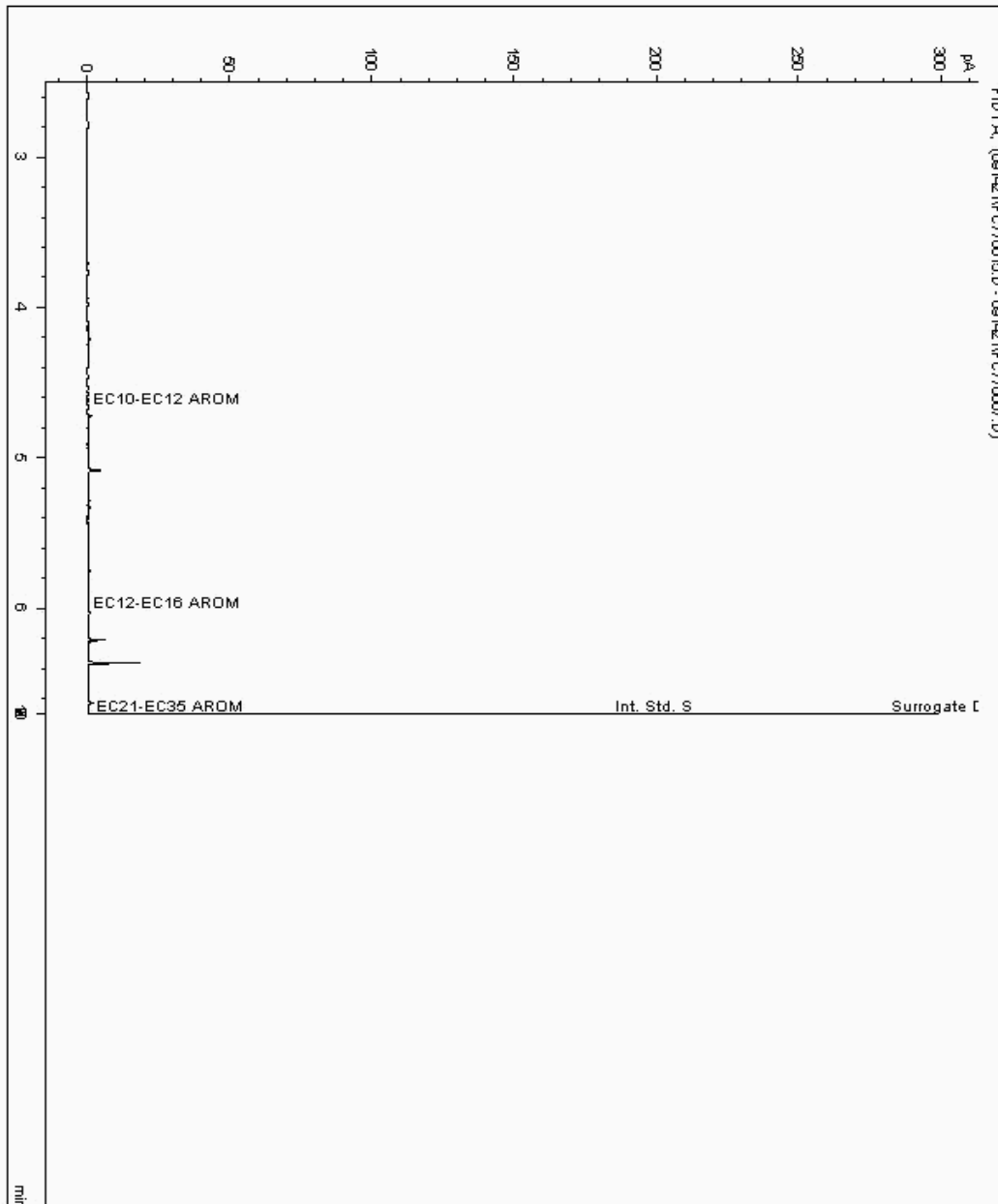
Analysis: EPH CWG (Aromatic) Aqueous GC (W)

Sample No : 24961018
Sample ID : TP2

Depth : 0.00 - 0.30

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 23316852-
Date Acquired : 9/14/2021 3:04:12 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

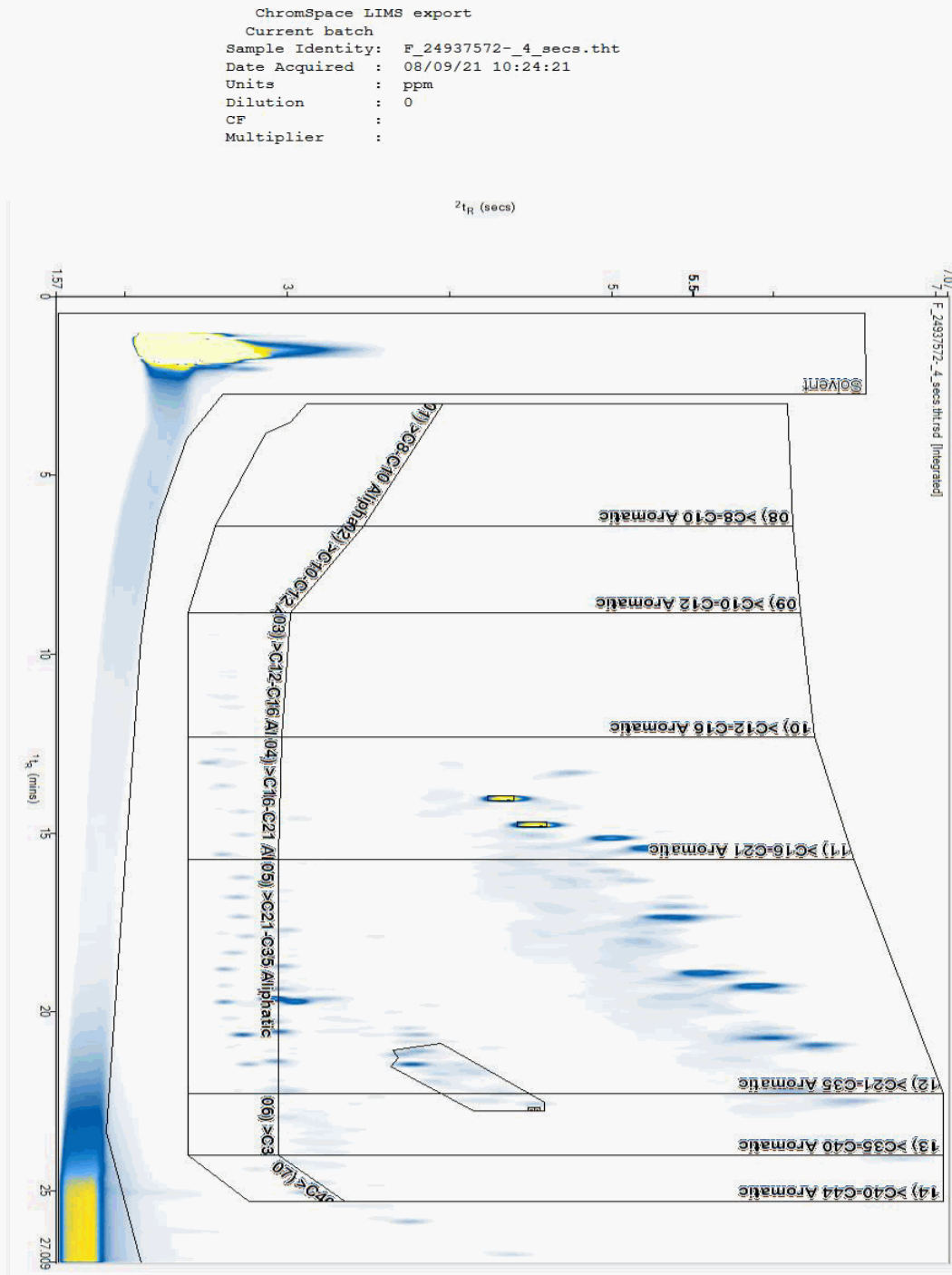
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937572
Sample ID : TP1

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

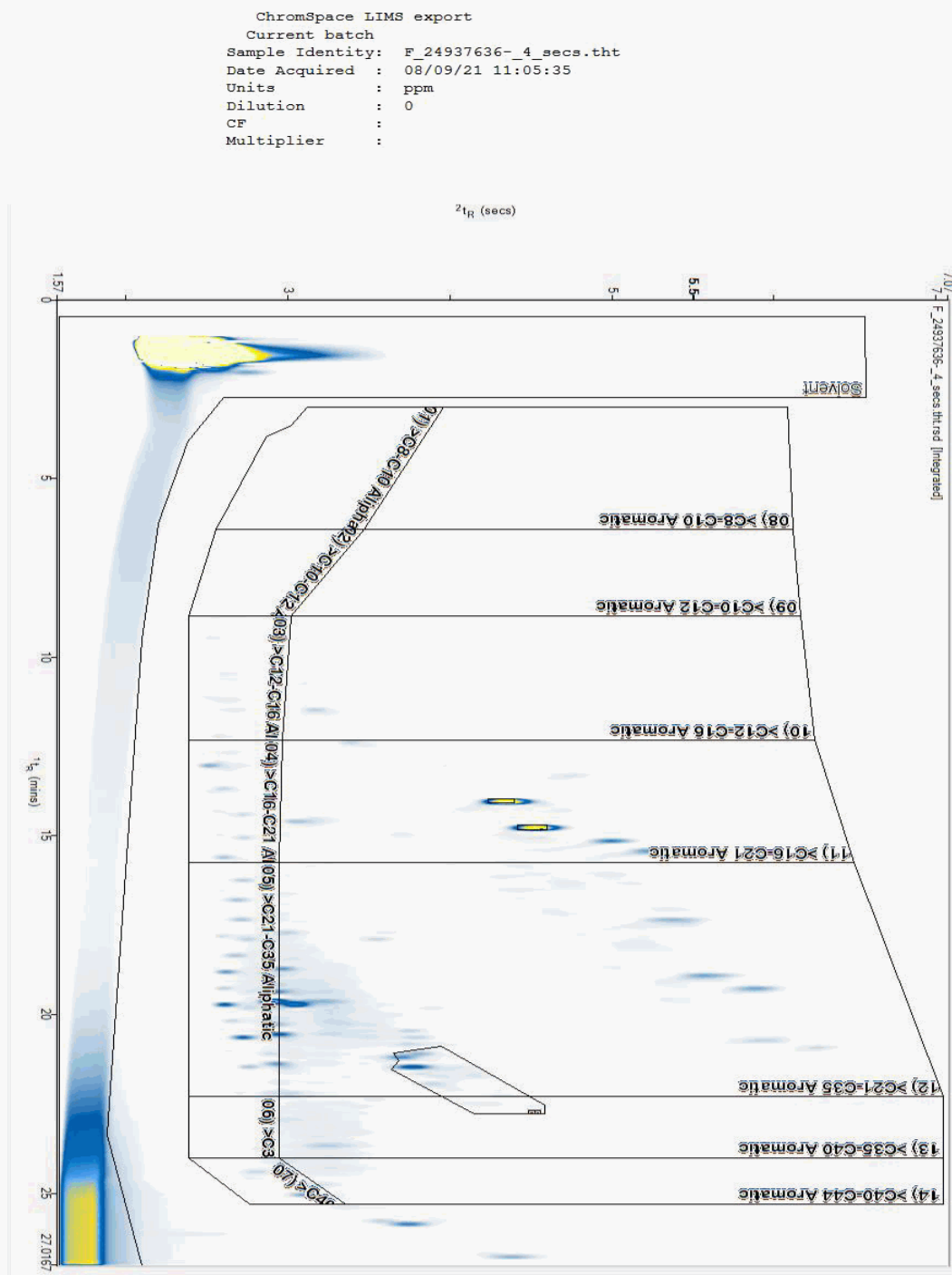
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937636
Sample ID : TP4

