Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121950 Blank	**Job Number:**	W12_1950
LIMS ID Number:	EX1126589	**Date Booked in:**	29-Jun-11
QC Batch Number:	110589	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	94
Phenanthrene-d10	93
Chrysene-d12	87
Perylene-d12	83

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121950 Blank Spike	**Job Number:**	W12_1950
LIMS ID Number:	EX1126590	**Date Booked in:**	29-Jun-11
QC Batch Number:	110589	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.13	96.500	97
Acenaphthylene	208-96-8	4.17	84.400	100
Acenaphthene	83-32-9	4.29	88.800	99
Fluorene	86-73-7	4.65	76.200	95
Phenanthrene	85-01-8	5.46	92.200	99
Anthracene	120-12-7	5.51	83.000	98
Fluoranthene	206-44-0	6.75	91.900	89
Pyrene	129-00-0	7.02	87.400	99
Benzo[a]anthracene	56-55-3	8.67	102.000	96
Chrysene	218-01-9	8.72	95.100	99
Benzo[b]fluoranthene	205-99-2	10.19	87.900	78
Benzo[k]fluoranthene	207-08-9	10.22	95.000	64
Benzo[a]pyrene	50-32-8	10.61	83.100	90
Indeno[1,2,3-cd]pyrene	193-39-5	11.98	62.100	74
Dibenzo[a,h]anthracene	53-70-3	12.02	67.800	81
Benzo[g,h,i]perylene	191-24-2	12.27	88.500	75
Total (USEPA16) PAHs	-	-	1381.900	-

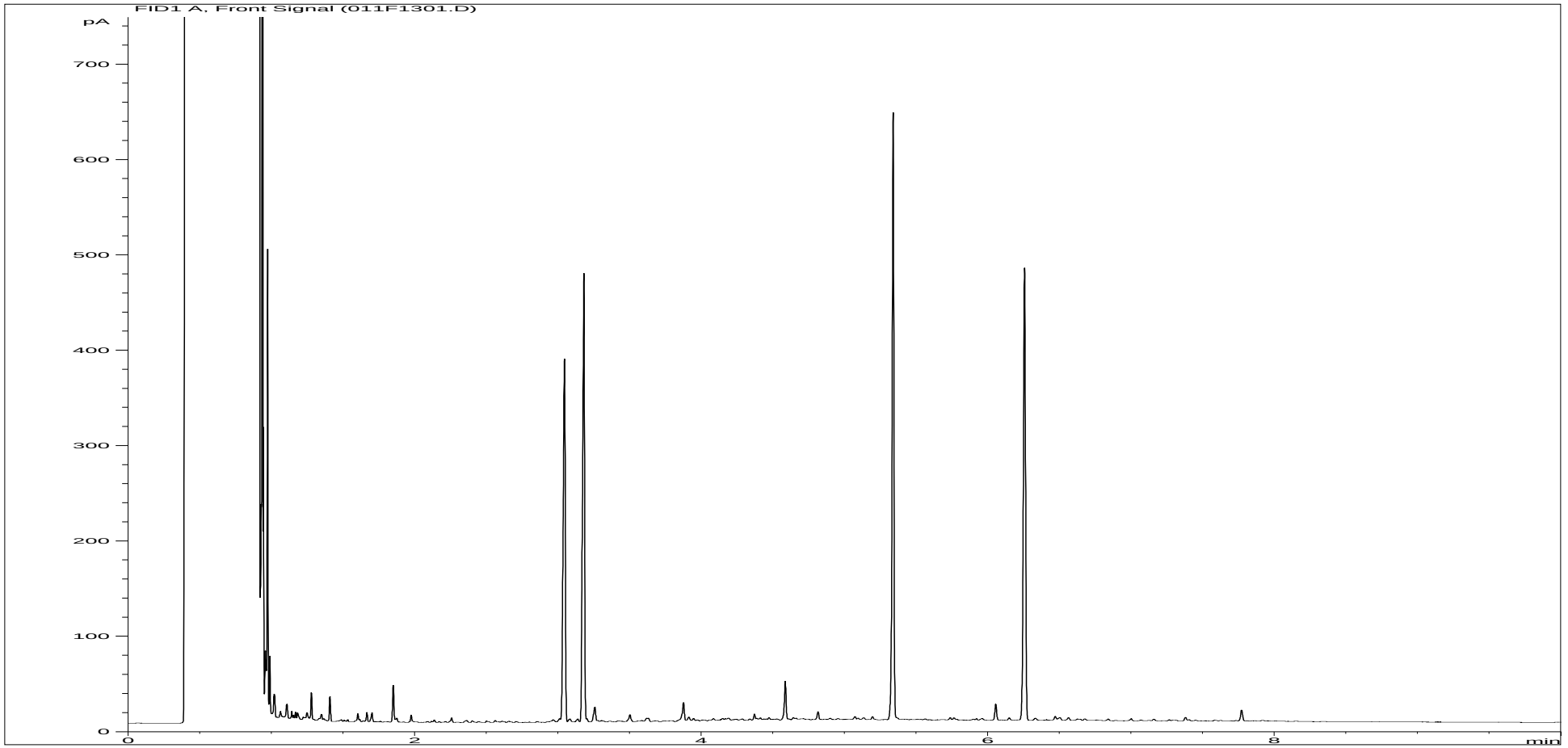
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	86
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

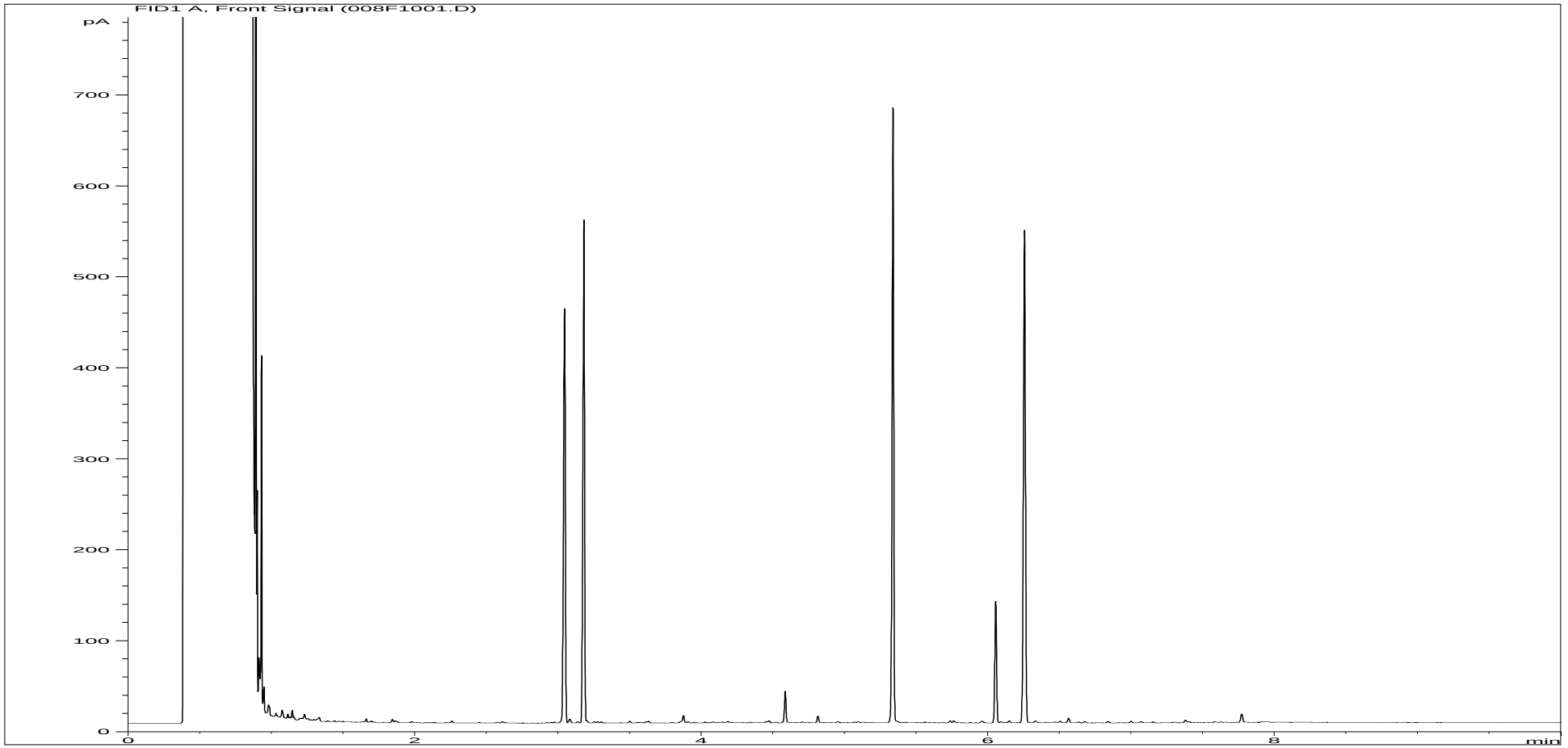
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126588	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	TP11-6-1 0.3-0.6
Acquisition Date/Time:	04-Jul-11, 13:24:39		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\011F1301.D		

Where individual results are flagged see report notes for status.

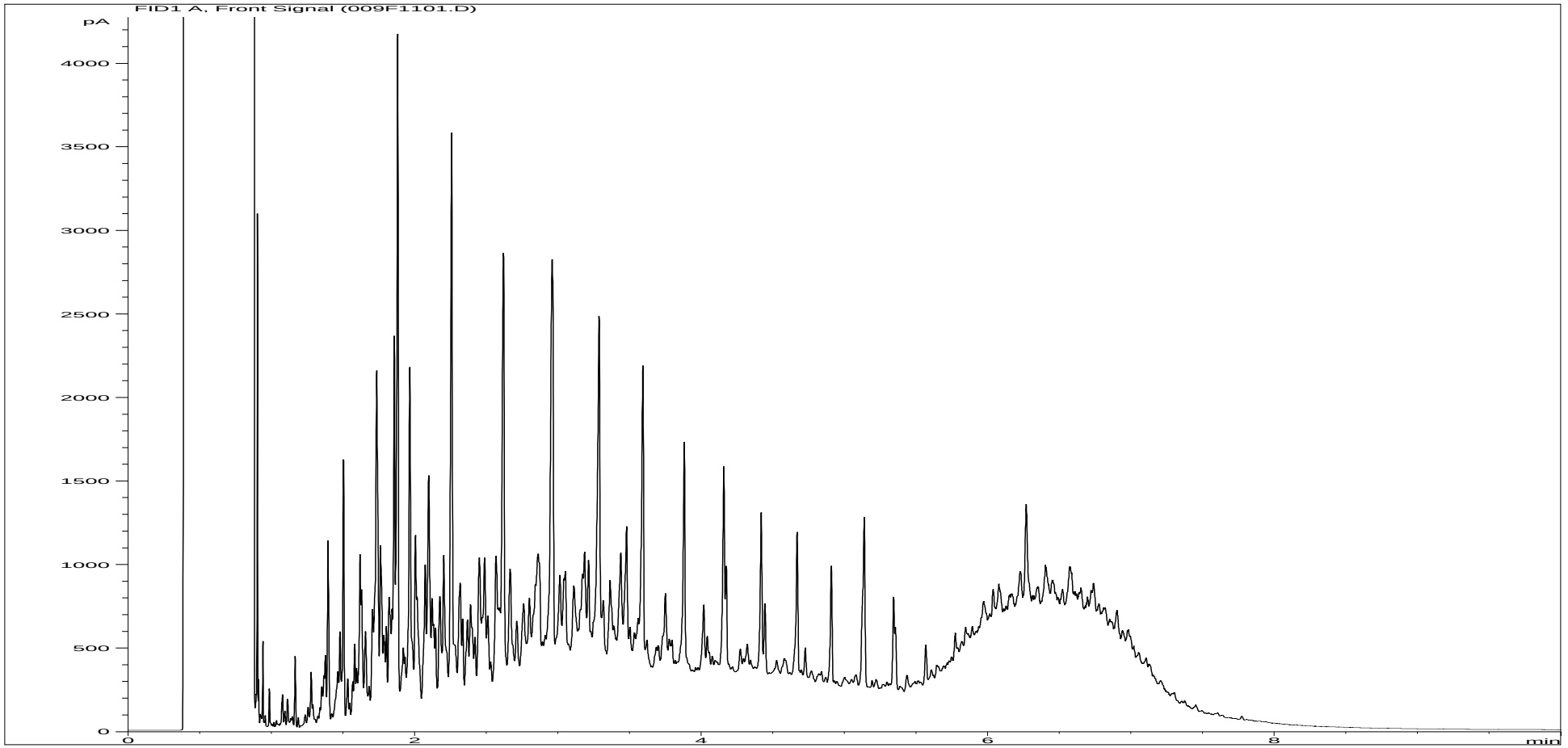
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126589	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121950 Blank
Acquisition Date/Time:	04-Jul-11, 12:33:03		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\008F1001.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126590	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121950 Blank Spike
Acquisition Date/Time:	04-Jul-11, 12:50:18		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\009F1101.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W121950

Customer Worley Parsons Komex
Site Maelor Works
Report No W121950

Consignment No
Date Logged 29-Jun-2011

Report Due 01-Jul-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		LeachPrep	PAHMSW	PHEHPLC	SFAPI				SFAS	TPHFID	VOCHSAW
		Sampled	Report B (CENC)	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Leachate Prep	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	BTEX Analysis HSA MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	
EX/1126588	TP11-6-1 0.3-0.6	17/06/11																									
EX/1126589	Report 121950 Blank	17/06/11																									
EX/1126590	Report 121950 Blank Spike	17/06/11																									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W121950

Consignment No
Date Logged 29-Jun-2011

Report Due 01-Jul-2011

ID Number	Description	MethodID	WSLM13	WSLM2	WSLM3
		Sampled	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓
EX/1126588	TP11-6-1 0.3-0.6	17/06/11			
EX/1126589	Report 121950 Blank	17/06/11			
EX/1126590	Report 121950 Blank Spike	17/06/11			

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EFS/114388M (Ver. 1)
Your Ref:

June 9, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

SOIL Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 05/07/11 when they will be discarded. Please call 01283 554547 for an extension of this date.
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

JNColbourne

J Colbourne
Project Co-ordinator
01283 554547

Scientifics, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Scientifics is a trading name of Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/114388M (Ver. 1)

Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 24-May-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Jun-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (80) Results (Pages 5 to 10)
GC-FID Chromatograms (Pages 11 to 16)
Table of Asbestos Screening Results (Page 17)
Analytical and Deviating Sample Overview (Pages 18 to 19)
Table of Method Descriptions (Page 20)
Table of Report Notes (Page 21)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 09-Jun-2011

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105°C unless otherwise stated. (except QC samples)
Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units
Method Codes :		ELESULP	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPSOIL	ICPWSS	PAHMSUS	PHSOIL
Method Reporting Limits :		20	0.2	0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	0.5	16	36	10	0.08	
Accreditation Code:		UM	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM		UM
Laboratory ID Number CL/	**Client Sample Description**	**Elemental Sulphur**	**GRO**	**Boron (H20 Soluble)**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Selenium (MS)**	**Zinc (MS)**	**Iron**	**SO4-- (H2O sol) mg/l**	**PAH by MS.16(0.08)**	**pH units (AR)**
1120290	TP11-07/1 0.45	129	0.27	<0.5	4	<0.2	13.5	7	22.4	<0.5	15.7	<0.5	43.8	19200	158	Req	6.2
1120291	TP11-08/1 0.3	<21	<0.2	<0.5	7.3	0.54	14.4	44.3	102.2	<0.52	41.3	<0.5	96.4	18900	125	Req	9.0
1120292	TP11-11/1 0.3	391	<0.3	0.5	7.1	0.24	39	20.9	48.3	<0.5	21.6	<0.5	65.9	26500	858	Req	6.5
1120293	TP11-12/1 0.45	<21	<0.2	<0.5	9	0.27	856	26.6	34.1	0.78	39.6	<0.5	106.8	30700	181	Req	8.7
1120294	QC Blank (NVM)	<20‡	<0.1	<0.5‡	<0.3‡	<0.2‡	<1.2‡	<1.6‡	<0.7‡	<0.5‡	<2.0‡	<0.5‡	<16.0‡	<36‡	<20‡	Req	7.01
1120295	Reference Material (% Recovery) (NVM)	101‡	95	100‡	100‡	100‡	100‡	100‡	101‡	101‡	103‡	101‡	101‡	103‡	200‡	Req	100

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	09-Jun-11
Report Number	**EFS/114388M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		mg/kg	mg/kg	mg/kg	mg/kg		%	mg/kg	mg/kg	mg/l	%	%						
Method Codes :		SFAPI	SFAPI	SFAPI	SFAPI	Sub002a	TMSS	TPHFIDUS	AMMAR	KONECL	LOI(%MM)	SSP3						
Method Reporting Limits :		0.5	0.5	0.5	2		0.2	10.0	0.5	1.0	0.2	0.1						
Accreditation Code:		N	UM	UM	UM	U	U	UM	UM	N	N	N						
Laboratory ID Number CL/	**Client Sample Description**	**Cyanide(Complex)(AR)**	**Cyanide(Free) (AR)**	**Cyanide(Total) (AR)**	**Thiocyanate(SCN)(AR)**	**^Asbestos Screen**	**Tot.Moisture @ 105C**	**TPH by GCFID (AR)**	**Exchange.Ammonium AR**	**Chloride:(2:1)**	**L.O.I. % @ 450C**	**Stone Content %**						
1120290	TP11-07/1 0.45	<0.6	<0.6	<0.6	<2.2	NAIIS	10.5	99	5.1	13	1.4	3.9						
1120291	TP11-08/1 0.3	0.7	<0.6	0.7	<2.3	CH AM	12.1	2160	<0.6	13.5	4.7	5.8						
1120292	TP11-11/1 0.3	<0.6	<0.6	<0.6	<2.5		20.6	87	12.3	32	6.3	4.5						
1120293	TP11-12/1 0.45	<0.6	<0.6	<0.6	<2.4		17.8	75	<0.6	13.4	0.9	3.6						
1120294	QC Blank (NVM)	<0.5	<0.5‡	<0.5‡	<2.0‡			<10.0‡	<0.5‡	<1.0								
1120295	Reference Material (% Recovery) (NVM)		85‡	84‡	96‡			87‡	95‡	98	100							

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Tel +44 (0) 1283 554400
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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	09-Jun-11
Report Number	**EFS/114388M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
Method Codes :		VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC						
Method Reporting Limits :		1	5	2	3	0.3	0.3	0.3	0.3	0.3	0.3						
Accreditation Code:		UM	UM	UM	UM	UM	U	U	U	U	U						
Laboratory ID Number CL/	**Client Sample Description**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Xylenols**	**Naphthols**	**Trimethylphenols**	**Total Phenols**						
1120290	TP11-07/1 0.45	<1	<6	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.7						
1120291	TP11-08/1 0.3	<1	<6	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.7						
1120292	TP11-11/1 0.3	<1	<6	<3	<8	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1120293	TP11-12/1 0.45	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1120294	QC Blank (NVM)	<1‡	<5‡	<2‡	<6‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.5						
1120295	Reference Material (% Recovery) (NVM)	<1‡	<5‡	<2‡	<6‡	78‡	88	83	78	98	85						

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	09-Jun-11
Report Number	**EFS/114388M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-07/1 0.45	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120290	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.09	-	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.43	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	89
Phenanthrene-d10	91
Chrysene-d12	93
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	101

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-08/1 0.3	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120291	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.45	0.10	70	**UM**
Acenaphthylene	208-96-8	4.50	0.24	93	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	5.02	0.13	33	UM
Phenanthrene	85-01-8	5.90	0.38	96	UM
Anthracene	120-12-7	5.95	0.63	99	U
Fluoranthene	206-44-0	7.28	1.90	96	UM
Pyrene	129-00-0	7.57	1.44	96	UM
Benzo[a]anthracene	56-55-3	9.28	0.90	94	UM
Chrysene	218-01-9	9.33	0.85	98	UM
Benzo[b]fluoranthene	205-99-2	10.83	0.94	89	UM
Benzo[k]fluoranthene	207-08-9	10.87	0.19	90	UM
Benzo[a]pyrene	50-32-8	11.26	0.61	98	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.66	0.40	95	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	12.99	0.40	70	UM
Total (USEPA16) PAHs	-	-	< 9.31	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	88
Phenanthrene-d10	90
Chrysene-d12	91
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	98

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-11/1 0.3	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120292	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	5.90	0.14	97	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.65	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	86
Phenanthrene-d10	86
Chrysene-d12	81
Perylene-d12	86

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-12/1 0.45	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120293	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	4.50	0.10	80	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	5.90	0.21	97	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	7.28	0.57	77	UM
Pyrene	129-00-0	7.57	0.54	73	UM
Benzo[a]anthracene	56-55-3	9.28	0.43	89	UM
Chrysene	218-01-9	9.33	0.38	92	UM
Benzo[b]fluoranthene	205-99-2	10.83	0.52	95	UM
Benzo[k]fluoranthene	207-08-9	10.86	0.13	96	UM
Benzo[a]pyrene	50-32-8	11.26	0.39	97	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.66	0.20	96	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	12.99	0.20	78	UM
Total (USEPA16) PAHs	-	-	< 4.30	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	87
Phenanthrene-d10	87
Chrysene-d12	95
Perylene-d12	107

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	106

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Job 114388 Blank (NVM)	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120294	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**U**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	U
Fluorene	86-73-7	-	< 0.08	-	U
Phenanthrene	85-01-8	-	< 0.08	-	U
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	U
Pyrene	129-00-0	-	< 0.08	-	U
Benzo[a]anthracene	56-55-3	-	< 0.08	-	U
Chrysene	218-01-9	-	< 0.08	-	U
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	U
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	U
Benzo[a]pyrene	50-32-8	-	< 0.08	-	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	U
Total (USEPA16) PAHs	-	-	< 1.28	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	86
Acenaphthene-d10	83
Phenanthrene-d10	79
Chrysene-d12	75
Perylene-d12	77

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	101

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Reference Material (% Rec	**Job Number:**	S11_4388M
LIMS ID Number:	CL1120295	**Date Booked in:**	24-May-11
QC Batch Number:	111168	**Date Extracted:**	02-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jun-11
Directory:	0211PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit	Accr. code
Naphthalene	91-20-3	3.45	93	95	**U**
Acenaphthylene	208-96-8	4.50	95	99	U
Acenaphthene	83-32-9	4.62	95	99	U
Fluorene	86-73-7	5.02	95	95	U
Phenanthrene	85-01-8	5.90	93	99	U
Anthracene	120-12-7	5.95	102	100	U
Fluoranthene	206-44-0	7.28	99	100	U
Pyrene	129-00-0	7.57	95	98	U
Benzo[a]anthracene	56-55-3	9.28	99	99	U
Chrysene	218-01-9	9.33	94	99	U
Benzo[b]fluoranthene	205-99-2	10.82	97	99	U
Benzo[k]fluoranthene	207-08-9	10.86	95	99	U
Benzo[a]pyrene	50-32-8	11.26	98	99	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.66	98	100	U
Dibenzo[a,h]anthracene	53-70-3	12.69	97	96	U
Benzo[g,h,i]perylene	191-24-2	12.99	99	75	U
Total (USEPA16) PAHs	-	-	96	-	N

