



CERTIFICATE OF ANALYSIS

SDG: 160714-104
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 375845
Superseded Report: 370724

VOC MS (S)

		QC 1378	QC 1382
p/m-Xylene	TM116	96.1 76.97 : 121.75	87.4 71.30 : 112.70
Sec-Butylbenzene	TM116	64.8 49.99 : 131.78	84.2 54.99 : 144.98
Tetrachloroethene	TM116	110.4 87.96 : 133.65	94.8 85.92 : 127.92
Toluene	TM116	102.6 79.23 : 114.58	88.0 76.08 : 110.17
Trichloroethene	TM116	103.4 81.65 : 115.27	91.6 78.17 : 121.37
Trichlorofluoromethane	TM116	103.8 81.26 : 121.09	94.2 75.01 : 124.99
Vinyl Chloride	TM116	100.0 64.90 : 133.10	107.0 66.81 : 138.46

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.

The figure detailed is the percentage recovery result for the AQC.

The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.



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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

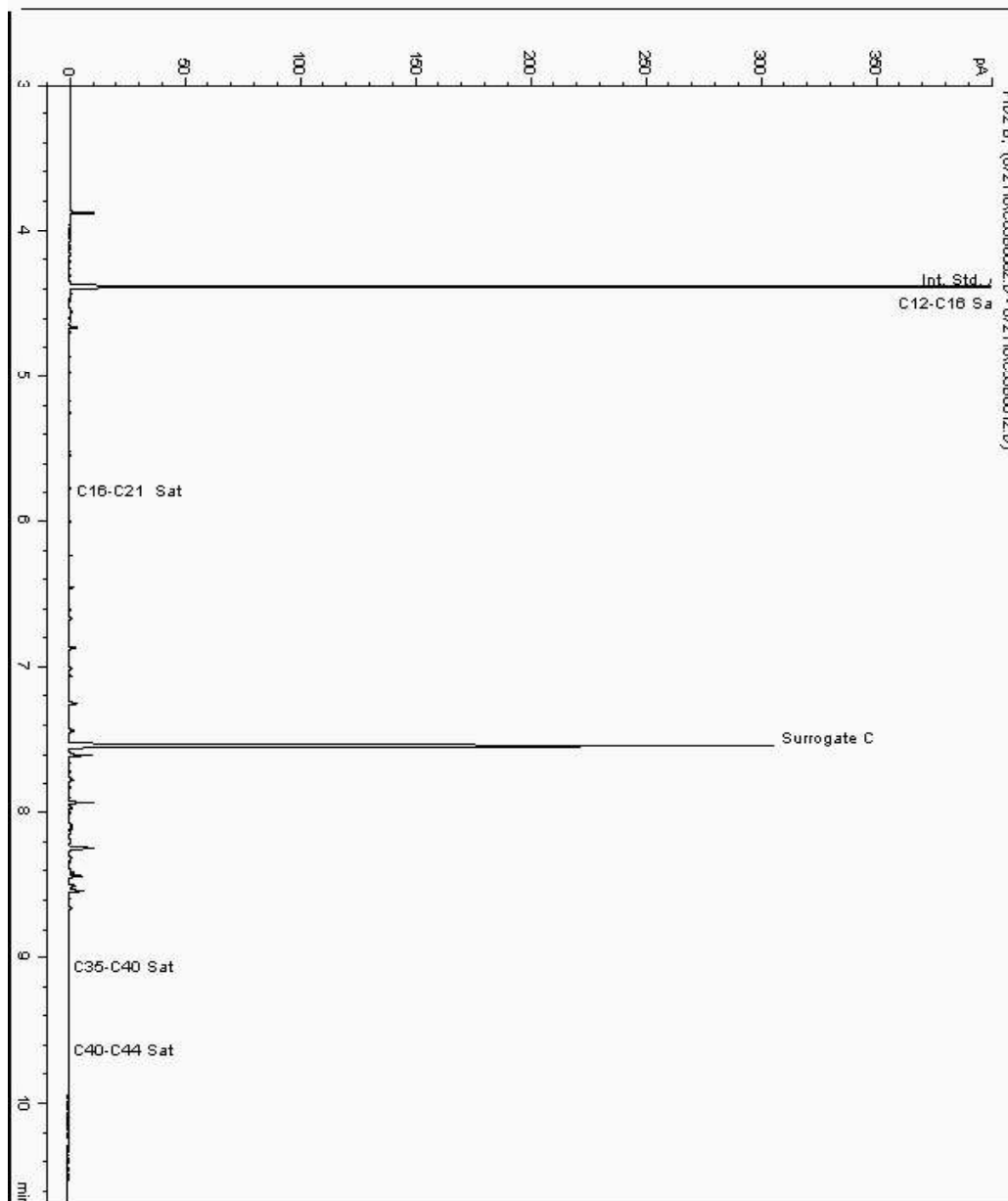
Sample No : 13805891
Sample ID : WS07

Depth : 0.00 - 0.40

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

Sample Identity: 12956190-
Date Acquired : 22/07/2016 09:26:46 PM
Units : ppb
Dilution: WS07[0.00 - 0.40]

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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

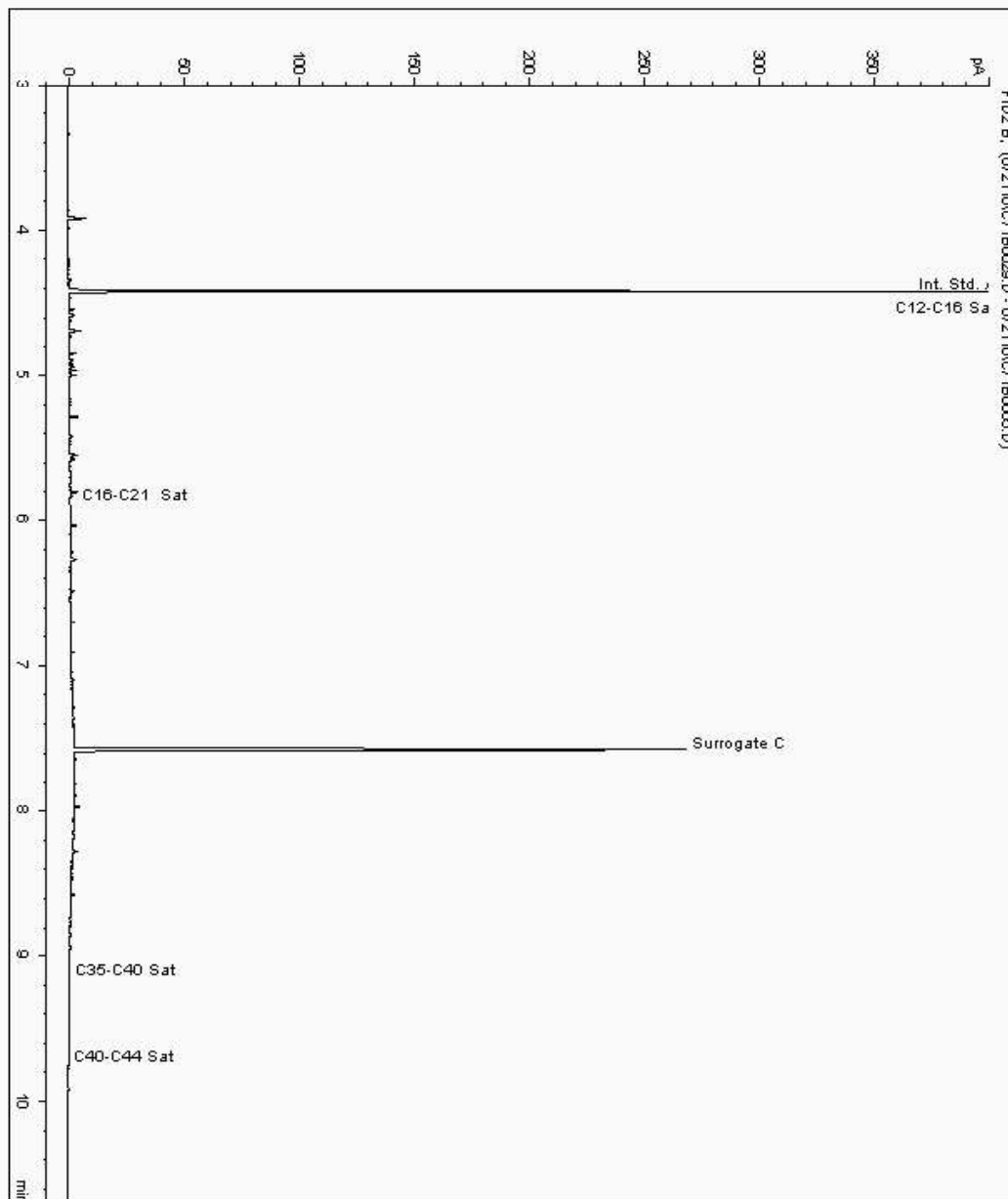
Sample No : 13806005
Sample ID : WS05

Depth : 0.30 - 1.00

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

Sample Identity: 12956150-
Date Acquired : 21/07/2016 21:51:35 PM
Units : ppb
Dilution: WS05[0.30 - 1.00]

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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

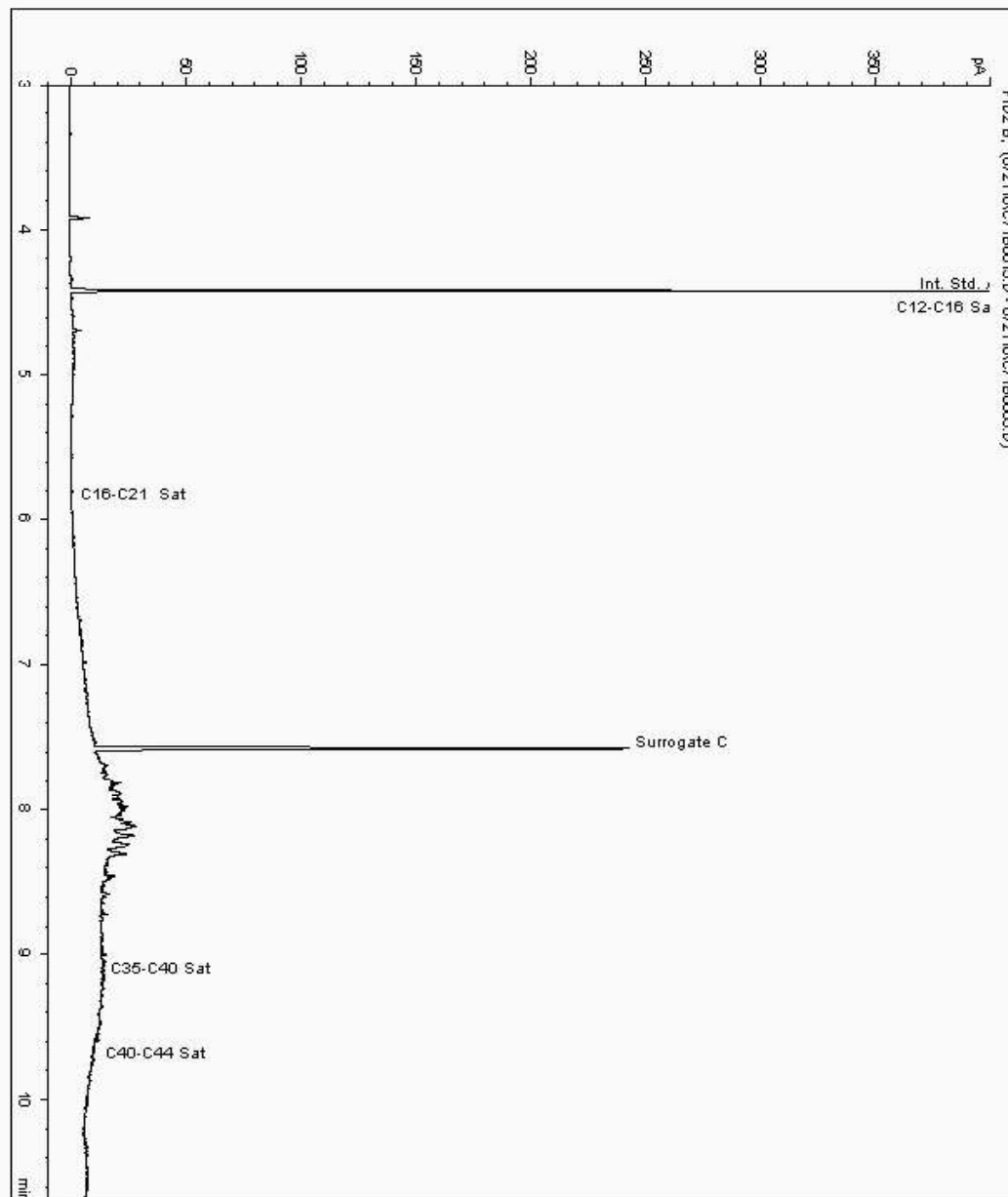
Sample No : 13806059
Sample ID : WS01

Depth : 0.10 - 0.60

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

Sample Identity: 12956064-
Date Acquired : 21/07/2016 17:46:18 PM
Units : ppb
Dilution: WS01[0.10 - 0.60]

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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

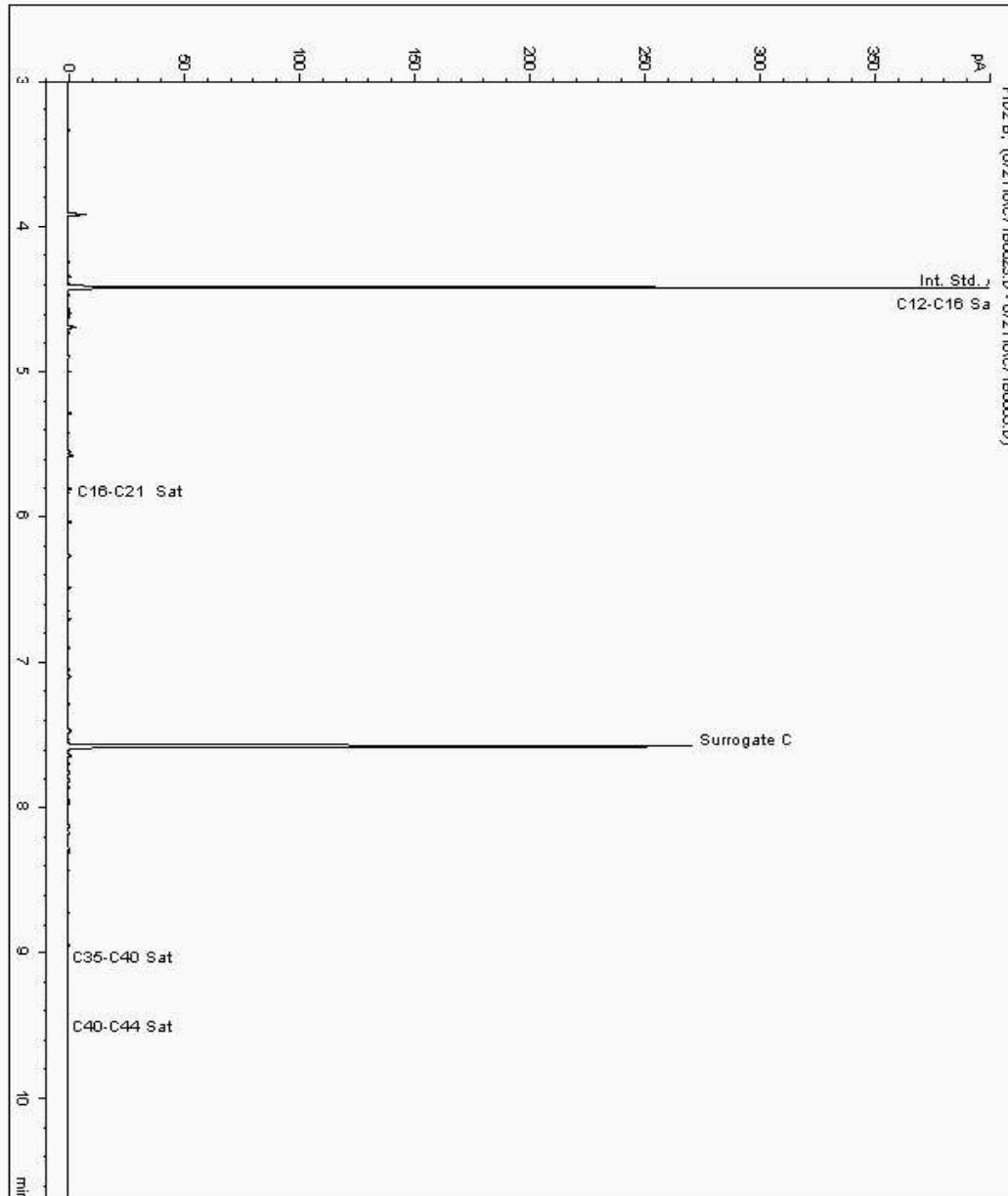
Sample No : 13806109
Sample ID : WS03

Depth : 0.05 - 0.40

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

Sample Identity: 12956105-
Date Acquired : 21/07/2016 20:05:21 PM
Units : ppb
Dilution: WS03[0.05 - 0.40]

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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