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

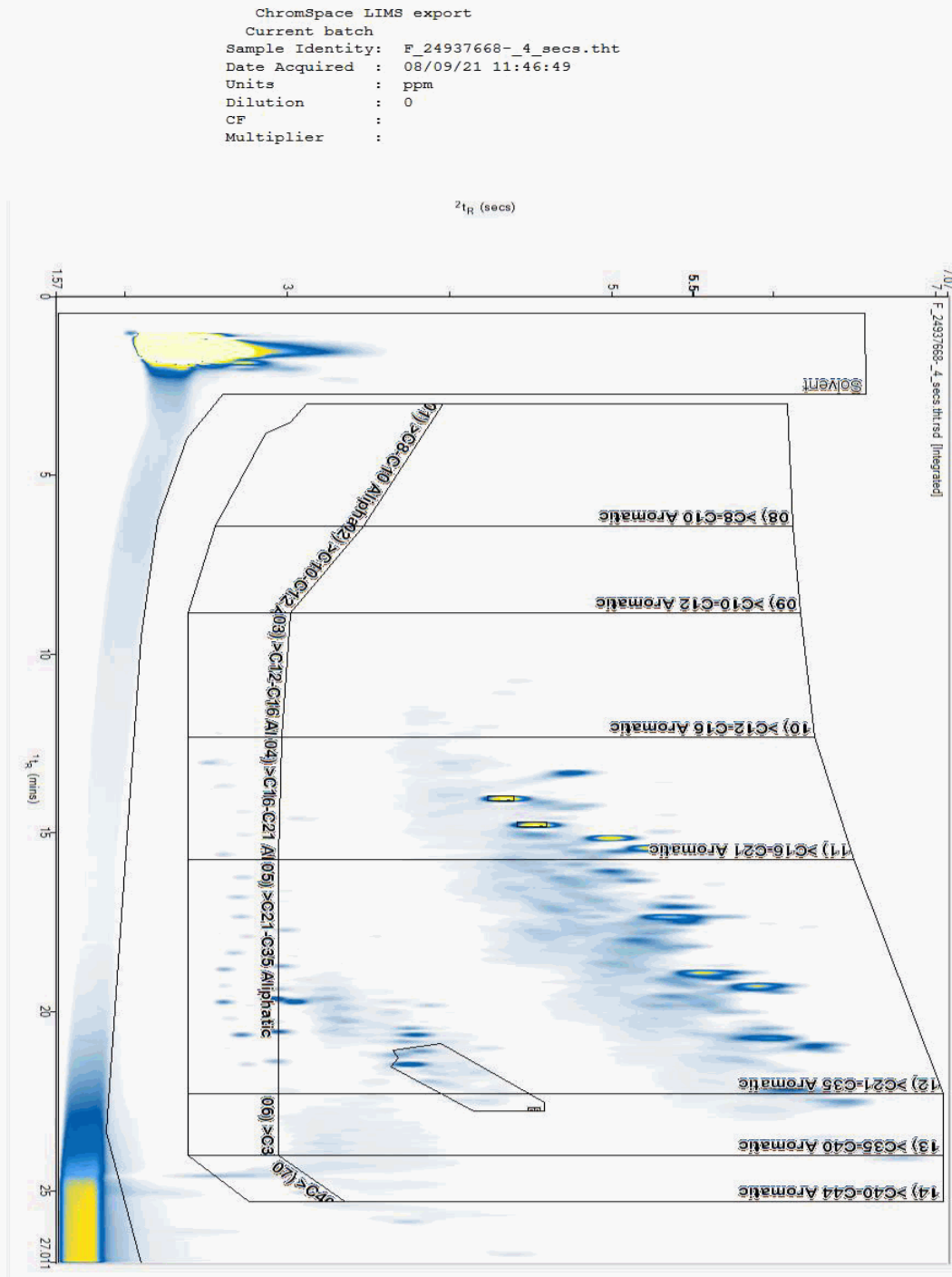
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937668
Sample ID : TP3

Depth : 0.00 - 0.35





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

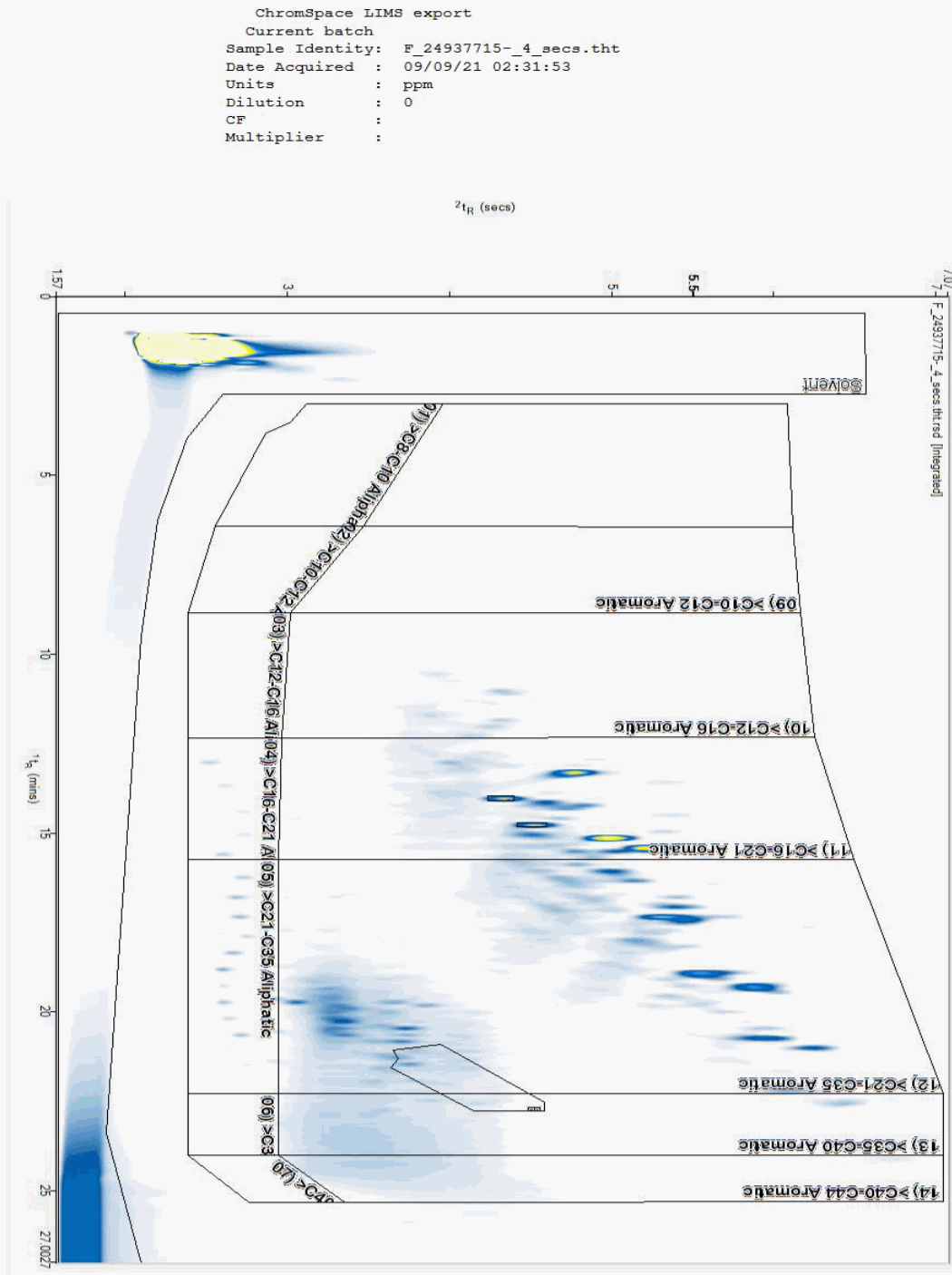
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937715
Sample ID : TP2

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

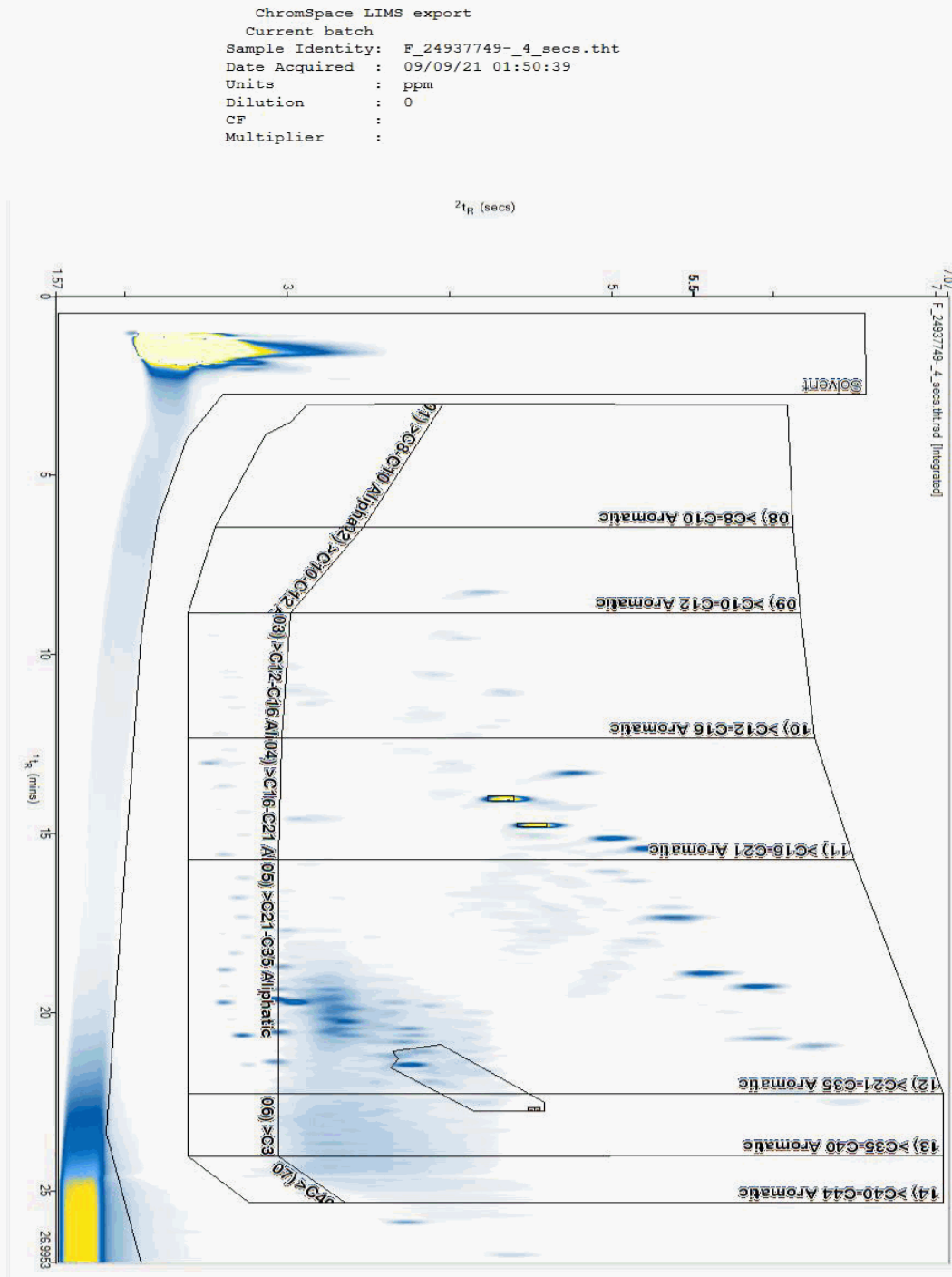
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937749
Sample ID : TP7