"M" denotes that % fit has been manually interpreted

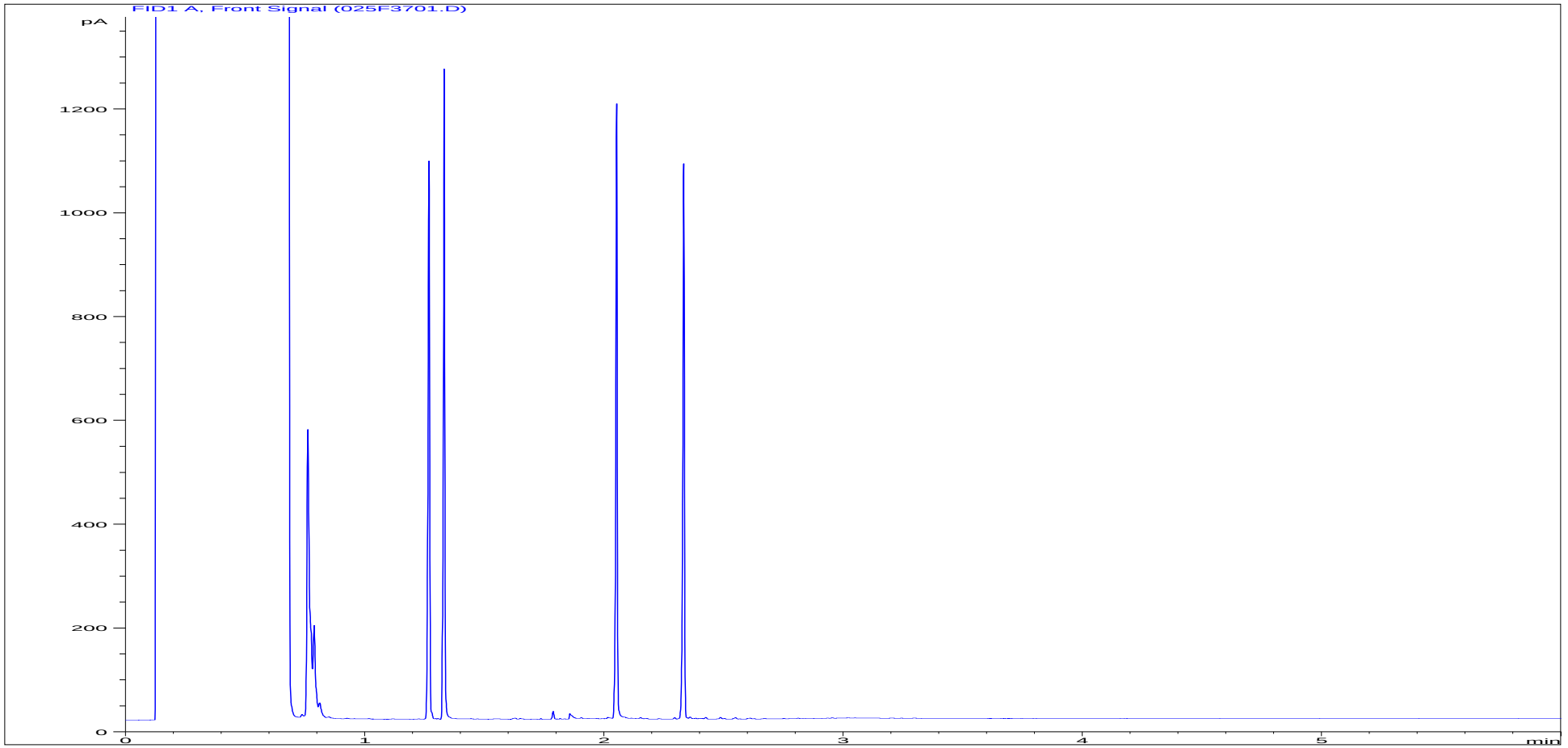
Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	103
Perylene-d12	107

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

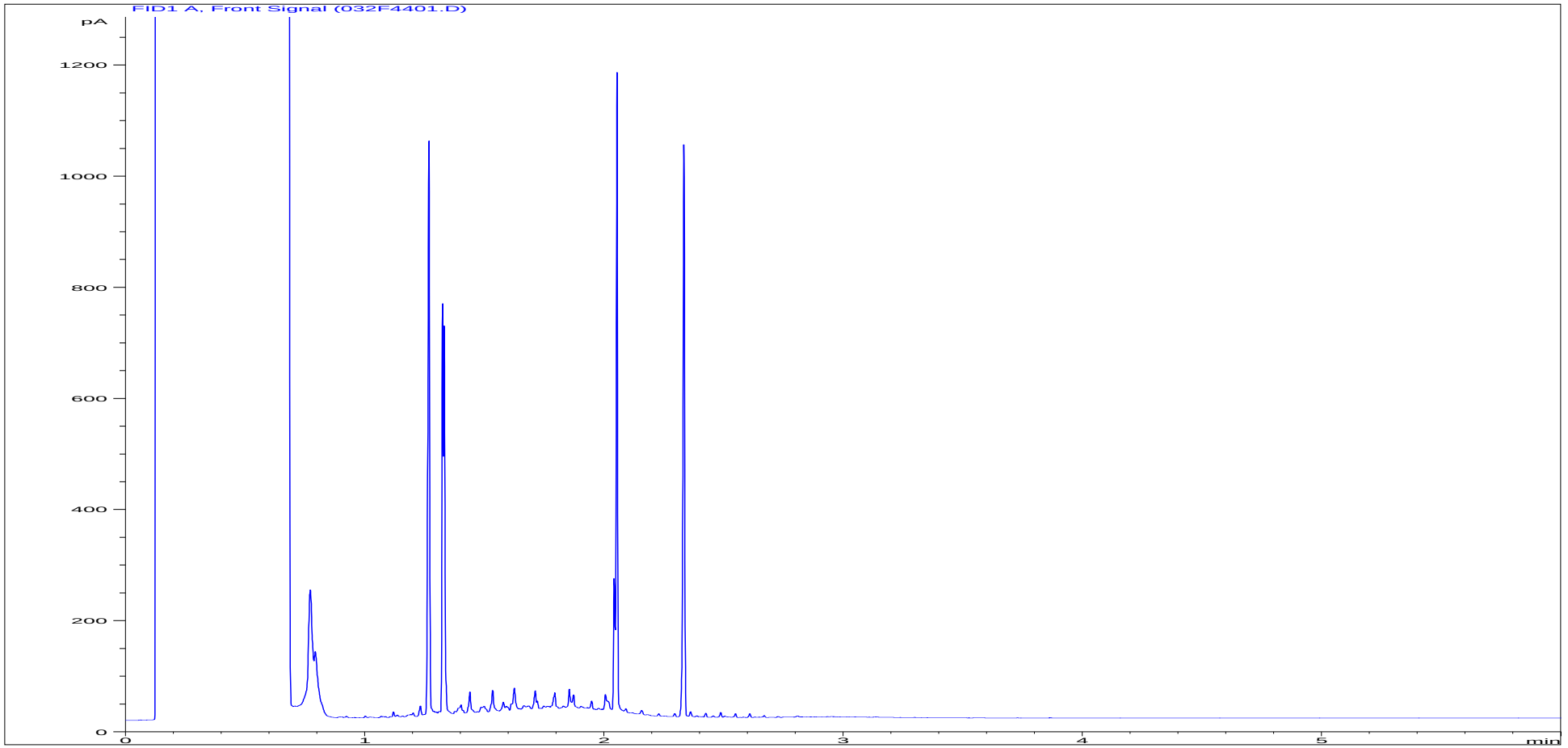
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	BLKS111168	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Job 114388 Blank (NVM)
Acquisition Date/Time:	02-Jun-11, 19:18:33		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\025F3701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

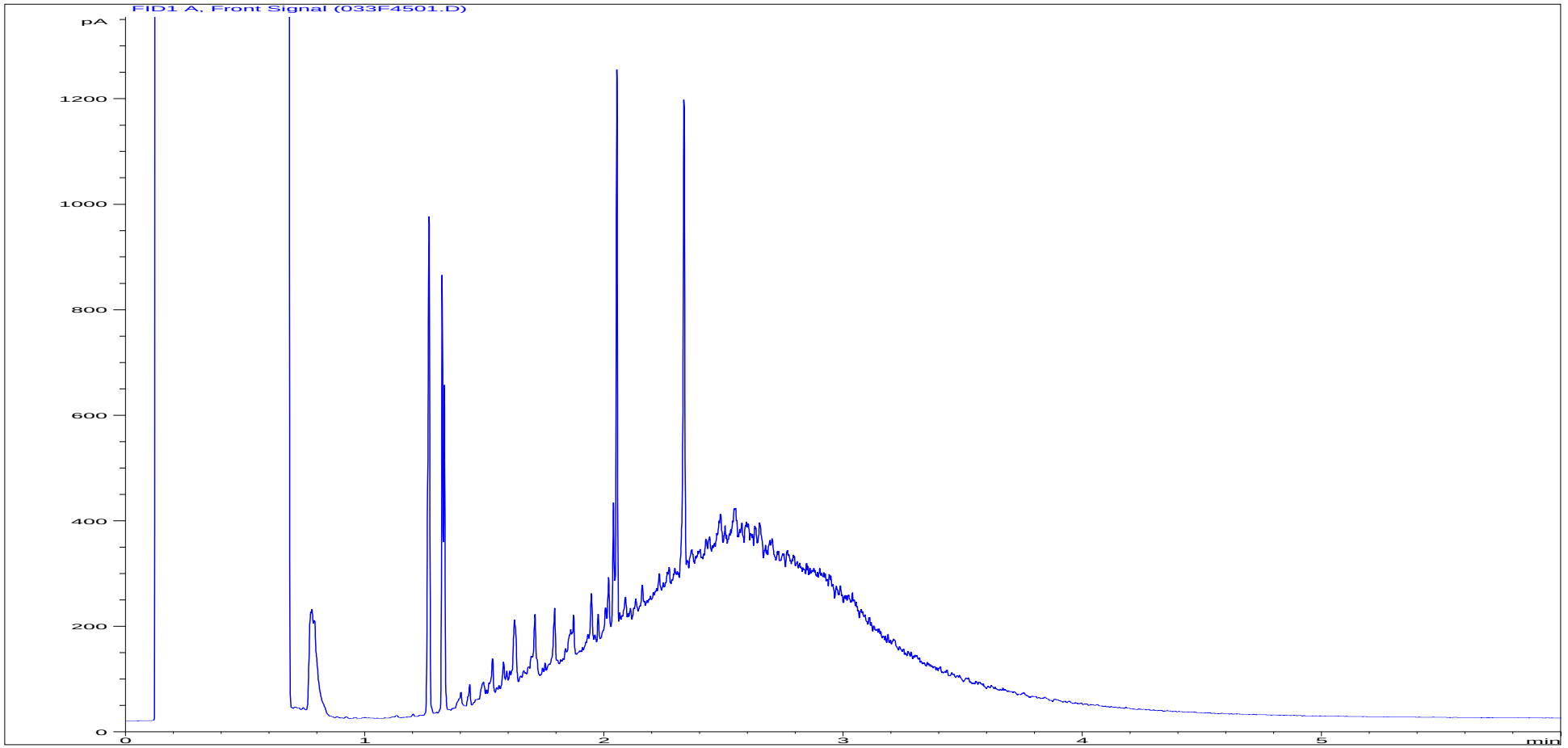
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1120290	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-07/1 0.45
Acquisition Date/Time:	02-Jun-11, 20:43:31		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\032F4401.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

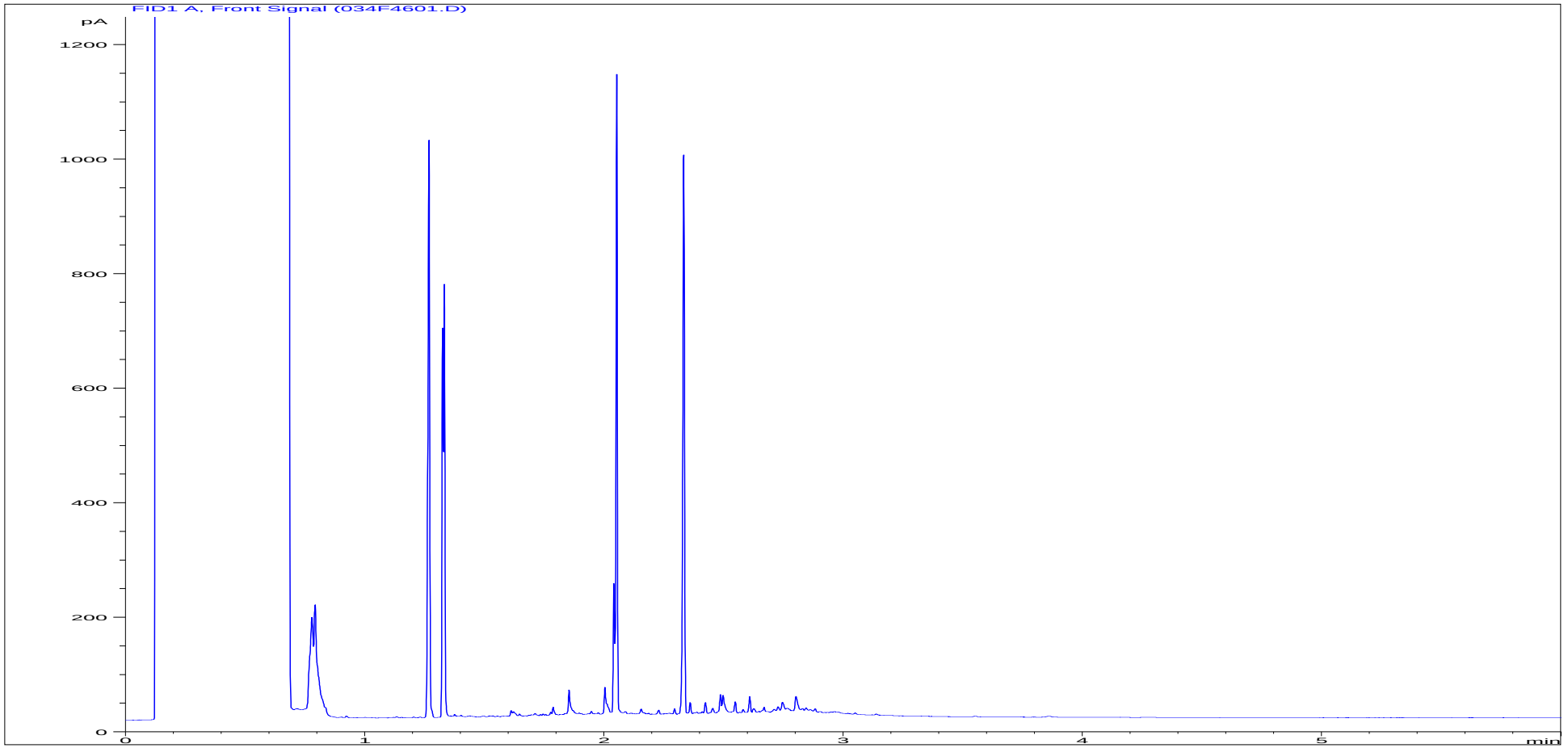
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1120291	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-08/1 0.3
Acquisition Date/Time:	02-Jun-11, 20:55:30		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\033F4501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

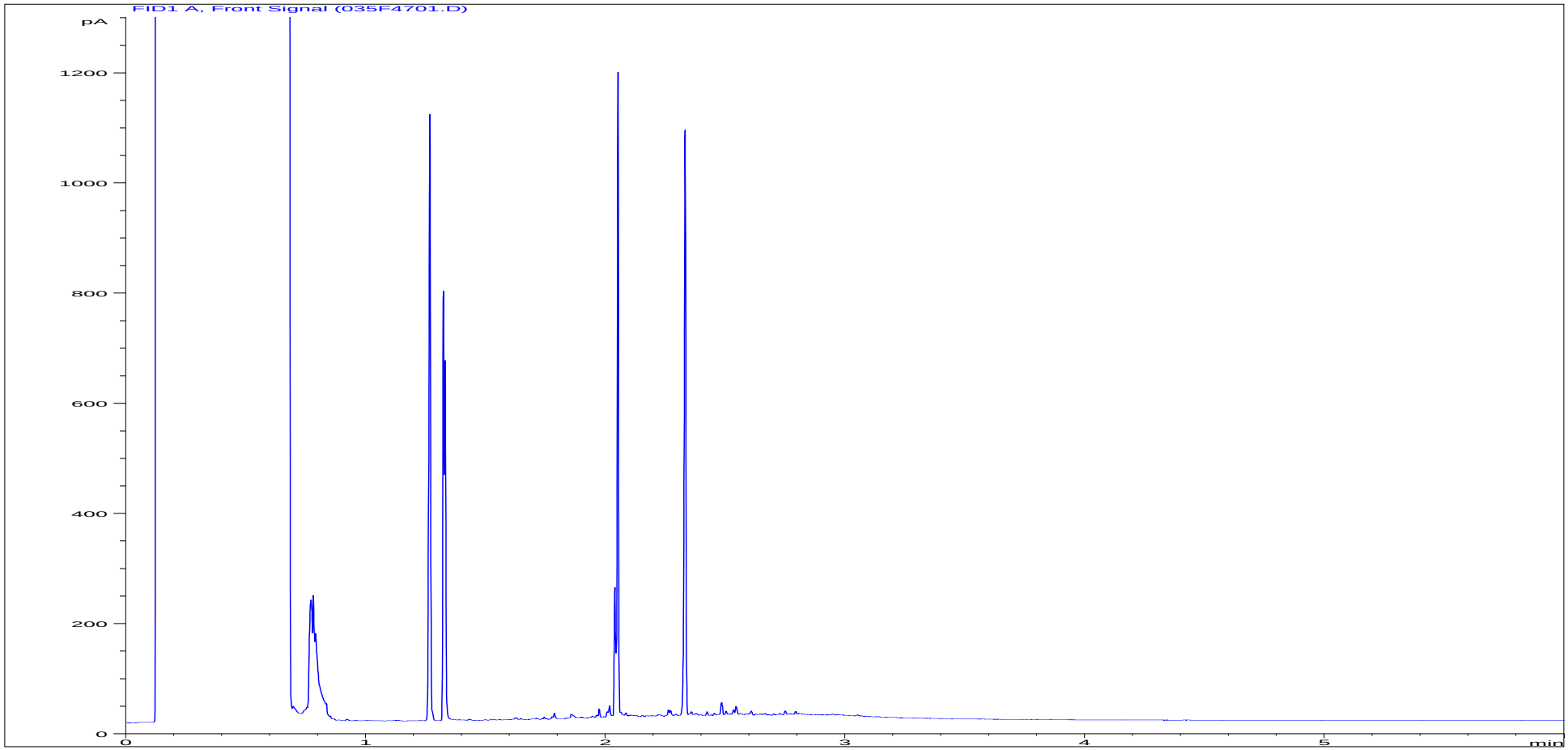
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1120292	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-11/1 0.3
Acquisition Date/Time:	02-Jun-11, 21:07:32		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\034F4601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

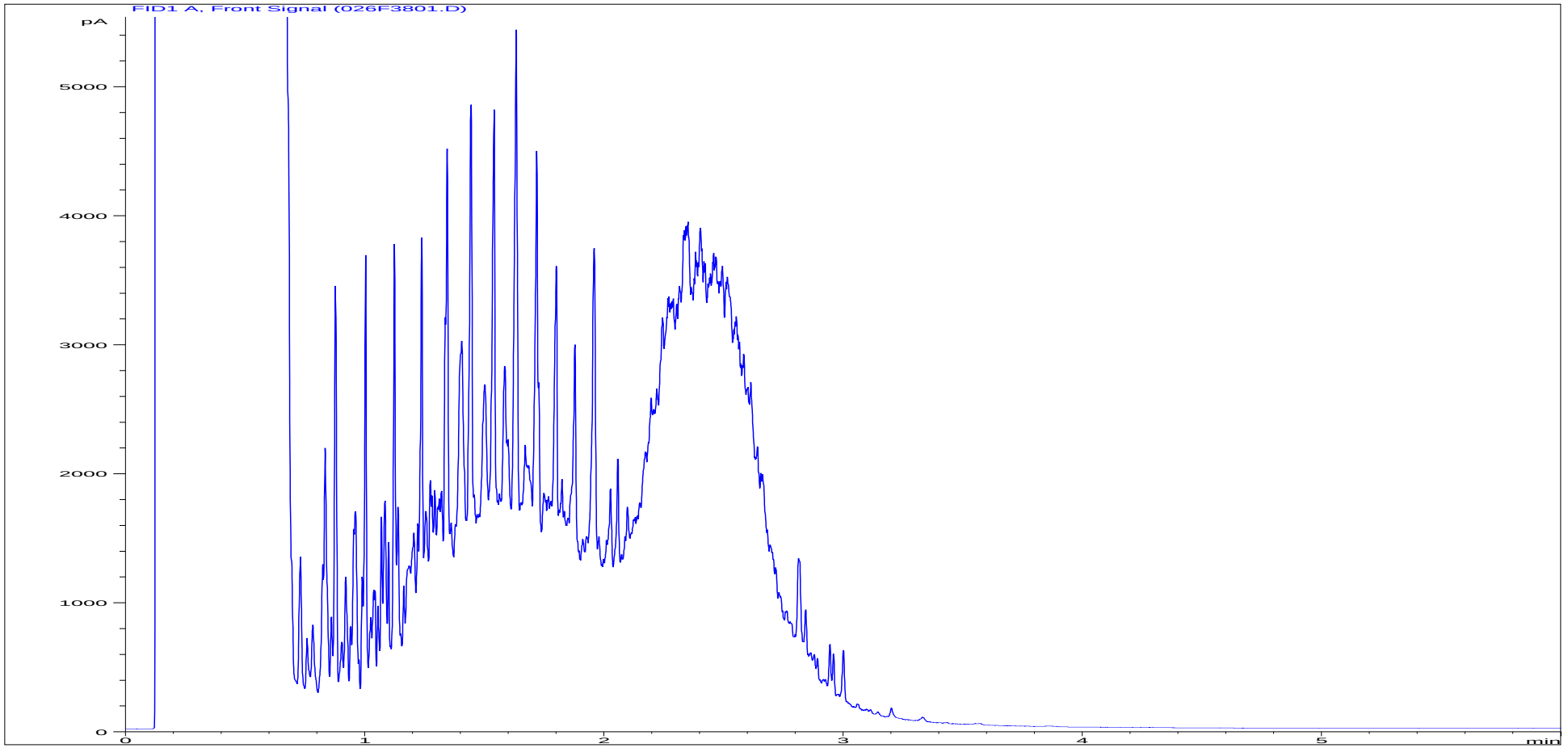
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1120293	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-12/1 0.45
Acquisition Date/Time:	02-Jun-11, 21:19:17		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\035F4701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	RMS111168	**Job Number:**	S11_4388M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	02-Jun-11, 19:30:35		
Datafile:	D:\TES\DATA\Y2011\0602TPH_GC14\060211 2011-06-02 10-46-07\026F3801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

ESG Asbestos Limited

Certificate of Analysis for Asbestos in Soils

UKAS TESTING 1089

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

Client:	Scientifics Environmental Chemistry	Page 1 of 1
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	Report No:ANO-0488-1524
For the attention of :	Worley Parsons	Report Date:03/06/2011
Site Address:	Maelor Works	Project Number:S114388

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	Sample Type	DEPTH (M)	TEST DATE	% asbestos by dry weight**	ASBESTOS FIBRE TYPES IDENTIFIED
CL/1120290	17/05/11	TP11-07/1 0.45			03/06/2011	Screen Only	No Asbestos Identified in Sample
CL/1120291	18/05/11	TP11-08/1 0.3			03/06/2011	Screen & ID	Amosite & Chrysotile

*Sampling carried out by client ** Detection limit of Method SCI-ASB-020 is 0.001 *** Analysis carried out 200g Qualitative H&S Screen

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Derwent House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

Key

NADIS = No Asbestos Detected in Sample

Authorised Signatory:

Name: Kate Lovatt

Position: System Support & Quality Manager

ESG Asbestos Limited is a wholly owned subsidiary of Environmental Scientifics Group Limited (ESG), registered in England and Wales, registered company 04951688.