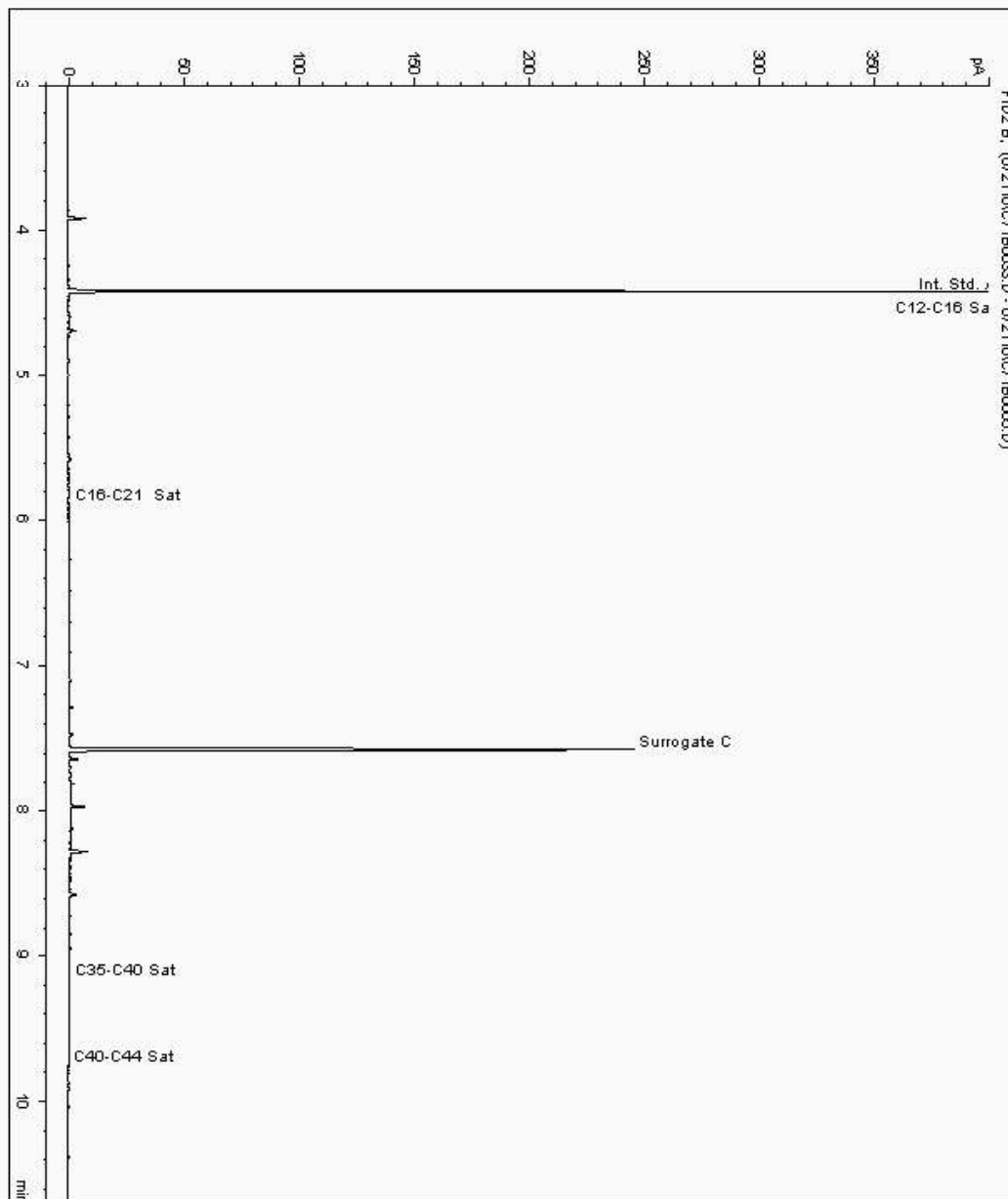
Sample No : 13806187
Sample ID : WS02

Depth : 0.00 - 0.50

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

Sample Identity: 12956083-
Date Acquired : 21/07/2016 22:56:52 PM
Units : ppb
Dilution: WS02[0.00 - 0.50]

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Chromatogram

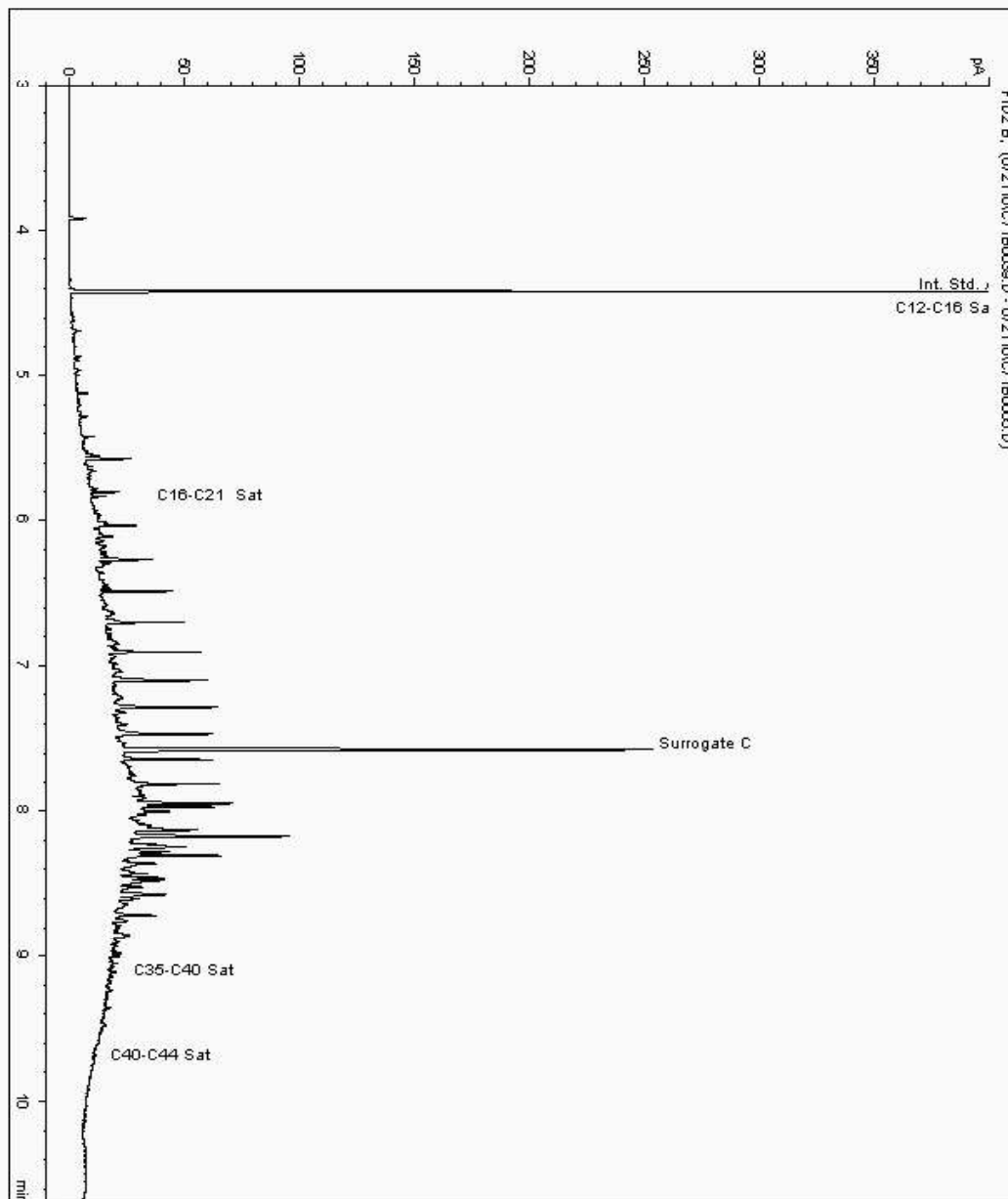
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 13806253
Sample ID : WS04

Depth : 0.10 - 0.30

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

Sample Identity: 12956130-
Date Acquired : 22/07/2016 00:26:32 PM
Units : ppb
Dilution: WS04[0.10 - 0.30]





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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

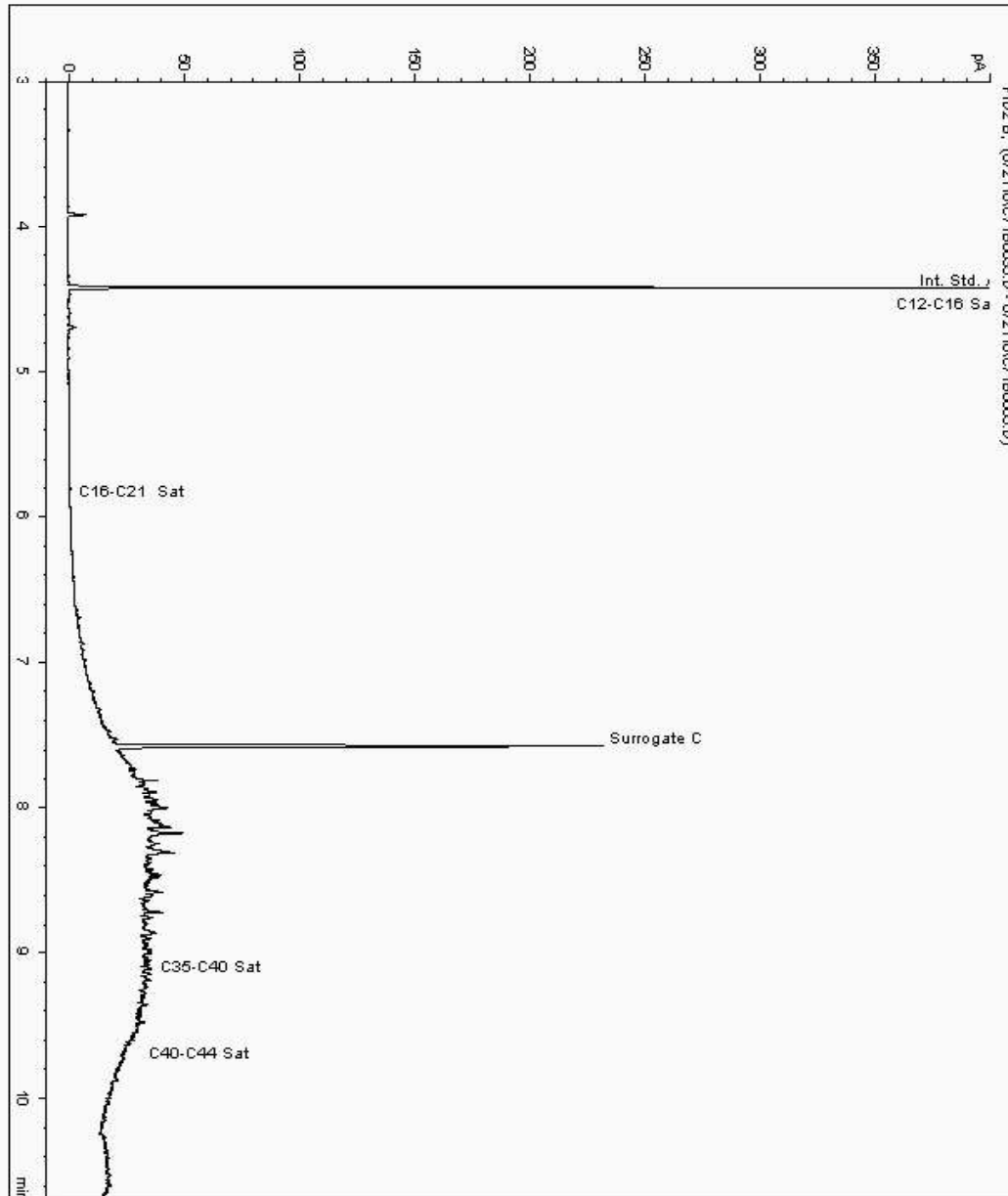
Sample No : 13806334
Sample ID : WS06

Depth : 0.20 - 0.60

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

Sample Identity: 12956170-
Date Acquired : 21/07/2016 23:29:58 PM
Units : ppb
Dilution: WS06[0.20 - 0.60]

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Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S)

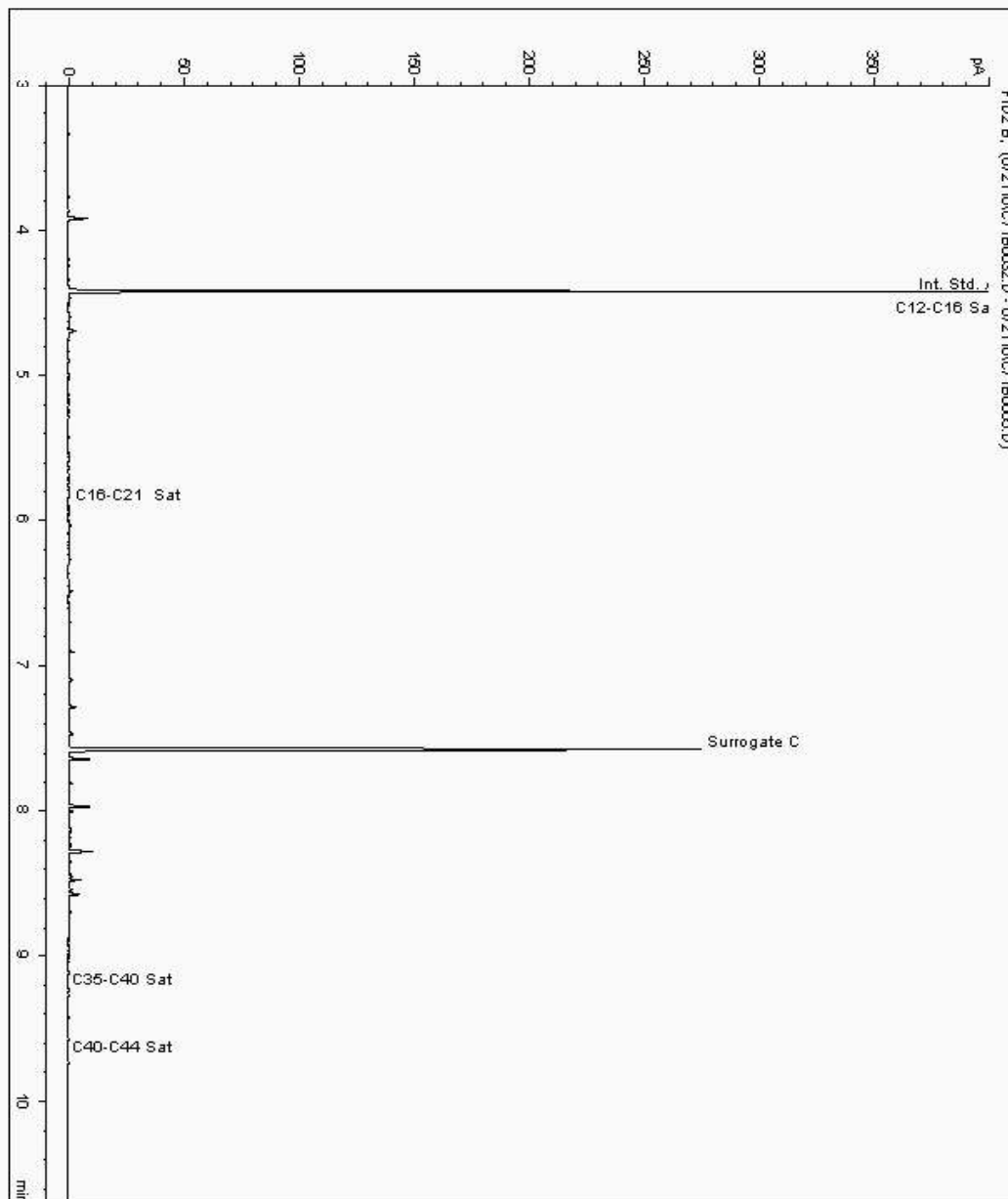
Sample No : 13806395
Sample ID : WS08

Depth : 0.00 - 0.40

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

Sample Identity: 12956224-
Date Acquired : 21/07/2016 22:36:11 PM
Units : ppb
Dilution: WS08[0.00 - 0.40]

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Chromatogram

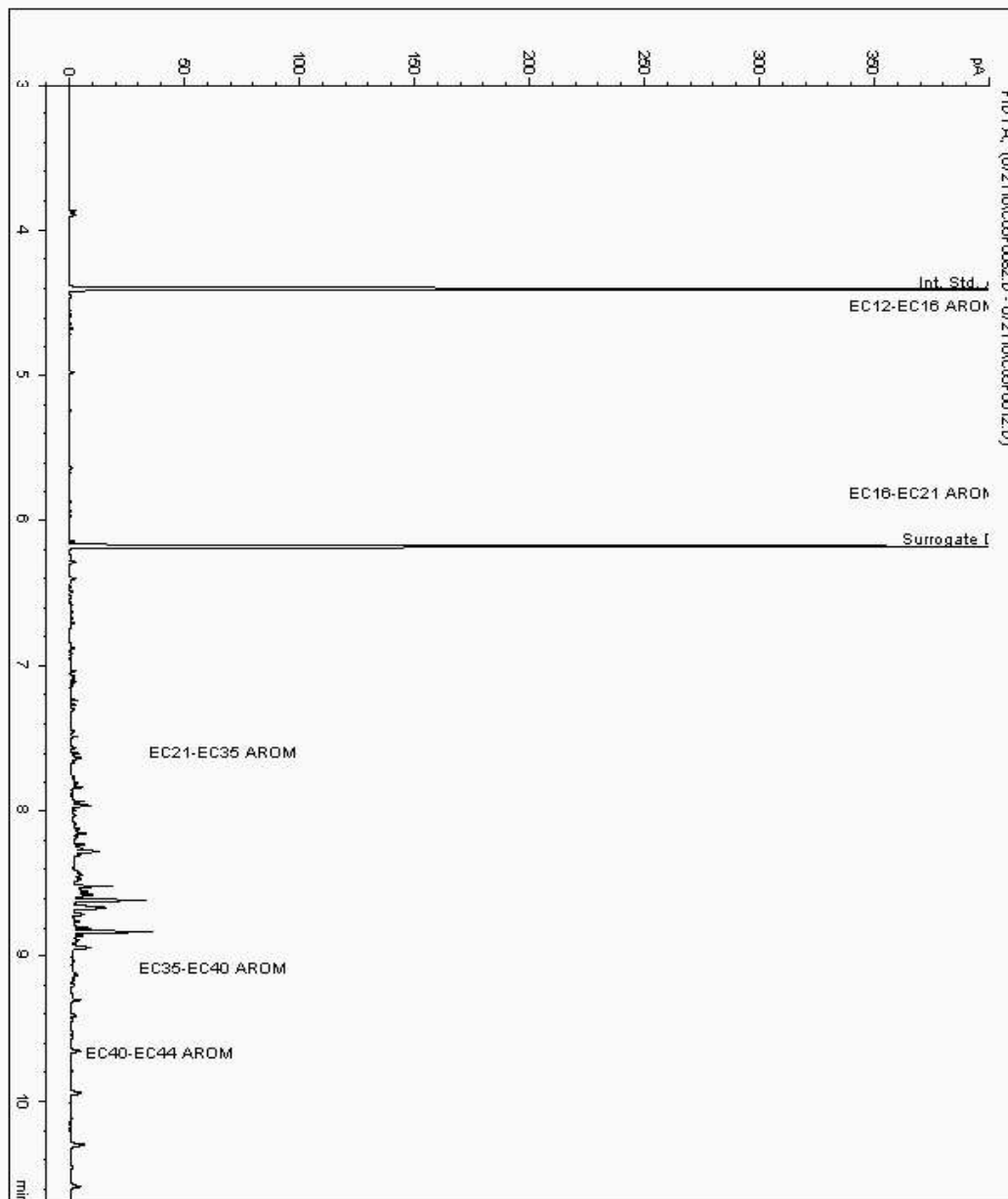
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 13805891
Sample ID : WS07

Depth : 0.00 - 0.40

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

Sample Identity: 12956191-
Date Acquired : 22/07/2016 09:26:46 PM
Units : ppb
Dilution: WS07[0.00 - 0.40] →





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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