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

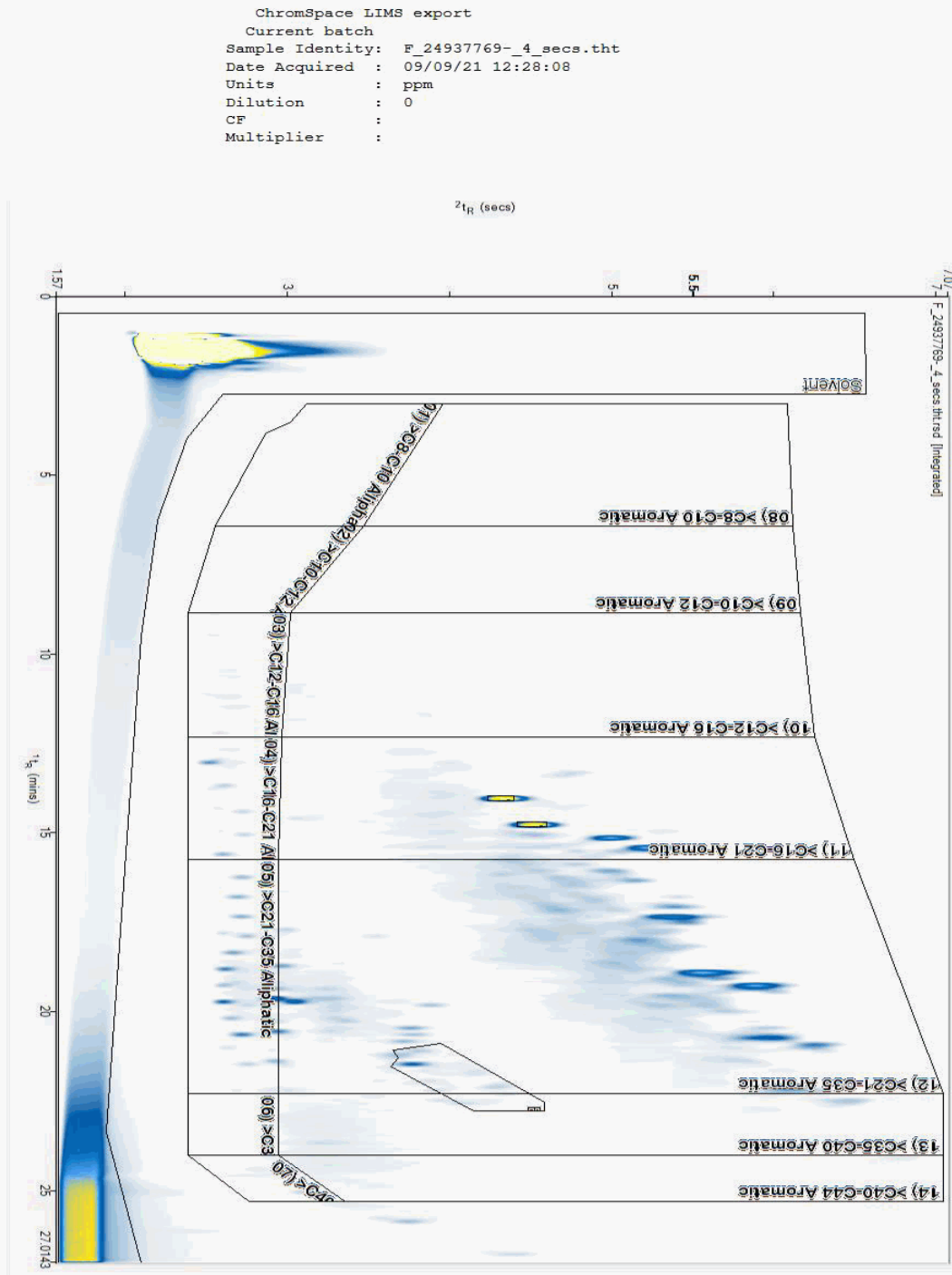
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937769
Sample ID : TP5

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

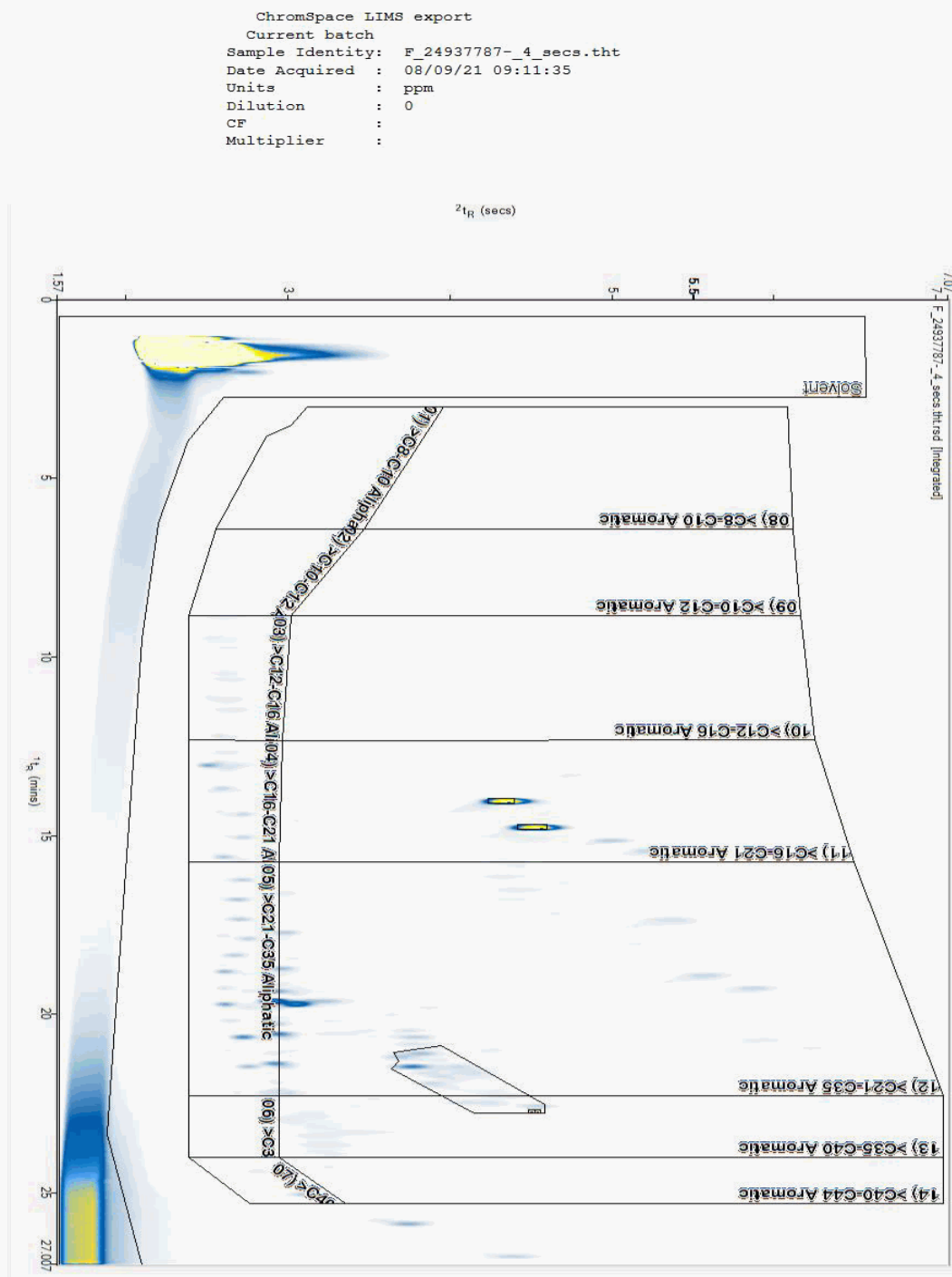
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937787
Sample ID : TP6

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

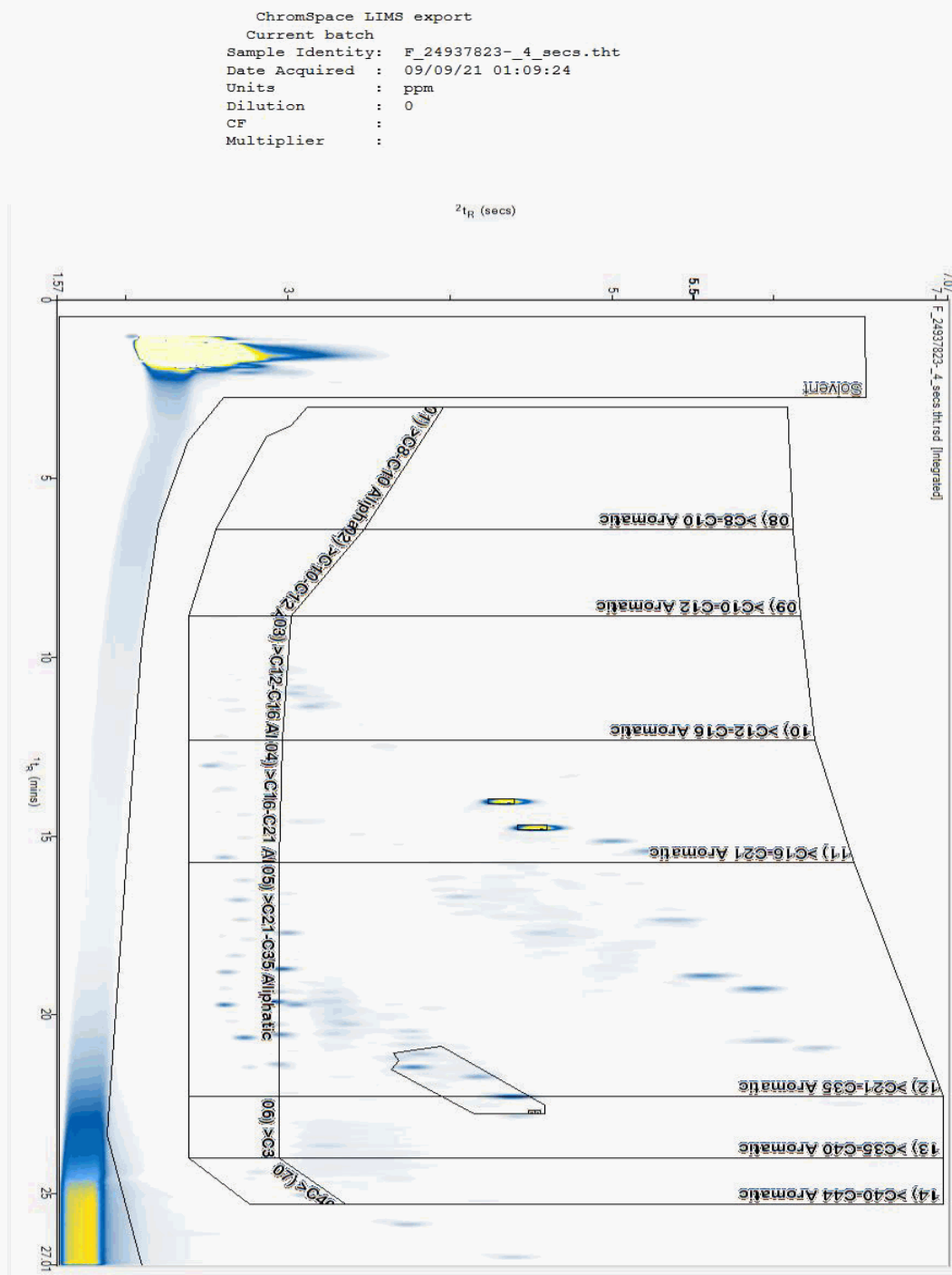
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 24937823
Sample ID : TP8