Where individual results are flagged see report notes for status.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S114388

Customer Worley Parsons
Site Maelor Works
Report No S114388

Consignment No 21011
Date Logged 24-May-2011

Report Due 06-Jun-2011

ID Number	Description	Sampled	MethodID	AMMAR	CustServ	ELESULP	GROHSA	ICPBOR	ICPMSS								ICPSOIL	ICPWSS	KONECL	LOI(%MM)	MCertS	PAHMSUS	PHEHPLC	PHSOIL	SFAPI		
				Exchangeable Ammonium as N (AR)	Report B	Elemental Sulphur	GRO	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Iron	SO4-- (H2O sol) mg/l	Chloride (2:1)	LOI % @ 450°C	MCertS Analysis	PAH by MS.16(0.08)	Phenol - HPLC	pH units (AR)	Cyanide(Complex) (AR)	Cyanide(Free) (AR)	Cyanide(Total) (AR)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
CL/1120290	TP11-07/1 0.45	17/05/11					E																				
CL/1120291	TP11-08/1 0.3	18/05/11					E																				
CL/1120292	TP11-11/1 0.3	19/05/11																									
CL/1120293	TP11-12/1 0.45	20/05/11																									
CL/1120294	Job 114388 Blank																										
CL/1120295	Reference Material (% Recovery																										

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S114388

Customer Worley Parsons
Site Maelor Works
Report No S114388

Consignment No 21011
Date Logged 24-May-2011

Report Due 06-Jun-2011

ID Number	Description	MethodID	SFAPI	SSP3	Sub002a	TMSS	TPHFIDUS	VOCHSAS
		Sampled	Thiocyanate(SCN) (AR)	Stone Content %	^Asbestos (screen)	Tot.Moisture @ 105C	TPH by GCFID (AR)	BTEX-HsaMS analysis
	Accredited to ISO17025		✓		✓	✓	✓	✓
CL/1120290	TP11-07/1 0.45	17/05/11						E
CL/1120291	TP11-08/1 0.3	18/05/11						E
CL/1120292	TP11-11/1 0.3	19/05/11						
CL/1120293	TP11-12/1 0.45	20/05/11						
CL/1120294	Job 114388 Blank							
CL/1120295	Reference Material (% Recovery							

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
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C	Headspace present in the sample container
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E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ELESULP	Air Dried	Determination of Elemental Sulphur using Solvent Extraction followed by HPLC detection.
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Air Dried	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	ICPSOIL	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPOES detection
Soil	ICPWSS	Air Dried	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	KONECL	Air Dried	Determination of Chloride in Soil using water extraction at the stated water:soil ratio, discrete colorimetric detection
Soil	LOI(%MM)	Air Dried	Determination of loss on ignition for soil samples at specified temperature by gravimetry
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHEHPLC	As Received	Determination of Phenols by methanol extraction followed by HPLC detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SSP3	As Received	Determination of stones content by dry sieving at the required particle size
Soil	Subcon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Sample Descriptions

Client : Worley Parsons Komex

Site : Maelor Works

Report Number : S11_4388M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1120290	TP11-07/1 0.45	Grey Stone SILT
CL/1120291	TP11-08/1 0.3	Grey Stone SILT
CL/1120292	TP11-11/1 0.3	Brown Stone SILT
CL/1120293	TP11-12/1 0.45	Brown Stone CLAY

END OF REPORT

Our Ref: EFS/114612M (Ver. 1)
Your Ref: 50065-29

June 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

SOIL Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 14/07/11 when they will be discarded. Please call 01283 554547 for an extension of this date.
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

JNColbourne

J Colbourne
Project Co-ordinator
01283 554547

Scientifics, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Scientifics is a trading name of Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/114612M (Ver. 1)

Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 10 samples described in this report were logged for analysis by Scientifics on 02-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Jun-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (80) Results (Pages 5 to 14)
Table of GRO Results (Page 15)
Table of TPH (Si) banding (std) (Page 16)
GC-FID Chromatograms (Pages 17 to 34)
Table of Asbestos Screening Results (Page 35)
Analytical and Deviating Sample Overview (Pages 36 to 37)
Table of Method Descriptions (Page 38)
Table of Report Notes (Page 39)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Jun-2011

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105°C unless otherwise stated. (except QC samples)
Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units
Method Codes :		ELESULP	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPSOIL	ICPWSS	PAHMSUS	PHSOIL
Method Reporting Limits :		20	0.2	0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	0.5	16	36	10	0.08	
Accreditation Code:		UM	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM		UM
Laboratory ID Number CL/	**Client Sample Description**	**Elemental Sulphur**	**GRO**	**Boron (H20 Soluble)**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Selenium (MS)**	**Zinc (MS)**	**Iron**	**SO4-- (H2O sol) mg/l**	**PAH by MS.16(0.08)**	**pH units (AR)**
1121349	MW11-03/1 0.4	<20	<0.2	0.8	6.7	0.35	20.8	15.8	65.9	<0.5	18.6	<0.5	86.6	20000	101	Req	7.2
1121352	MW11-04/1 0.3	<21	<0.2	0.5	8.3	<0.21	22	27.2	35.8	<0.53	28	0.6	99.3	25800	544	Req	8.1
1121356	MW11-07/1 0.2	31		1.7	15.1	0.8	25.6	43.9	216.6	<0.54	85.7	0.8	166.7	20700	203	Req	8.4
1121354	MW11-08/1 0.2 (NVM)	<21‡	<0.2	0.5‡	5.3‡	0.87‡	17.7‡	26.5‡	1110‡	<0.51‡	375.6‡	<0.5‡	74.1‡	8990‡	702‡	Req	9.1
1121355	MW11-08/2 0.6 (NVM)	240‡		0.6‡	8.8‡	0.36‡	23.3‡	25.1‡	66.8‡	<0.5‡	43.9‡	<0.5‡	63‡	24800‡	1450‡	Req	7.8
1121350	MW11-15/1 0.25	<20	<0.2	<0.5	5.4	0.2	13.7	15.4	35	<0.5	15.4	0.5	68.3	19400	155	Req	8.5
1121353	TP11-02/1 0.3	163	0.35	0.7	11.1	0.59	14.7	112.2	207.8	0.69	38.9	1.1	357.4	22500	89	Req	7.7
1121351	TP11-10/1 0.4	43	<0.2	0.6	8.6	0.21	17.5	23.7	34.9	<0.5	21.9	0.6	83	27200	96	Req	7.8
1121357	QC Blank (NVM)	<20‡	<0.1	<0.5‡	<0.3‡	<0.2‡	<1.2‡	<1.6‡	<0.7‡	<0.5‡	<2.0‡	<0.5‡	<16.0‡	<36‡	<20‡	Req	6.99
1121358	Reference Material (% Recovery) (NVM)	103‡	75	109‡	99‡	95‡	105‡	106‡	95‡	95‡	99‡	101‡	100‡	82‡	186‡	Req	101.3

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	14-Jun-11
Report Number	**EFS/114612M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Units :		mg/kg	mg/kg	mg/kg	mg/kg		%	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	%	%	mg/kg		
Method Codes :		SFAPI	SFAPI	SFAPI	SFAPI	Sub002a	TMSS	TPHFIDUS	TPHUSSI	AMMAR	GROHSA	KONECL	LOI(%MM)	SSP3	TPHFIDUS		
Method Reporting Limits :		0.5	0.5	0.5	2		0.2	10.0	10.0	0.5	0.2	1.0	0.2	0.1	10.0		
Accreditation Code:		N	UM	UM	UM	U	U	UM		UM		N	N	N	N		
Laboratory ID Number CL/	**Client Sample Description**	**Cyanide(Complex)(AR)**	**Cyanide(Free) (AR)**	**Cyanide(Total) (AR)**	**Thiocyanate(SCN)(AR)**	**^Asbestos Screen**	**Tot.Moisture @ 105C**	**TPH by GCFID (AR)**	**TPH by GCFID (AR/Si)**	**Exchange.Ammonium AR**	**GRO (AA)**	**Chloride:(2:1)**	**L.O.I. % @ 450C**	**Stone Content %**	**TPH Band (>C10-C35)**		
1121349	MW11-03/1 0.4	<0.6	<0.6	<0.6	<2.4	NAIIS	16.6	44		1.3		7.1	4	<0.1	37		
1121352	MW11-04/1 0.3	<2.2	<0.6	2.2	<2.4	NAIIS	17.9	95		55		7.4	3.9	9.6	89		
1121356	MW11-07/1 0.2	<2.6	<0.6	2.6	<2.5		18.8	6280	Req	3.3	Req	17	3.9	8.2	6050		
1121354	MW11-08/1 0.2 (NVM)	<0.5	<0.5‡	<0.5‡	<2.2‡		7.2	532‡		<0.5‡		22	1.8	7.7	486		
1121355	MW11-08/2 0.6 (NVM)	<0.6	<0.6‡	<0.6‡	<2.2‡		10.0	14100‡	Req	0.6‡	Req	430	4.1	7.2	13400		
1121350	MW11-15/1 0.25	<0.5	<0.5	<0.5	<2.2		8.3	100		1.6		67	2.3	8.8	84		
1121353	TP11-02/1 0.3	218	1.9	219	<2.5		20.7	5070		2.1		24	8.1	6.5	4580		
1121351	TP11-10/1 0.4	<4.5	<0.6	4.5	<2.3		12.5	30		3.4		9	5.2	7.5	24		
1121357	QC Blank (NVM)	<0.5	<0.5‡	<0.5‡	<2.0‡			<10.0‡	Req	<0.5‡	Req	<1.0			<10.0		
1121358	Reference Material (% Recovery) (NVM)		86‡	87‡	102‡			89‡	Req	88‡	Req	99	103		89		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	14-Jun-11
Report Number	**EFS/114612M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
Method Codes :		VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC						
Method Reporting Limits :		1	5	2	3	0.3	0.3	0.3	0.3	0.3	0.3						
Accreditation Code:		UM	UM	UM	UM	UM	U	U	U	U	U						
Laboratory ID Number CL/	**Client Sample Description**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Xylenols**	**Naphthols**	**Trimethylphenols**	**Total Phenols**						
1121349	MW11-03/1 0.4	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1121352	MW11-04/1 0.3	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1121356	MW11-07/1 0.2	2	<6	5	17	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1121354	MW11-08/1 0.2 (NVM)	5‡	<5‡	<2‡	<6‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.6						
1121355	MW11-08/2 0.6 (NVM)	1‡	<6‡	3‡	49‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.7						
1121350	MW11-15/1 0.25	<1	<5	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.6						
1121353	TP11-02/1 0.3	4	<6	<3	10	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1121351	TP11-10/1 0.4	<1	<6	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.7						
1121357	QC Blank (NVM)	<1‡	<5‡	<2‡	<6‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.5						
1121358	Reference Material (% Recovery) (NVM)	101‡	99‡	104‡	102‡	92‡	113	98	93	95	97						

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	14-Jun-11
Report Number	**EFS/114612M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-03/1 0.4	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121349	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.53	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	100
Chrysene-d12	87
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	97

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15/1 0.25	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121350	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	9.24	0.09	91	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	10.78	0.09	74	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.40	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	100
Chrysene-d12	89
Perylene-d12	85

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-10/1 0.4	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121351	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.09	-	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.46	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	105
Phenanthrene-d10	103
Chrysene-d12	89
Perylene-d12	85

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	95

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-04/1 0.3	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121352	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.42	0.46	93	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	5.86	0.13	97	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	7.24	0.10	69	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.96	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	103
Phenanthrene-d10	102
Chrysene-d12	91
Perylene-d12	85

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	97

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-02/1 0.3	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121353	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.42	5.50	99	**UM**
Acenaphthylene	208-96-8	4.47	11.11	99	U
Acenaphthene	83-32-9	4.59	1.29	63	UM
Fluorene	86-73-7	4.99	8.25	98	UM
Phenanthrene	85-01-8	5.86	37.30	100	UM
Anthracene	120-12-7	5.91	23.50	96	U
Fluoranthene	206-44-0	7.23	78.90	99	UM
Pyrene	129-00-0	7.53	63.60	99	UM
Benzo[a]anthracene	56-55-3	9.24	49.60	96	UM
Chrysene	218-01-9	9.29	42.40	98	UM
Benzo[b]fluoranthene	205-99-2	10.79	43.30	98	UM
Benzo[k]fluoranthene	207-08-9	10.82	18.50	94	UM
Benzo[a]pyrene	50-32-8	11.22	37.50	97	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	21.30	89	UM
Dibenzo[a,h]anthracene	53-70-3	12.64	7.25	94	UM
Benzo[g,h,i]perylene	191-24-2	12.94	17.50	99	UM
Total (USEPA16) PAHs	-	-	466.73	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	97
Phenanthrene-d10	97
Chrysene-d12	106
Perylene-d12	122

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	92
Terphenyl-d14	93

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-08/1 0.2 (NVM)	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121354	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.42	0.13	70	**U**
Acenaphthylene	208-96-8	4.47	0.78	99	U
Acenaphthene	83-32-9	-	< 0.09	-	U
Fluorene	86-73-7	-	< 0.09	-	U
Phenanthrene	85-01-8	5.86	0.63	99	U
Anthracene	120-12-7	5.91	0.87	99	U
Fluoranthene	206-44-0	7.23	0.80	99	U
Pyrene	129-00-0	7.53	1.70	99	U
Benzo[a]anthracene	56-55-3	9.24	0.57	M	U
Chrysene	218-01-9	9.29	0.37	66	U
Benzo[b]fluoranthene	205-99-2	10.78	1.37	93	U
Benzo[k]fluoranthene	207-08-9	10.82	0.34	91	U
Benzo[a]pyrene	50-32-8	11.22	2.06	99	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	1.81	92	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	U
Benzo[g,h,i]perylene	191-24-2	12.94	4.27	99	U
Total (USEPA16) PAHs	-	-	< 15.90	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	106
Phenanthrene-d10	107
Chrysene-d12	109
Perylene-d12	112

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	97

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-08/2 0.6 (NVM)	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121355	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.42	0.23	79	**U**
Acenaphthylene	208-96-8	4.47	5.20	95	U
Acenaphthene	83-32-9	4.59	6.32	100	U
Fluorene	86-73-7	4.99	6.20	97	U
Phenanthrene	85-01-8	5.86	11.10	96	U
Anthracene	120-12-7	5.91	13.40	94	U
Fluoranthene	206-44-0	7.24	48.10	100	U
Pyrene	129-00-0	7.53	74.30	99	U
Benzo[a]anthracene	56-55-3	9.24	13.90	93	U
Chrysene	218-01-9	9.29	14.20	95	U
Benzo[b]fluoranthene	205-99-2	10.78	15.90	94	U
Benzo[k]fluoranthene	207-08-9	10.82	5.72	92	U
Benzo[a]pyrene	50-32-8	11.22	16.90	99	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	10.86	92	U
Dibenzo[a,h]anthracene	53-70-3	12.64	2.68	84	U
Benzo[g,h,i]perylene	191-24-2	12.94	13.10	98	U
Total (USEPA16) PAHs	-	-	258.20	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	99
Phenanthrene-d10	98
Chrysene-d12	110
Perylene-d12	126

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-07/1 0.2	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121356	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	2.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.42	20.60	100	**UM**
Acenaphthylene	208-96-8	4.47	7.45	98	U
Acenaphthene	83-32-9	4.59	17.90	98	UM
Fluorene	86-73-7	4.98	10.70	96	UM
Phenanthrene	85-01-8	5.86	39.80	98	UM
Anthracene	120-12-7	5.91	37.40	98	U
Fluoranthene	206-44-0	7.23	63.00	100	UM
Pyrene	129-00-0	7.52	89.70	99	UM
Benzo[a]anthracene	56-55-3	9.23	15.90	96	UM
Chrysene	218-01-9	9.28	16.00	93	UM
Benzo[b]fluoranthene	205-99-2	10.78	18.80	94	UM
Benzo[k]fluoranthene	207-08-9	10.82	7.44	94	UM
Benzo[a]pyrene	50-32-8	11.22	21.10	99	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	17.40	94	UM
Dibenzo[a,h]anthracene	53-70-3	12.64	1.74	55	UM
Benzo[g,h,i]perylene	191-24-2	12.94	25.60	76	UM
Total (USEPA16) PAHs	-	-	410.21	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	105
Acenaphthene-d10	107
Phenanthrene-d10	106
Chrysene-d12	112
Perylene-d12	125

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	89
Terphenyl-d14	95

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Job 114612 Blank (NVM)	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121357	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**U**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	U
Fluorene	86-73-7	-	< 0.08	-	U
Phenanthrene	85-01-8	-	< 0.08	-	U
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	U
Pyrene	129-00-0	-	< 0.08	-	U
Benzo[a]anthracene	56-55-3	-	< 0.08	-	U
Chrysene	218-01-9	-	< 0.08	-	U
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	U
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	U
Benzo[a]pyrene	50-32-8	-	< 0.08	-	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	U
Total (USEPA16) PAHs	-	-	< 1.28	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	102
Phenanthrene-d10	99
Chrysene-d12	80
Perylene-d12	72

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Reference Material (% Recovery (N	**Job Number:**	S11_4612M
LIMS ID Number:	CL1121358	**Date Booked in:**	02-Jun-11
QC Batch Number:	111224	**Date Extracted:**	09-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Jun-11
Directory:	0911PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit	Accr. code
Naphthalene	91-20-3	3.42	94	97	**U**
Acenaphthylene	208-96-8	4.47	92	100	U
Acenaphthene	83-32-9	4.59	96	99	U
Fluorene	86-73-7	4.98	98	95	U
Phenanthrene	85-01-8	5.86	93	99	U
Anthracene	120-12-7	5.91	104	99	U
Fluoranthene	206-44-0	7.23	92	99	U
Pyrene	129-00-0	7.52	87	98	U
Benzo[a]anthracene	56-55-3	9.23	97	100	U
Chrysene	218-01-9	9.29	94	99	U
Benzo[b]fluoranthene	205-99-2	10.78	95	100	U
Benzo[k]fluoranthene	207-08-9	10.82	94	97	U
Benzo[a]pyrene	50-32-8	11.22	96	100	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	97	99	U
Dibenzo[a,h]anthracene	53-70-3	12.64	97	98	U
Benzo[g,h,i]perylene	191-24-2	12.94	103	96	U
Total (USEPA16) PAHs	-	-	96	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	103
Phenanthrene-d10	103
Chrysene-d12	104
Perylene-d12	103

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	97

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Gasoline Range Organics
(BTEX and Aliphatic Carbon Ranges)

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: s11_4612
Directory: D:\TES\DATA\Y2011\0609HSA_GC9\060911 2011-06-09 14-11-00\034F2901.D
Method: Headspace GCFID
Accreditation Code: N

Matrix: Soil
Date Booked in: 02-Jun-11
Date extracted: 09-Jun-11
Date Analysed: 09-Jun-11, 23:1

			Concentration, (mg/kg) - as dry weight.					Aliphatics				
	Sample ID	Client ID	Benzene	Toluene	Ethyl benzene	m/p-Xylene	o-Xylene	C5 - C6	>C6 - C7	>C7 - C8	>C8 - C10	Total GRO
*	CL1121355	MW11-08/2 0.6 (NVM)	<0.011	<0.011	<0.011	0.012	<0.011	<0.2	<0.2	<0.2	<0.2	<0.2
*	CL1121356	MW11-07/1 0.2	<0.012	<0.012	<0.012	<0.012	<0.012	<0.2	<0.2	<0.2	<0.2	<0.2
*	CL1121357	Job 114612 Blank (NVM)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1
*	CL1121358	Reference Material (% Recovery (NVM)	0.036	0.189	0.041	0.132	<0.010	0.3	0.2	<0.2	<0.2	1.1

Note: Benzene elutes between C6 and C7, toluene elutes between C7 and C8, ethyl benzene and the xylenes elute between C8 and C9.
Each BTEX compund is deducted from the appropriate band to give the aliphatic fractions, however aromatic compounds may still be contributing to these fractions

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: S11_4612
QC Batch Number: 111224
Directory: D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\084B4901.D
Method: Ultra Sonic

Separation: Silica gel
Eluents: Hexane, DCM

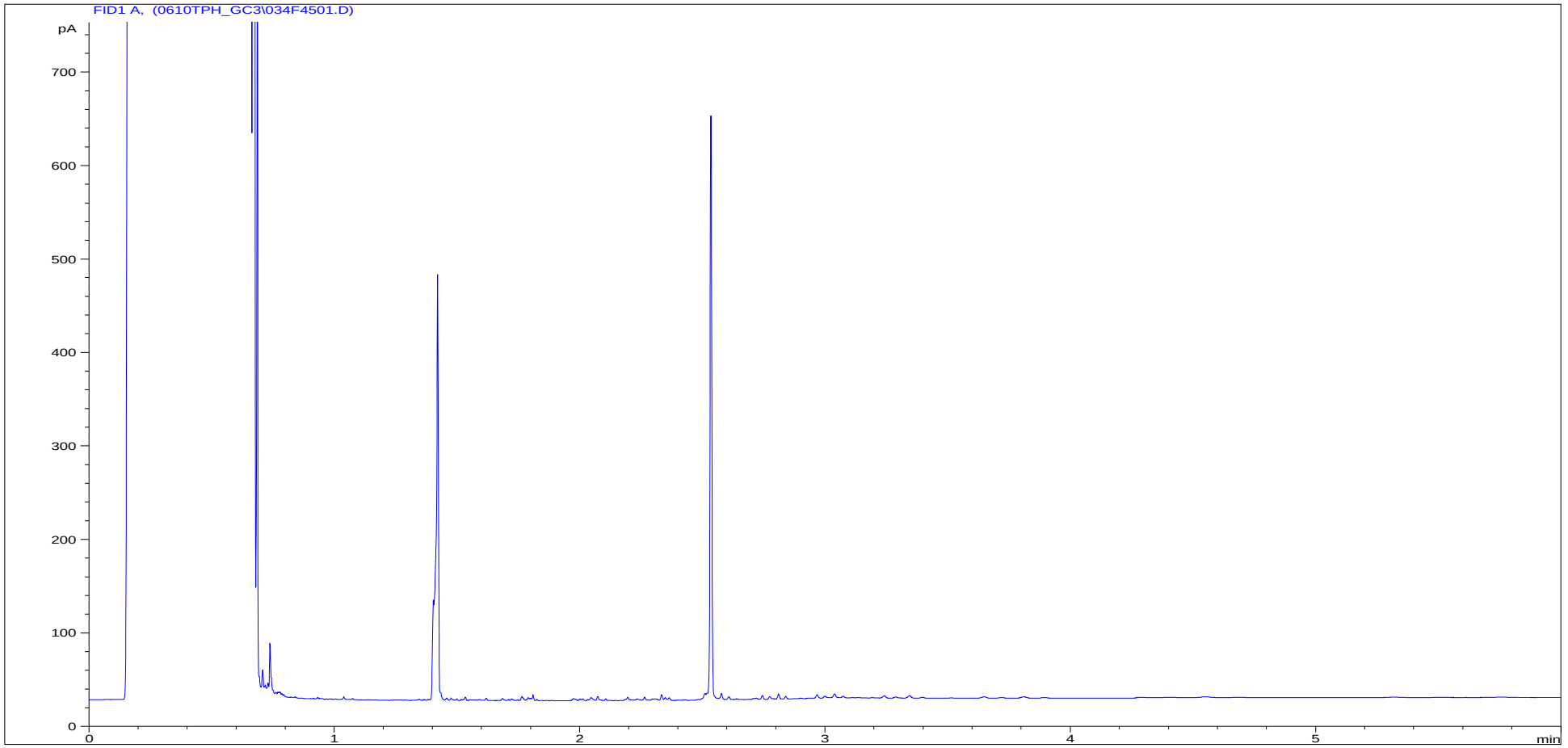
Matrix: Soil
Date Booked in: 02-Jun-11
Date Extracted: 09-Jun-11
Date Analysed: 10-Jun-11

This sample data is not MCERTS accredited.
*** This sample data is not ISO17025 accredited.**

		Concentration, (mg/kg) - as dry weight.											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
CL1121355	MW11-08/2 0.6 (NVM)	<4	<4	75.1	12.3	1910	659	2880	2170	1260	1960	6170	4910
CL1121356	MW11-07/1 0.2	<5	8.82	16.7	35.8	389	259	1330	1160	628	1310	2390	2810
CL1121357	Job 114612 Blank (NVM)	<4	<4	<4	<4	<4	<4	<4	<4	<8.76	<8.76	<20	<20
CL1121358	Reference Material (% Recovery (NVM)	96	98	96	98	96	98	96	98	96	98	96	98

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

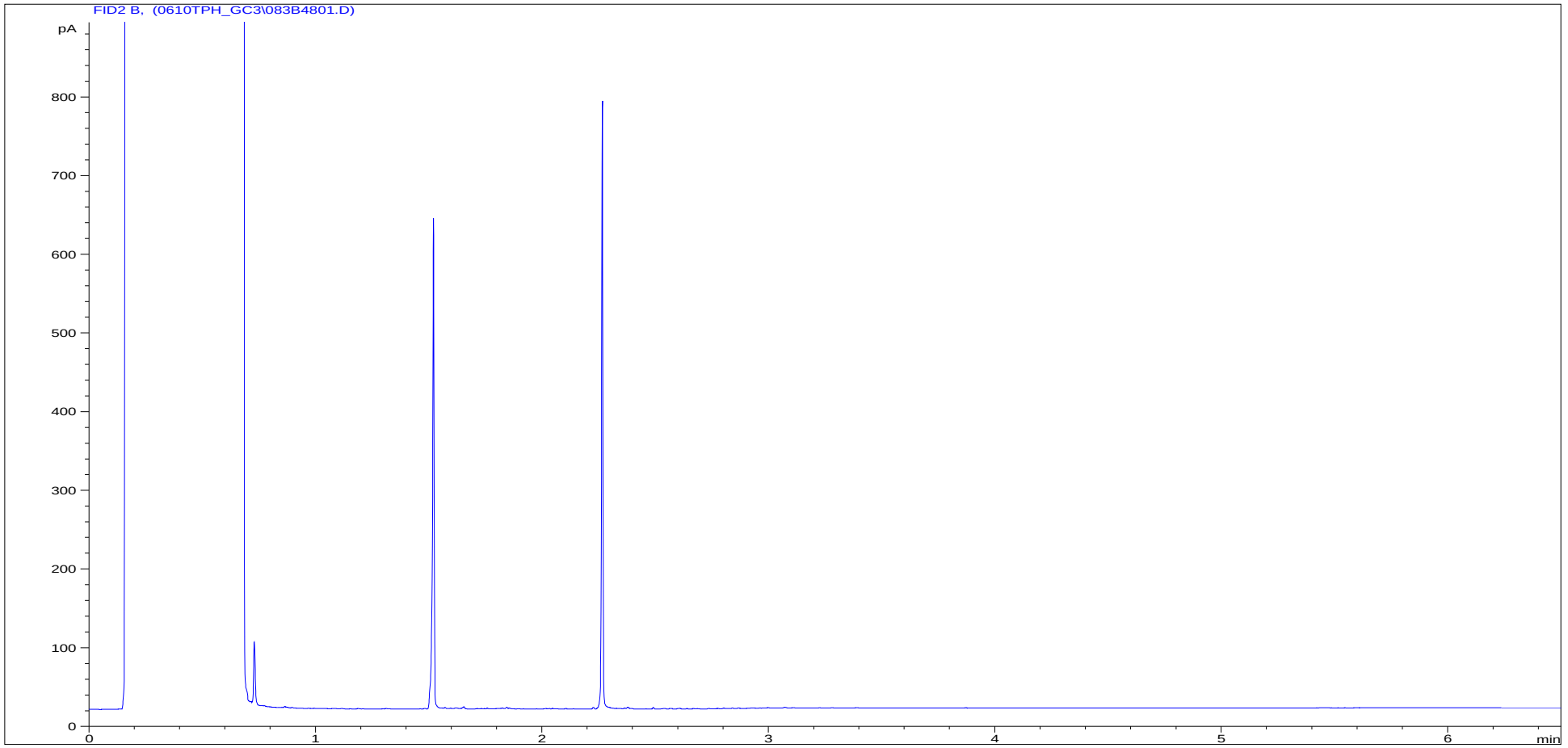
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	BLKS111224ALI	**Job Number:**	S11_4612M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Job 114612 Blank (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\034F4501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