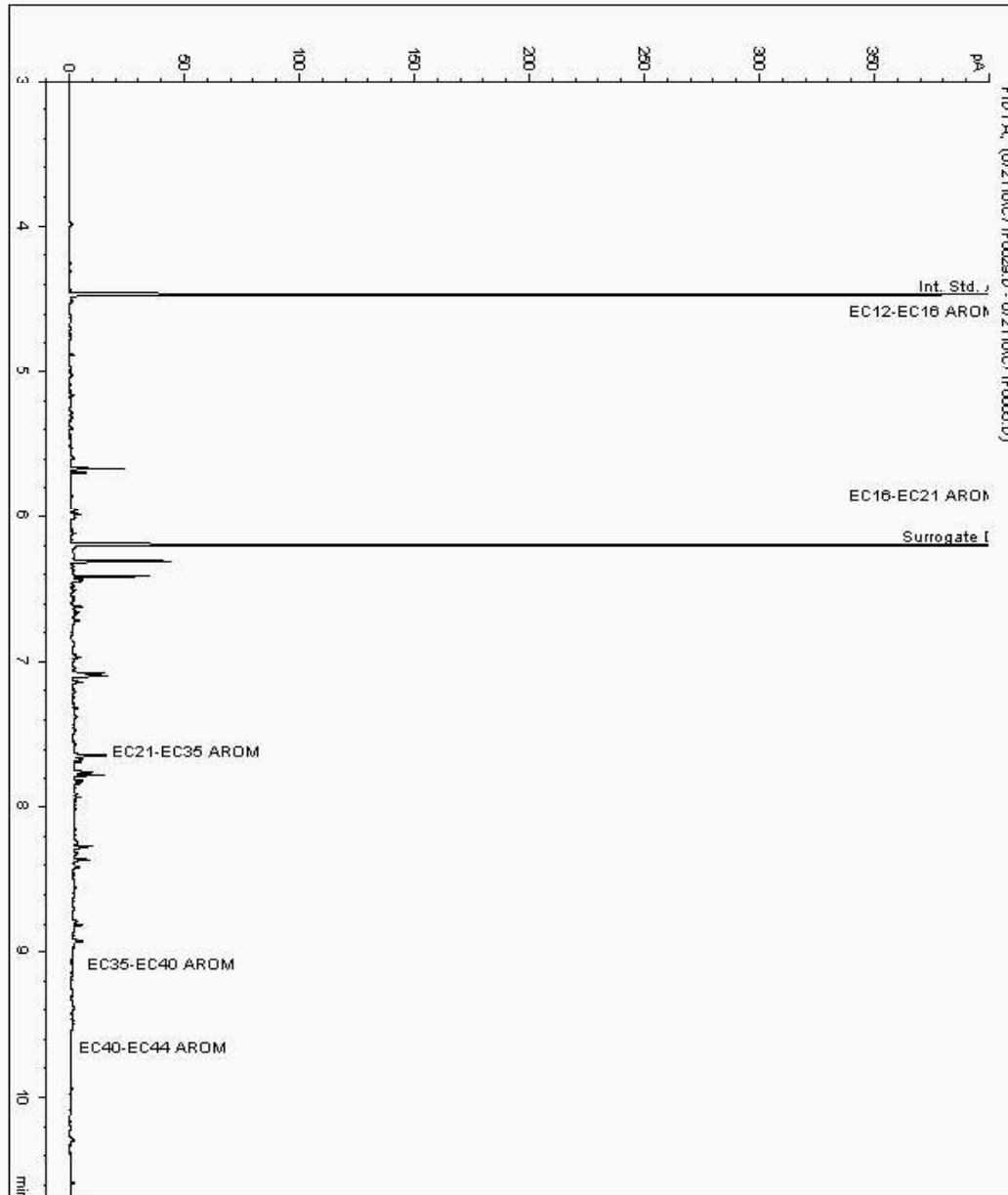
Sample No : 13806005
Sample ID : WS05

Depth : 0.30 - 1.00

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

Sample Identity: 12956151-
Date Acquired : 21/07/2016 21:51:36 PM
Units : ppb
Dilution: WS05[0.30 - 1.00]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

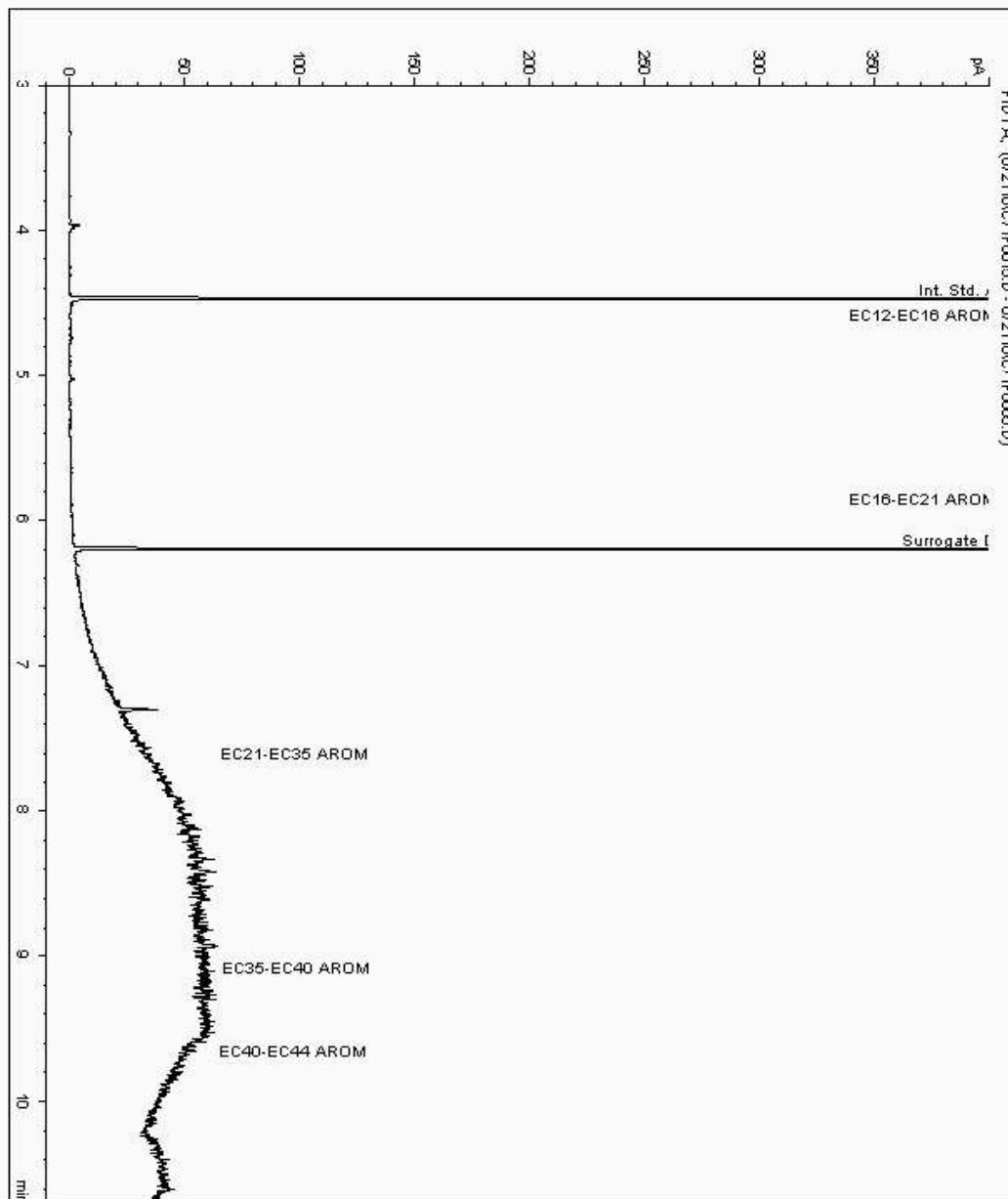
Sample No : 13806059
Sample ID : WS01

Depth : 0.10 - 0.60

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

Sample Identity: 12956065-
Date Acquired : 21/07/2016 17:46:18 PM
Units : ppb
Dilution: WS01[0.10 - 0.60]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

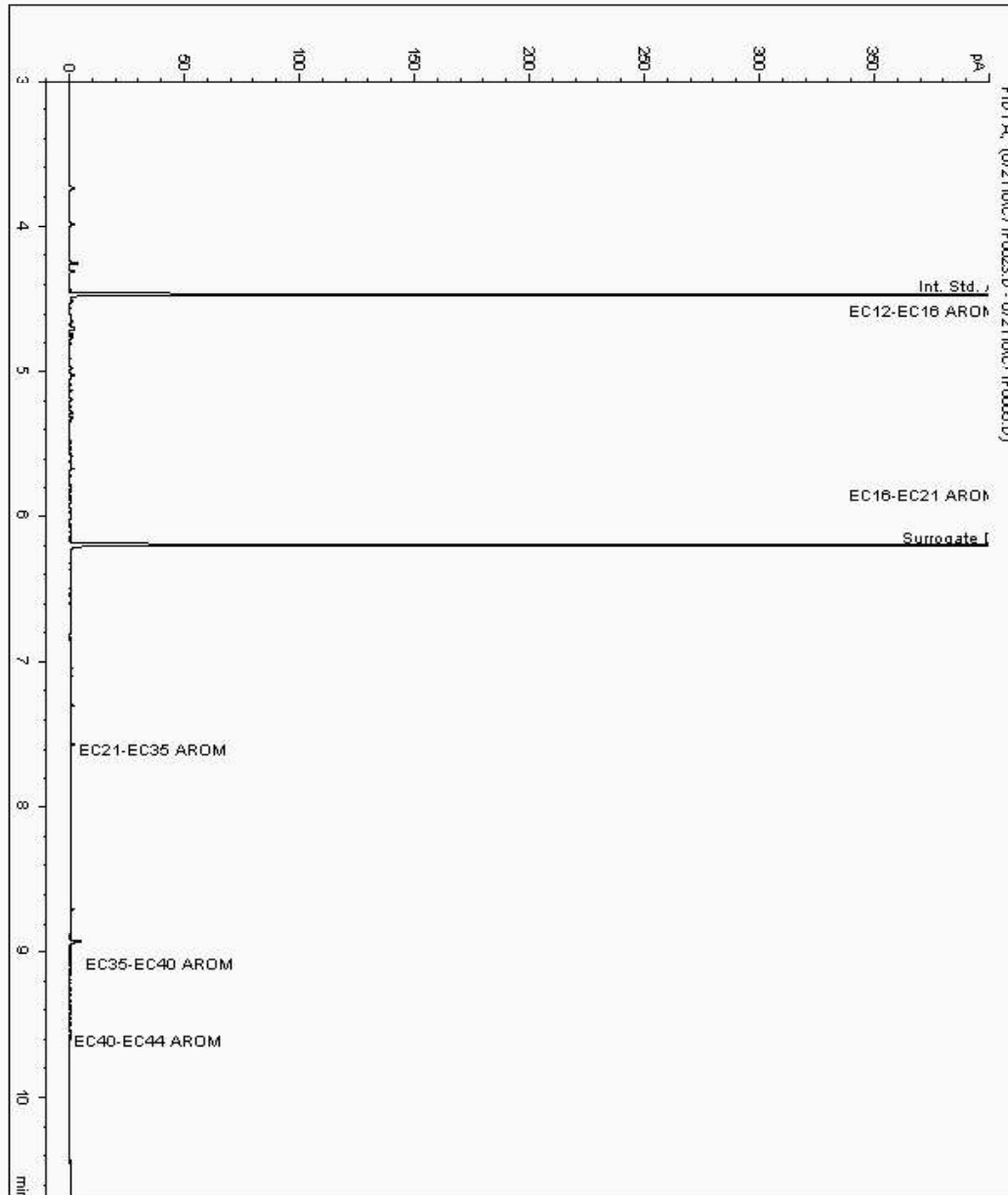
Sample No : 13806109
Sample ID : WS03

Depth : 0.05 - 0.40

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

Sample Identity: 12956106-
Date Acquired : 21/07/2016 20:05:21 PM
Units : ppb
Dilution: WS03[0.05 - 0.40]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

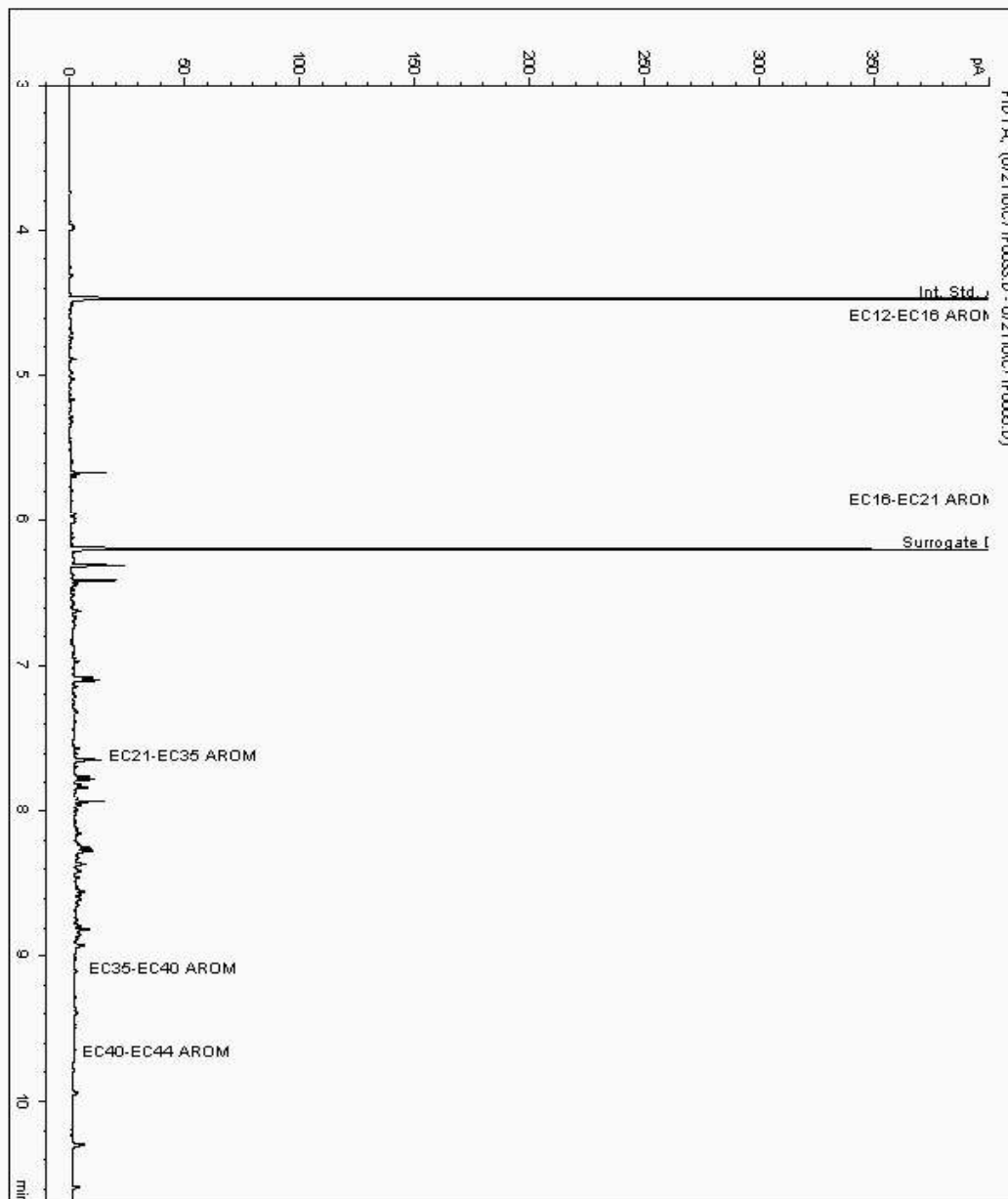
Sample No : 13806187
Sample ID : WS02

Depth : 0.00 - 0.50

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

Sample Identity: 12956084-
Date Acquired : 21/07/2016 22:56:52 PM
Units : ppb
Dilution: WS02[0.00 - 0.50]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

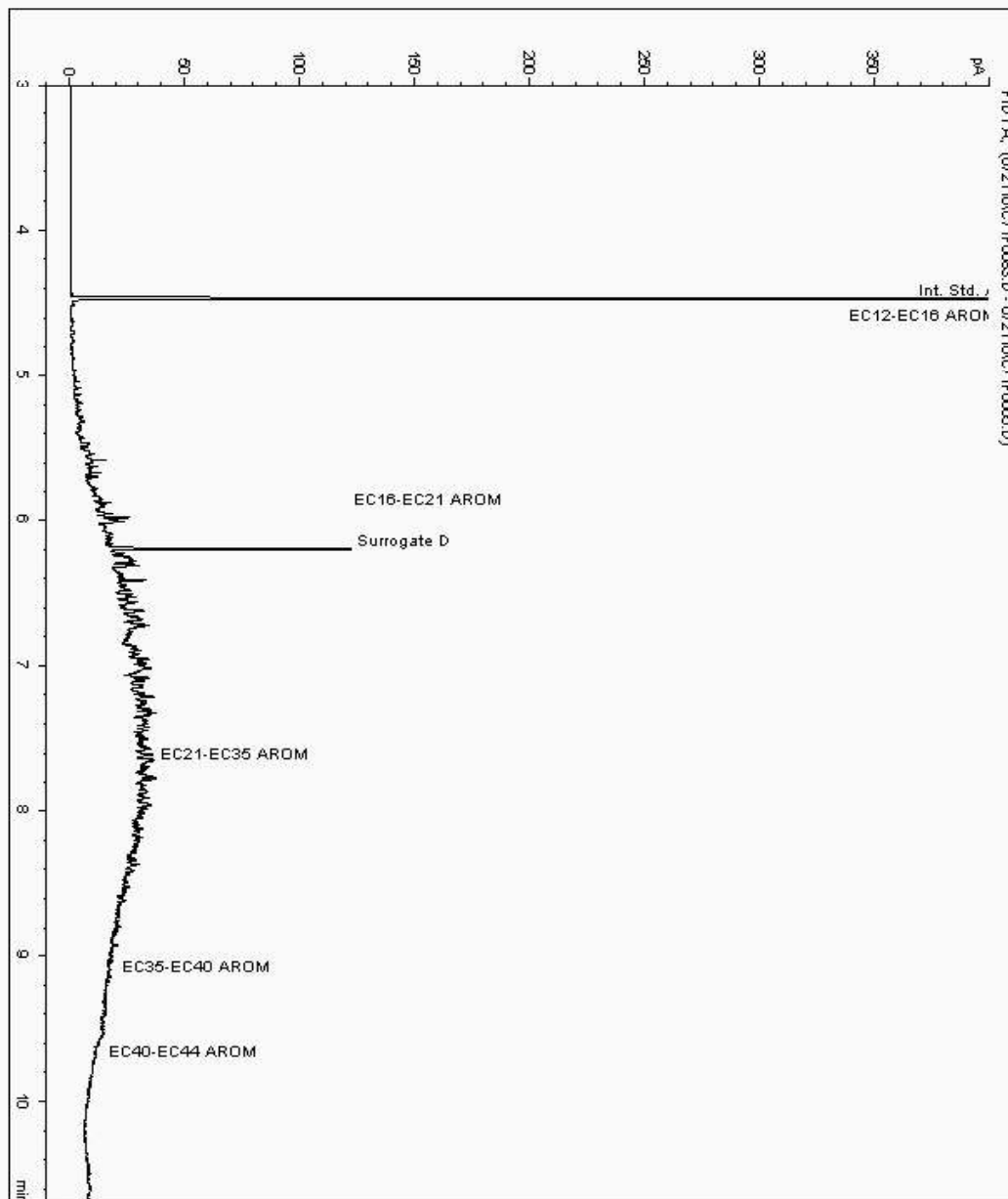
Sample No : 13806253
Sample ID : WS04

Depth : 0.10 - 0.30

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

Sample Identity: 12956131-
Date Acquired : 22/07/2016 14:29:19 PM
Units : ppb
Dilution: WS04[0.10 - 0.30]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