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

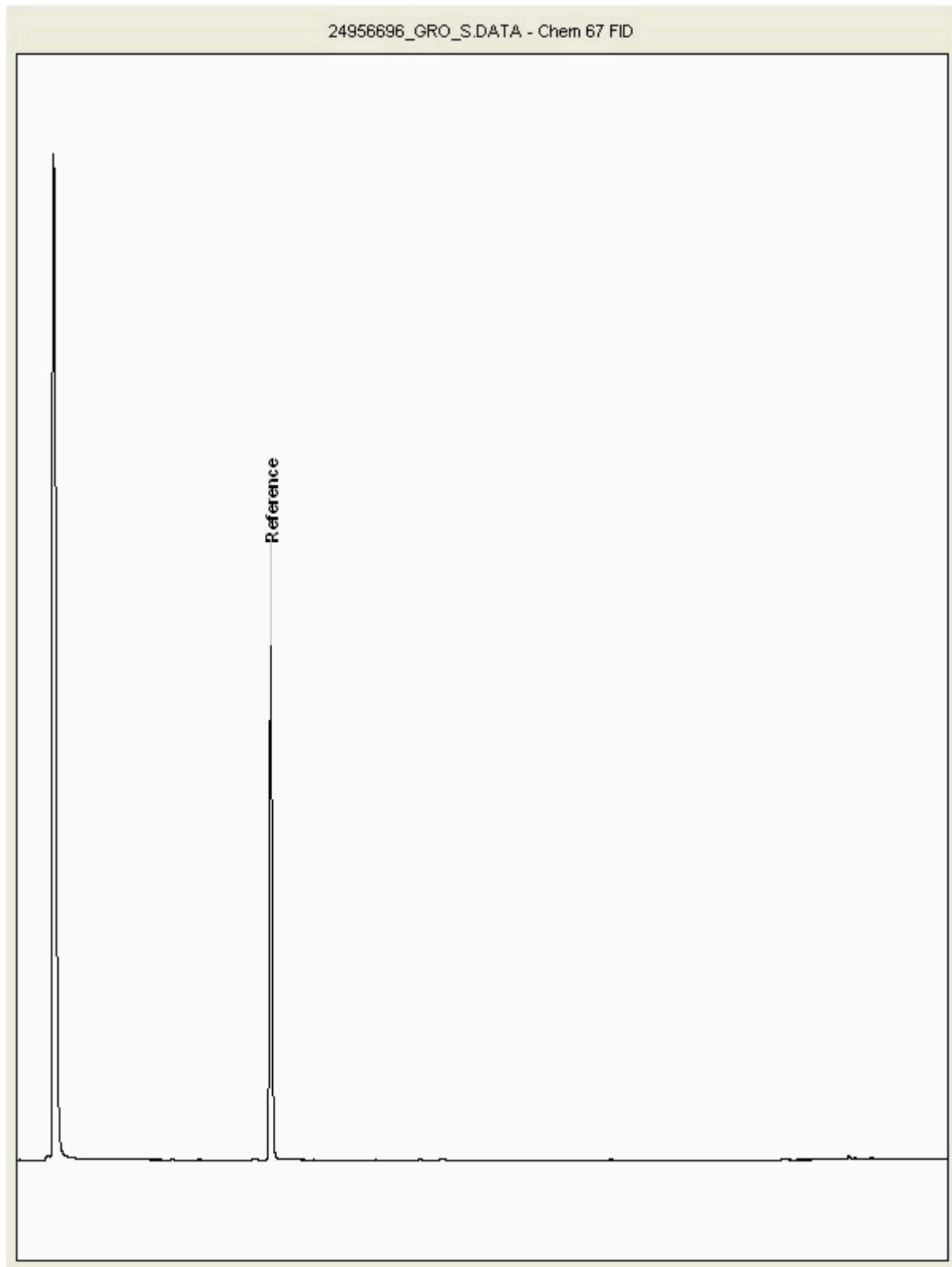
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24956696
Sample ID : TP8

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

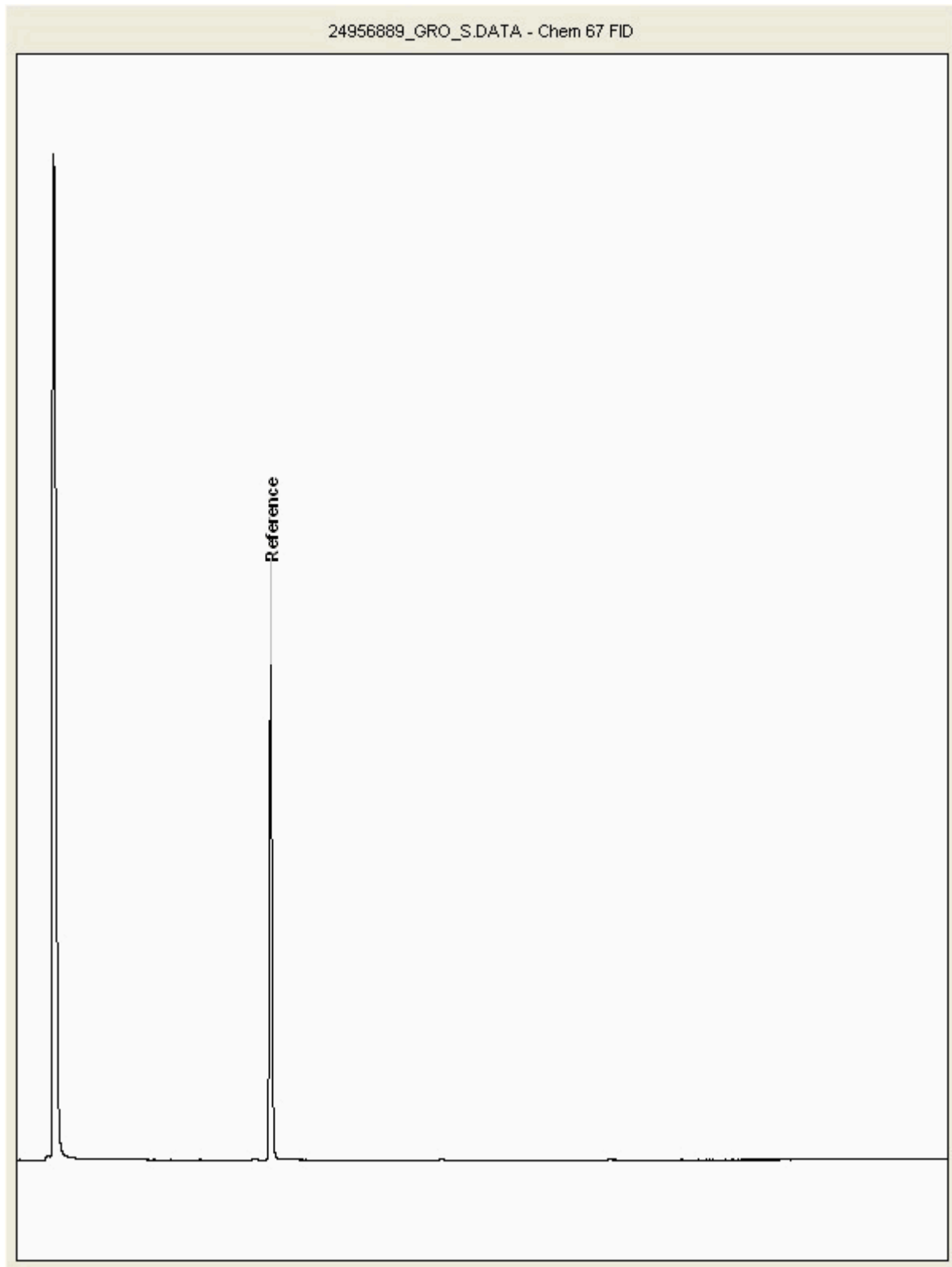
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24956889
Sample ID : TP1

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

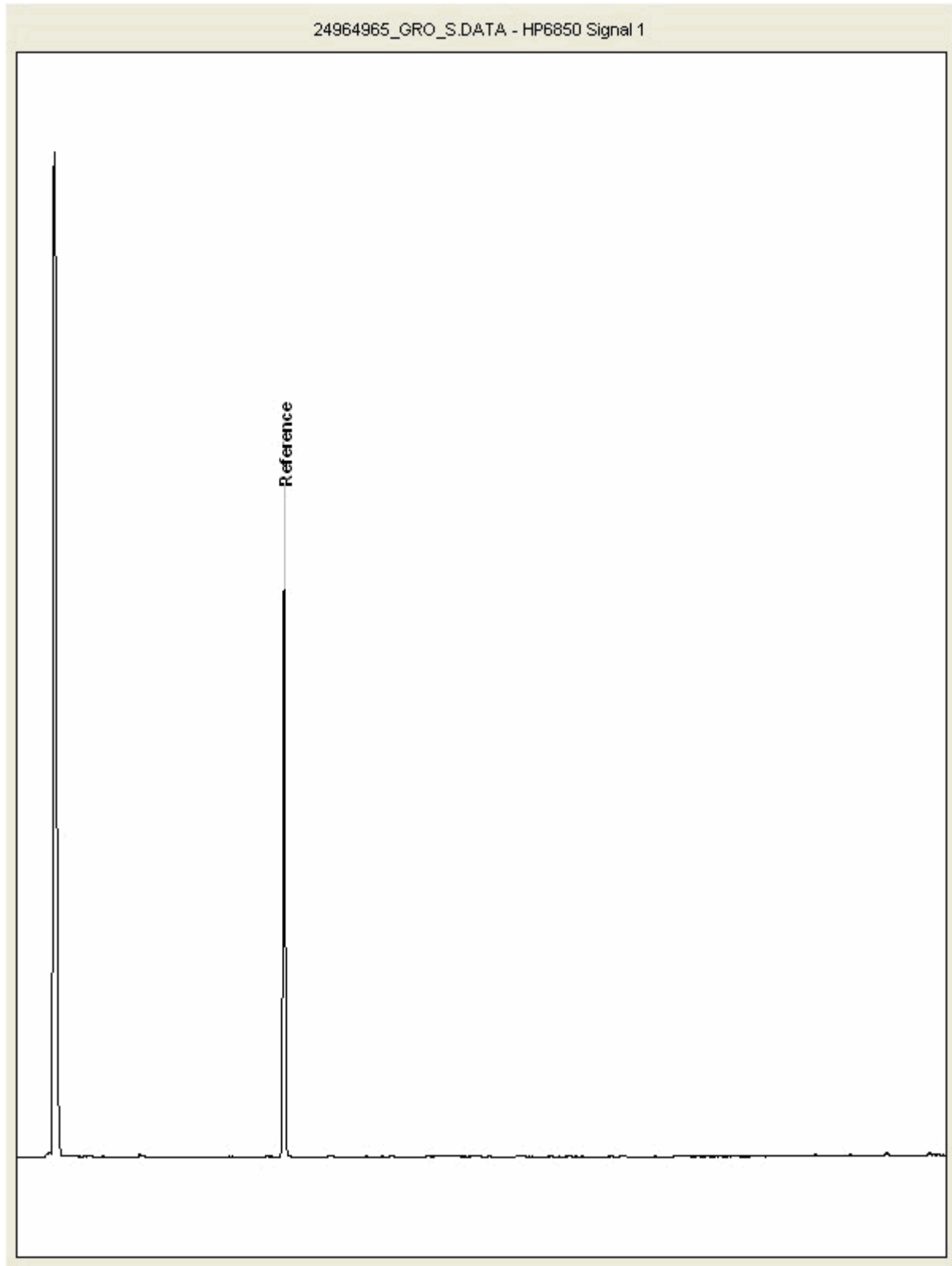
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24964965
Sample ID : TP4

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

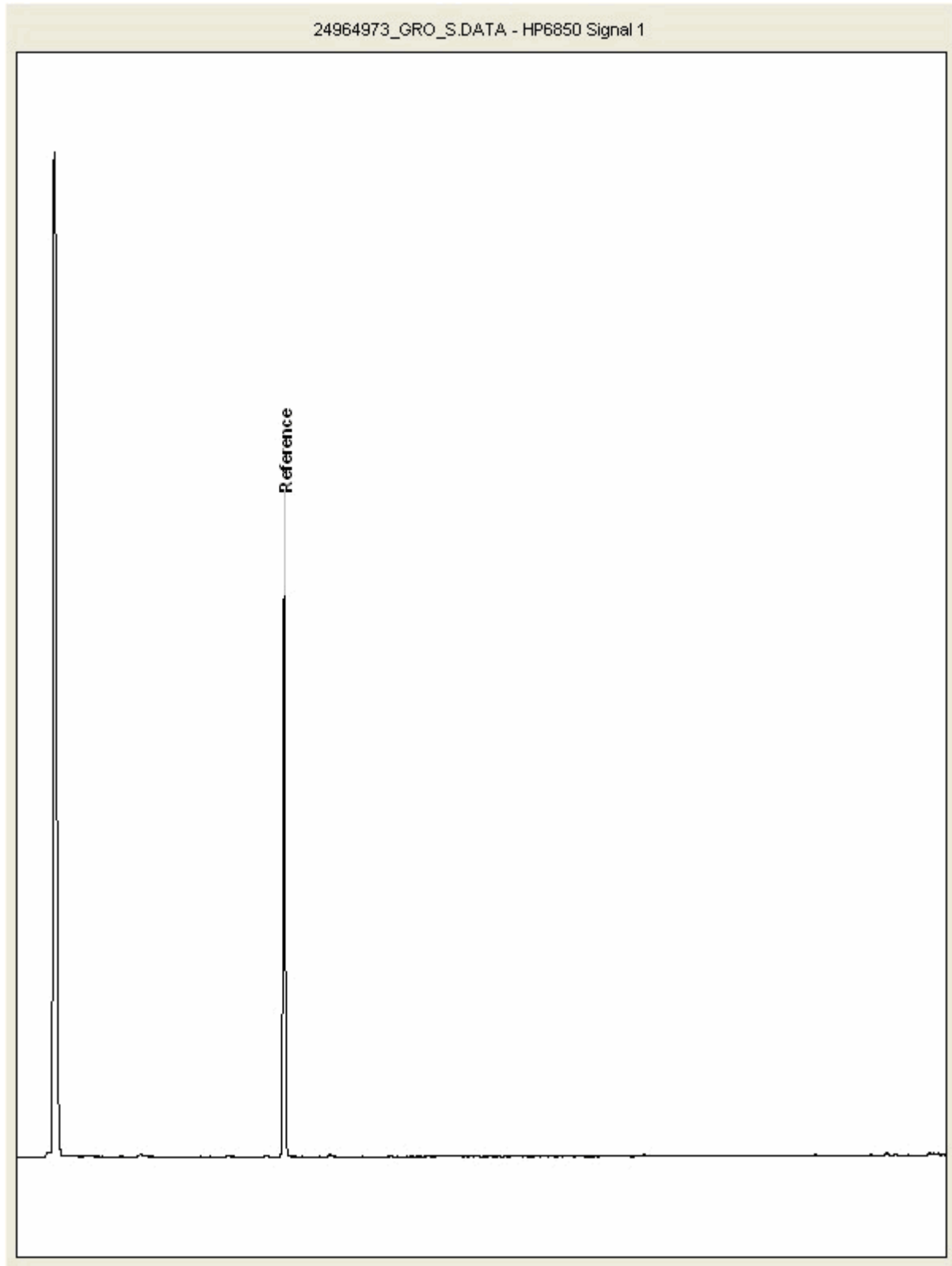
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24964973
Sample ID : TP2