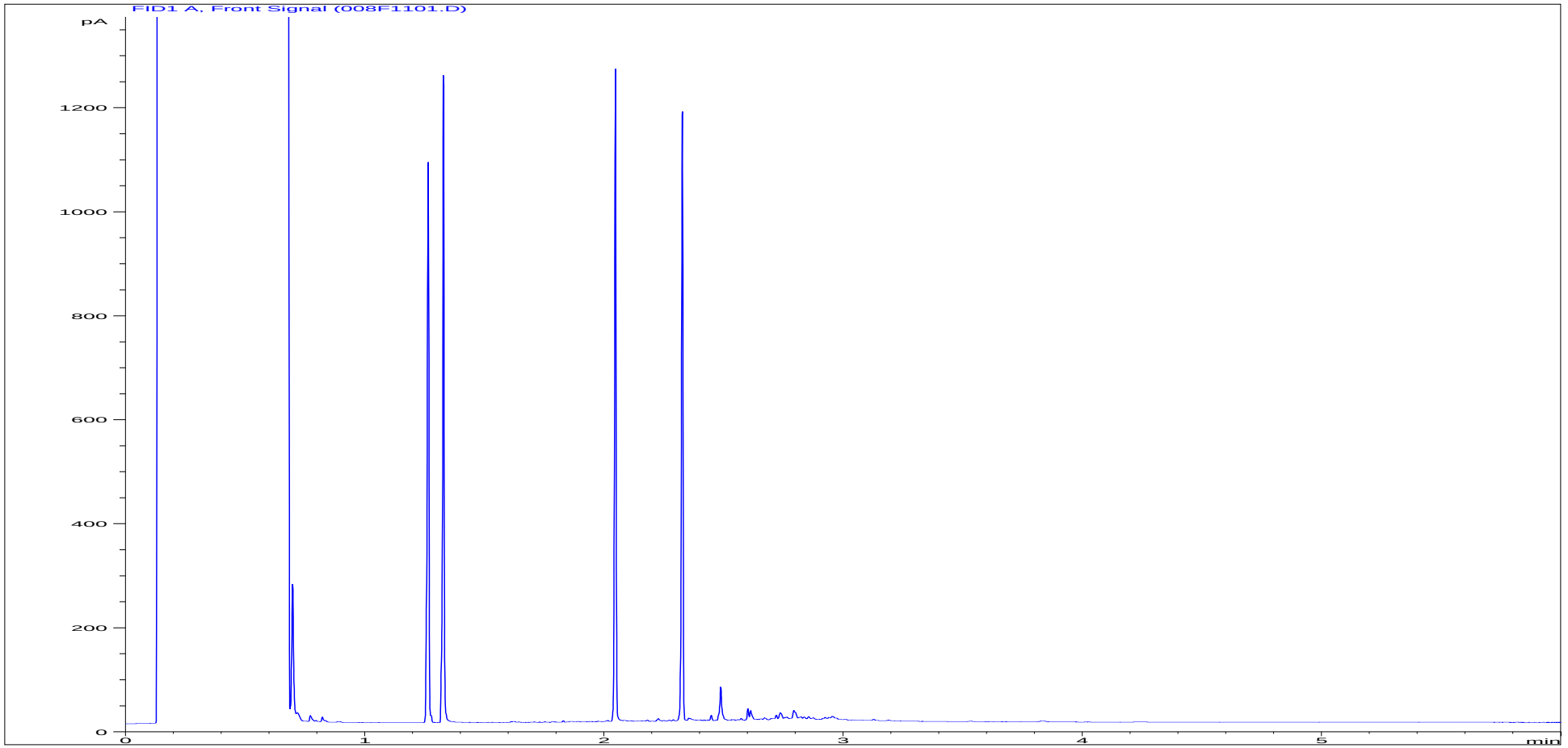
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	BLKS111224ARO	**Job Number:**	S11_4612M
Multiplier:	11.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Job 114612 Blank (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\083B4801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

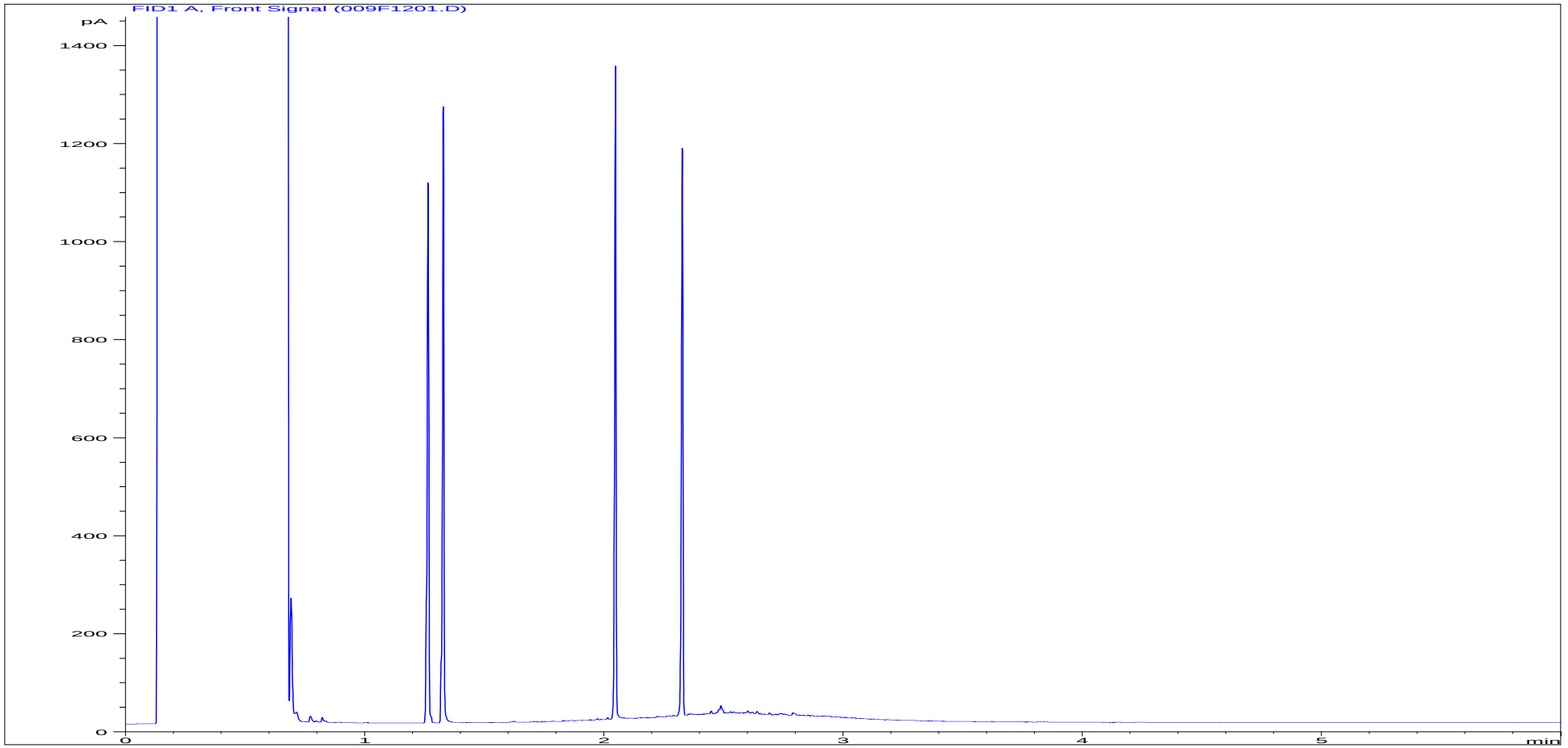
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121349	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-03/1 0.4
Acquisition Date/Time:	09-Jun-11, 17:36:30		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\008F1101.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

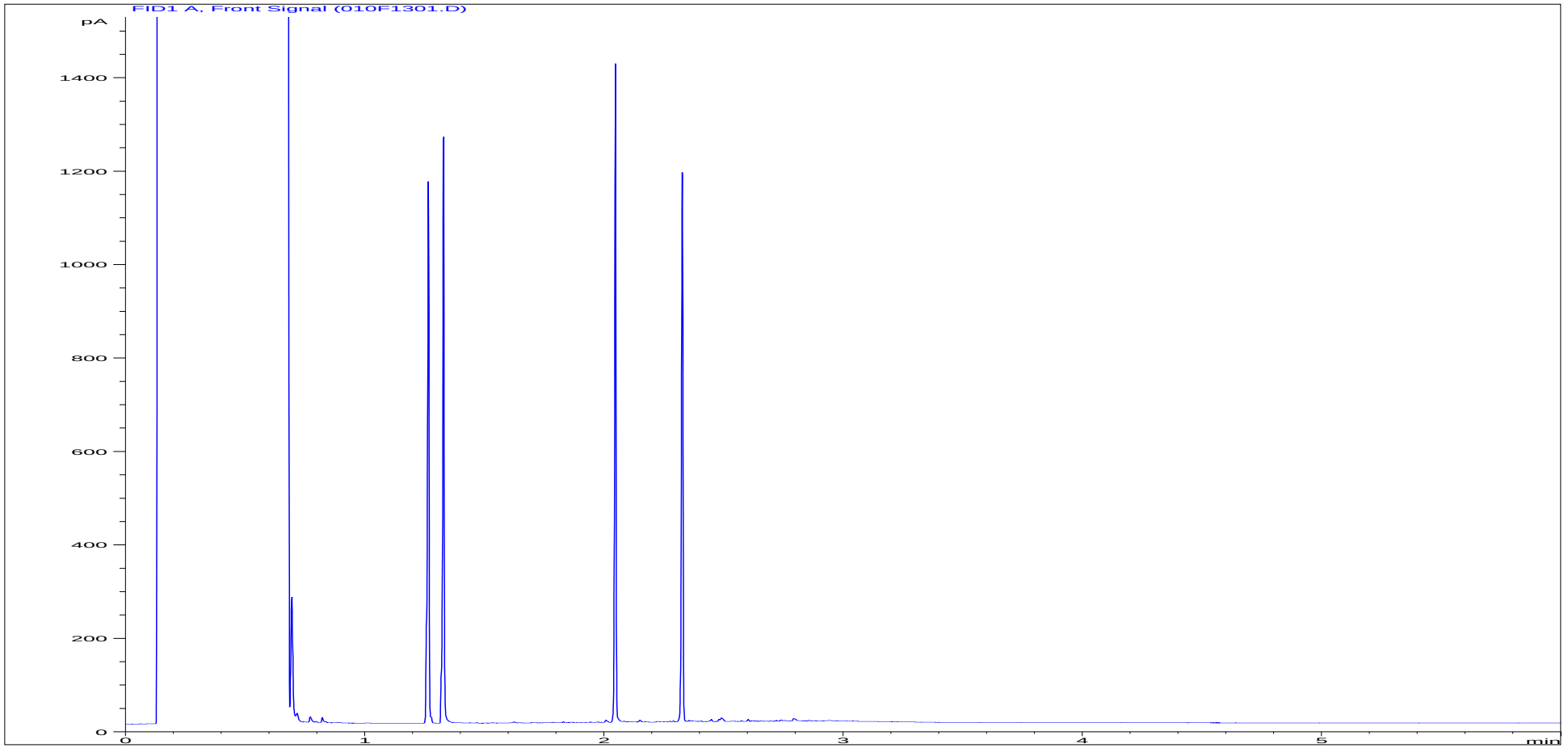
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121350	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-15/1 0.25
Acquisition Date/Time:	09-Jun-11, 17:48:37		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\009F1201.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

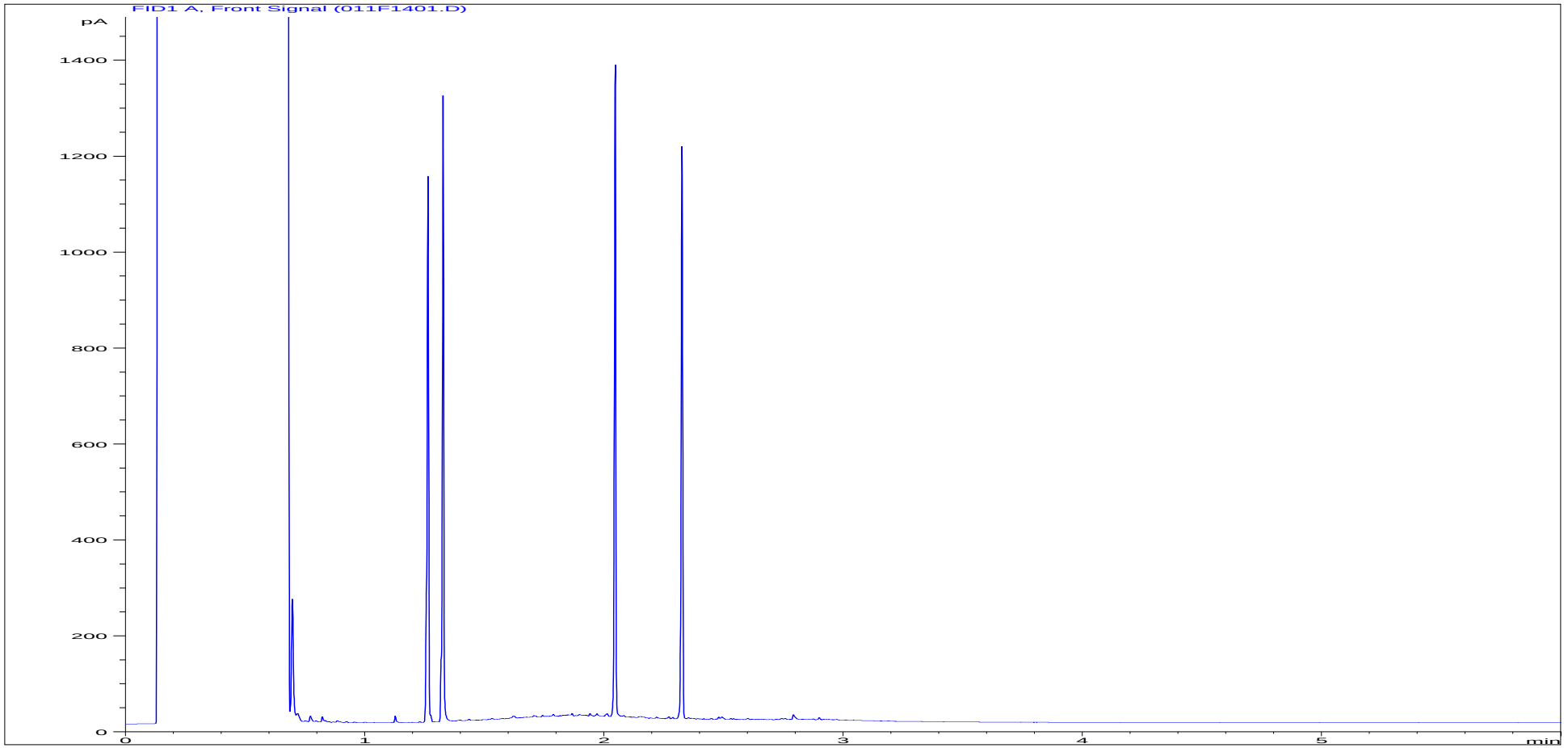
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121351	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-10/1 0.4
Acquisition Date/Time:	09-Jun-11, 18:00:44		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\010F1301.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

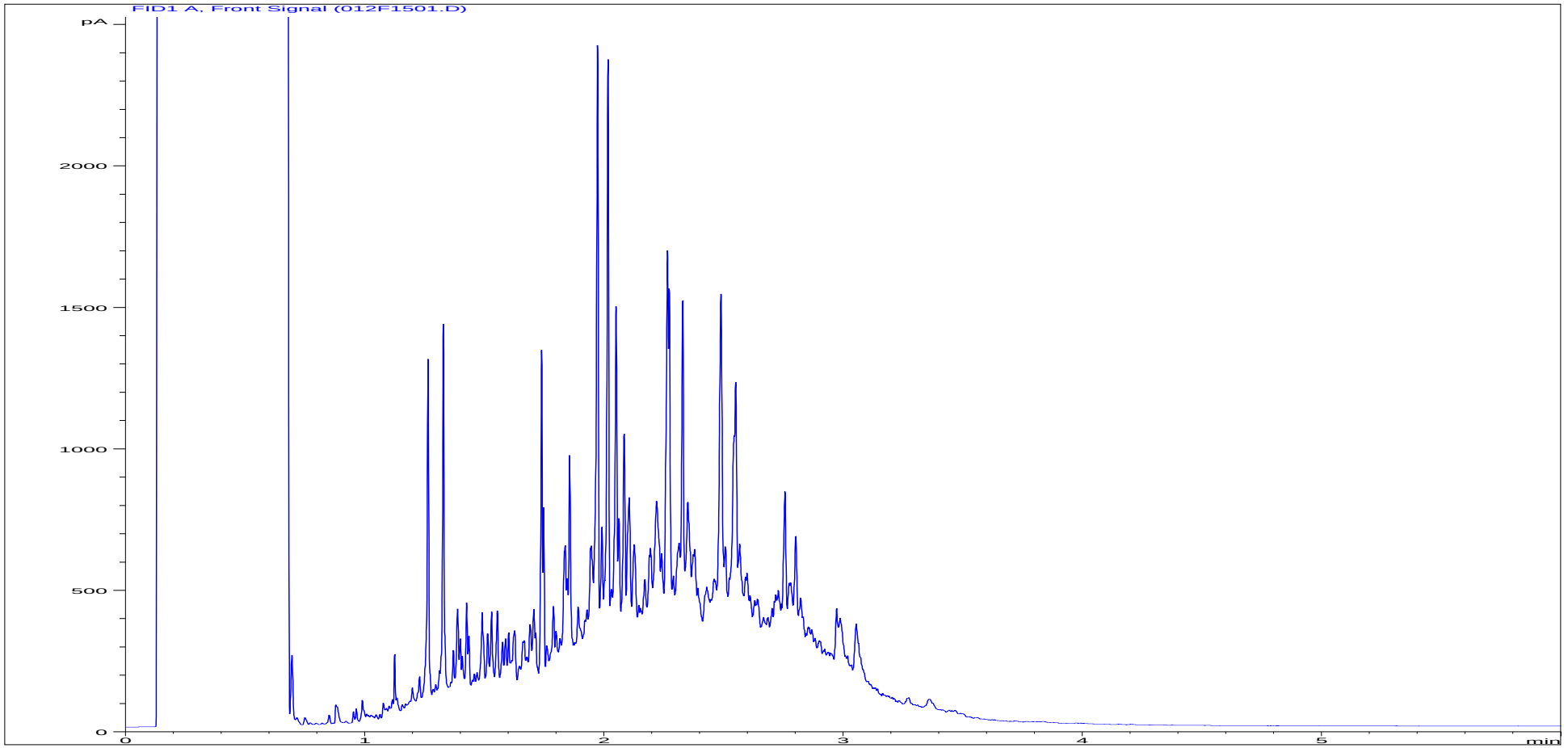
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121352	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-04/1 0.3
Acquisition Date/Time:	09-Jun-11, 18:12:48		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\011F1401.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

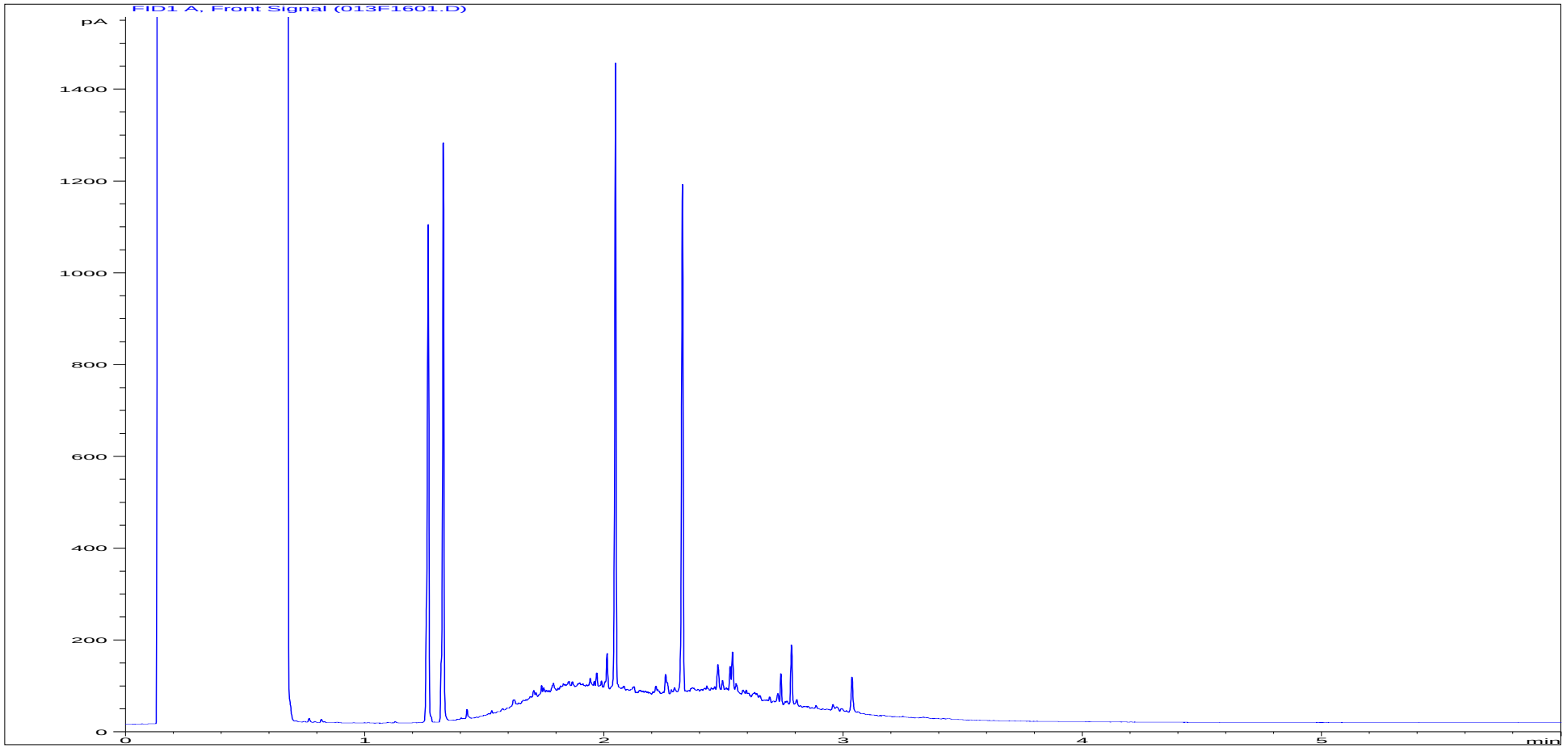
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121353	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	TP11-02/1 0.3
Acquisition Date/Time:	09-Jun-11, 18:24:53		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\012F1501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