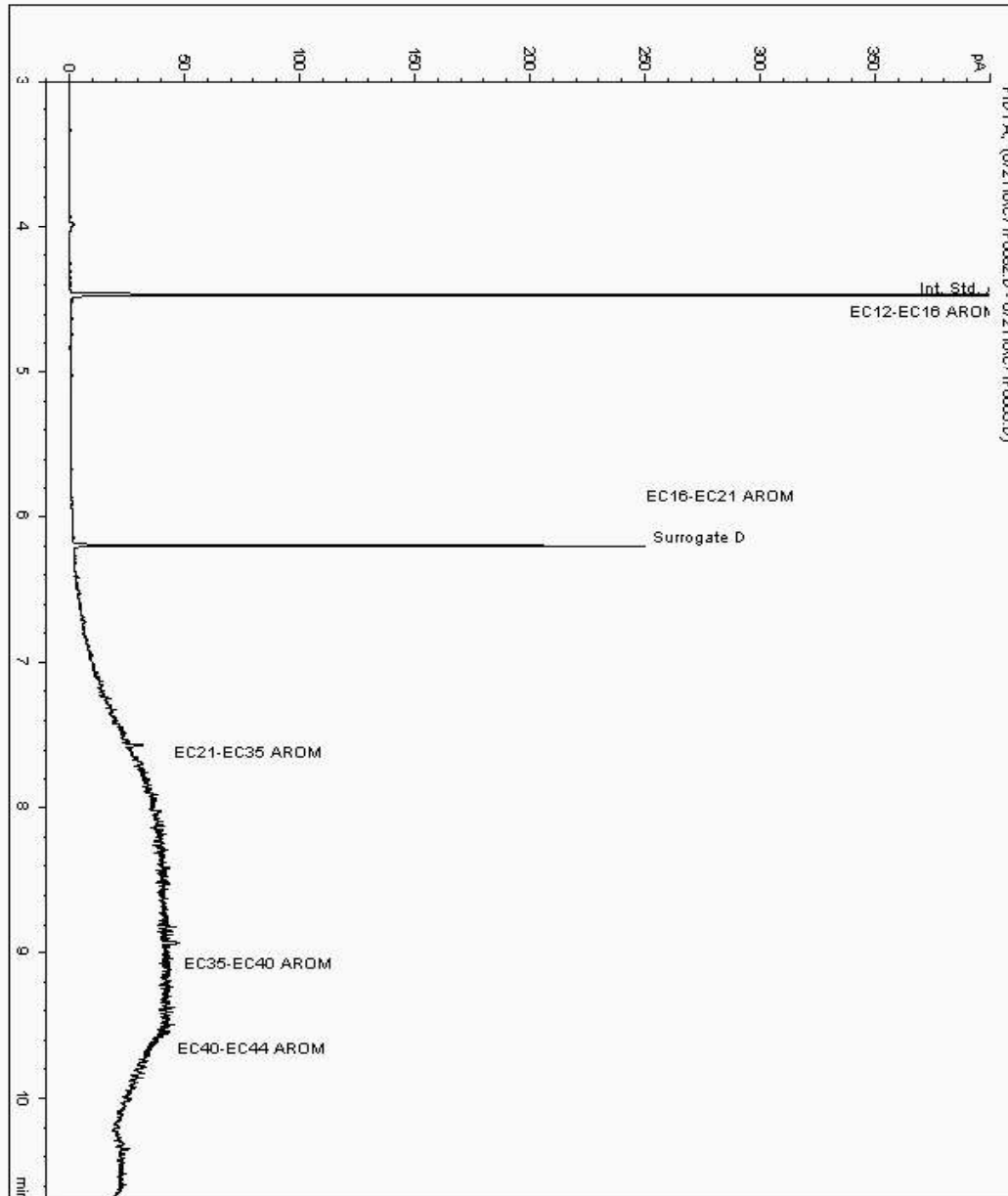
Sample No : 13806334
Sample ID : WS06

Depth : 0.20 - 0.60

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

Sample Identity: 12956171-
Date Acquired : 22/07/2016 14:08:56 PM
Units : ppb
Dilution: WS06[0.20 - 0.60]

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Chromatogram

Analysis: EPH CWG (Aromatic) GC (S)

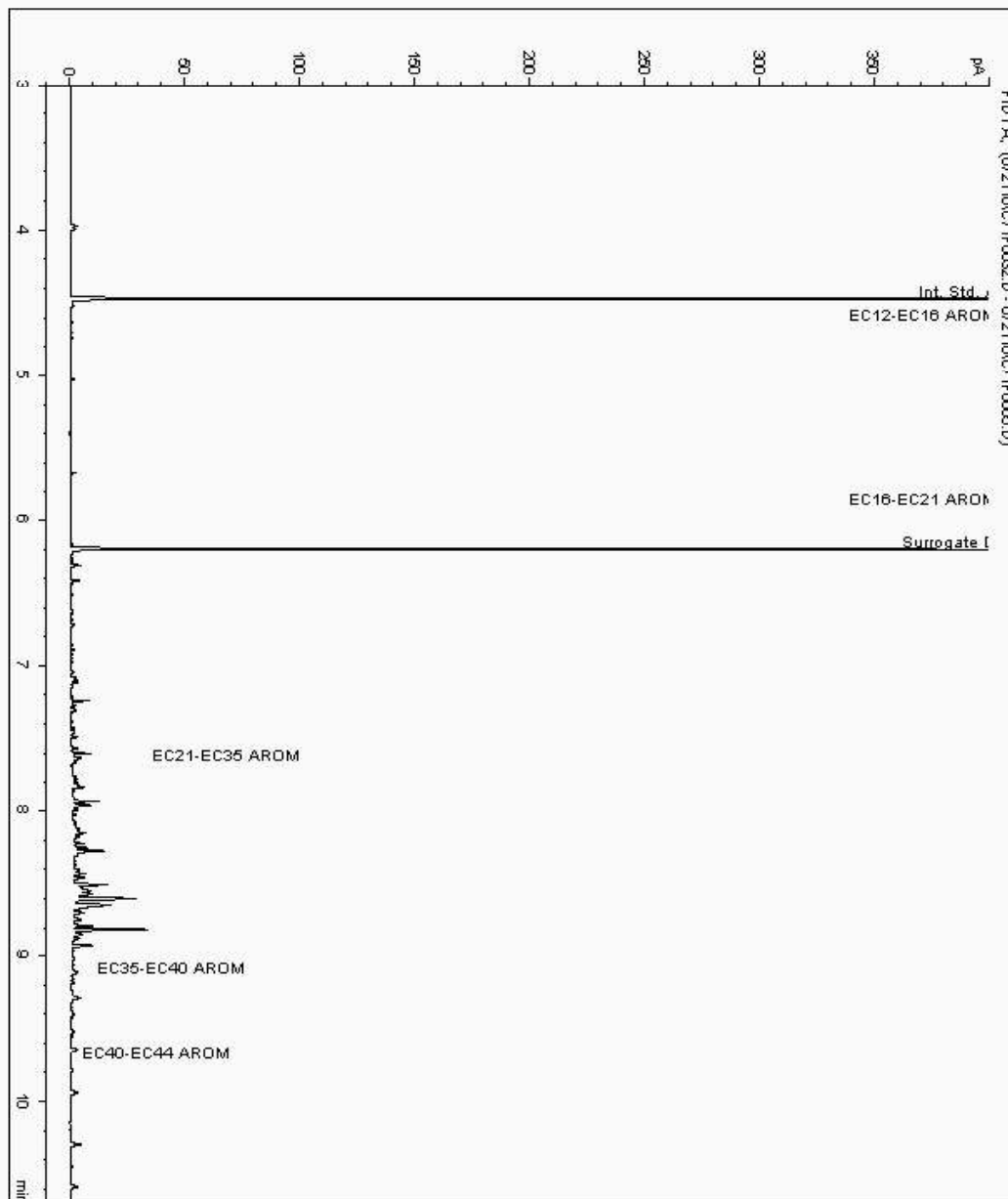
Sample No : 13806395
Sample ID : WS08

Depth : 0.00 - 0.40

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

Sample Identity: 12956225-
Date Acquired : 21/07/2016 22:36:11 PM
Units : ppb
Dilution: WS08[0.00 - 0.40]

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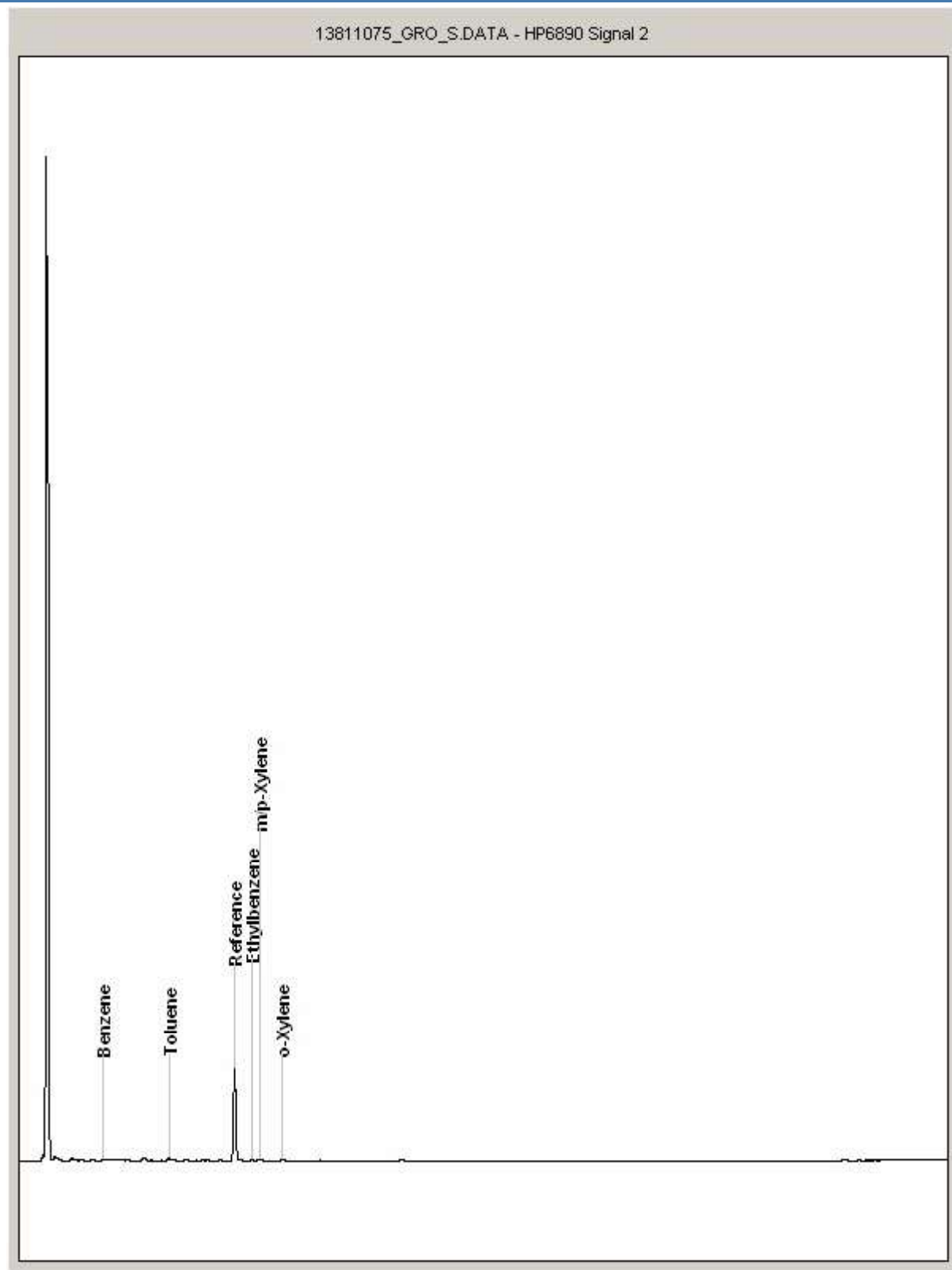
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811075
Sample ID : WS03

Depth : 0.05 - 0.40





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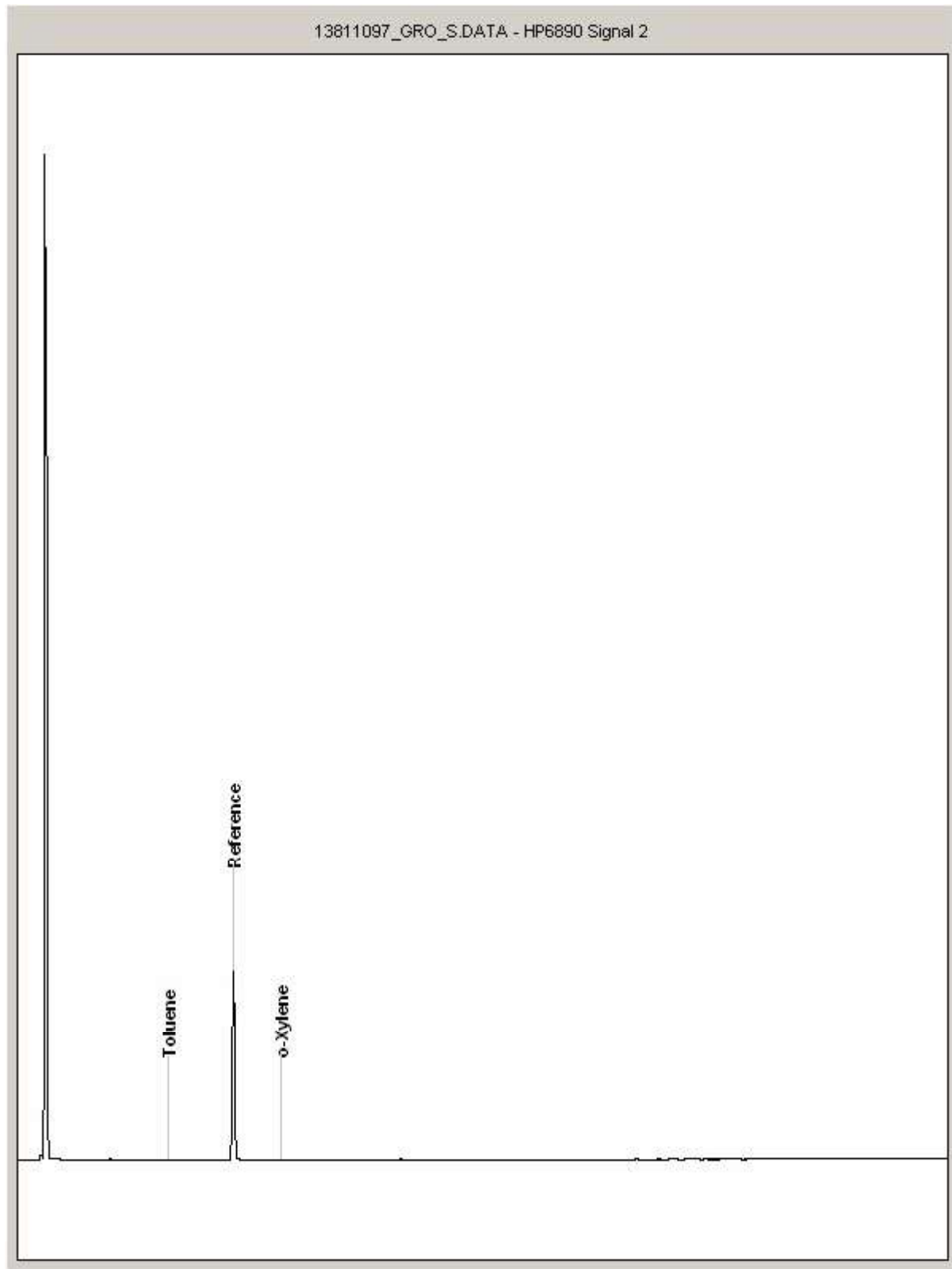
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811097
Sample ID : WS01