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

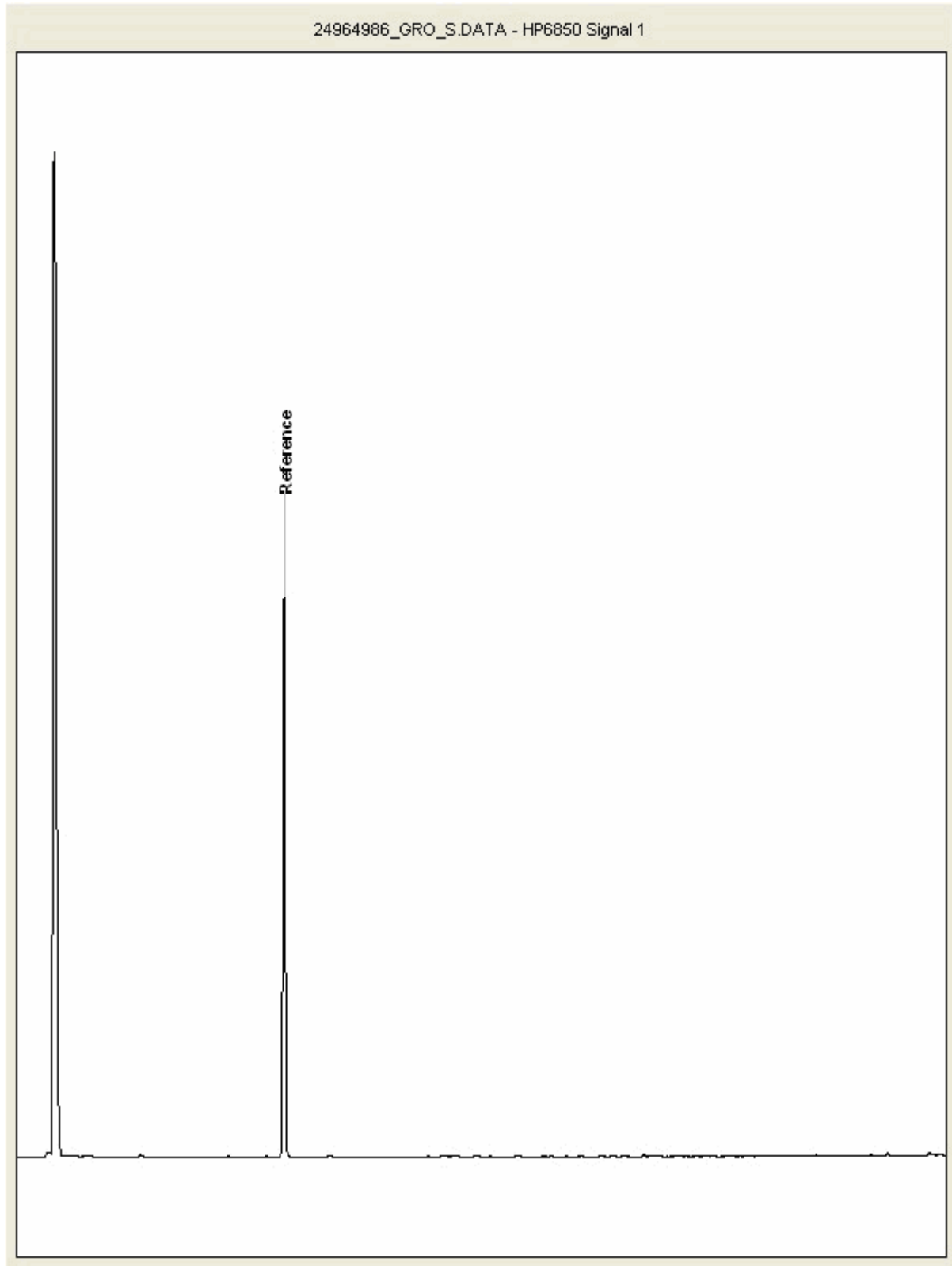
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24964986
Sample ID : TP3

Depth : 0.00 - 0.35





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

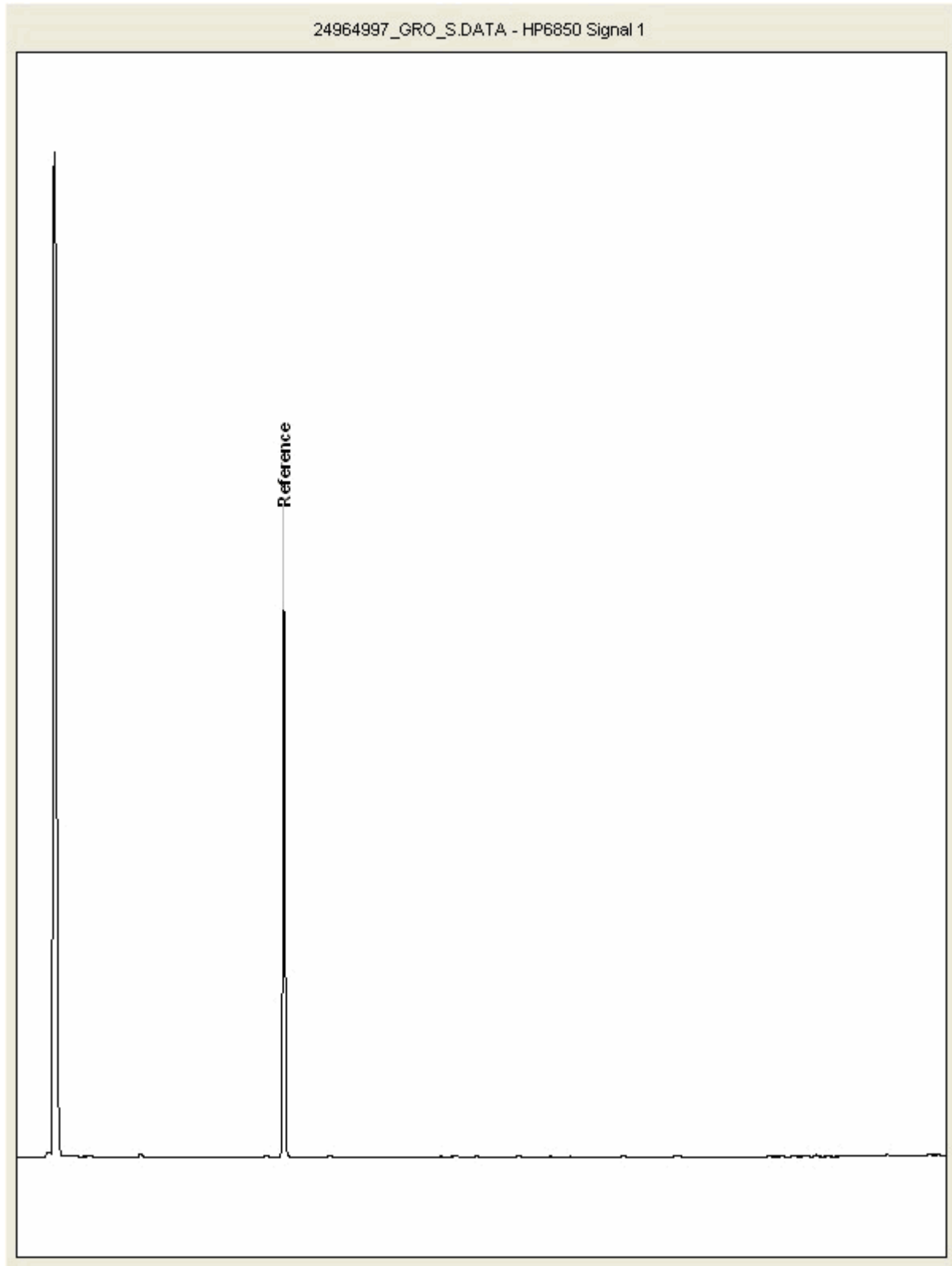
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24964997
Sample ID : TP6

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

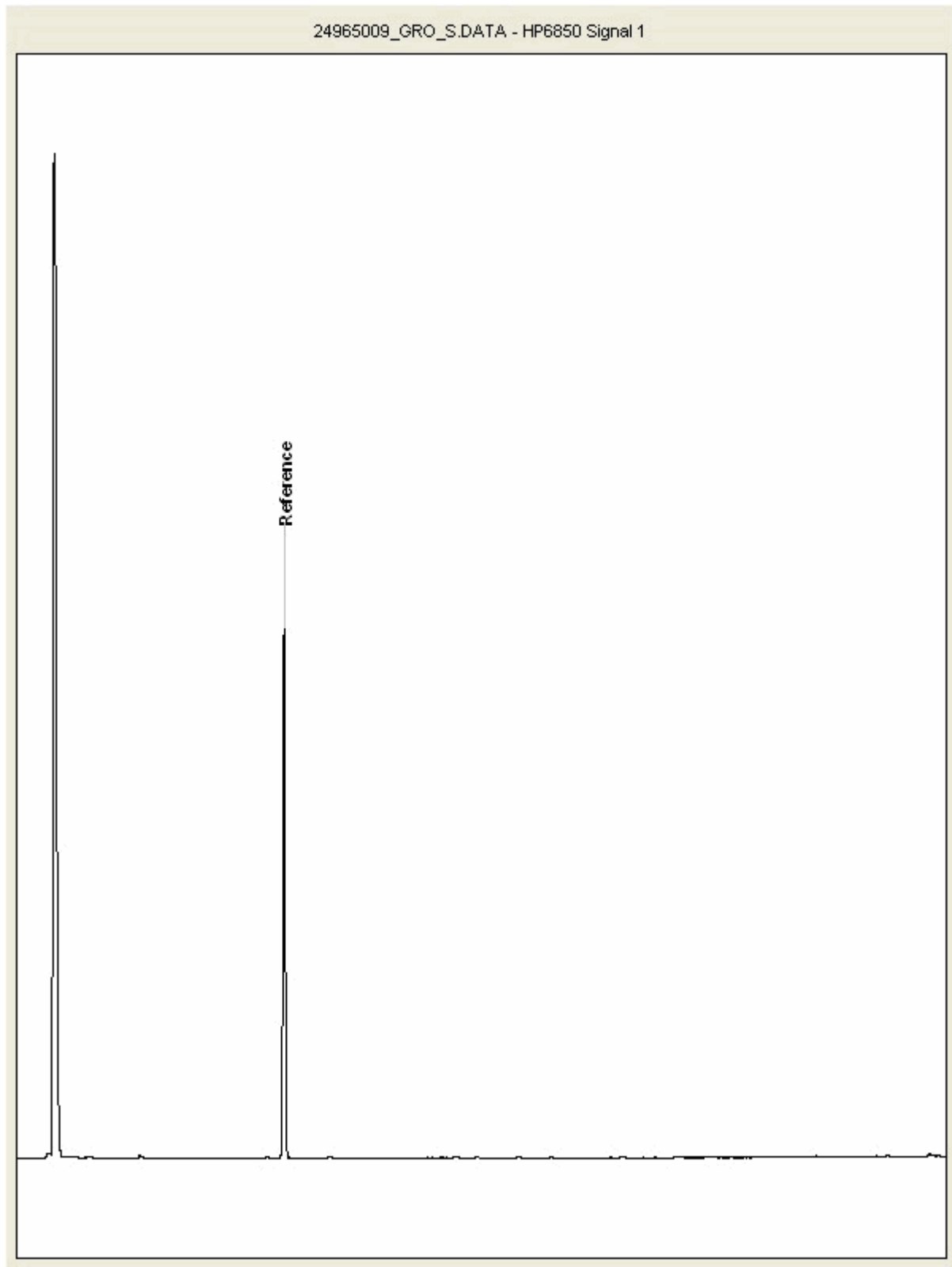
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24965009
Sample ID : TP5