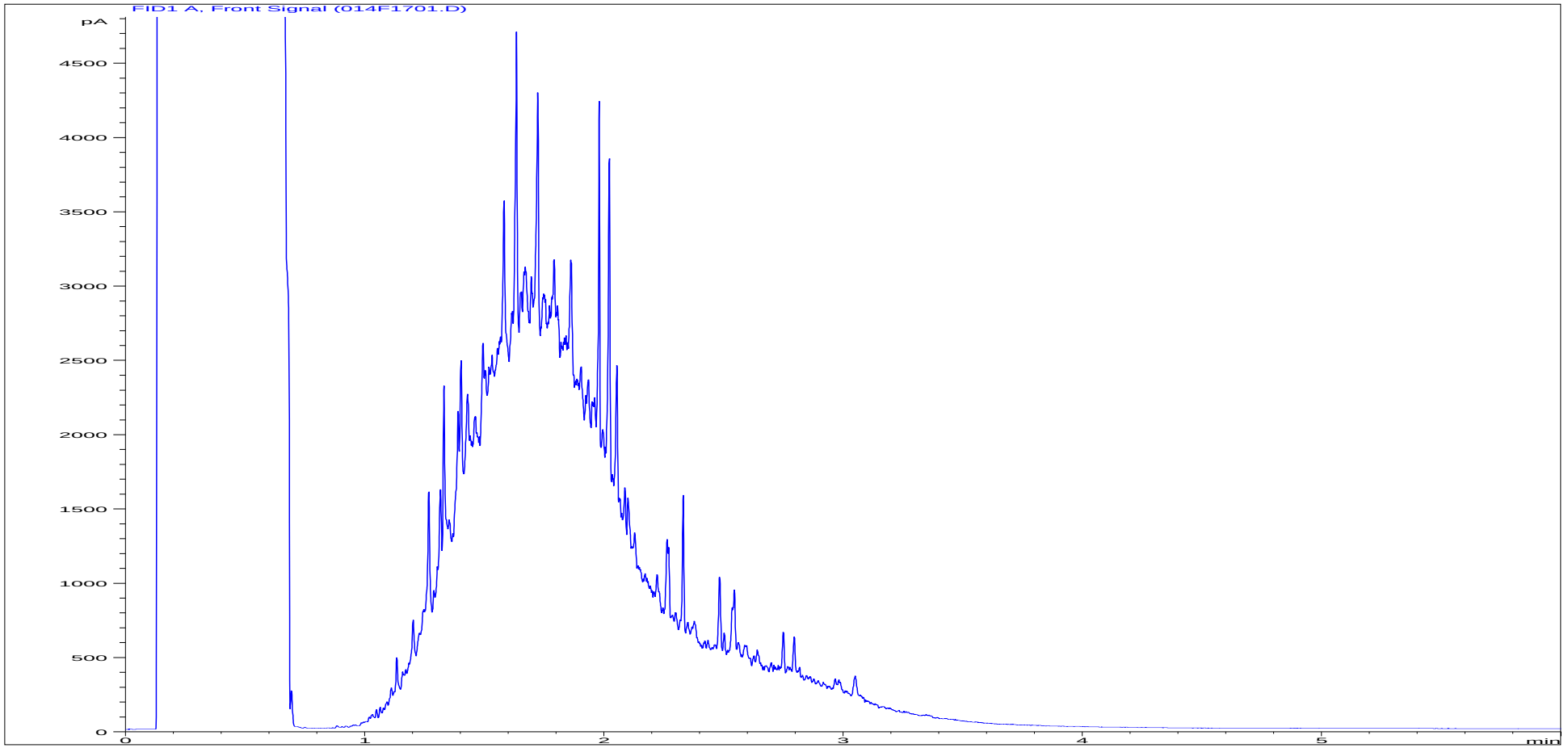
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121354	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-08/1 0.2 (NVM)
Acquisition Date/Time:	09-Jun-11, 18:37:05		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\013F1601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

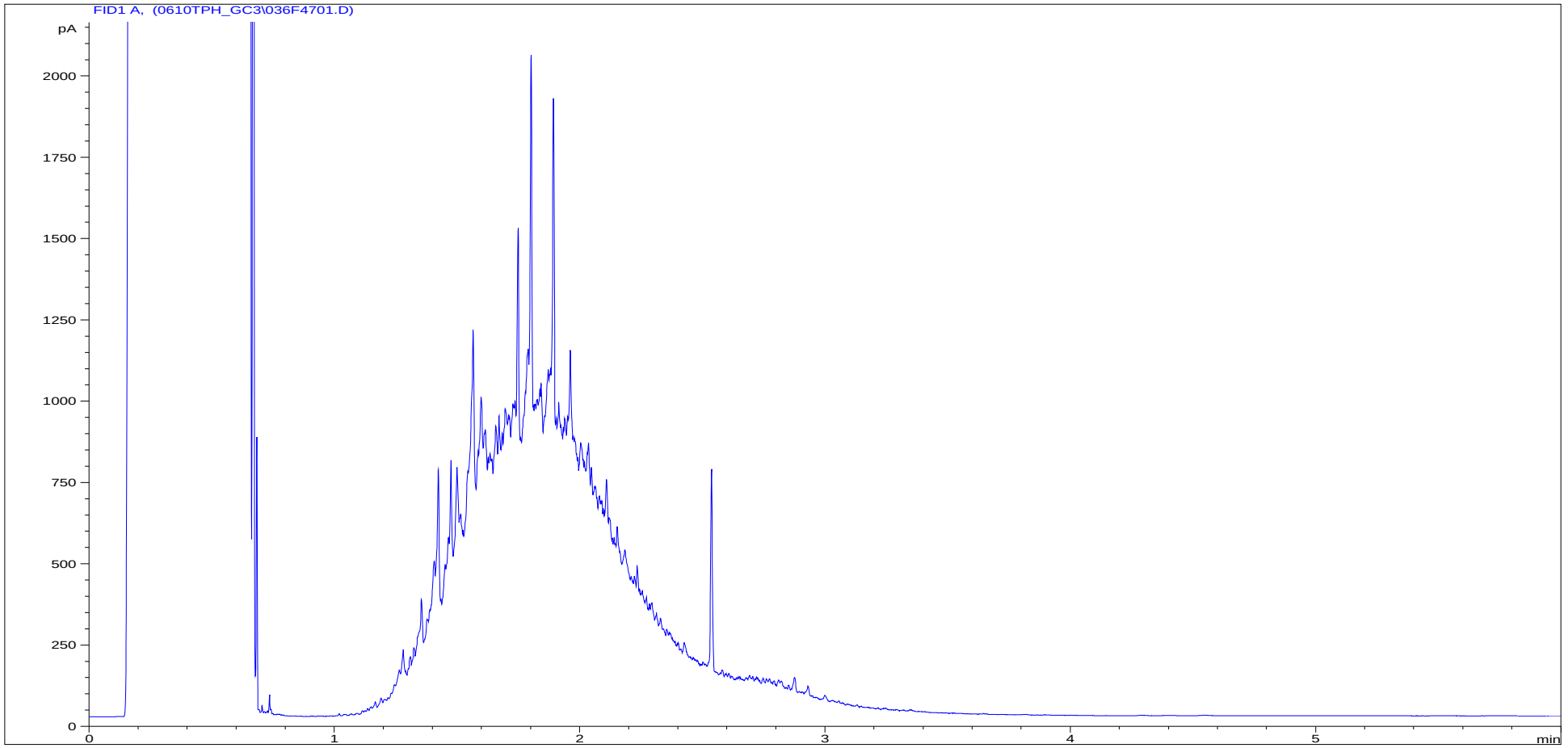
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121355	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-08/2 0.6 (NVM)
Acquisition Date/Time:	09-Jun-11, 18:49:08		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\014F1701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

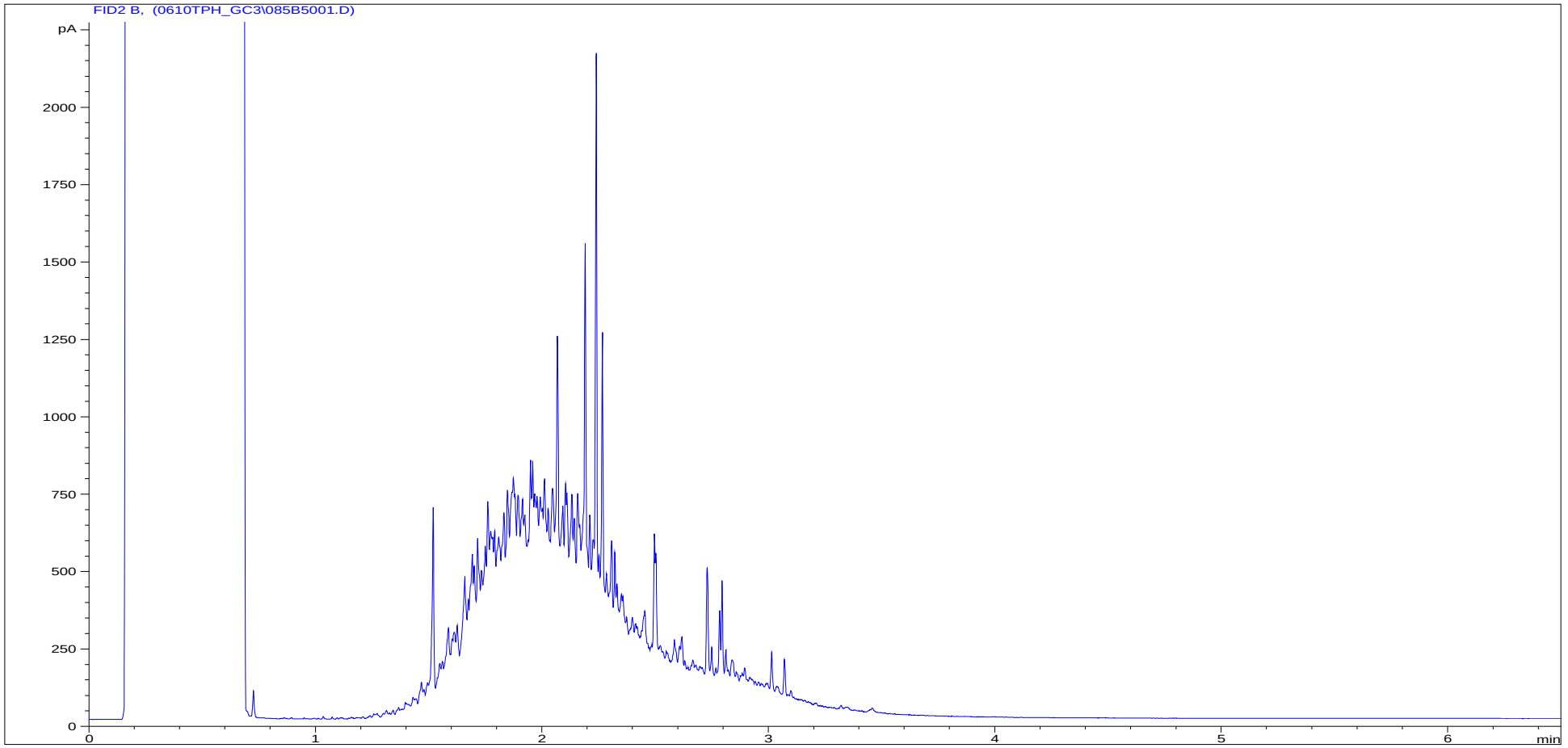
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1121355ALI	**Job Number:**	S11_4612M
Multiplier:	13.68	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-08/2 0.6 (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\036F4701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

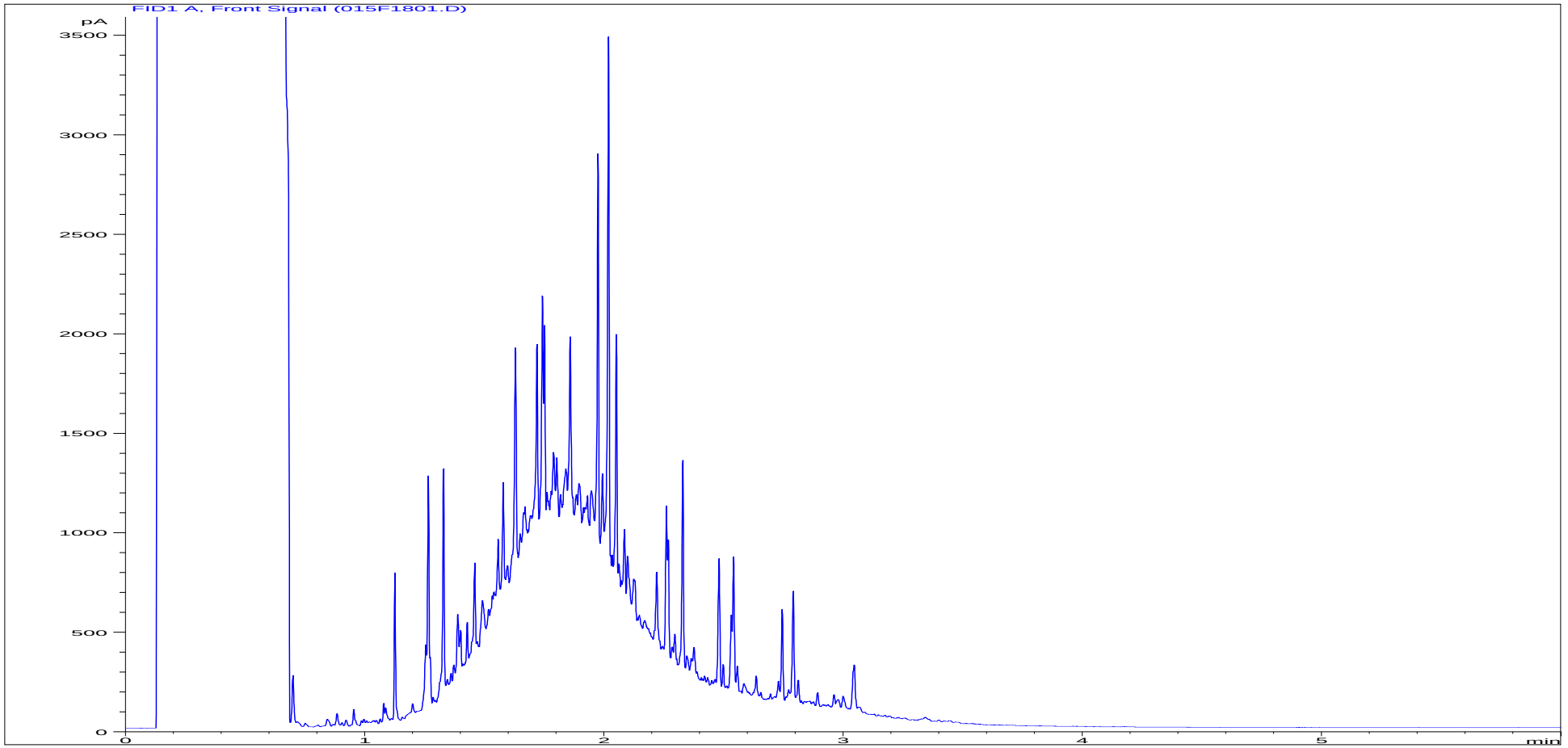
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1121355ARO	**Job Number:**	S11_4612M
Multiplier:	10.8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-08/2 0.6 (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\085B5001.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

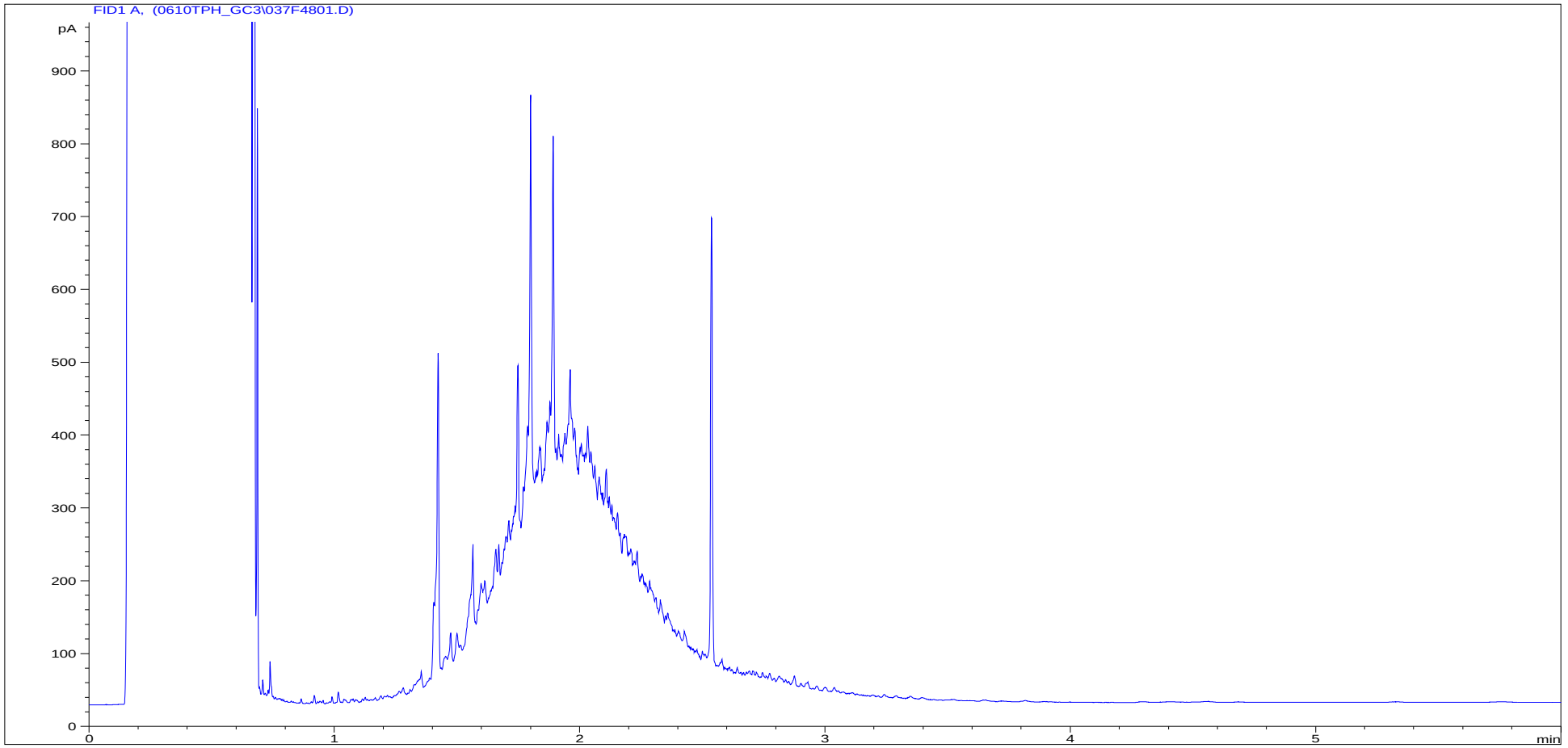
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121356	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-07/1 0.2
Acquisition Date/Time:	09-Jun-11, 19:01:07		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\015F1801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

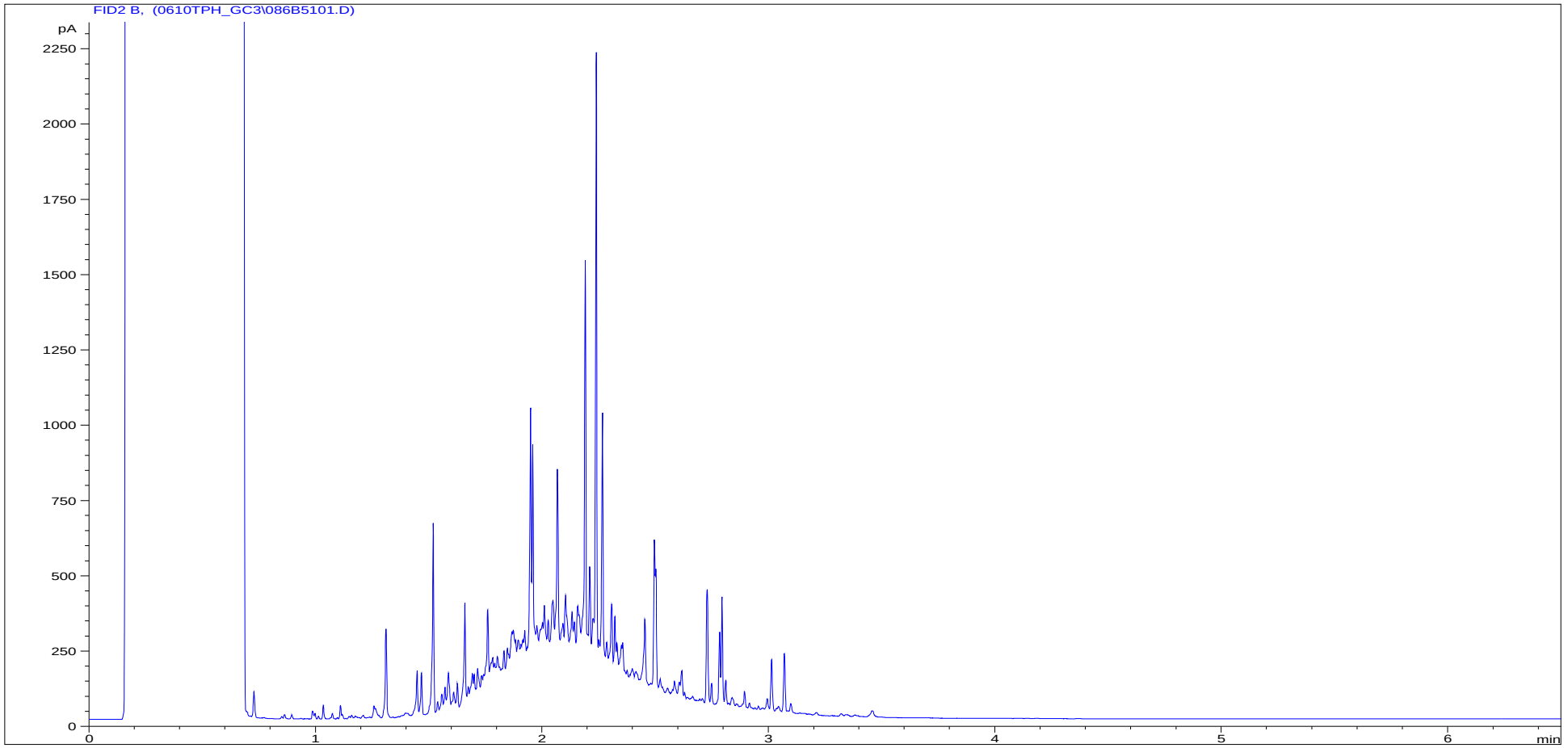
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1121356ALI	**Job Number:**	S11_4612M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-07/1 0.2
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\037F4801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

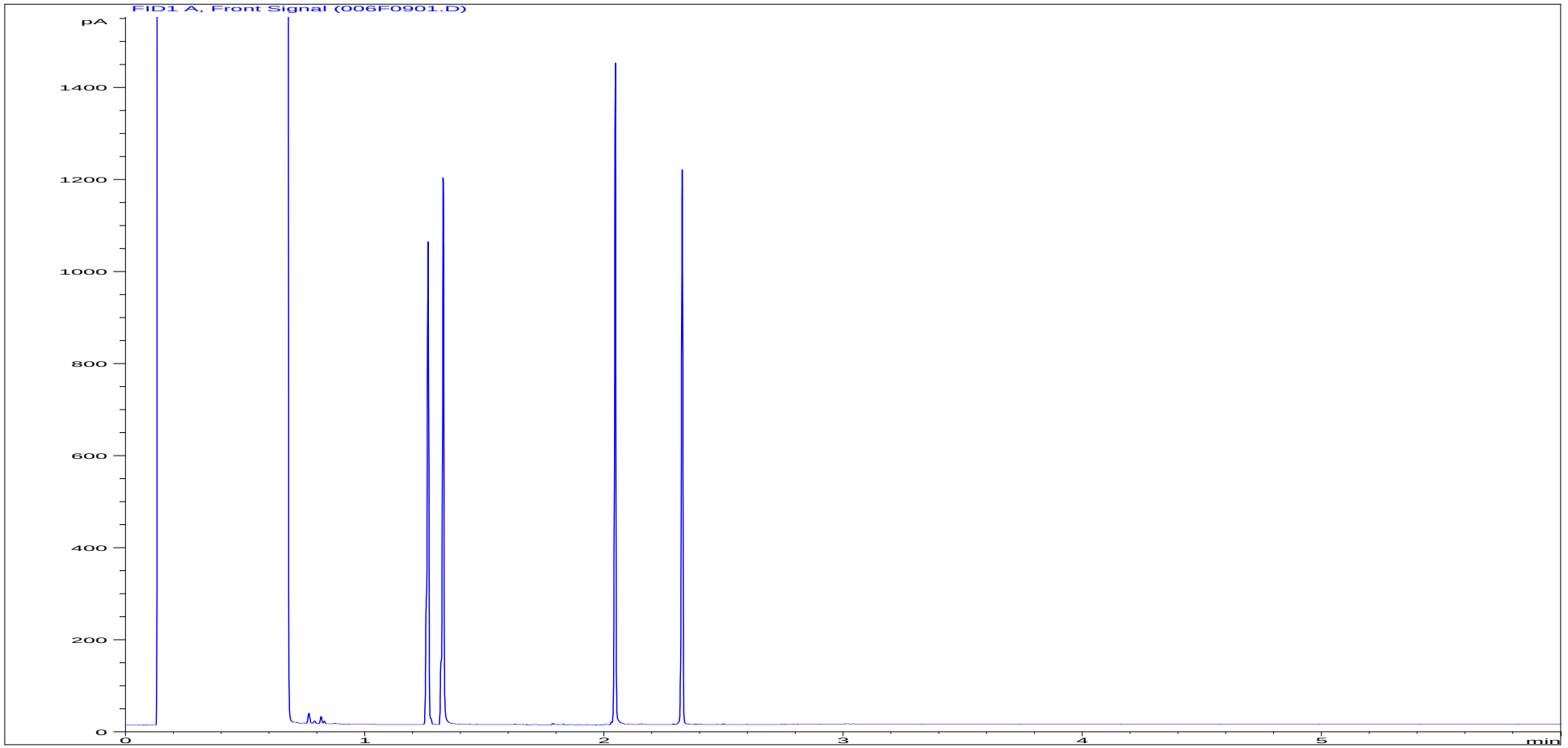
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1121356ARO	**Job Number:**	S11_4612M
Multiplier:	11.4	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-07/1 0.2
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\086B5101.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