Depth : 0.10 - 0.60





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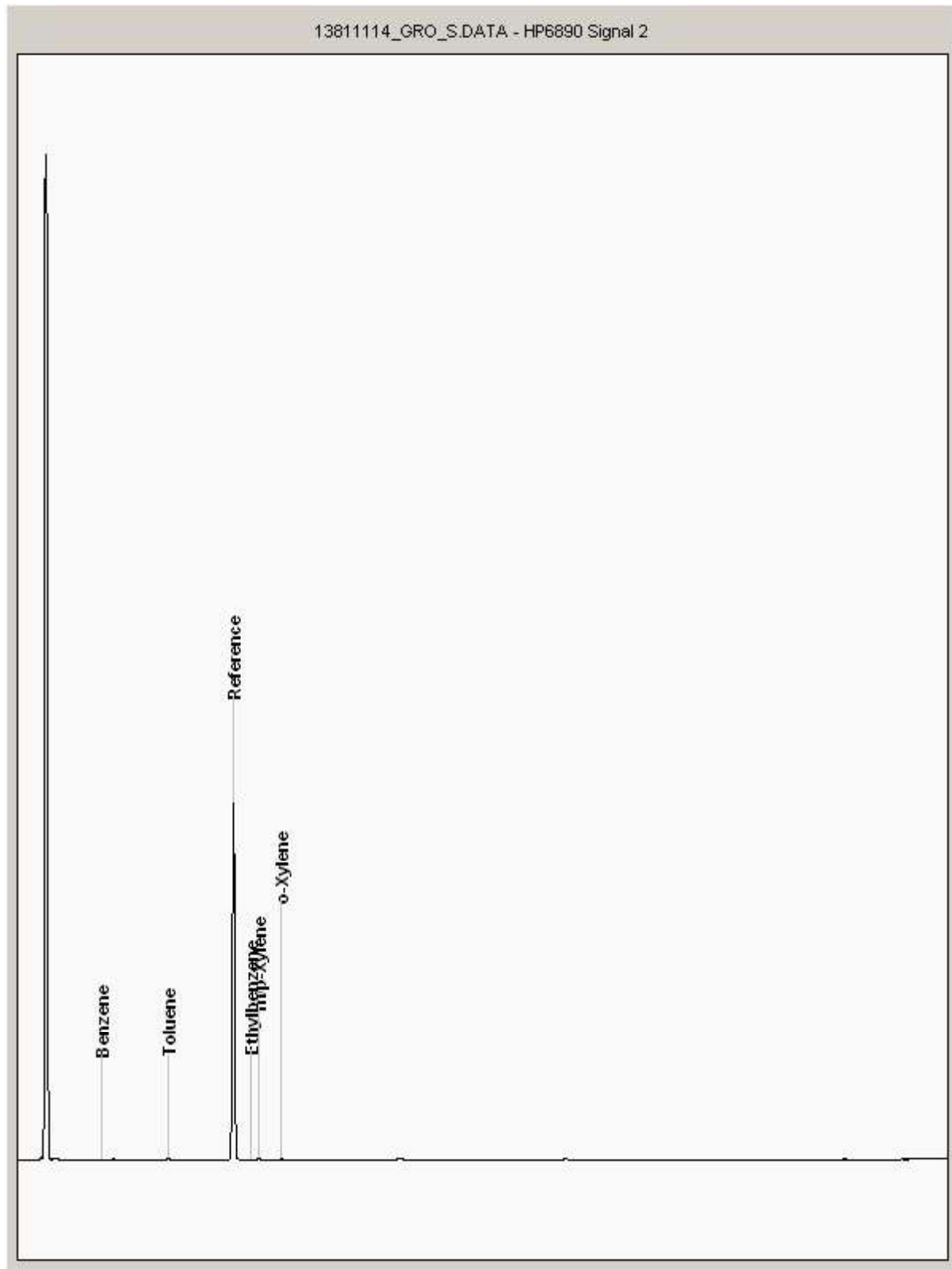
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811114
Sample ID : WS02

Depth : 0.00 - 0.50





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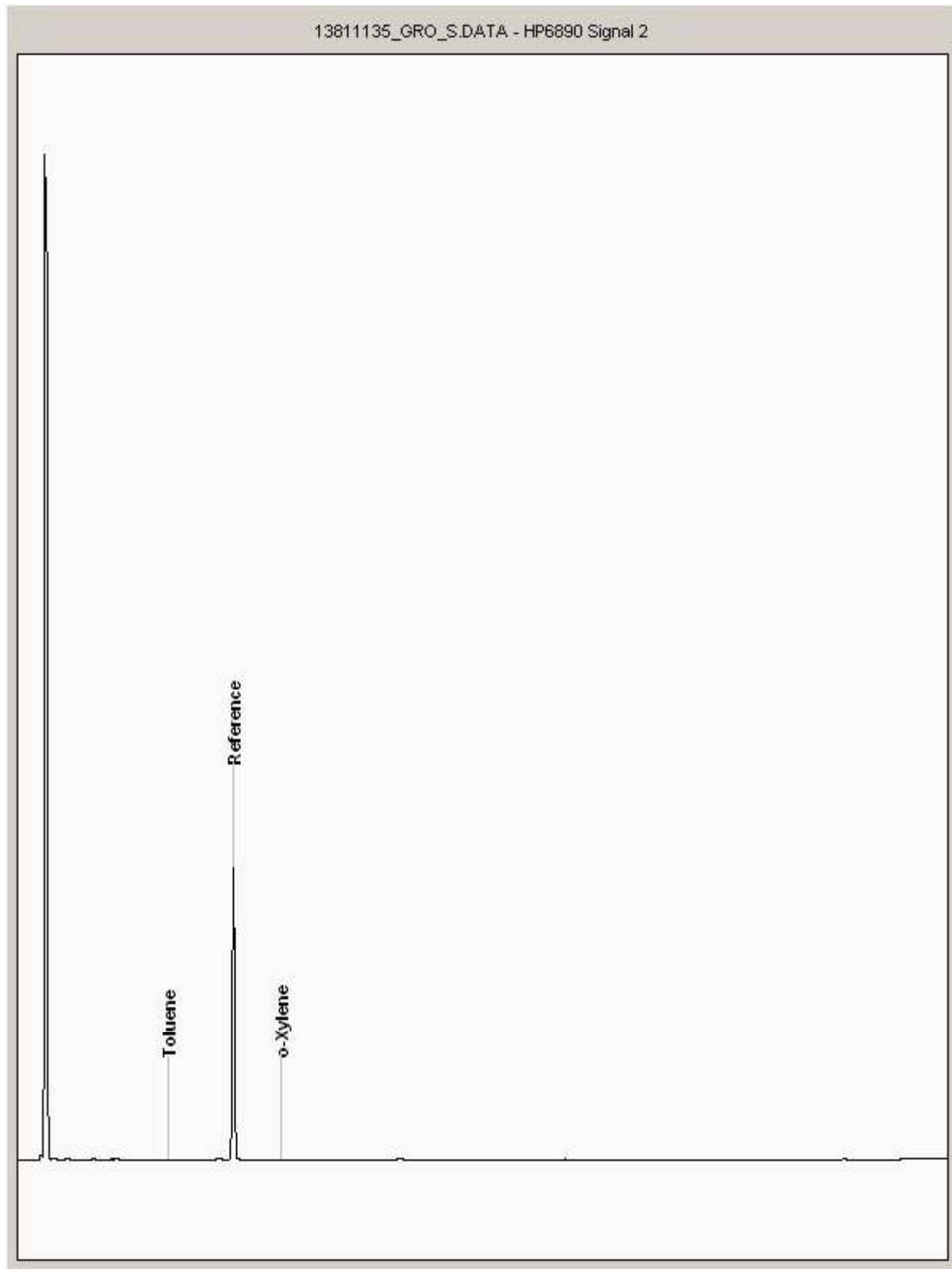
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811135
Sample ID : WS07

Depth : 0.00 - 0.40





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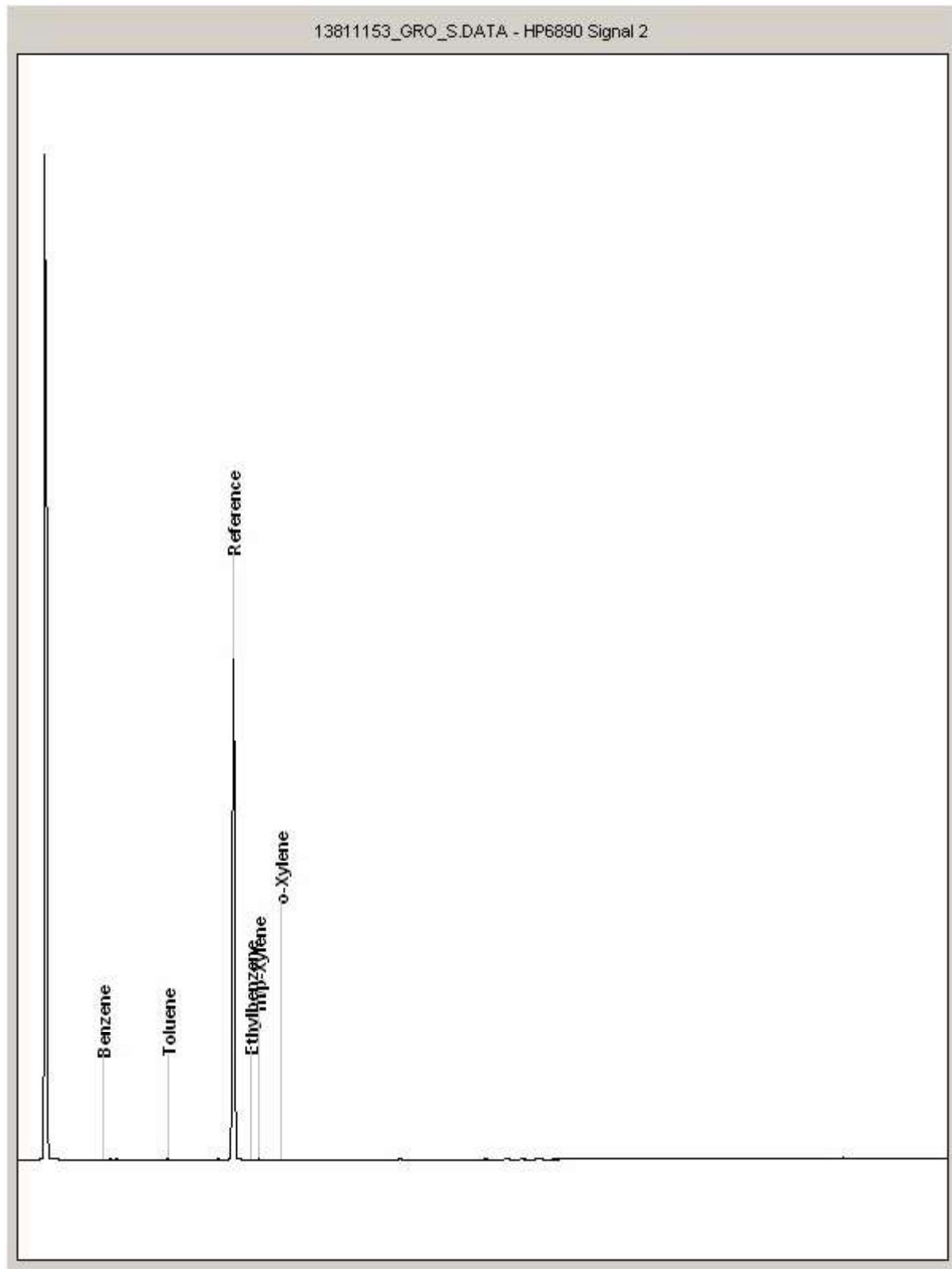
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811153
Sample ID : WS05

Depth : 0.30 - 1.00





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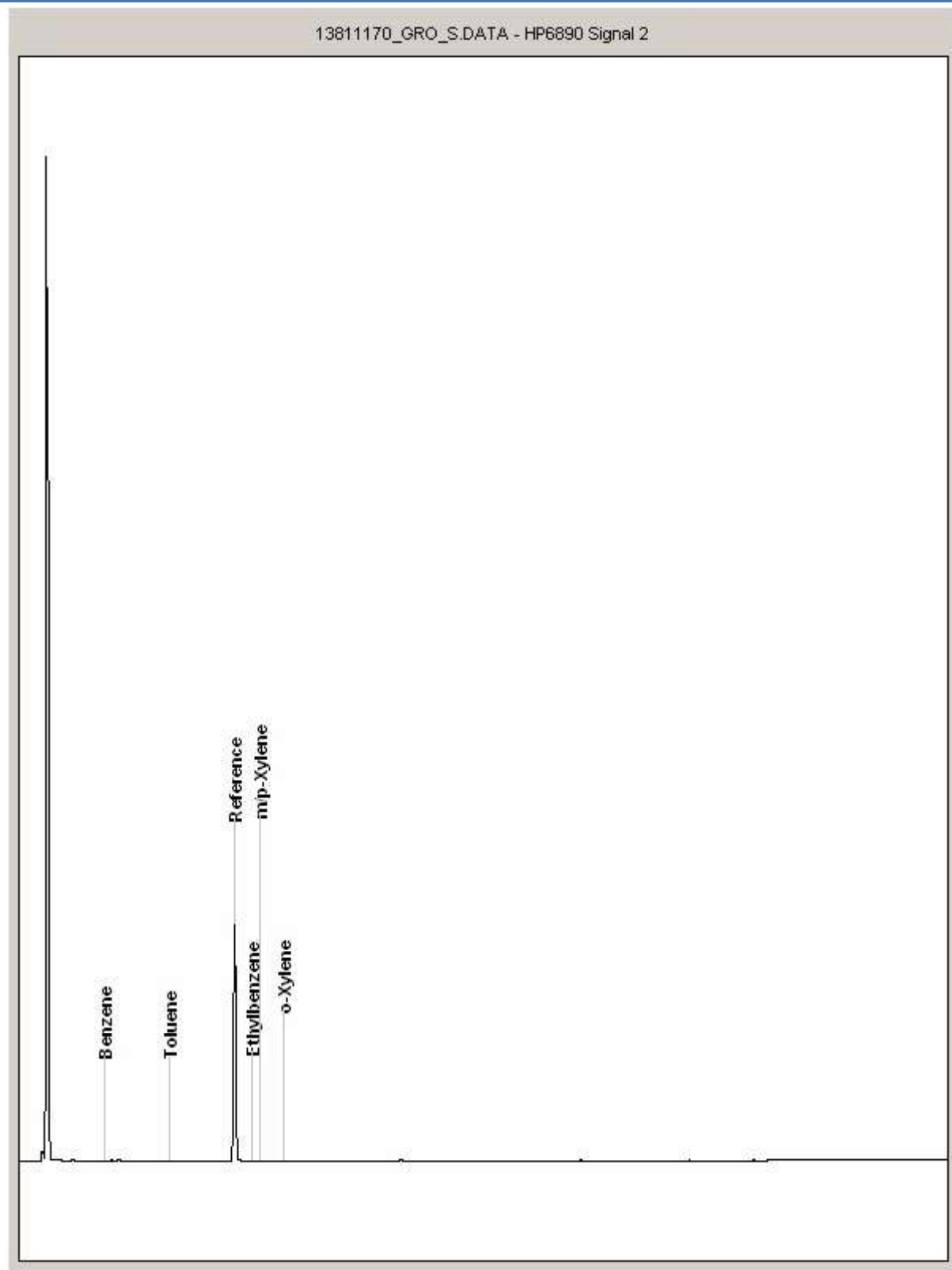
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811170
Sample ID : WS04

Depth : 0.10 - 0.30





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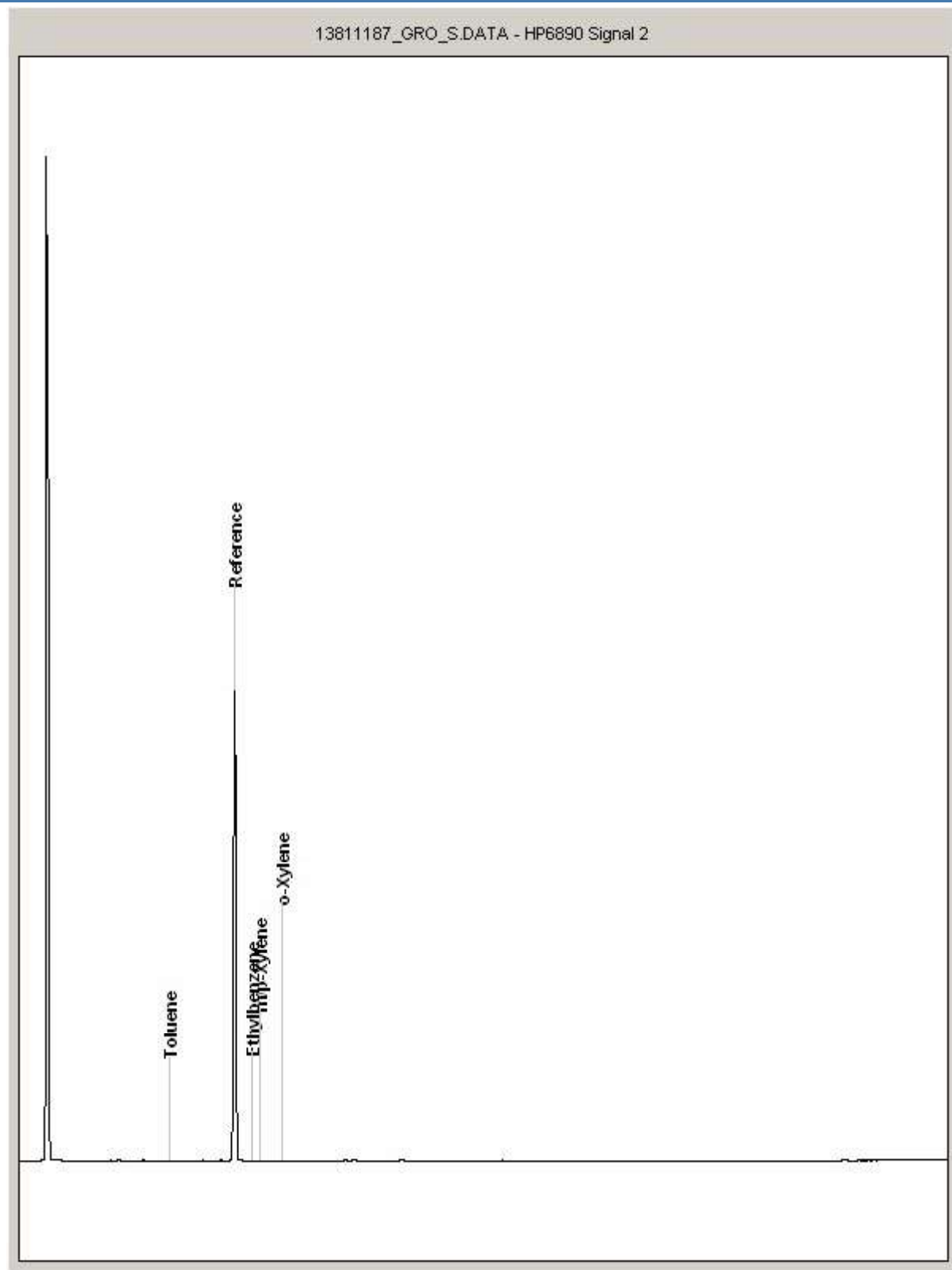
Order Number: 34529110
Report Number: 375845
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811187
Sample ID : WS06