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

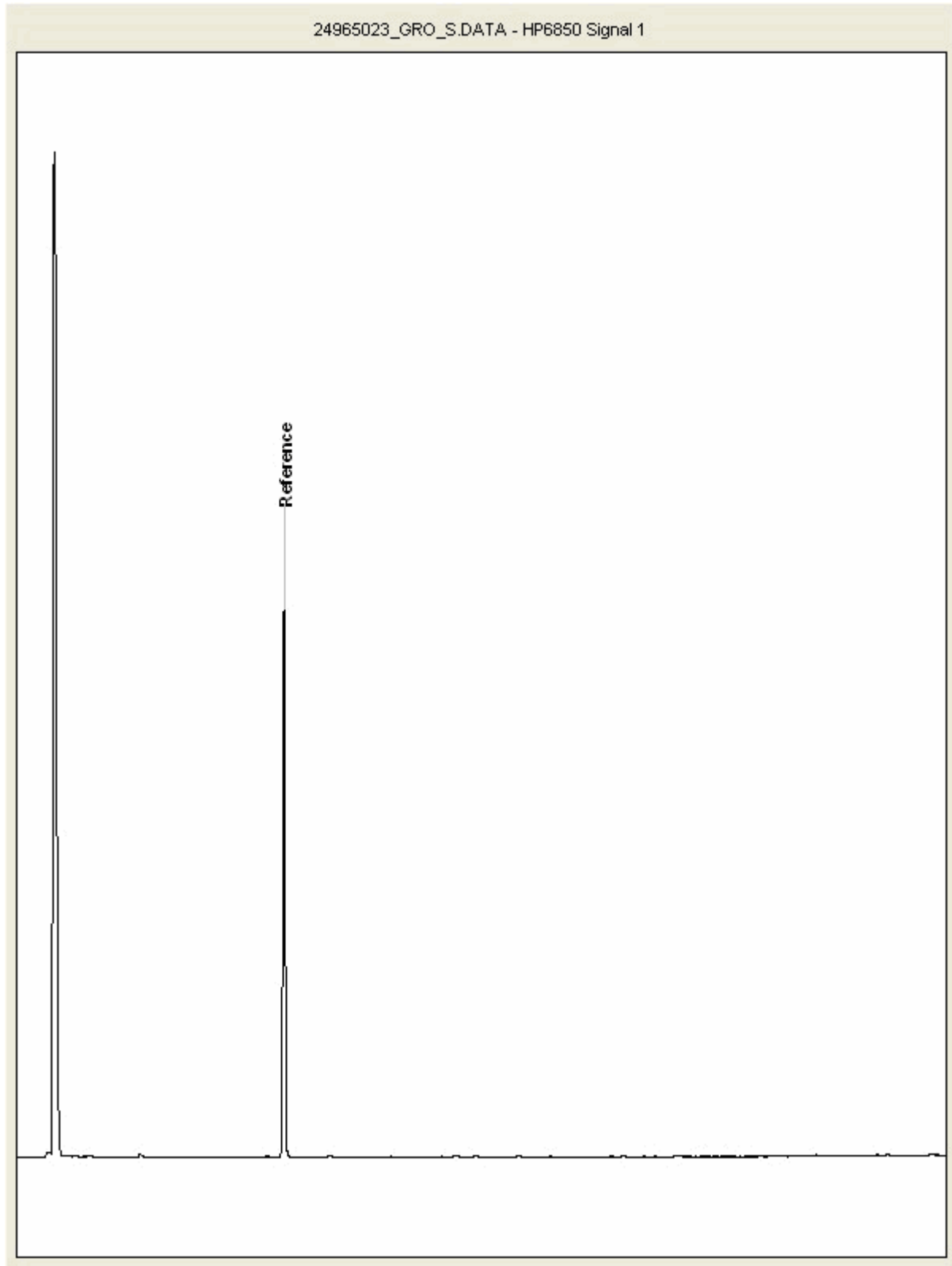
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 24965023
Sample ID : TP7

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

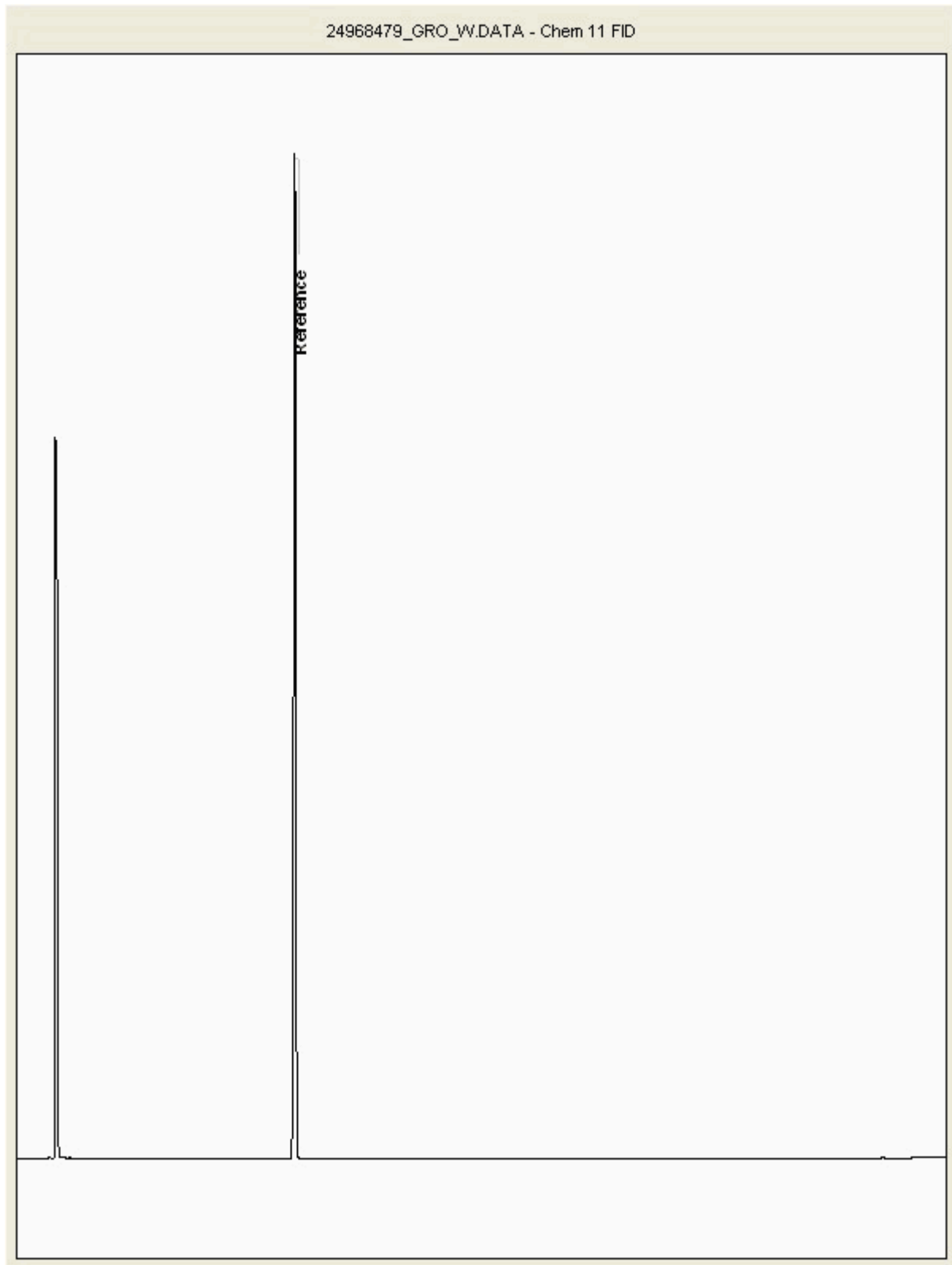
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968479
Sample ID : TP7

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

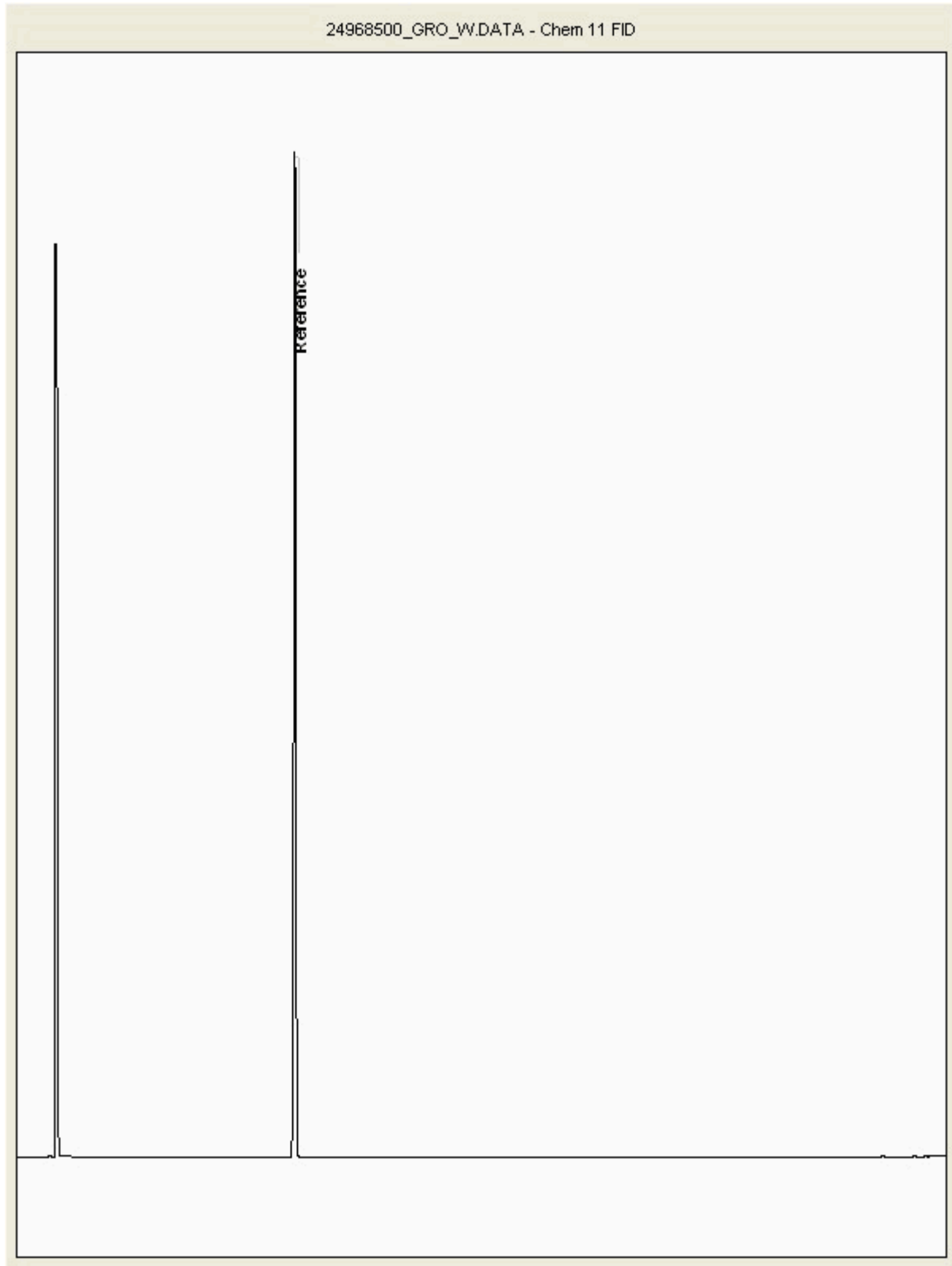
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968500
Sample ID : TP6