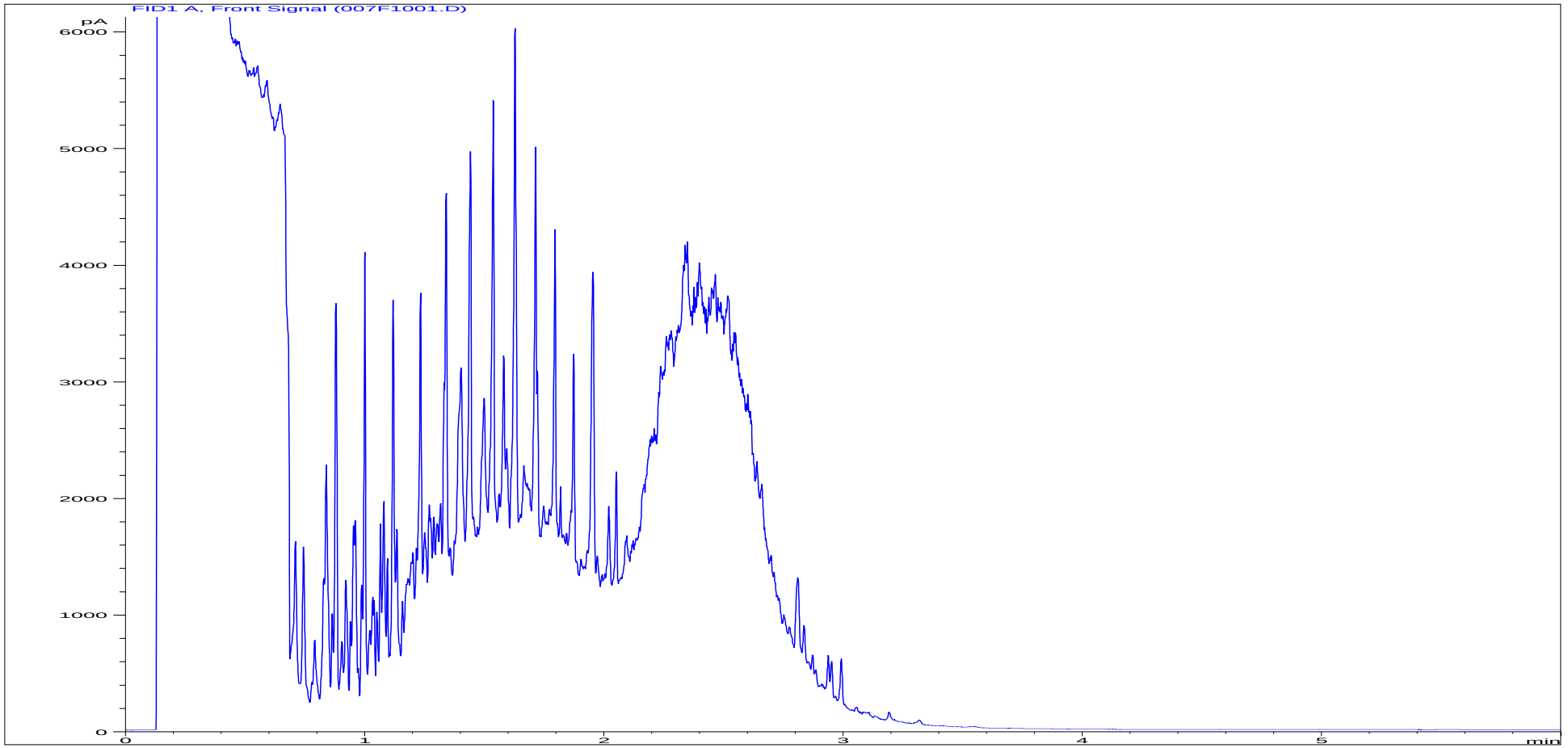
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121357	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Job 114612 Blank (NVM)
Acquisition Date/Time:	09-Jun-11, 17:11:58		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\006F0901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

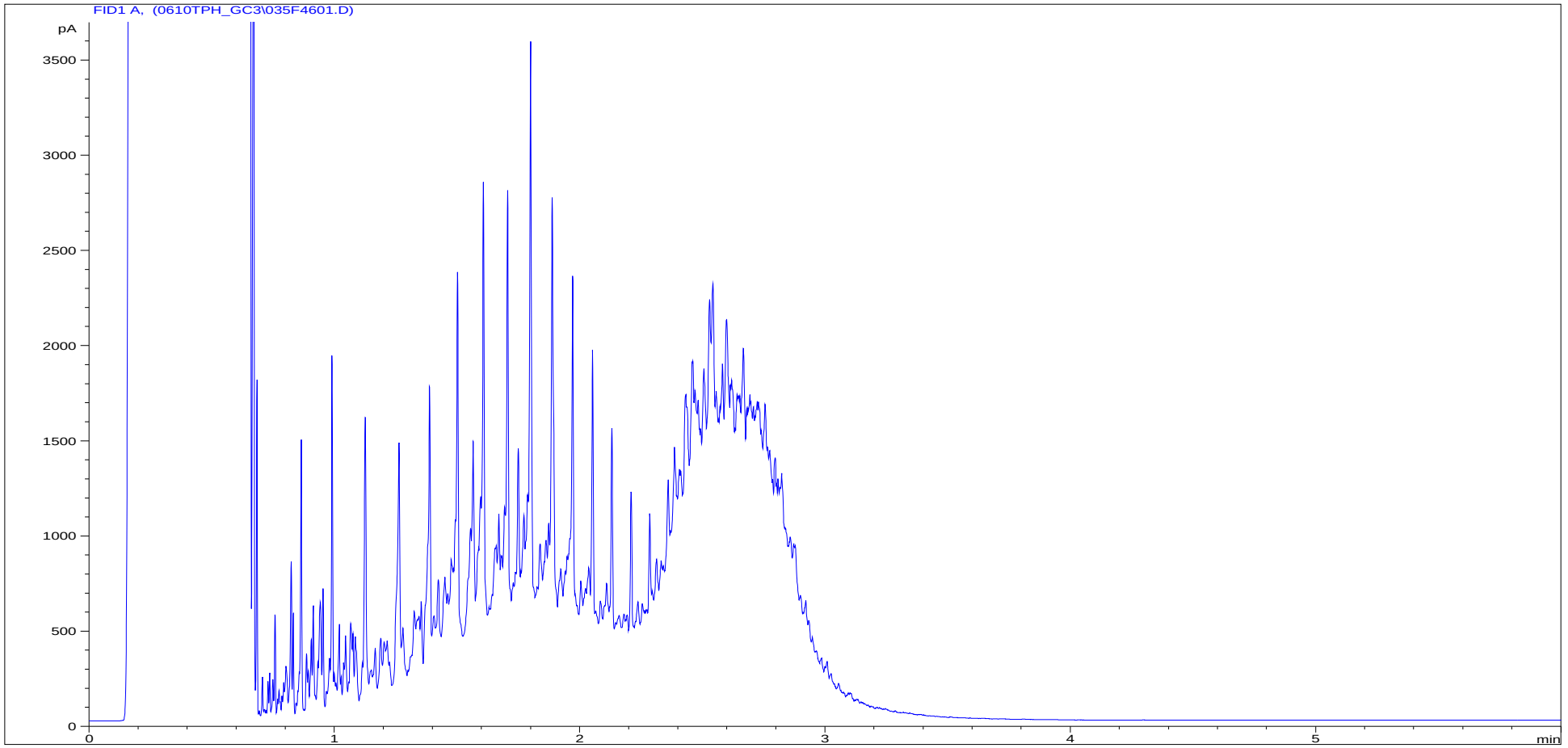
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1121358	**Job Number:**	S11_4612M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	09-Jun-11, 17:24:07		
Datafile:	D:\TES\DATA\Y2011\0609TPH_GC14\060911 2011-06-09 15-33-27\007F1001.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

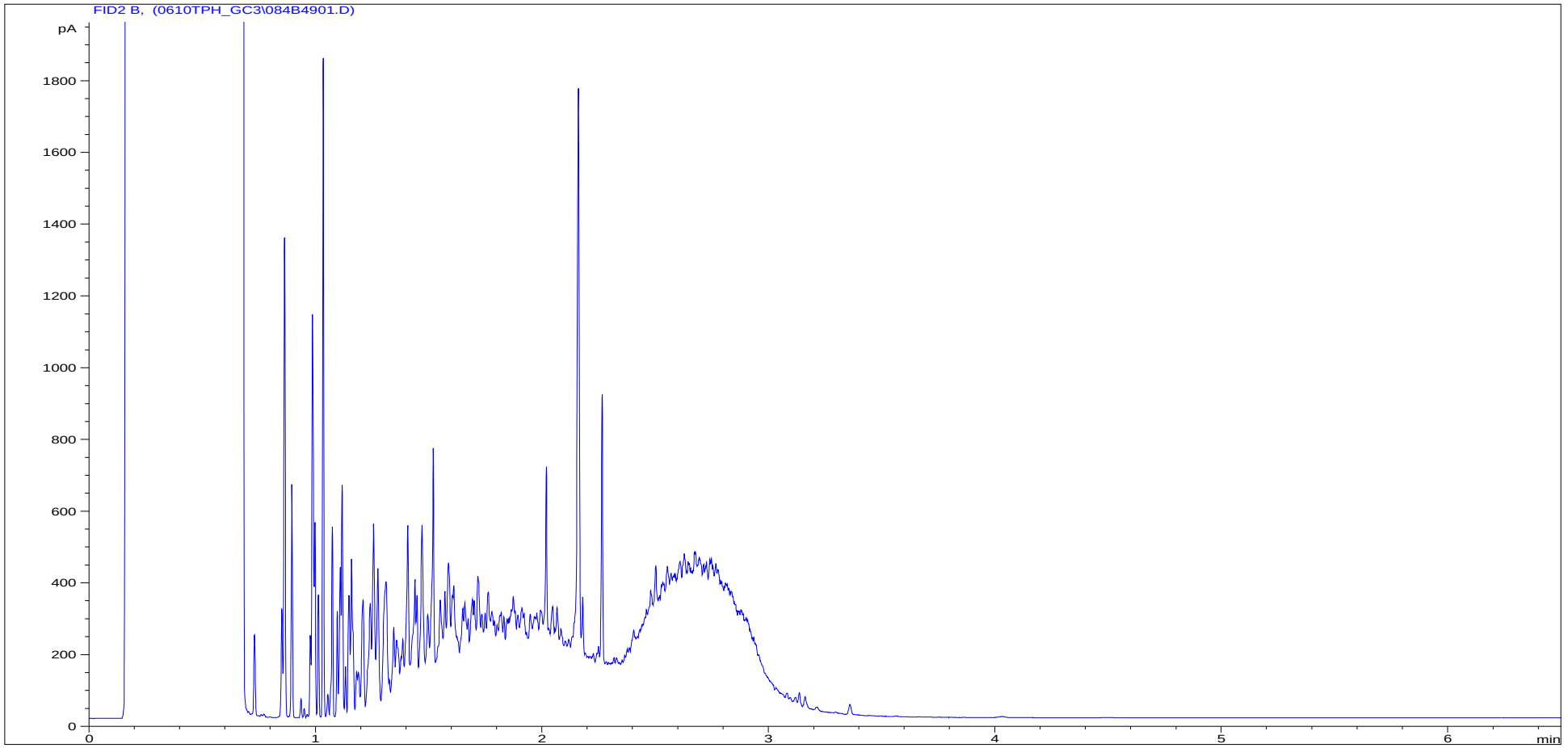
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	RMS111224ALI	**Job Number:**	S11_4612M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\035F4601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	RMS111224ARO	**Job Number:**	S11_4612M
Multiplier:	11.4	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	10-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0610TPH_GC3\084B4901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

ESG Asbestos Limited

Certificate of Analysis for Asbestos in Soils

UKAS TESTING
1089

ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

Client:	Scientifics Environmental Chemistry	Page 1 of 1
Address:	Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent	Report No:ANO-0488-1593
For the attention of :	Worley Parsons Komex	Report Date:13/06/2011
Site Address:	Maelor Works	Project Number:S114612

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	Sample Type	DEPTH (M)	TEST DATE	% asbestos by dry weight**	ASBESTOS FIBRE TYPES IDENTIFIED
CL/1121349	23/05/11	MW11-03/1 0.4			13/06/2011	Screen Only	No Asbestos Identified in Sample
CL/1121352	24/05/11	MW11-04/1 0.3			13/06/2011	Screen Only	No Asbestos Identified in Sample

*Sampling carried out by client ** Detection limit of Method SCI-ASB-020 is 0.001 *** Analysis carried out 200g Qualitative H&S Screen

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Derwent House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

Key

NADIS = No Asbestos Detected in Sample

Authorised Signatory:

Name: Kate Lovatt

Position: System Support & Quality Manager

ESG Asbestos Limited is a wholly owned subsidiary of Environmental Scientifics Group Limited (ESG), registered in England and Wales, registered company 04951688.

Where individual results are flagged see report notes for status.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S114612

Customer Worley Parsons Komex
Site Maelor Works
Report No S114612

Consignment No 21164
Date Logged 02-Jun-2011

Report Due 10-Jun-2011

ID Number	Description	MethodID	AMMAR	CustServ	ELESULP	GROHSA		ICPBOR	ICPMSS									ICPSOIL	ICPWSS	KONECL	LOI(%MM)	MCertS	PAHMSUS	PHEHPLC	PHSOIL	SFAPI	
		Sampled	Exchangeable Ammonium as N (AR)	Report B	Elemental Sulphur	GRO	GRO (AA)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Iron	SO4-- (H2O sol) mg/l	Chloride (2:1)	LOI % @ 450°C	MCertS Analysis	PAH by MS.16(0.08)	Phenol - HPLC	pH units (AR)	Cyanide(Complex) (AR)	Cyanide(Free) (AR)
Accredited to ISO17025				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
CL/1121349	MW11-03/1 0.4	23/05/11				E																					
CL/1121350	MW11-15/1 0.25	23/05/11				E																					
CL/1121351	TP11-10/1 0.4	24/05/11				E																					
CL/1121352	MW11-04/1 0.3	24/05/11				E																					
CL/1121353	TP11-02/1 0.3	25/05/11				E																					
CL/1121354	MW11-08/1 0.2	25/05/11				E																					
CL/1121355	MW11-08/2 0.6	25/05/11																									
CL/1121356	MW11-07/1 0.2	26/05/11																									
CL/1121357	Job 114612 Blank																										
CL/1121358	Reference Material (% Recovery																										

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S114612

Customer Worley Parsons Komex
Site Maelor Works
Report No S114612

Consignment No 21164
Date Logged 02-Jun-2011

Report Due 10-Jun-2011

ID Number	Description	MethodID	SFAPI		SSP3	Sub002a	TMSS	TPHFIDUS		TPHUSSI	VOCHSAS
		Sampled	Cyanide(Total) (AR)	Thiocyanate(SCN) (AR)	Stone Content %	^Asbestos (screen)	Tot.Moisture @ 105C	TPH Band (C10-C35)	TPH by GCFID (AR)	TPH by GCFID (AR/Si)	BTEX-HsaMS analysis
Accredited to ISO17025			✓	✓		✓	✓		✓	✓	✓
CL/1121349	MW11-03/1 0.4	23/05/11									
CL/1121350	MW11-15/1 0.25	23/05/11									
CL/1121351	TP11-10/1 0.4	24/05/11									
CL/1121352	MW11-04/1 0.3	24/05/11									
CL/1121353	TP11-02/1 0.3	25/05/11									
CL/1121354	MW11-08/1 0.2	25/05/11									
CL/1121355	MW11-08/2 0.6	25/05/11									
CL/1121356	MW11-07/1 0.2	26/05/11									
CL/1121357	Job 114612 Blank										
CL/1121358	Reference Material (% Recovery										

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ELESULP	Air Dried	Determination of Elemental Sulphur using Solvent Extraction followed by HPLC detection.
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Air Dried	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	ICPSOIL	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPOES detection
Soil	ICPWSS	Air Dried	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	KONECL	Air Dried	Determination of Chloride in Soil using water extraction at the stated water:soil ratio, discrete colorimetric detection
Soil	LOI(%MM)	Air Dried	Determination of loss on ignition for soil samples at specified temperature by gravimetry
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHEHPLC	As Received	Determination of Phenols by methanol extraction followed by HPLC detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SSP3	As Received	Determination of stones content by dry sieving at the required particle size
Soil	Subcon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	TPHUSSI	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including quantitation of Aromatic and Aliphatic fractions.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis
Unless stated otherwise results are expressed as mg/l
Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Sample Descriptions

Client : Worley Parsons Komex

Site : Maelor Works

Report Number : S11_4612M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1121349	MW11-03/1 0.4	Brown SILT
CL/1121350	MW11-15/1 0.25	Brown Stone SILT
CL/1121351	TP11-10/1 0.4	Brown Stone SILT
CL/1121352	MW11-04/1 0.3	Brown Stone SILT Clay
CL/1121353	TP11-02/1 0.3	Black/Brown Stone SILT
CL/1121354	MW11-08/1 0.2 (NVM)	Brown Silt STONE
CL/1121355	MW11-08/2 0.6 (NVM)	Grey Silt STONE
CL/1121356	MW11-07/1 0.2	Brown Stone SILT

END OF REPORT

Our Ref: EFS/115024M (Ver. 1)
Your Ref: 50065-29

June 23, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

SOIL Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 27/07/11 when they will be discarded. Please call 01283 554547 for an extension of this date.
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

JNColbourne

J Colbourne
Project Co-ordinator
01283 554547

Scientifics, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Scientifics is a trading name of Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/115024M (Ver. 1)

Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 11 samples described in this report were logged for analysis by Scientifics on 15-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 23-Jun-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (80) Results (Pages 5 to 15)
GC-FID Chromatograms (Pages 16 to 26)
Asbestos (Screen) (Page 27)
Analytical and Deviating Sample Overview (Pages 28 to 29)
Table of Method Descriptions (Page 30)
Table of Report Notes (Page 31)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 23-Jun-2011

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105°C unless otherwise stated. (except QC samples)
Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units
Method Codes :		ELESULP	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPSOIL	ICPWSS	PAHMSUS	PHSOIL
Method Reporting Limits :		20	0.2	0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	0.5	16	36	10	0.08	
Accreditation Code:		UM	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM		UM
Laboratory ID Number CL/	**Client Sample Description**	**Elemental Sulphur**	**GRO**	**Boron (H20 Soluble)**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Selenium (MS)**	**Zinc (MS)**	**Iron**	**SO4-- (H2O sol) mg/l**	**PAH by MS.16(0.08)**	**pH units (AR)**
1123244	MW11-13 2.1	<21	<0.2	0.9	9.3	0.23	38.9	23.1	24.3	<0.5	45	<0.5	73	37200	139	Req	8.9
1123245	MW11-13 3.2	344	<0.2	1	5.8	<0.21	15.8	9.3	75.8	<0.5	14.4	<0.5	49.8	17900	211	Req	7.1
1123251	MW11-15 1.0-1.1	<21	<0.3	0.9	11.8	0.25	36.8	24.4	28.5	<0.5	41.5	0.5	68	35000	143	Req	8.1
1123252	MW11-15 3 4.0-4.1	<20	<0.3	1.4	5.7	0.28	37.8	23.2	24.8	<0.5	44.4	<0.5	73.8	35400	161	Req	8.7
1123246	MW11-17 1 0.2	<21	<0.2	0.8	9.3	0.22	31.6	14	73.3	<0.5	24.1	<0.5	59	29800	69	Req	7.4
1123247	MW11-17 2 3.5-3.7	<20	<0.2	0.9	7.4	0.25	35	23.7	27	<0.5	43.1	0.6	72.3	37900	73	Req	8.8
1123248	MW11-18 1 0.4	<20	<0.2	0.9	7.8	0.47	40	38.2	105.7	<0.5	67.5	0.6	1130	20800	167	Req	8.6
1123249	MW11-18 2 1.1-1.2	<21	<0.2	1.4	7	0.59	46.1	2320	400.7	<0.51	285	<0.5	2350	31200	358	Req	8.1
1123250	MW11-18 3 1.9-2.0	<21	<0.3	4.1	8.2	0.23	25.8	15.4	51.2	<0.5	23.6	<0.5	70.3	26100	163	Req	6.9
1123253	Blank (NVM)	<20‡	<0.1	<0.5‡	<0.3‡	<0.2‡	<1.2‡	<1.6‡	<0.7‡	<0.5‡	<2.0‡	<0.5‡	<16.0‡	<36‡	<20‡	Req	6.98
1123254	Reference Material (% Recovery) (NVM)	104‡	97	110‡	106‡	105‡	104‡	104‡	107‡	109‡	105‡	106‡	105‡	92‡	162‡	Req	98

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	23-Jun-11
Report Number	**EFS/115024M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		mg/kg	mg/kg	mg/kg	mg/kg		%	mg/kg	mg/kg	mg/l	%	%	mg/kg	% M/M			
Method Codes :		SFAPI	SFAPI	SFAPI	SFAPI	Sub042	TMSS	TPHFIDUS	AMMAR	KONECL	LOI(%MM)	SSP3	TPHFIDUS	WSLM59			
Method Reporting Limits :		0.5	0.5	0.5	2		0.2	10.0	0.5	1.0	0.2	0.1	10.0	0.01			
Accreditation Code:		N	UM	UM	UM	U	U	UM	UM	N	N	N	N	N			
Laboratory ID Number CL/	**Client Sample Description**	**Cyanide(Complex)(AR)**	**Cyanide(Free) (AR)**	**Cyanide(Total) (AR)**	**Thiocyanate(SCN)(AR)**	**^Asbestos Screen EX**	**Tot.Moisture @ 105C**	**TPH by GCFID (AR)**	**Exchange.Ammonium AR**	**Chloride:(2:1)**	**L.O.I. % @ 450C**	**Stone Content %**	**TPH Band (>C10-C35)**	**Total Organic Carbon**			
1123244	MW11-13 2.1	<0.6	<0.6	<0.6	<2.4		16.9	12	<0.6	8.3	2.7	<0.1	<12.0				
1123245	MW11-13 3.2	<0.6	<0.6	<0.6	<2.4		18.0	24	44.1	22	2.7	5.7	20	0.75			
1123251	MW11-15 1.0-1.1	<0.6	<0.6	<0.6	<2.6		22.4	19.3	<0.6	200	2	4.9	16.8				
1123252	MW11-15 3 4.0-4.1	<0.6	<0.6	<0.6	<2.6		21.7	16.6	1.4	15.1	2.3	<0.1	14	0.41			
1123246	MW11-17 1 0.2	<0.6	<0.6	<0.6	<2.3		13.3	37	3	7.3	4.5	5.3	29				
1123247	MW11-17 2 3.5-3.7	<0.6	<0.6	<0.6	<2.5		19.2	18.6	1	4.1	2.8	<0.1	16.1	0.5			
1123248	MW11-18 1 0.4	<0.5	<0.5	<0.5	<2.2	NAIIS	9.0	438	0.8	8.2	4.4	6.0	384				
1123249	MW11-18 2 1.1-1.2	1.5	<0.6	1.5	<2.4		15.6	518	1.5	11.3	5.9	6.3	436	3.91			
1123250	MW11-18 3 1.9-2.0	<0.6	<0.6	<0.6	<2.5		21.3	32	5.3	11.5	5.8	6.5	25	1.43			
1123253	Blank (NVM)	<0.5	<0.5‡	<0.5‡	<2.0‡			<10.0‡	<0.5‡	<1.0			<10.0	<0.02			
1123254	Reference Material (% Recovery) (NVM)		84‡	83‡	95‡			103‡	95‡	97	98		103	90			