Depth : 0.20 - 0.60





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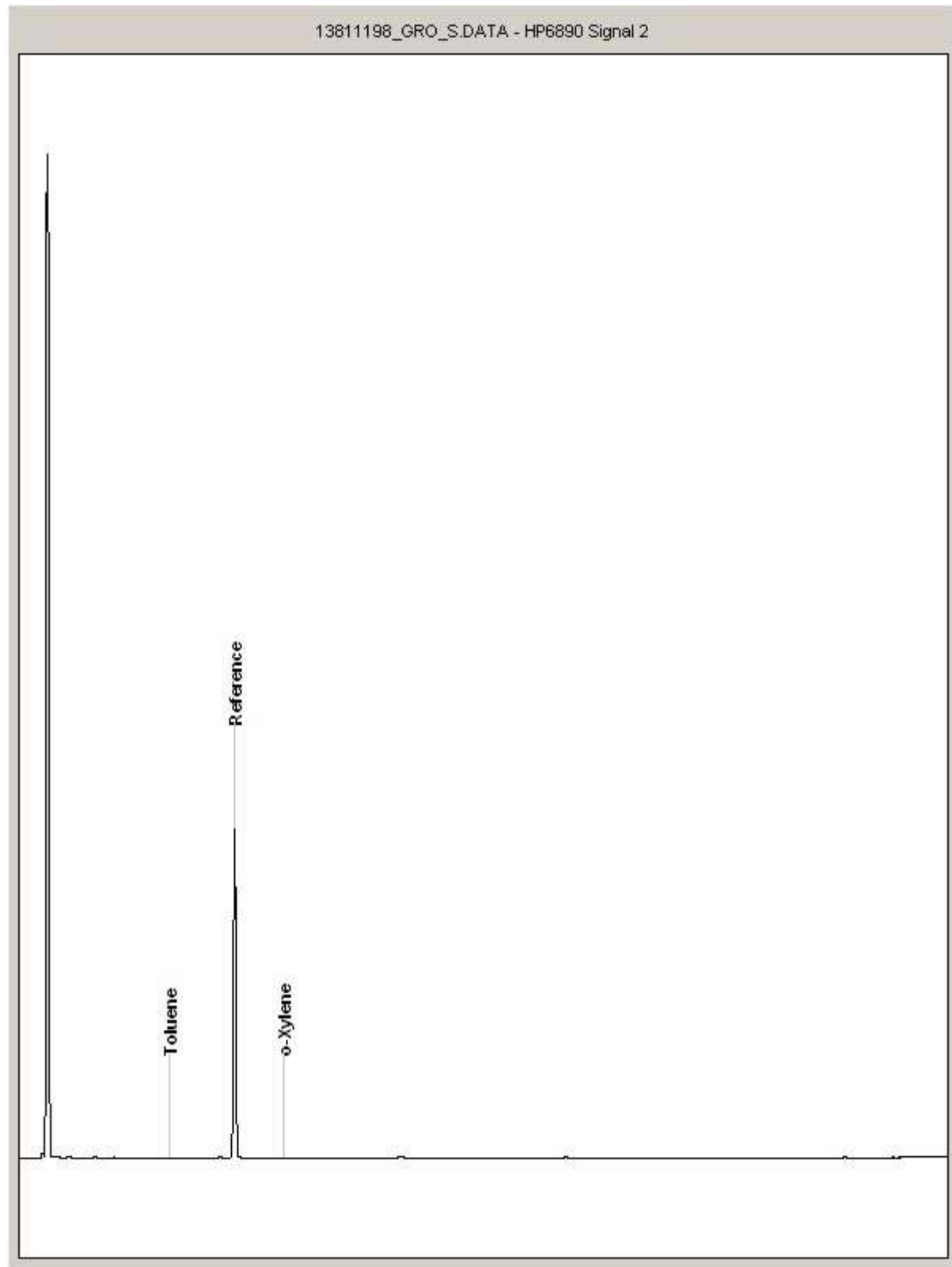
Order Number: 34529110
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Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 13811198
Sample ID : WS08

Depth : 0.00 - 0.40





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Appendix

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

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

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

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

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

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

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

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

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

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

11. Results relate only to the items tested.

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

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%, they are generally wider for volatiles analysis, 50-150%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

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

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

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

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

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

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

General

20. 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.

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

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

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

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

Sample Deviations

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

Asbestos

Identification of Asbestos in Bulk Materials & Soils

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

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.

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.



ARCADIS UK Ltd
2 Craven Court
Willie Snaith Road
Newmarket
Suffolk
CB8 7FA

Attention: Jonathan Harris

CERTIFICATE OF ANALYSIS

Date: 16 August 2016
Customer: H_ARCADIS_NMK
Sample Delivery Group (SDG): 160807-3
Your Reference: 34529110
Location: Castlebrook High
Report No: 373645

We received 9 samples on Saturday August 06, 2016 and 9 of these samples were scheduled for analysis which was completed on Tuesday August 16, 2016. 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.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG:	160807-3	Location:	Castlebrook High	Order Number:	34529110
Job:	H_ARCADIS_NMK-1336	Customer:	ARCADIS UK Ltd	Report Number:	373645
Client Reference:	34529110	Attention:	Jonathan Harris	Superseded Report:	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
13922723	CB-BH01-050816-GW-1500	GW		05/08/2016
13922722	CB-BH02-050816-GW-1440	GW		05/08/2016
13922731	CB-BH03-050816-GW-1215	GW		05/08/2016
13922730	CB-BH04-050816-GW-1230	GW		05/08/2016
13922725	CB-BH05-050816-GW-1515	GW		05/08/2016
13922727	CB-WS01-050816-GW-1420	GW		05/08/2016
13922726	CB-WS02-050816-GW-1400	GW		05/08/2016
13922728	CB-WS08-050816-GW-1245	GW		05/08/2016
13922729	CB-WS11-050816-GW-1330	GW		05/08/2016

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



CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

LIQUID Results Legend X Test N No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
	13922729	CB-WS11-050816-G W-1330	GW		ZnAc (ALE246) Vial (ALE297)
	13922728	CB-WS08-050816-G W-1245	GW		0.5l glass bottle (AL ZnAc (ALE246) Vial (ALE297)
	13922726	CB-WS02-050816-G W-1400	GW		NaOH (ALE245) 0.5l glass bottle (AL ZnAc (ALE246) Vial (ALE297)
	13922727	CB-WS01-050816-G W-1420	GW		NaOH (ALE245) 0.5l glass bottle (AL ZnAc (ALE246) Vial (ALE297)
Anions by Kone (w)	13922725	CB-BH05-050816-G W-1515	GW		NaOH (ALE246) 0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
	13922730	CB-BH04-050816-G W-1230	GW		NaOH (ALE246) 0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
	13922731	CB-BH03-050816-G W-1215	GW		NaOH (ALE246) 0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
	13922722	CB-BH02-050816-G W-1440	GW		NaOH (ALE246) 0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
	13922723	CB-BH01-050816-G W-1500	GW		NaOH (ALE246) 0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
					0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
					0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
					0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
					0.5l glass bottle (AL ZnAc (ALE245) Vial (ALE297)
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 9			
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 9			
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 9			
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 9			
Fluoride	All	NDPs: 0 Tests: 9			
GRO by GC-FID (W)	All	NDPs: 0 Tests: 9			
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 9			
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 9			
pH Value	All	NDPs: 0 Tests: 9			
Sulphide	All	NDPs: 0 Tests: 9			
TPH CWG (W)	All	NDPs: 0 Tests: 9			

CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

[illegible]

CERTIFICATE OF ANALYSIS

SDG:	160807-3
Job:	H_ARCADIS_NMK-1336
Client Reference:	34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number:	34529110
Report Number:	373645
Superseded Report:	

[illegible]

CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

PAH Spec MS - Aqueous (W)

[illegible]



CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

PAH Spec MS - Aqueous (W)

Results Legend			Customer Sample R	CB-WS02-050816-GW-1400	CB-WS08-050816-GW-1245	CB-WS11-050816-GW-1330			
#	ISO17025 accredited.								
M	mCERTS accredited.								
aq	Aqueous / settled sample.								
diss.filt	Dissolved / filtered sample.								
tot.unfilt	Total / unfiltered sample.								
*	Subcontracted test.								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery								
(F)	Trigger breach confirmed								
1-5&*\$@	Sample deviation (see appendix)								
Component	LOD/Units	Method							
Naphthalene (aq)	<0.1 µg/l	TM178	<0.1		<0.1		<0.1		
			#		#		#		
Acenaphthene (aq)	<0.015 µg/l	TM178	<0.015		0.0352		<0.015		
			#		#		#		
Acenaphthylene (aq)	<0.011 µg/l	TM178	<0.011		<0.011		<0.011		
			#		#		#		
Fluoranthene (aq)	<0.017 µg/l	TM178	0.158		0.109		0.0183		
			#		#		#		
Anthracene (aq)	<0.015 µg/l	TM178	<0.015		<0.015		<0.015		
			#		#		#		
Phenanthrene (aq)	<0.022 µg/l	TM178	0.0672		0.183		<0.022		
			#		#		#		
Fluorene (aq)	<0.014 µg/l	TM178	<0.014		0.0584		<0.014		
			#		#		#		
Chrysene (aq)	<0.013 µg/l	TM178	0.0846		0.0519		<0.013		
			#		#		#		
Pyrene (aq)	<0.015 µg/l	TM178	0.16		0.15		0.0363		
			#		#		#		
Benzo(a)anthracene (aq)	<0.017 µg/l	TM178	0.107		0.112		<0.017		
			#		#		#		
Benzo(b)fluoranthene (aq)	<0.023 µg/l	TM178	0.138		0.0937		<0.023		
			#		#		#		
Benzo(k)fluoranthene (aq)	<0.027 µg/l	TM178	0.0465		0.0337		<0.027		
			#		#		#		
Benzo(a)pyrene (aq)	<0.009 µg/l	TM178	0.0906		0.0544		<0.009		
			#		#		#		
Dibenzo(a,h)anthracene (aq)	<0.016 µg/l	TM178	<0.016		<0.016		<0.016		
			#		#		#		
Benzo(g,h,i)perylene (aq)	<0.016 µg/l	TM178	0.0611		0.0375		<0.016		
			#		#		#		
Indeno(1,2,3-cd)pyrene (aq)	<0.014 µg/l	TM178	0.0466		0.0285		<0.014		
			#		#		#		
PAH, Total Detected USEPA 16 (aq)	<0.344 µg/l	TM178	0.959		0.947		<0.344		



CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

TPH CWG (W)

Results Legend			Customer Sample R		CB-BH01-050816-GW-1500	CB-BH02-050816-GW-1440	CB-BH03-050816-GW-1215	CB-BH04-050816-GW-1230	CB-BH05-050816-GW-1515	CB-WS01-050816-GW-1420
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
M	mCERTS accredited.				05/08/2016	05/08/2016	05/08/2016	05/08/2016	05/08/2016	05/08/2016
aq	Aqueous / settled sample.									
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.				06/08/2016	06/08/2016	06/08/2016	06/08/2016	06/08/2016	06/08/2016
**	% 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				160807-3	160807-3	160807-3	160807-3	160807-3	160807-3
(F)	Trigger breach confirmed				13922723	13922722	13922731	13922730	13922725	13922727
1-58*\$@	Sample deviation (see appendix)				GW	GW	GW	GW	GW	GW
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM245			74	54	82	85	80	84
GRO >C5-C12	<50 µg/l	TM245			<50	<50	<50	<50	<50	<50
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245			<3	<3	<3	<3	<3	<3
Benzene	<7 µg/l	TM245			<7	<7	<7	<7	<7	<7
Toluene	<4 µg/l	TM245			<4	<4	<4	<4	<4	<4
Ethylbenzene	<5 µg/l	TM245			<5	<5	<5	<5	<5	<5
m,p-Xylene	<8 µg/l	TM245			<8	<8	<8	<8	<8	<8
o-Xylene	<3 µg/l	TM245			<3	<3	<3	<3	<3	<3
Sum of detected Xylenes	<11 µg/l	TM245			<11	<11	<11	<11	<11	<11
Sum of detected BTEX	<28 µg/l	TM245			<28	<28	<28	<28	<28	<28
Aliphatics >C5-C6	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aliphatics >C6-C8	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aliphatics >C8-C10	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aliphatics >C10-C12	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174			<10	15	55	21	<10	<10
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174			48	118	307	244	<10	<10
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174			194	367	909	1230	<10	17
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174			242	500	1270	1490	<10	17
Aromatics >EC5-EC7	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aromatics >EC10-EC12	<10 µg/l	TM245			<10	<10	<10	<10	<10	<10
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174			<10	<10	34	19	<10	<10
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174			<10	<10	79	45	<10	<10
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174			<10	<10	145	217	<10	<10
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174			<10	<10	258	281	<10	<10
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174			242	500	1530	1770	<10	17



CERTIFICATE OF ANALYSIS

SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

TPH CWG (W)

Results Legend			Customer Sample R		CB-WS02-050816- GW-1400	CB-WS08-050816- GW-1245	CB-WS11-050816- GW-1330		
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	Water(GW/SW) 05/08/2016 06/08/2016 160807-3 13922726 GW	Water(GW/SW) 05/08/2016 06/08/2016 160807-3 13922728 GW	Water(GW/SW) 05/08/2016 06/08/2016 160807-3 13922729 GW				
M	mCERTS accredited.								
aq	Aqueous / settled sample.								
diss.filt	Dissolved / filtered sample.								
tot.unfilt	Total / unfiltered sample.								
*	Subcontracted test.								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery								
(F)	Trigger breach confirmed								
1-58*\$@	Sample deviation (see appendix)								
Component	LOD/Units								Method
GRO Surrogate % recovery**	%	TM245	85	77	76				
GRO >C5-C12	<50 µg/l	TM245	<50	<50	<50				
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245	<3	<3	<3				
Benzene	<7 µg/l	TM245	<7	<7	<7				
Toluene	<4 µg/l	TM245	<4	<4	<4				
Ethylbenzene	<5 µg/l	TM245	<5	<5	<5				
m,p-Xylene	<8 µg/l	TM245	<8	<8	<8				
o-Xylene	<3 µg/l	TM245	<3	<3	<3				
Sum of detected Xylenes	<11 µg/l	TM245	<11	<11	<11				
Sum of detected BTEX	<28 µg/l	TM245	<28	<28	<28				
Aliphatics >C5-C6	<10 µg/l	TM245	<10	<10	<10				
Aliphatics >C6-C8	<10 µg/l	TM245	<10	<10	<10				
Aliphatics >C8-C10	<10 µg/l	TM245	<10	<10	<10				
Aliphatics >C10-C12	<10 µg/l	TM245	<10	<10	<10				
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174	<10	<10	<10				
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174	<10	<10	25				
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174	<10	<10	173				
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174	<10	<10	198				
Aromatics >EC5-EC7	<10 µg/l	TM245	<10	<10	<10				
Aromatics >EC7-EC8	<10 µg/l	TM245	<10	<10	<10				
Aromatics >EC8-EC10	<10 µg/l	TM245	<10	<10	<10				
Aromatics >EC10-EC12	<10 µg/l	TM245	<10	<10	<10				
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174	<10	121	<10				
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174	<10	50	<10				
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174	<10	20	<10				
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174	<10	191	<10				
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174	<10	194	198				



SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser		
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID		
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
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		
TM228	US EPA Method 6010B	Determination of Major Cations in Water by iCap 6500 Duo ICP-OES		
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		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
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Order Number: 34529110
Report Number: 373645
Superseded Report:

Test Completion Dates

Lab Sample No(s)	13922723	13922722	13922731	13922730	13922725	13922727	13922726	13922728	13922729
Customer Sample Ref.	CB-BH01-050816-GW-1500	CB-BH02-050816-GW-1440	CB-BH03-050816-GW-1215	CB-BH04-050816-GW-1230	CB-BH05-050816-GW-1515	CB-WS01-050816-GW-1420	CB-WS02-050816-GW-1400	CB-WS08-050816-GW-1245	CB-WS11-050816-GW-1330
AGS Ref.	GW	GW	GW	GW	GW	GW	GW	GW	GW
Depth									
Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
Anions by Kone (w)	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016	13-Aug-2016
Cyanide Comp/Free/Total/Thiocyanate	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016
Dissolved Metals by ICP-MS	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016
EPH CWG (Aliphatic) Aqueous GC (W)	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016
EPH CWG (Aromatic) Aqueous GC (W)	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016
Fluoride	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016
GRO by GC-FID (W)	14-Aug-2016	16-Aug-2016	14-Aug-2016	14-Aug-2016	14-Aug-2016	14-Aug-2016	14-Aug-2016	16-Aug-2016	14-Aug-2016
Metals by iCap-OES Dissolved (W)	14-Aug-2016	14-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	12-Aug-2016	14-Aug-2016	12-Aug-2016	12-Aug-2016
PAH Spec MS - Aqueous (W)	16-Aug-2016	16-Aug-2016	16-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	16-Aug-2016	16-Aug-2016	15-Aug-2016
pH Value	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016	15-Aug-2016
Sulphide	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016	11-Aug-2016
TPH CWG (W)	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016	16-Aug-2016



SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
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Superseded Report:

ASSOCIATED AQC DATA

Anions by Kone (w)

Component	Method Code	QC 1359
Chloride	TM184	105.0 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	96.40 : 108.40
Sulphate (soluble)	TM184	106.8 90.53 : 113.03
TON as NO3	TM184	90.25 : 110.05

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1348
Free Cyanide (W)	TM227	107.5 93.25 : 112.75
Thiocyanate (W)	TM227	105.5 97.75 : 109.75
Total Cyanide (W)	TM227	103.5 95.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1362	QC 1386
Aluminium	TM152	107.33 0.00 : 0.00	100.0 0.00 : 0.00
Antimony	TM152	108.33 0.00 : 0.00	100.83 0.00 : 0.00
Arsenic	TM152	110.33 0.00 : 0.00	100.0 0.00 : 0.00
Barium	TM152	108.83 0.00 : 0.00	99.33 0.00 : 0.00
Beryllium	TM152	108.67 0.00 : 0.00	100.83 0.00 : 0.00
Borate	TM152	108.64 0.00 : 0.00	101.23 0.00 : 0.00
Boron	TM152	108.67 0.00 : 0.00	101.33 0.00 : 0.00
Cadmium	TM152	110.0 0.00 : 0.00	102.17 0.00 : 0.00
Chromium	TM152	109.17 0.00 : 0.00	100.0 0.00 : 0.00
Cobalt	TM152	109.0 0.00 : 0.00	99.5 0.00 : 0.00
Copper	TM152	109.83 0.00 : 0.00	100.0 0.00 : 0.00
Lead	TM152	103.33 0.00 : 0.00	95.33 0.00 : 0.00
Lithium	TM152	109.0 0.00 : 0.00	102.17 0.00 : 0.00
Manganese	TM152	107.5 0.00 : 0.00	99.0 0.00 : 0.00
Molybdenum	TM152	109.33 0.00 : 0.00	101.5 0.00 : 0.00