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

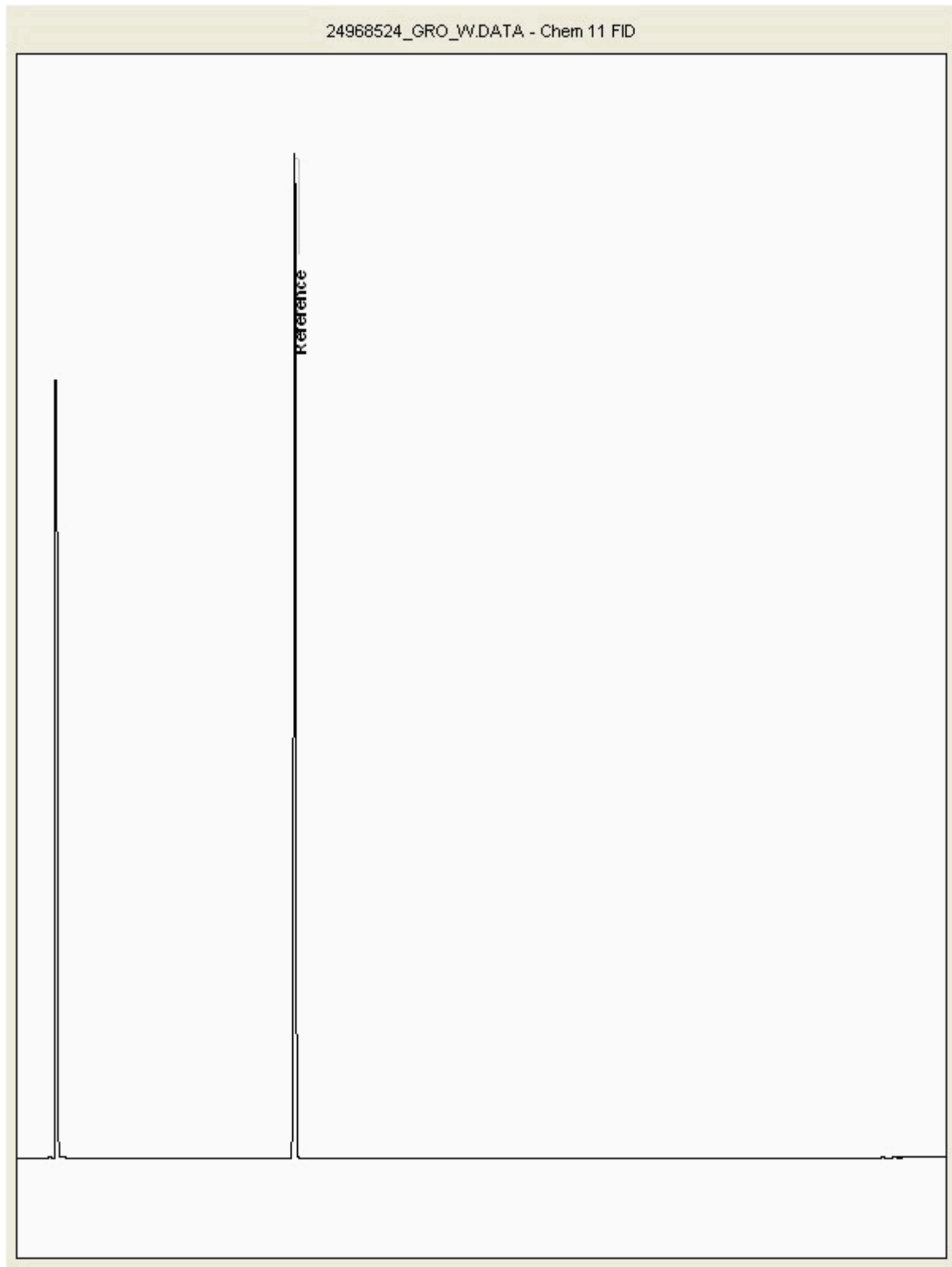
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968524
Sample ID : TP5

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

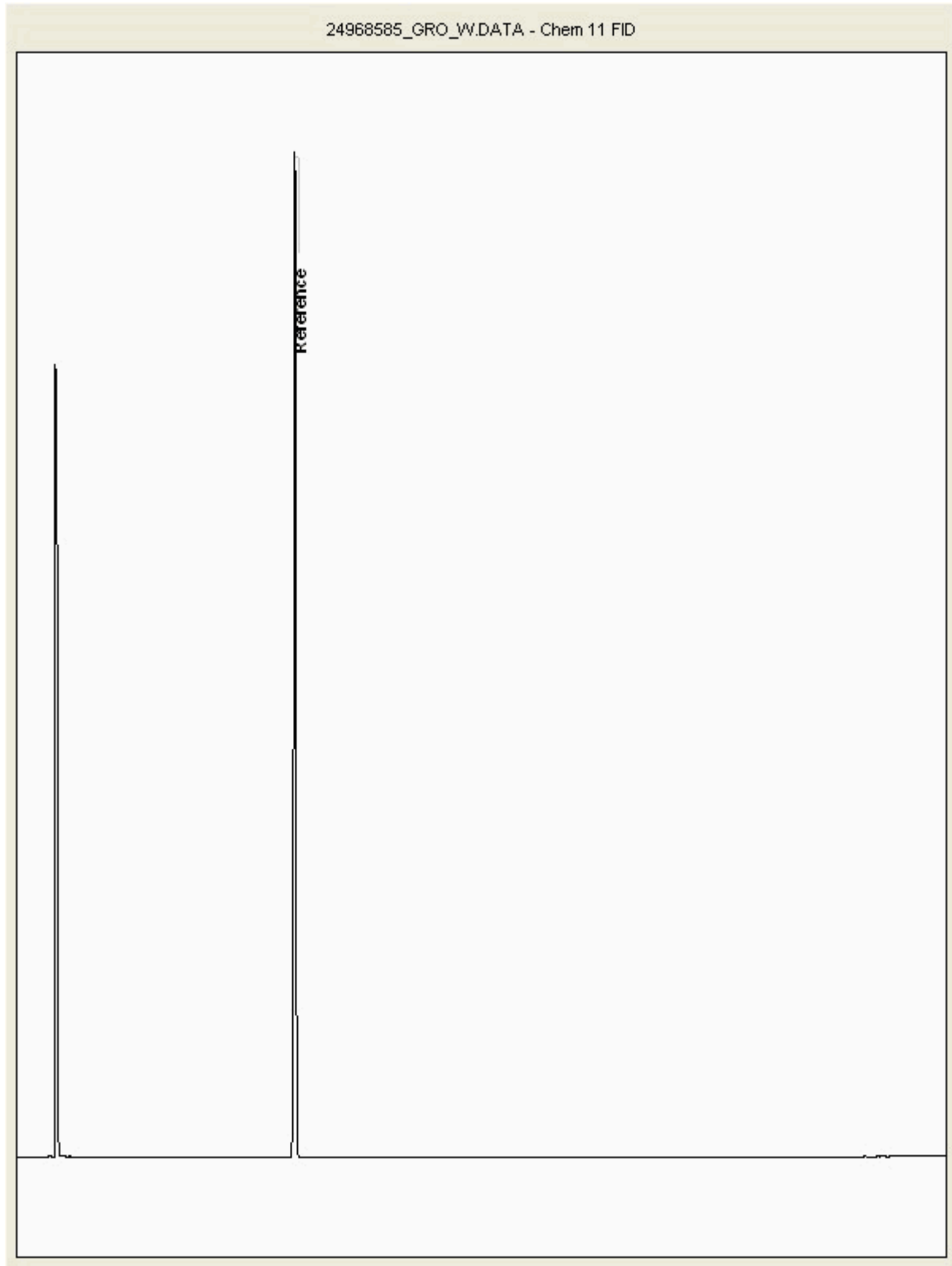
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968585
Sample ID : TP2

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

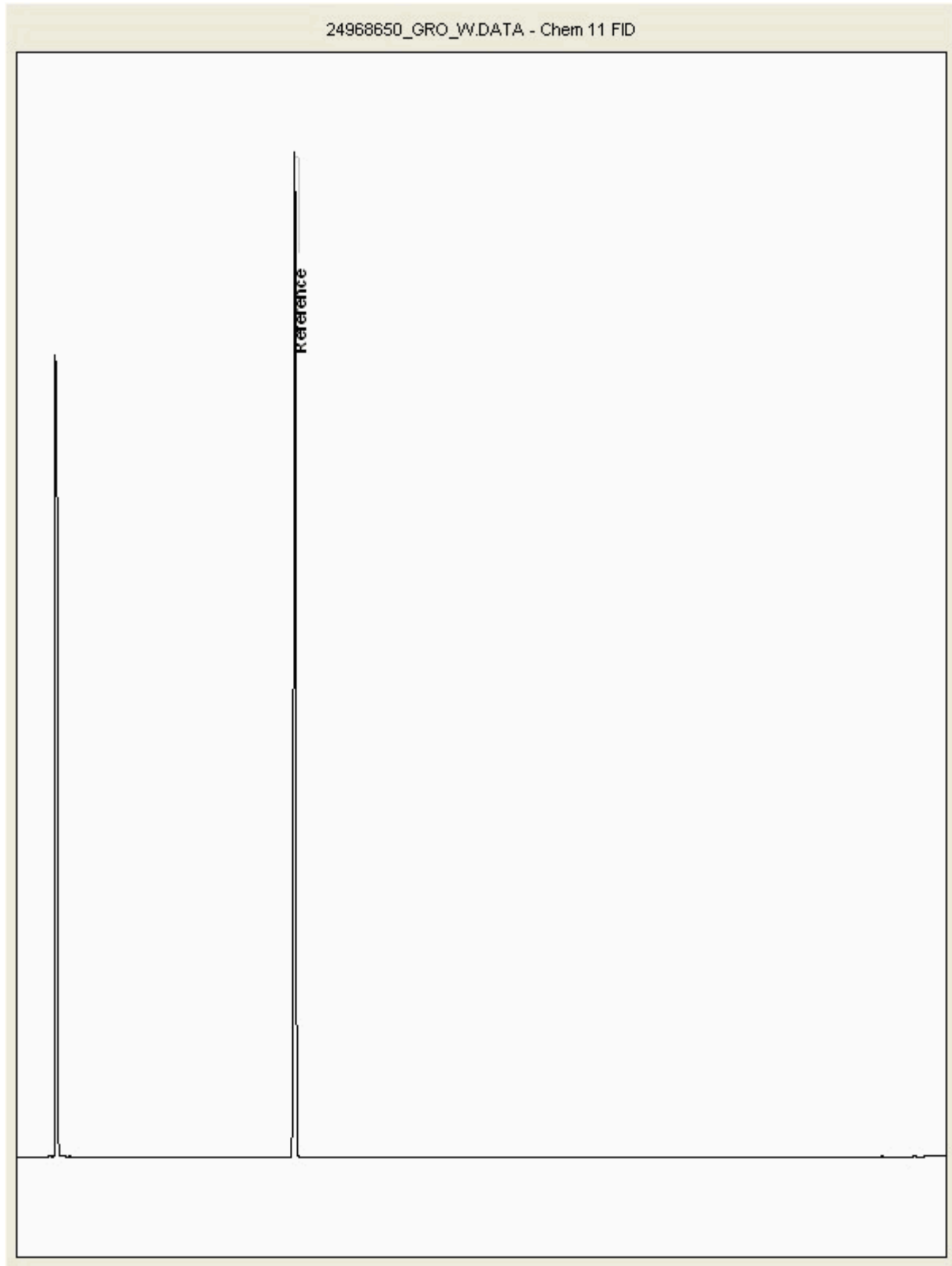
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968650
Sample ID : TP1