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Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	23-Jun-11
Report Number	**EFS/115024M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
Method Codes :		VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC						
Method Reporting Limits :		1	5	2	3	0.3	0.3	0.3	0.3	0.3	0.3						
Accreditation Code:		UM	UM	UM	UM	UM	U	U	U	U	U						
Laboratory ID Number CL/	**Client Sample Description**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Xylenols**	**Naphthols**	**Trimethylphenols**	**Total Phenols**						
1123244	MW11-13 2.1	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1123245	MW11-13 3.2	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1123251	MW11-15 1.0-1.1	<1	<6	<3	<8	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1123252	MW11-15 3 4.0-4.1	<1	<6	<3	<8	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1123246	MW11-17 1 0.2	<1	<6	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.7						
1123247	MW11-17 2 3.5-3.7	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1123248	MW11-18 1 0.4	<1	<5	<2	<7	<0.3	<0.3	<0.3	<0.3	<0.3	<1.6						
1123249	MW11-18 2 1.1-1.2	<1	<6	<2	<7	<0.4	<0.4	<0.4	<0.4	<0.4	<1.8						
1123250	MW11-18 3 1.9-2.0	<1	<6	<3	<8	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1123253	Blank (NVM)	<1‡	<5‡	<2‡	<6‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.5						
1123254	Reference Material (% Recovery) (NVM)	97‡	89‡	96‡	97‡	99‡	111	92	102	78	104						

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	23-Jun-11
Report Number	**EFS/115024M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13 2.1	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123244	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.54	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	107
Phenanthrene-d10	119
Chrysene-d12	133
Perylene-d12	141

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	92
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13 3.2	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123245	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.56	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	115
Acenaphthene-d10	113
Phenanthrene-d10	125
Chrysene-d12	139
Perylene-d12	147

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-17 1 0.2	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123246	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.09	-	**UM**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	-	< 0.09	-	UM
Phenanthrene	85-01-8	-	< 0.09	-	UM
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	UM
Pyrene	129-00-0	-	< 0.09	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.09	-	UM
Chrysene	218-01-9	-	< 0.09	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.09	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	UM
Total (USEPA16) PAHs	-	-	< 1.48	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	105
Phenanthrene-d10	113
Chrysene-d12	122
Perylene-d12	130

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	92
Terphenyl-d14	96

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-17 2 3.5-3.7	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123247	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.58	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	105
Acenaphthene-d10	102
Phenanthrene-d10	107
Chrysene-d12	107
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	95

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-18 1 0.4	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123248	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.40	0.13	81	**UM**
Acenaphthylene	208-96-8	4.46	0.68	99	U
Acenaphthene	83-32-9	4.58	0.12	99	UM
Fluorene	86-73-7	4.97	0.25	93	UM
Phenanthrene	85-01-8	5.84	2.80	100	UM
Anthracene	120-12-7	5.89	1.27	97	U
Fluoranthene	206-44-0	7.21	6.71	100	UM
Pyrene	129-00-0	7.50	5.00	97	UM
Benzo[a]anthracene	56-55-3	9.21	3.97	98	UM
Chrysene	218-01-9	9.26	3.50	98	UM
Benzo[b]fluoranthene	205-99-2	10.75	4.34	77	UM
Benzo[k]fluoranthene	207-08-9	10.79	1.64	81	UM
Benzo[a]pyrene	50-32-8	11.19	3.47	97	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.59	2.21	91	UM
Dibenzo[a,h]anthracene	53-70-3	12.61	0.51	55	UM
Benzo[g,h,i]perylene	191-24-2	12.91	1.93	97	UM
Total (USEPA16) PAHs	-	-	39.05	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	104
Phenanthrene-d10	115
Chrysene-d12	138
Perylene-d12	155

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	98

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-18 2 1.1-1.2	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123249	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.40	0.25	92	**UM**
Acenaphthylene	208-96-8	4.45	0.66	99	U
Acenaphthene	83-32-9	-	< 0.09	-	UM
Fluorene	86-73-7	4.97	0.19	90	UM
Phenanthrene	85-01-8	5.84	1.50	99	UM
Anthracene	120-12-7	5.89	0.70	100	U
Fluoranthene	206-44-0	7.21	4.85	99	UM
Pyrene	129-00-0	7.50	4.37	98	UM
Benzo[a]anthracene	56-55-3	9.21	3.30	96	UM
Chrysene	218-01-9	9.26	3.03	98	UM
Benzo[b]fluoranthene	205-99-2	10.76	3.78	99	UM
Benzo[k]fluoranthene	207-08-9	10.79	1.32	95	UM
Benzo[a]pyrene	50-32-8	11.19	2.83	99	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.58	1.75	93	UM
Dibenzo[a,h]anthracene	53-70-3	12.61	0.40	55	UM
Benzo[g,h,i]perylene	191-24-2	12.91	1.58	97	UM
Total (USEPA16) PAHs	-	-	< 30.68	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	108
Phenanthrene-d10	122
Chrysene-d12	147
Perylene-d12	163

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	99

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-18 3 1.9-2.0	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123250	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.63	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	105
Phenanthrene-d10	115
Chrysene-d12	127
Perylene-d12	132

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15 1.0-1.1	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123251	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.65	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	106
Phenanthrene-d10	114
Chrysene-d12	133
Perylene-d12	145

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15 3 4.0-4.1	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123252	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.63	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	99
Phenanthrene-d10	106
Chrysene-d12	111
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	98

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Job 115024 Blank (NVM)	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123253	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**U**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	U
Fluorene	86-73-7	-	< 0.08	-	U
Phenanthrene	85-01-8	-	< 0.08	-	U
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	U
Pyrene	129-00-0	-	< 0.08	-	U
Benzo[a]anthracene	56-55-3	-	< 0.08	-	U
Chrysene	218-01-9	-	< 0.08	-	U
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	U
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	U
Benzo[a]pyrene	50-32-8	-	< 0.08	-	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	U
Total (USEPA16) PAHs	-	-	< 1.28	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	108
Phenanthrene-d10	122
Chrysene-d12	142
Perylene-d12	155

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	92
Terphenyl-d14	100

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Reference Material (% Rec	**Job Number:**	S11_5024M
LIMS ID Number:	CL1123254	**Date Booked in:**	15-Jun-11
QC Batch Number:	111330	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	2111PAH.GC5\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit	Accr. code
Naphthalene	91-20-3	3.40	95	100	**U**
Acenaphthylene	208-96-8	4.45	101	100	U
Acenaphthene	83-32-9	4.57	97	98	U
Fluorene	86-73-7	4.97	103	94	U
Phenanthrene	85-01-8	5.84	92	99	U
Anthracene	120-12-7	5.89	106	99	U
Fluoranthene	206-44-0	7.21	98	100	U
Pyrene	129-00-0	7.50	93	99	U
Benzo[a]anthracene	56-55-3	9.21	109	99	U
Chrysene	218-01-9	9.26	95	99	U
Benzo[b]fluoranthene	205-99-2	10.75	98	99	U
Benzo[k]fluoranthene	207-08-9	10.79	95	98	U
Benzo[a]pyrene	50-32-8	11.19	102	100	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.58	100	99	U
Dibenzo[a,h]anthracene	53-70-3	12.61	93	97	U
Benzo[g,h,i]perylene	191-24-2	12.91	100	96	U
Total (USEPA16) PAHs	-	-	99	-	N

"M" denotes that % fit has been manually interpreted

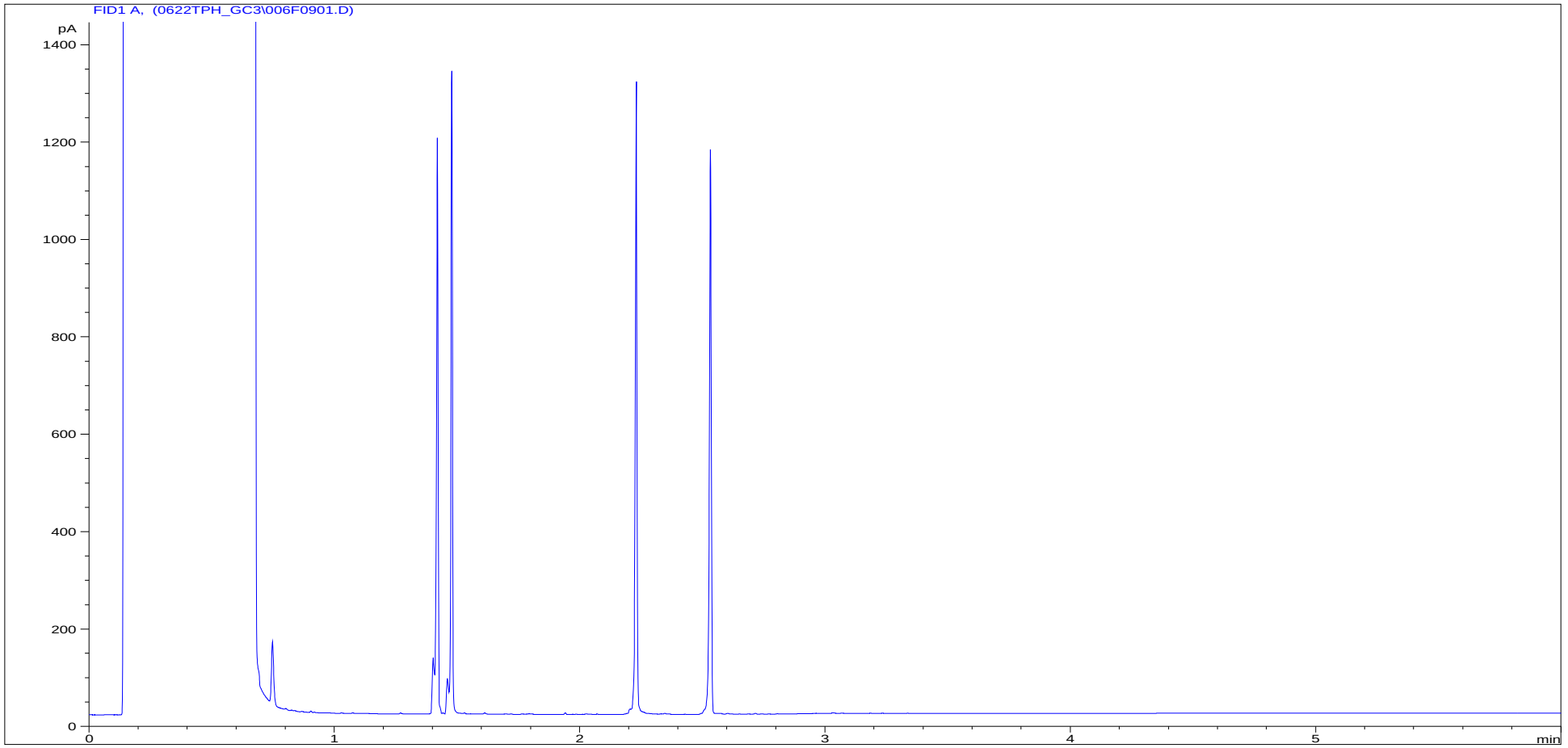
Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	121
Acenaphthene-d10	119
Phenanthrene-d10	136
Chrysene-d12	157
Perylene-d12	172

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	99

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

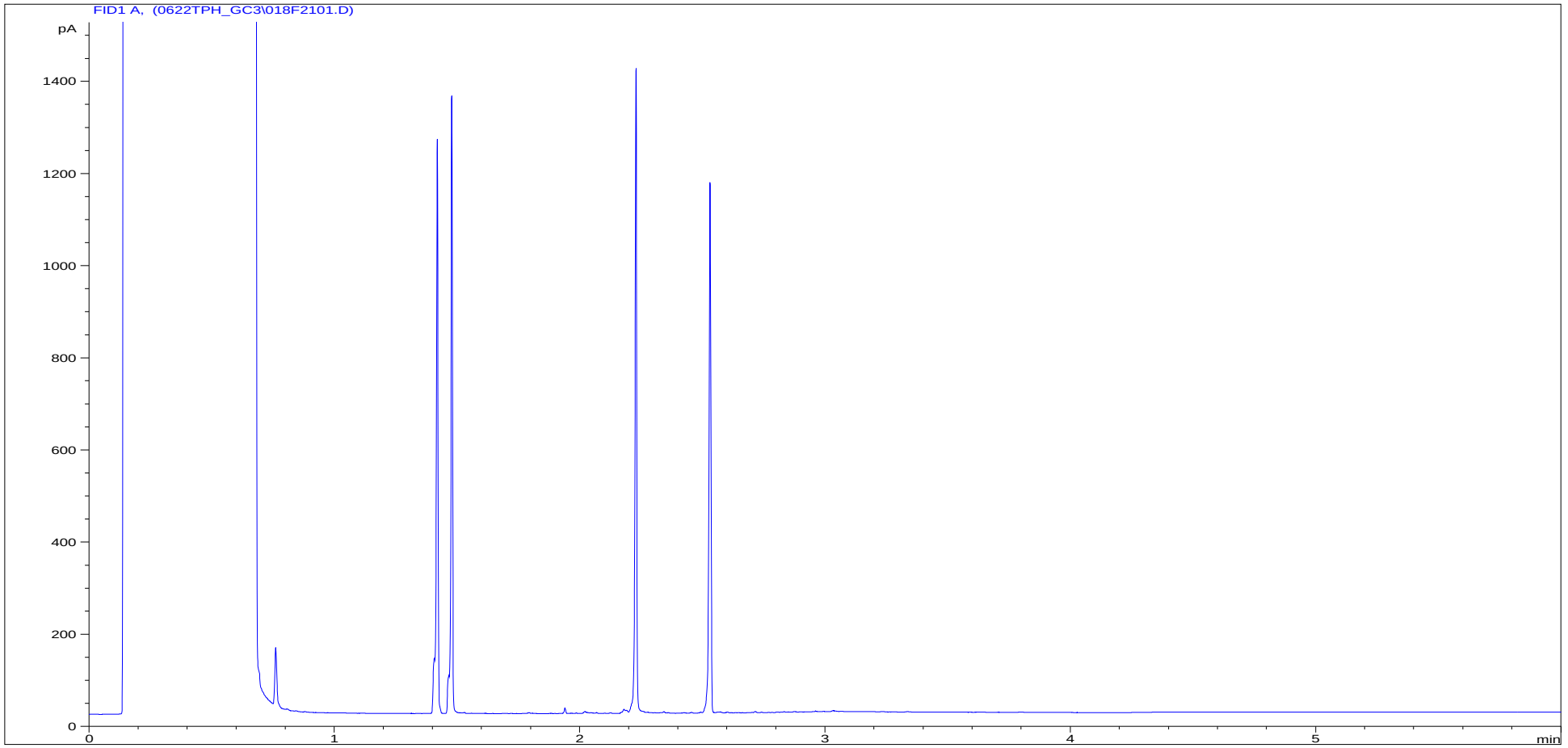
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	BLKS111330	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Job 115024 Blank (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\006F0901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

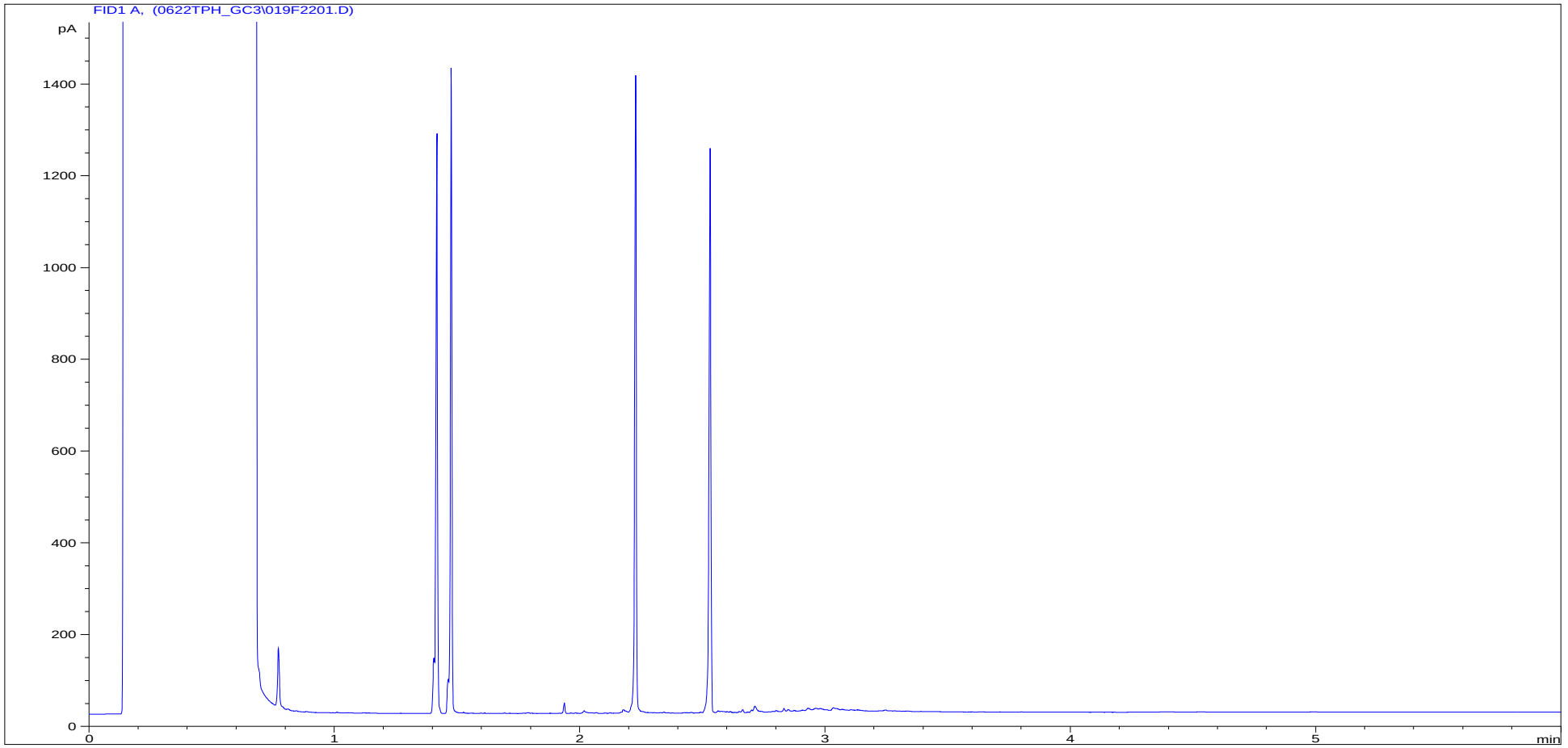
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123244	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-13 2.1
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\018F2101.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

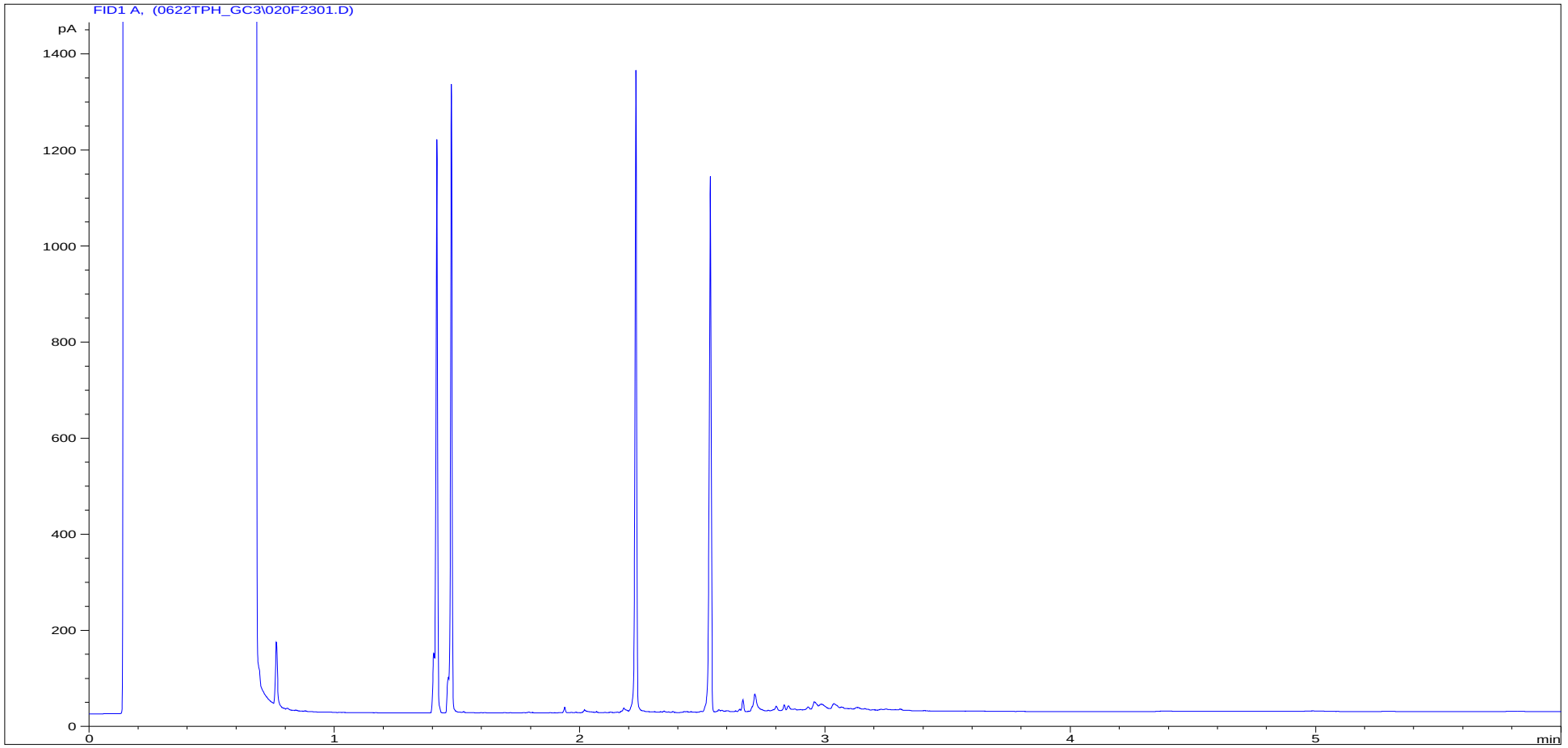
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123245	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-13 3.2
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\019F2201.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

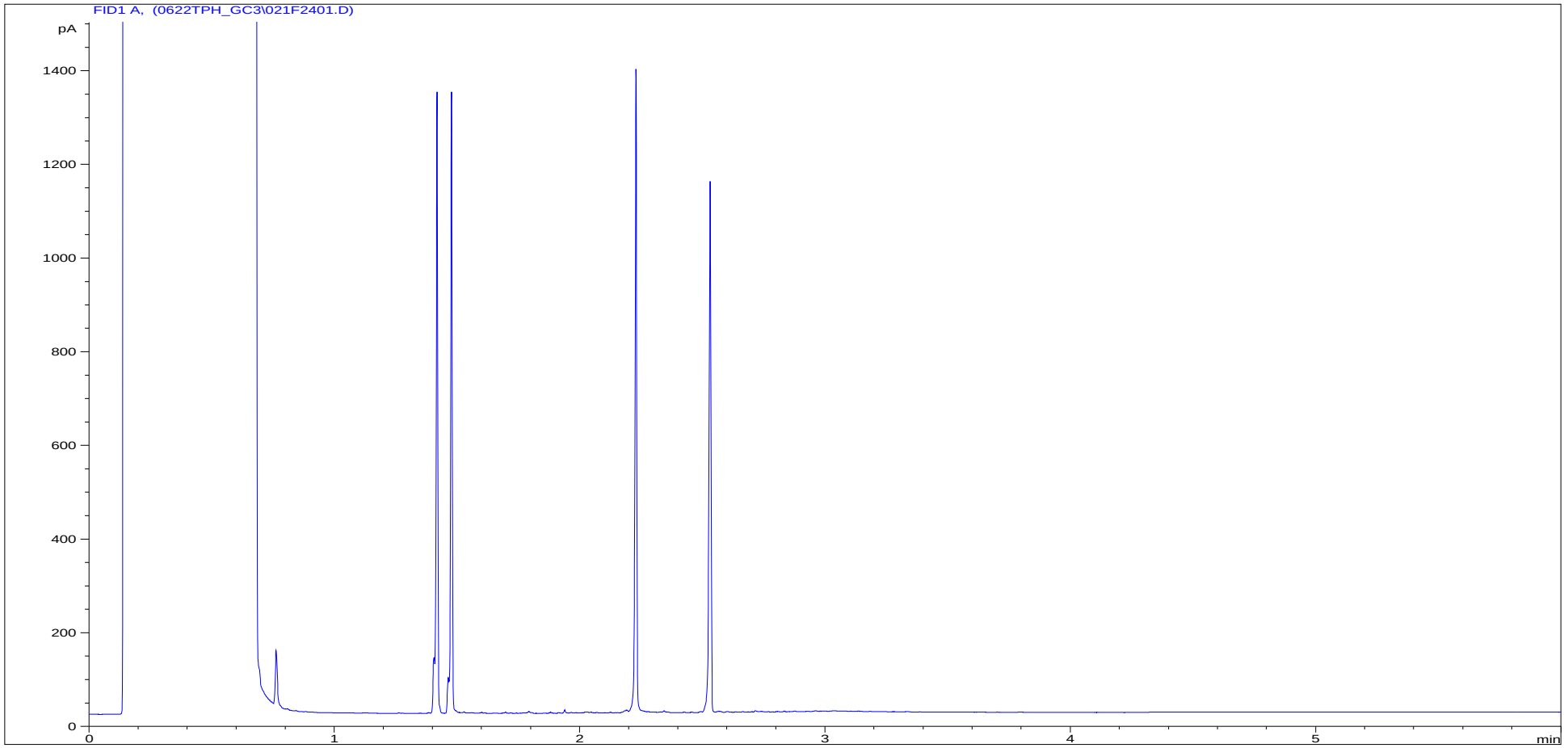
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123246	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-17 1 0.2
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\020F2301.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