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Dissolved Metals by ICP-MS

		QC 1362	QC 1386
Nickel	TM152	110.83 0.00 : 0.00	100.83 0.00 : 0.00
Phosphorus	TM152	108.17 0.00 : 0.00	98.0 0.00 : 0.00
Selenium	TM152	109.33 0.00 : 0.00	99.0 0.00 : 0.00
Strontium	TM152	111.0 0.00 : 0.00	102.0 0.00 : 0.00
Tellurium	TM152	105.17 0.00 : 0.00	97.5 0.00 : 0.00
Thallium	TM152	106.33 0.00 : 0.00	97.83 0.00 : 0.00
Titanium	TM152	108.67 0.00 : 0.00	103.67 0.00 : 0.00
Uranium	TM152	106.67 0.00 : 0.00	98.67 0.00 : 0.00
Vanadium	TM152	116.5 0.00 : 0.00	107.67 0.00 : 0.00
Zinc	TM152	109.0 0.00 : 0.00	101.0 0.00 : 0.00

EPH CWG (Aliphatic) Aqueous GC (W)

Component	Method Code	QC 1364	QC 1337	QC 1380
Total Aliphatics >C12-C35	TM174	88.13 66.67 : 110.42	86.04 74.68 : 100.32	88.33 66.67 : 110.42

EPH CWG (Aromatic) Aqueous GC (W)

Component	Method Code	QC 1369	QC 1339	QC 1383
Total Aromatics >EC12-EC35	TM174	93.33 77.08 : 109.58	90.0 76.08 : 110.59	93.33 63.00 : 121.00

Fluoride

Component	Method Code	QC 1308	QC 1308
Fluoride	TM104	101.33 93.92 : 104.02	100.67 93.92 : 104.02

GRO by GC-FID (W)



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Superseded Report:

GRO by GC-FID (W)

Component	Method Code	QC 1356	QC 1311
Benzene by GC	TM245	98.0 77.50 : 122.50	89.5 76.72 : 118.62
Ethylbenzene by GC	TM245	96.0 77.50 : 122.50	87.5 74.74 : 116.76
m & p Xylene by GC	TM245	95.5 77.50 : 122.50	86.5 76.93 : 119.20
MTBE GC-FID	TM245	97.0 77.50 : 122.50	89.5 80.00 : 121.03
o Xylene by GC	TM245	94.5 77.50 : 122.50	86.5 70.00 : 130.00
QC	TM245	93.26 70.36 : 111.78	93.95 69.19 : 113.44
Toluene by GC	TM245	99.0 77.50 : 122.50	90.0 79.35 : 119.27

Metals by iCap-OES Dissolved (W)

Component	Method Code	QC 1313	QC 1318
Calcium	TM228	92.3 86.23 : 109.99	95.7 85.73 : 108.53
Iron	TM228	88.67 79.67 : 106.07	92.0 81.27 : 106.87
Magnesium	TM228	91.0 83.80 : 108.64	93.7 85.49 : 107.57
Potassium	TM228	90.8 85.81 : 112.03	93.6 84.09 : 110.37
Sodium	TM228	90.4 84.00 : 111.30	89.1 83.66 : 109.52

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 1332	QC 1364
Acenaphthene by GCMS	TM178	105.5 85.75 : 114.25	107.0 86.55 : 114.15
Acenaphthylene by GCMS	TM178	101.5 83.00 : 113.00	99.5 85.27 : 110.71
Anthracene by GCMS	TM178	99.0 87.72 : 105.21	100.5 86.06 : 112.26
Benz(a)anthracene by GCMS	TM178	96.5 81.40 : 124.90	97.0 79.67 : 116.73
Benzo(a)pyrene by GCMS	TM178	102.5 83.95 : 128.95	112.5 83.10 : 128.10
Benzo(b)fluoranthene by GCMS	TM178	117.0 87.50 : 132.50	121.0 86.00 : 131.00
Benzo(ghi)perylene by GCMS	TM178	91.5 82.05 : 112.05	91.0 79.96 : 107.30
Benzo(k)fluoranthene by GCMS	TM178	114.0 86.45 : 131.45	118.5 87.50 : 132.50
Chrysene by GCMS	TM178	102.0 85.00 : 124.00	105.0 86.00 : 114.60
Dibenzo(ah)anthracene by GCMS	TM178	89.0 63.00 : 117.00	87.0 68.95 : 111.55
Fluoranthene by GCMS	TM178	99.0 88.50 : 111.00	101.5 81.15 : 116.55



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PAH Spec MS - Aqueous (W)

		QC 1332	QC 1364
Fluorene by GCMS	TM178	100.5 89.45 : 111.95	103.0 90.88 : 112.23
Indeno(123cd)pyrene by GCMS	TM178	98.5 90.97 : 118.18	108.5 82.25 : 114.75
Naphthalene by GCMS	TM178	97.5 89.55 : 113.25	99.0 87.58 : 110.52
Phenanthrene by GCMS	TM178	100.0 89.55 : 110.55	105.0 89.55 : 112.75
Pyrene by GCMS	TM178	97.0 87.85 : 109.75	98.0 82.25 : 116.15

pH Value

Component	Method Code	QC 1358	QC 1367
pH	TM256	100.27 99.33 : 102.56	100.27 99.33 : 102.56

Sulphide

Component	Method Code	QC 1312
Sulphide	TM101	102.0 89.29 : 110.21

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.

The figure detailed is the percentage recovery result for the AQC.

The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.



SDG: 160807-3
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Client Reference: 34529110

Location: Castlebrook High
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Superseded Report:

Chromatogram

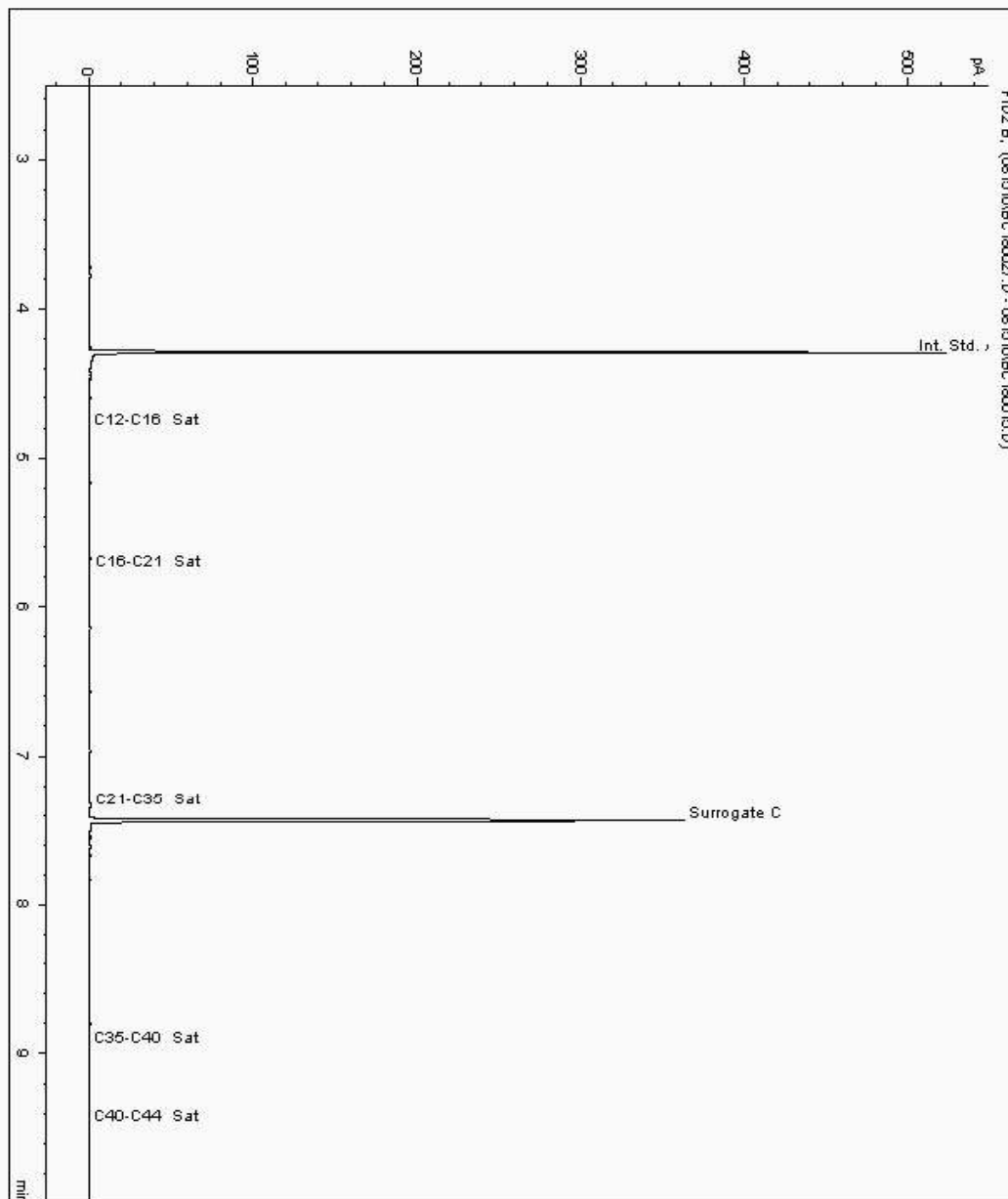
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13935954
Sample ID : CB-WS08-050816-GW-1245

Depth :

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

Sample Identity: 13089730-
Date Acquired : 16/08/2016 01:47:48 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.008





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Client Reference: 34529110

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Superseded Report:

Chromatogram

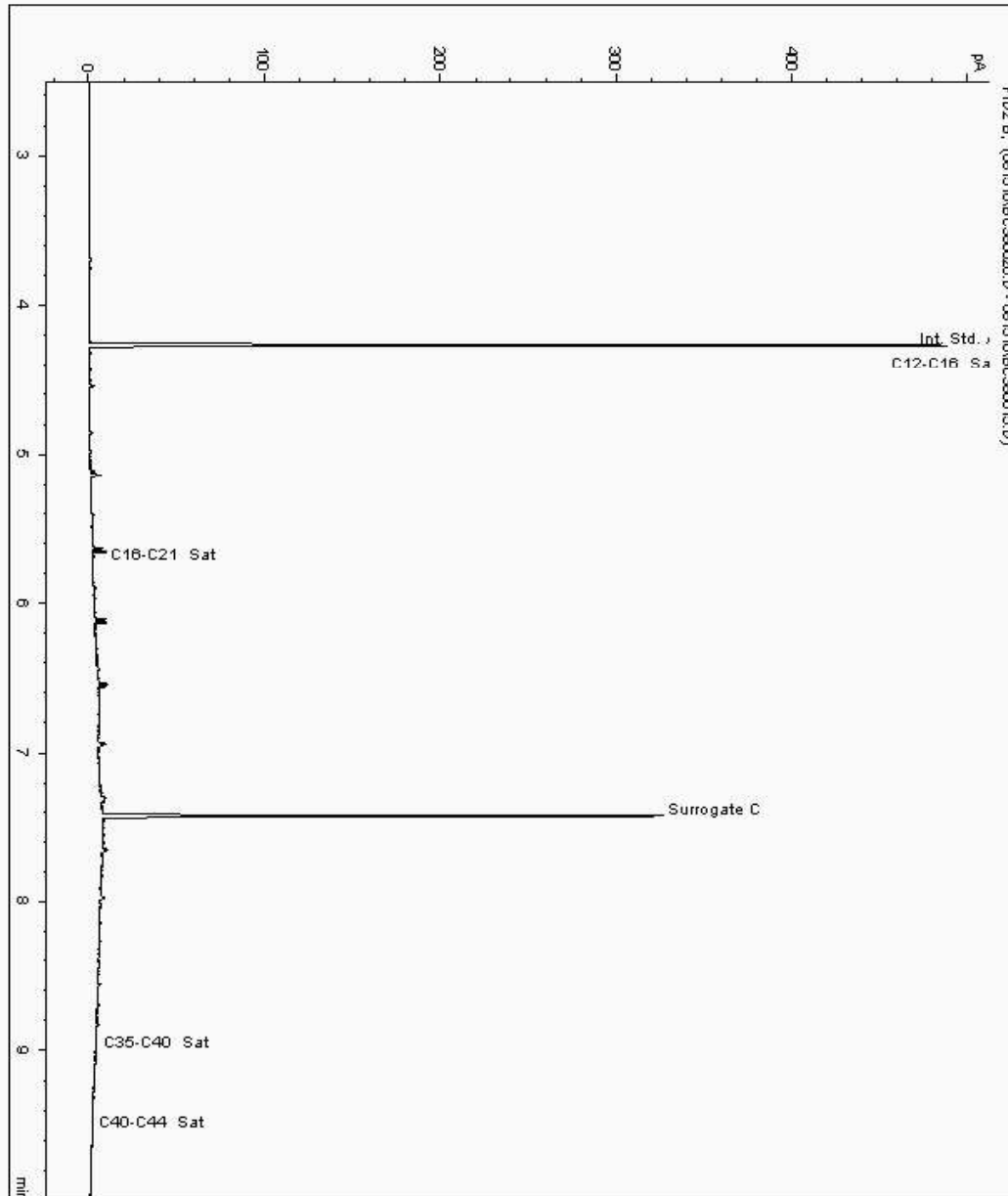
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936094
Sample ID : CB-BH04-050816-GW-1230

Depth :

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

Sample Identity: 13089756-
Date Acquired : 16/08/16 01:01:55 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.009





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

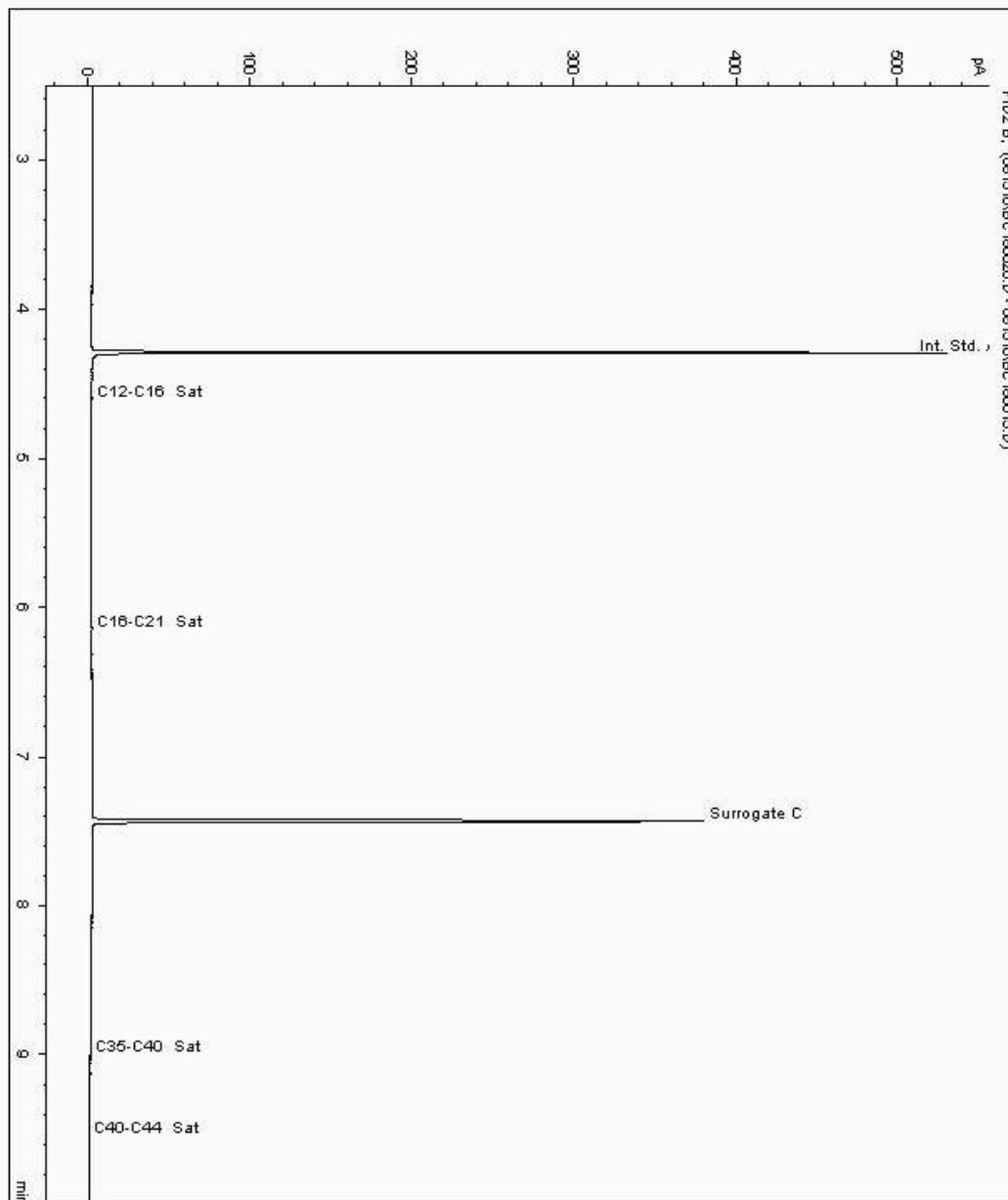
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936140
Sample ID : CB-WS11-050816-GW-1330

Depth :

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

Sample Identity: 13089743-
Date Acquired : 16/08/2016 01:28:44 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.008