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

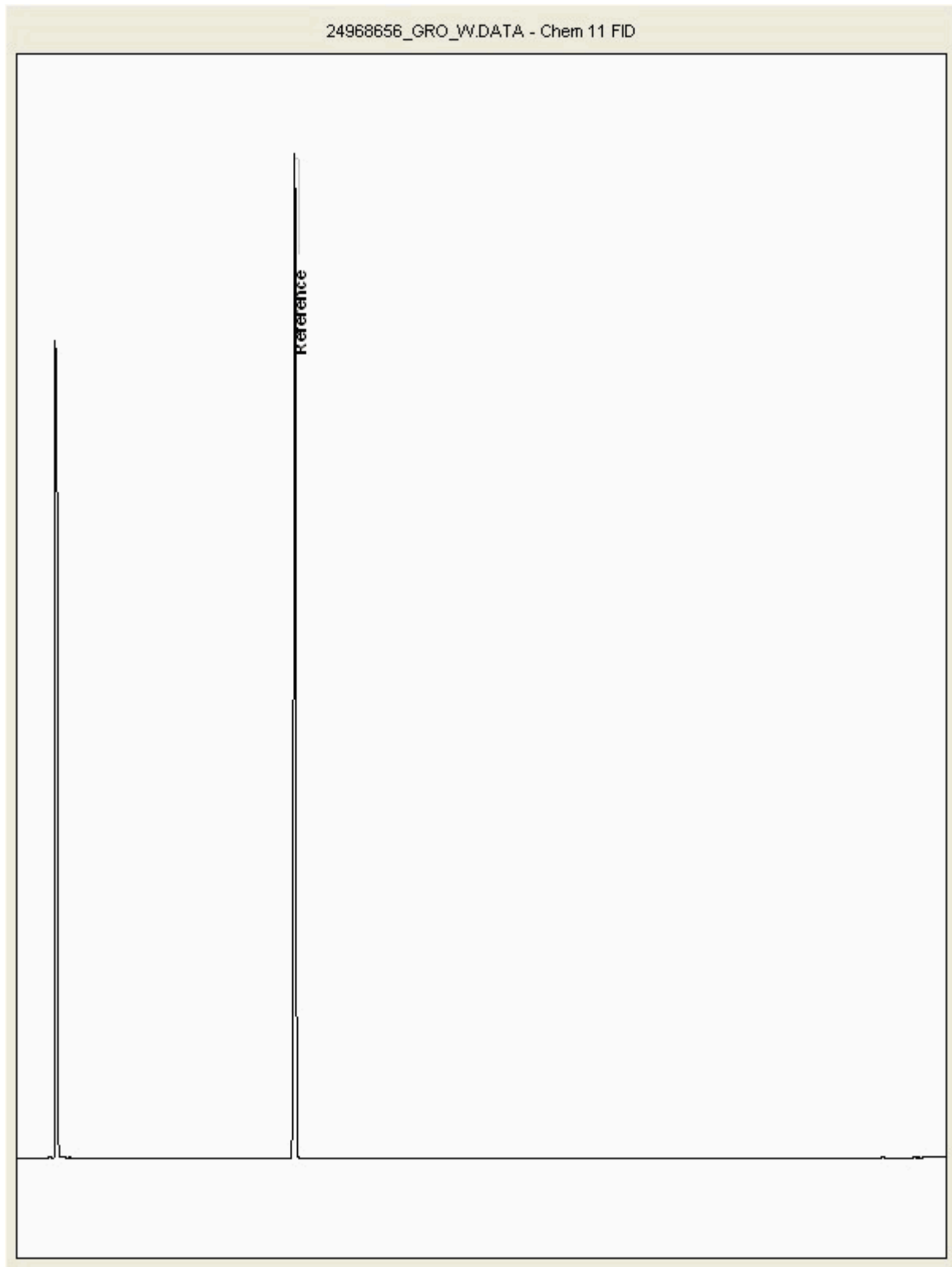
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968656
Sample ID : TP8

Depth : 0.00 - 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

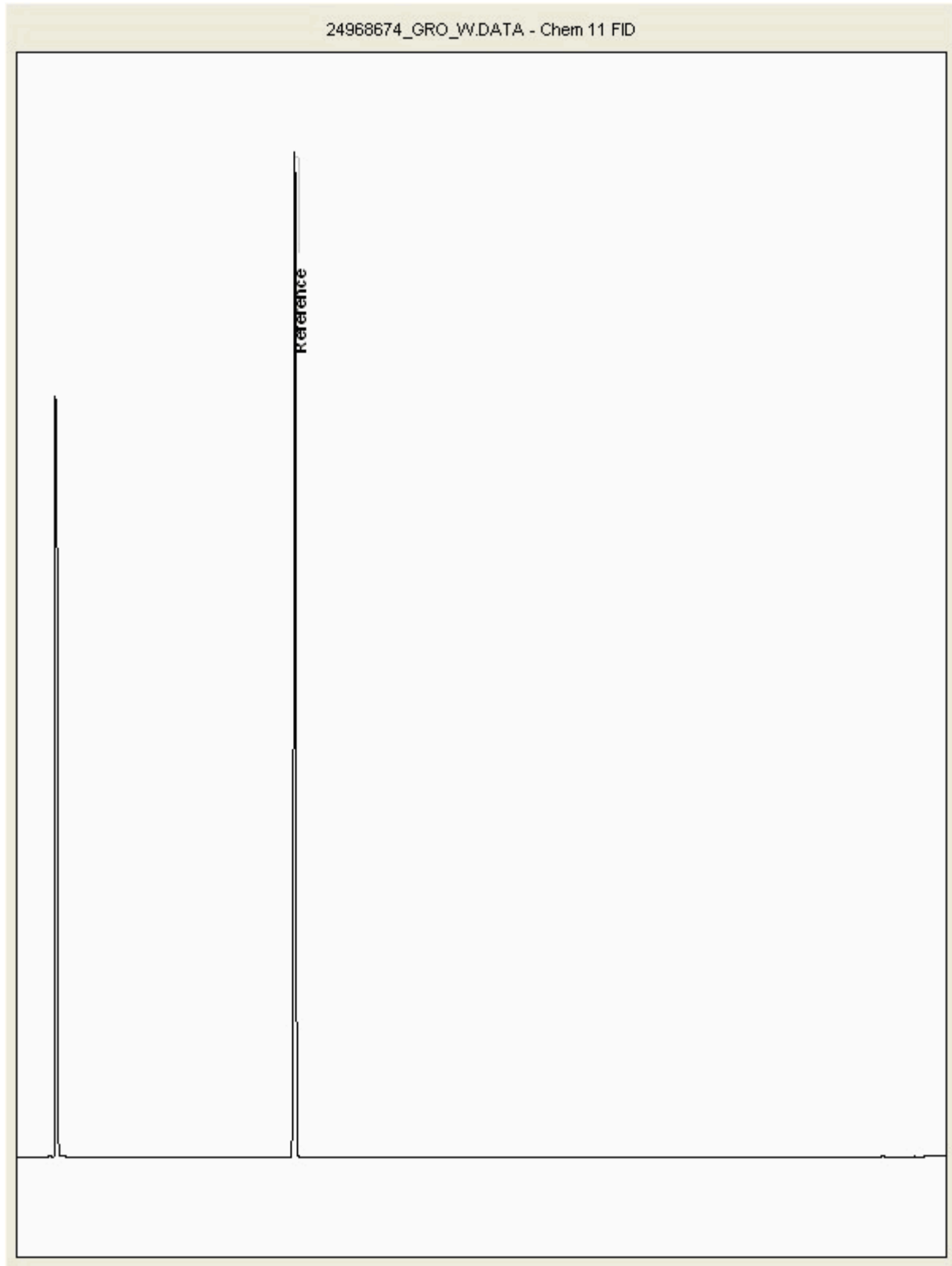
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968674
Sample ID : TP4

Depth : 0.00 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 210907-69
Client Ref.: 70057126

Report Number: 613204
Location: Windy Arbor

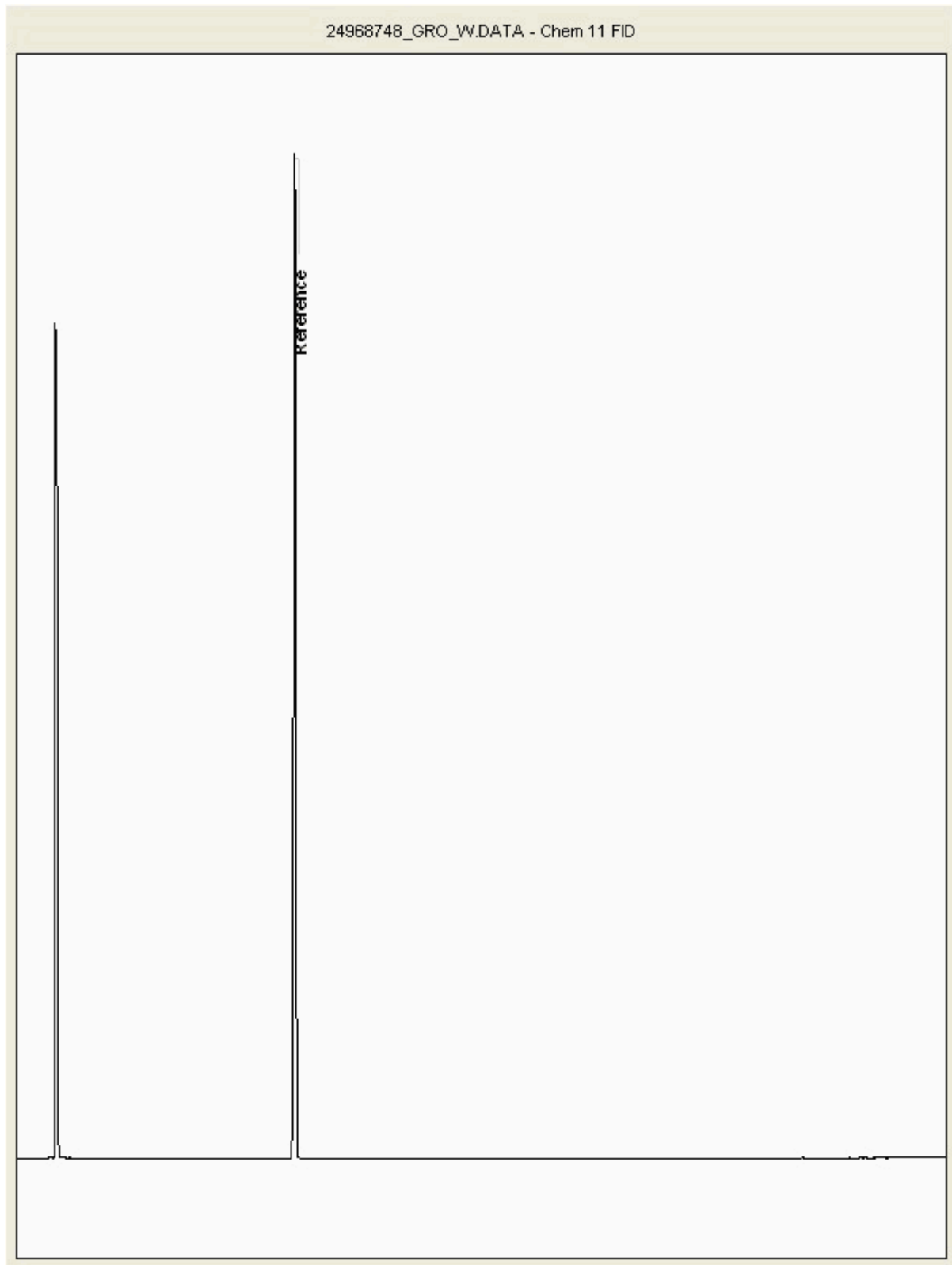
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 24968748
Sample ID : TP3

Depth : 0.00 - 0.35





CERTIFICATE OF ANALYSIS

SDG:	210907-69	Client Reference:	70057126	Report Number:	613204
Location:	Windy Arbor	Order Number:	70057126	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. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

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.