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

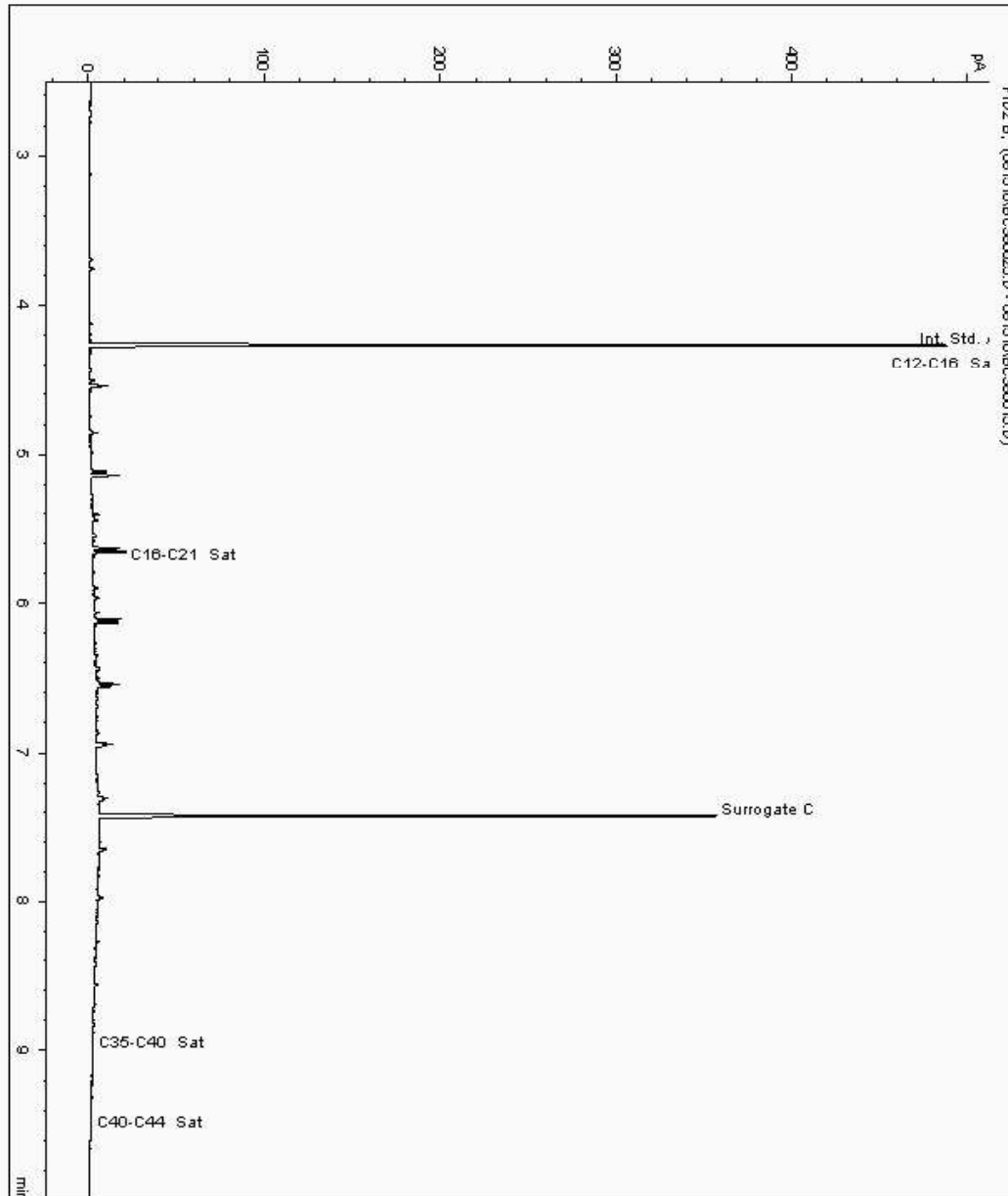
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936161
Sample ID : CB-BH03-050816-GW-1215

Depth :

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

Sample Identity: 13089769-
Date Acquired : 16/08/16 00:43:10 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.009





SDG: 160807-3
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Client Reference: 34529110

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Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

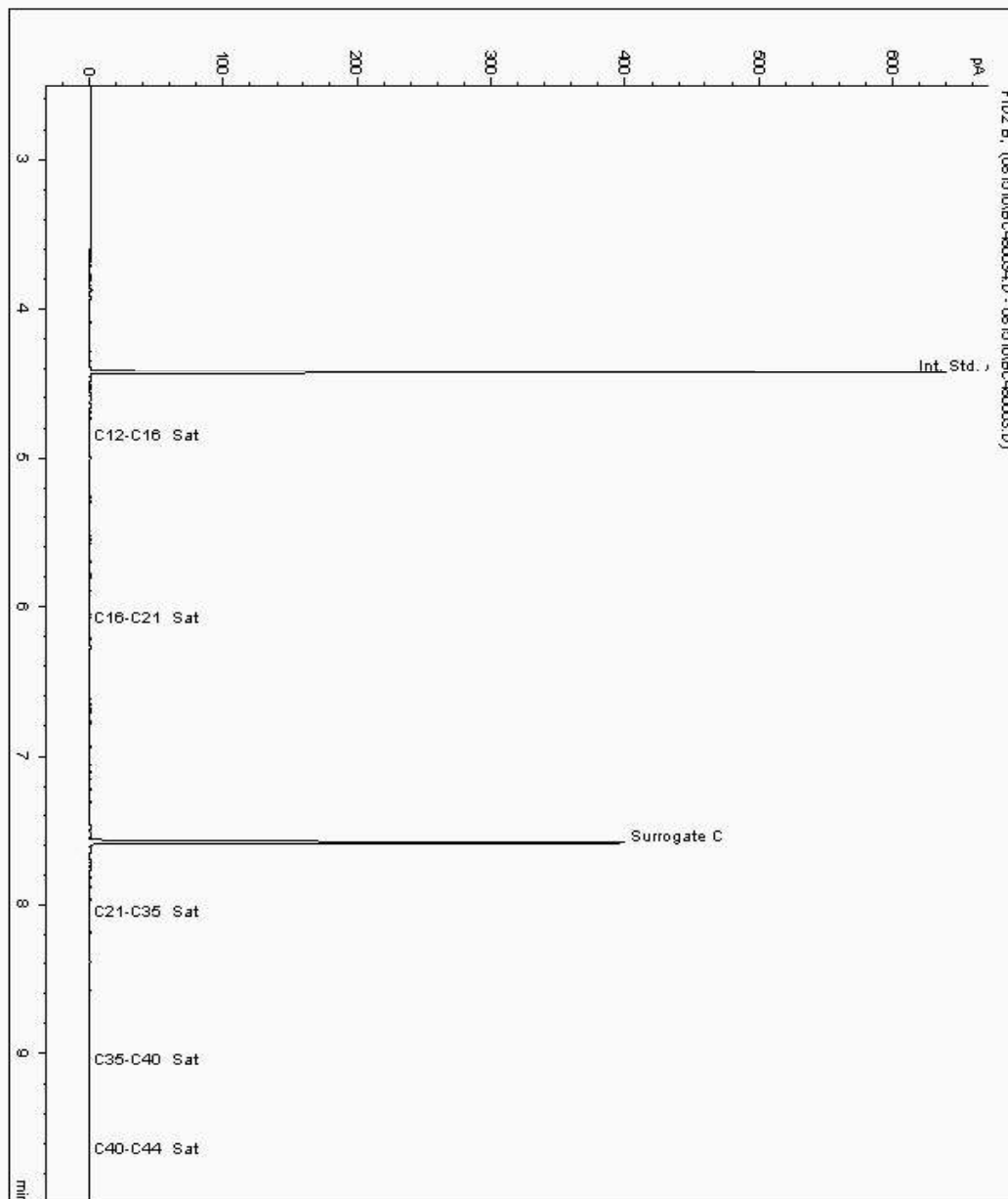
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936204
Sample ID : CB-BH05-050816-GW-1515

Depth :

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

Sample Identity: 13089691-
Date Acquired : 16/08/2016 03:48:15 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.009





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

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Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

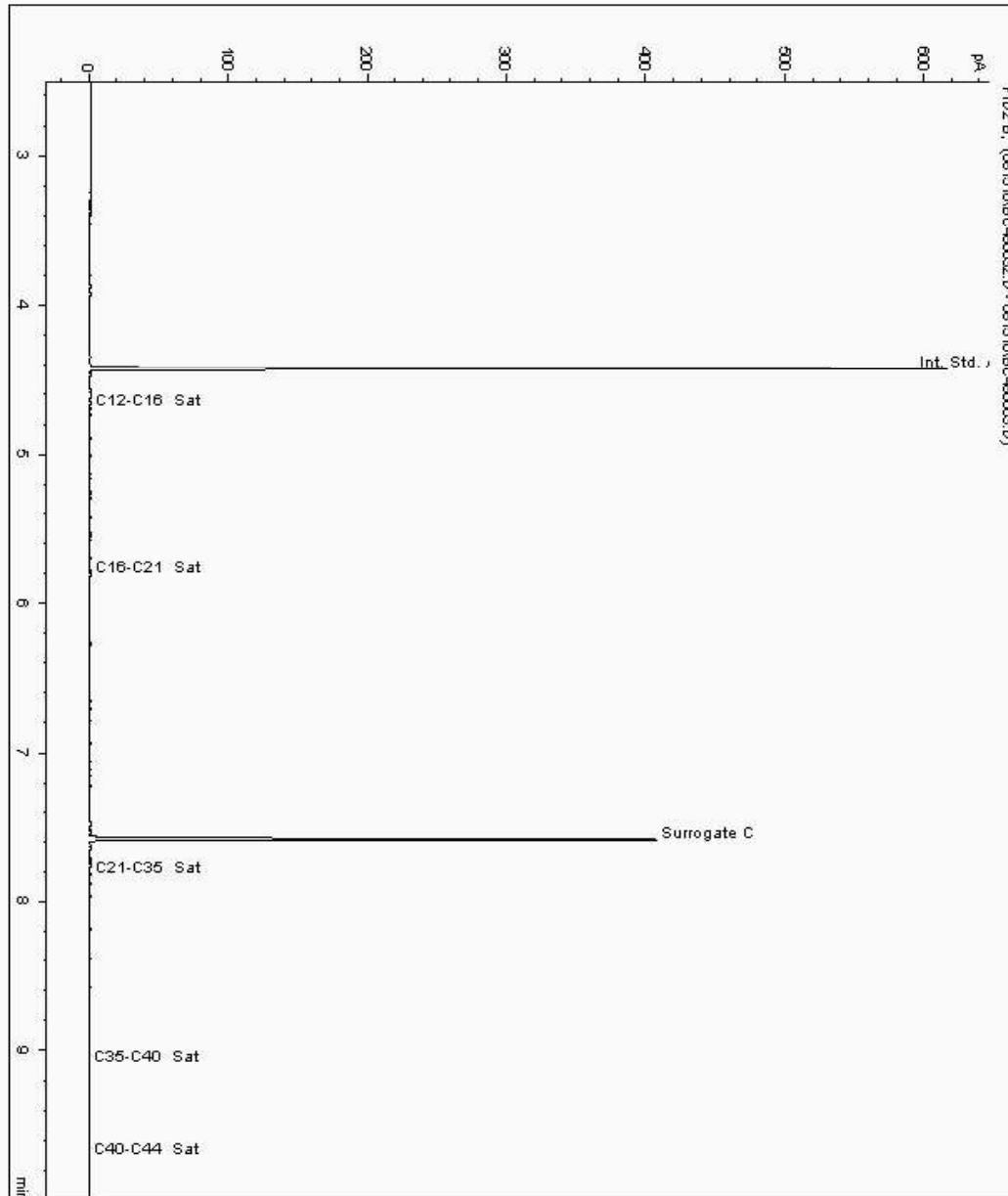
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936234
Sample ID : CB-WS01-050816-GW-1420

Depth :

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

Sample Identity: 13089717-
Date Acquired : 16/08/2016 03:09:56 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.009





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

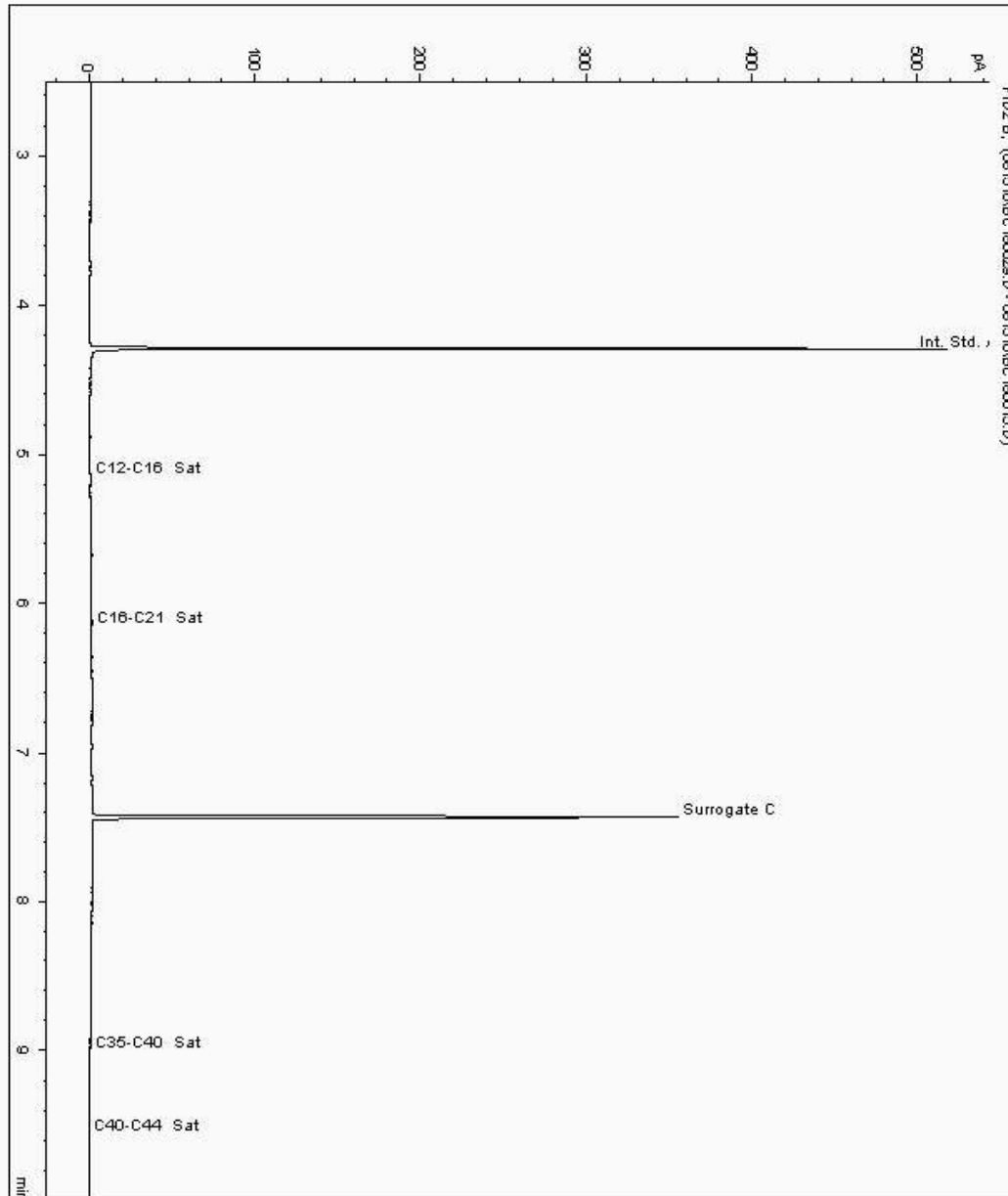
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936302
Sample ID : CB-BH01-050816-GW-1500

Depth :

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

Sample Identity: 13089678-
Date Acquired : 16/08/2016 02:25:54 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.008





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

Location: Castlebrook High
Customer: ARCADIS UK Ltd
Attention: Jonathan Harris

Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

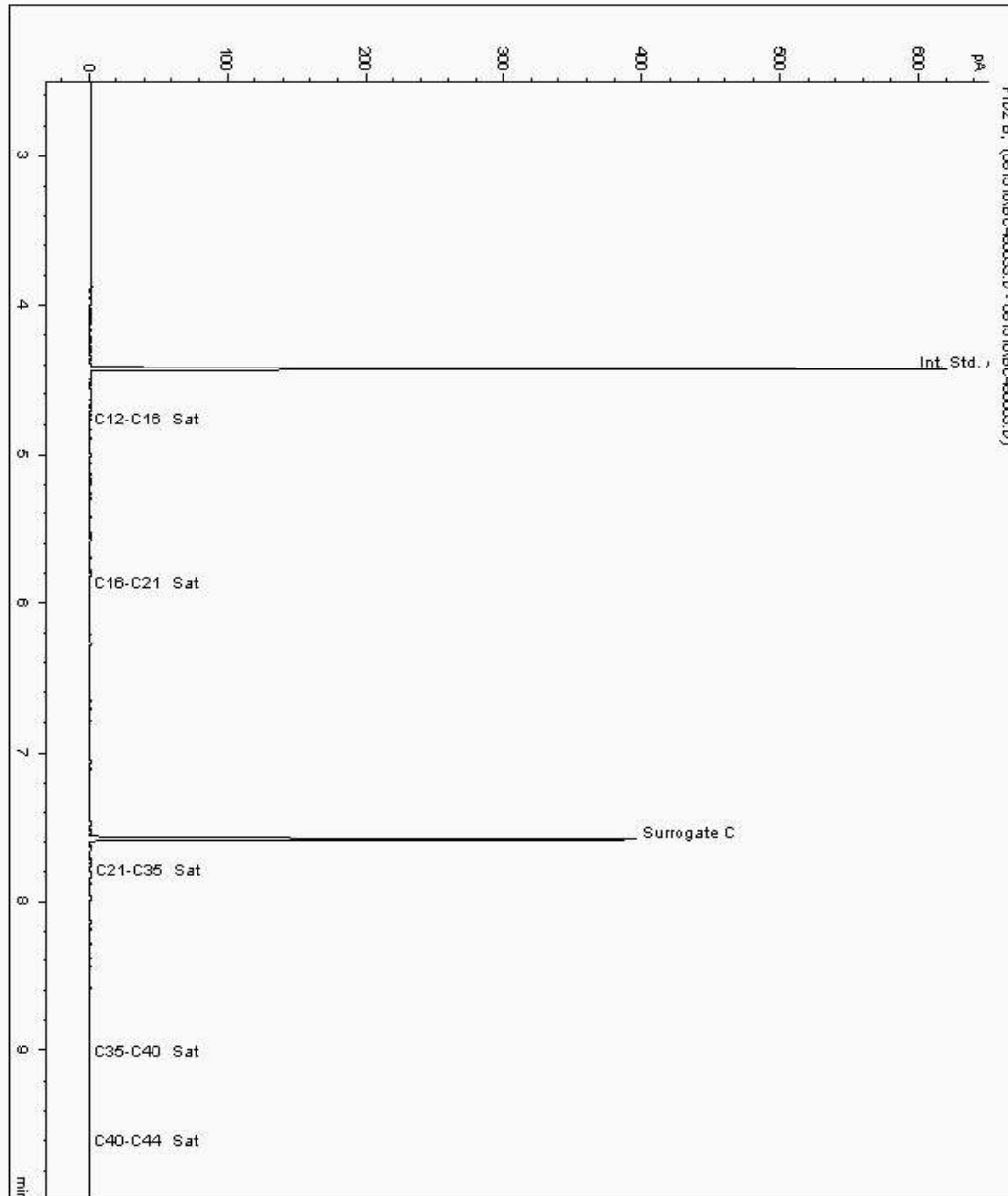
Analysis: EPH CWG (Aliphatic) Aqueous GC (W)

Sample No : 13936380
Sample ID : CB-WS02-050816-GW-1400

Depth :

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

Sample Identity: 13089704-
Date Acquired : 16/08/2016 03:29:05 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.009





SDG: 160807-3
Job: H_ARCADIS_NMK-1336
Client Reference: 34529110

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Customer: ARCADIS UK Ltd
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Order Number: 34529110
Report Number: 373645
Superseded Report:

Chromatogram

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

Sample No : 13936427
Sample ID : CB-BH02-050816-GW-1440

Depth :

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

Sample Identity: 13089661-
Date Acquired : 16/08/16 00:24:11 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.008