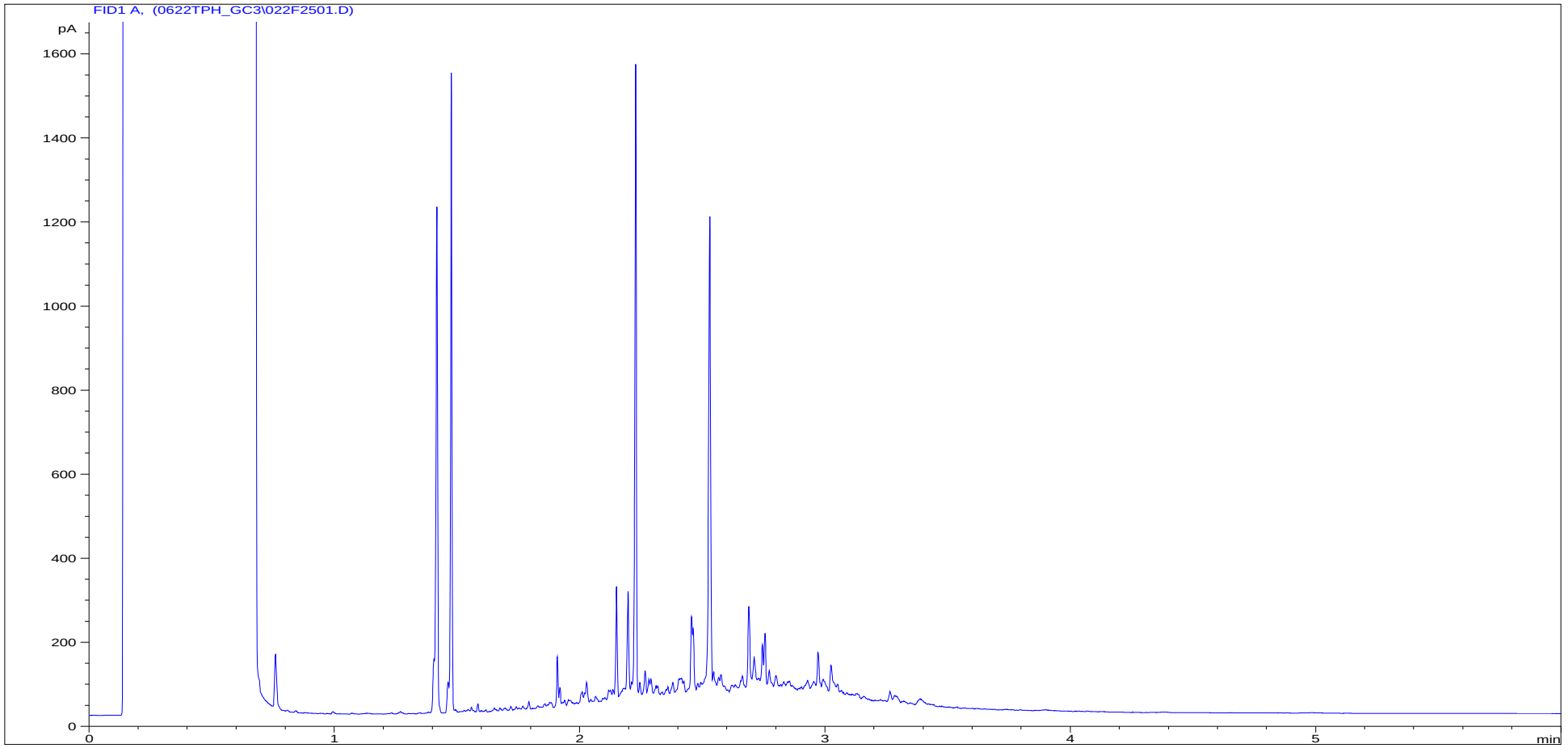
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123247	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-17 2 3.5-3.7
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\021F2401.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

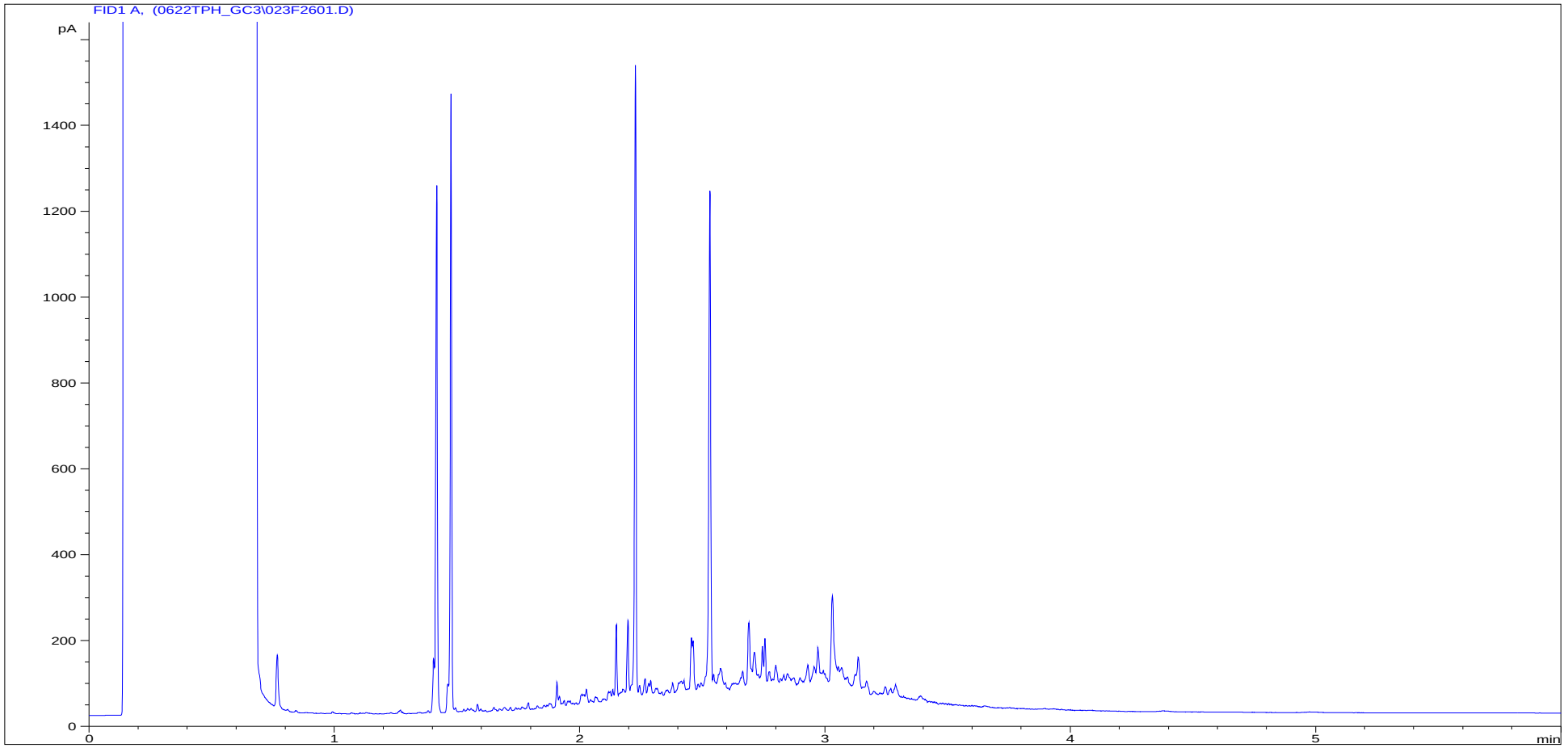
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123248	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-18 1 0.4
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\022F2501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

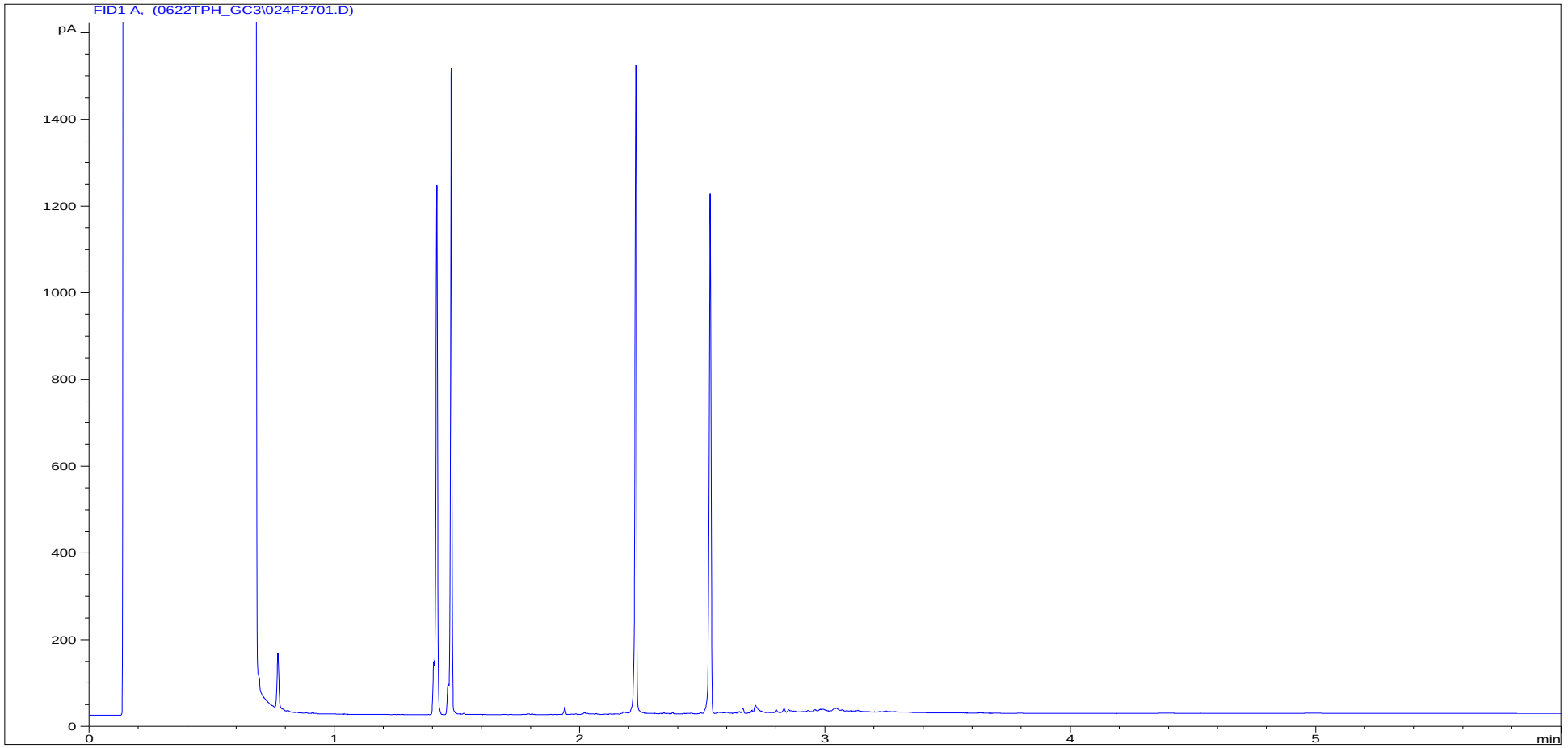
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123249	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-18 2 1.1-1.2
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\023F2601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

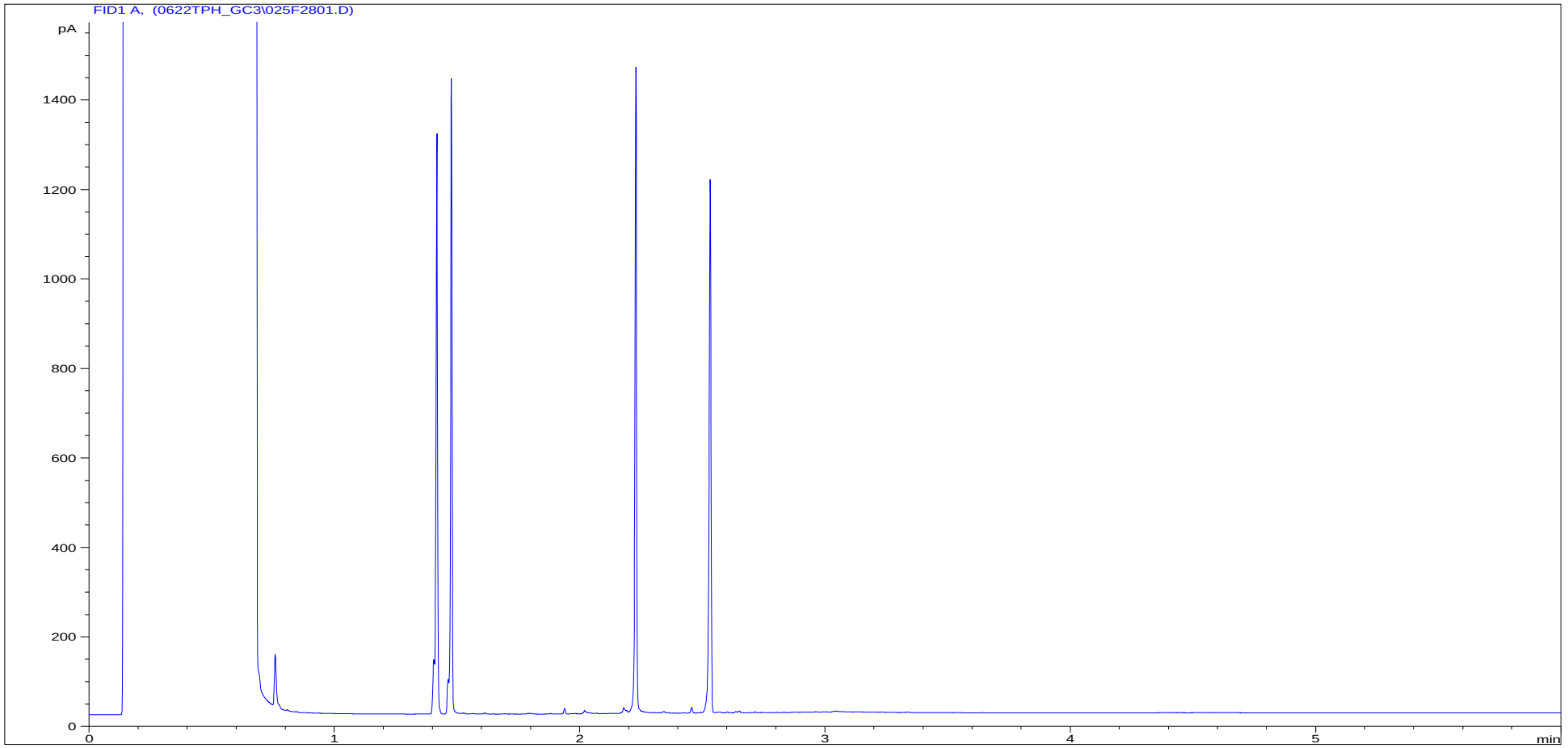
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123250	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-18 3 1.9-2.0
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\024F2701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

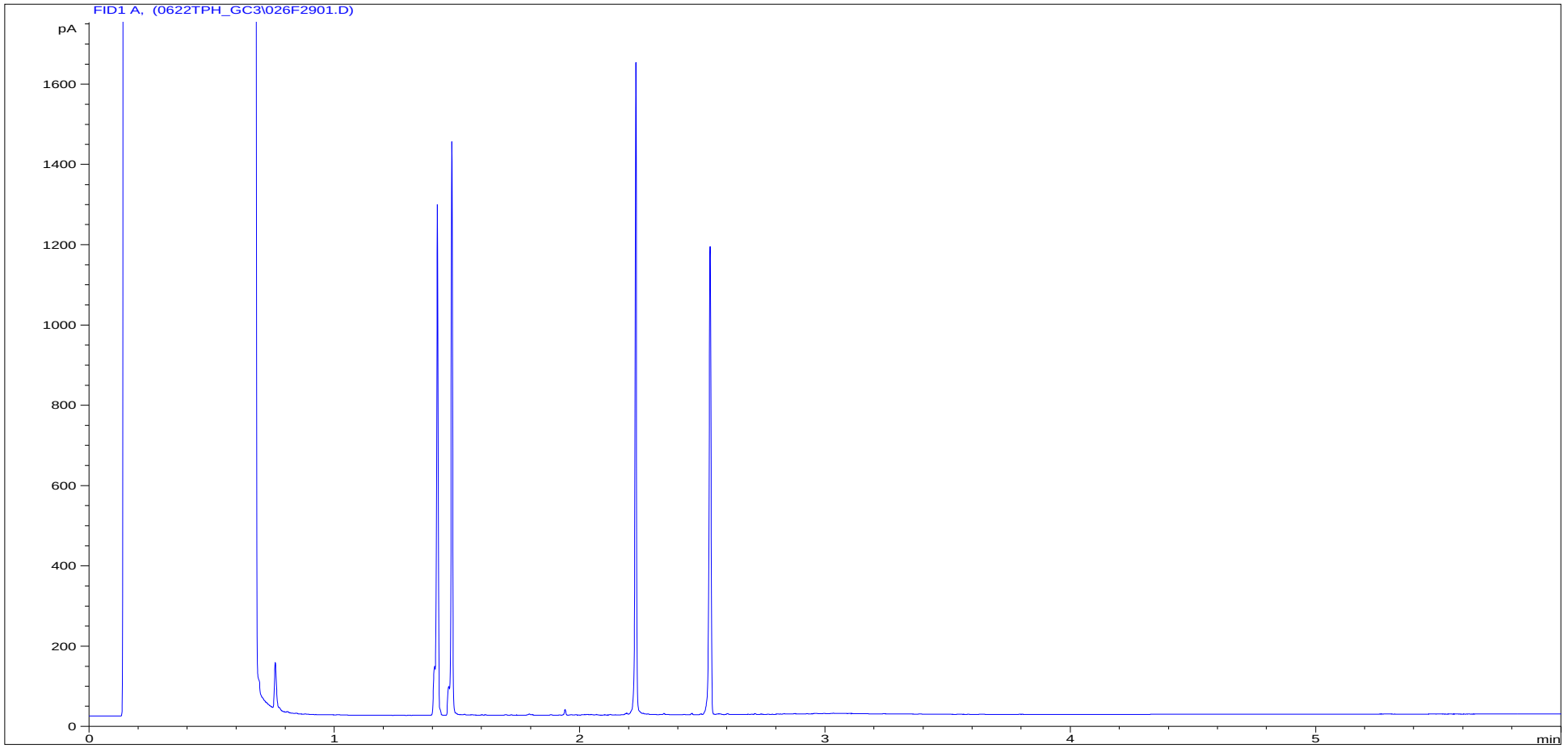
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123251	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-15 1.0-1.1
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\025F2801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

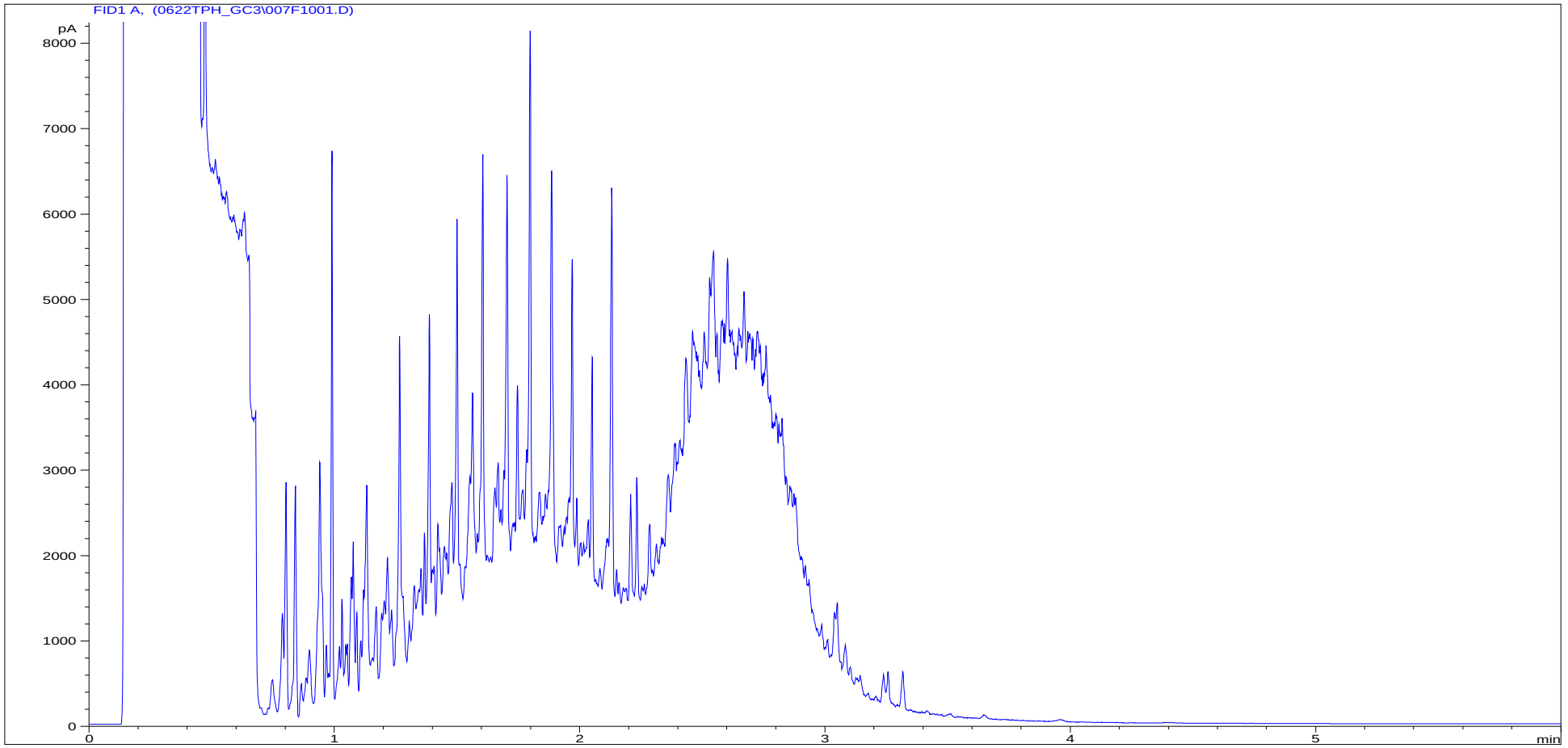
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123252	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-15 3 4.0-4.1
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\026F2901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	RMS111330	**Job Number:**	S11_5024M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2011\JUNE2011\0622TPH_GC3\007F1001.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S115024

Customer Worley Parsons Komex
Site Maelor Works
Report No S115024

Consignment No 21430
Date Logged 15-Jun-2011
Report Due 22-Jun-2011

ID Number	Description	MethodID	AMMAR	CustServ	ELESULP	GROHSA	ICPBOR	ICPMSS									ICPSOIL	ICPWSS	KONECL	LOI(%MM)	MCertS	PAHMSUS	PHEHPLC	PHSOIL	SFAPI		
		Sampled	Exchangeable Ammonium as N (AR)	Report B	Elemental Sulphur	GRO	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Iron	SO4-- (H2O sol) mg/l	Chloride (2:1)	LOI % @ 450°C	MCertS Analysis	PAH by MS.16(0.08)	Phenol - HPLC	pH units (AR)	Cyanide(Complex) (AR)	Cyanide(Free) (AR)	Cyanide(Total) (AR)
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
CL/1123244	MW11-13 2.1	06/06/11				E																					
CL/1123245	MW11-13 3.2	06/06/11				E																					
CL/1123246	MW11-17 1 0.2	06/06/11				E																					
CL/1123247	MW11-17 2 3.5-3.7	06/06/11				E																					
CL/1123248	MW11-18 1 0.4	07/06/11				E																					
CL/1123249	MW11-18 2 1.1-1.2	07/06/11				E																					
CL/1123250	MW11-18 3 1.9-2.0	07/06/11				E																					
CL/1123251	MW11-15 1.0-1.1	07/06/11				E																					
CL/1123252	MW11-15 3 4.0-4.1	07/06/11				E																					
CL/1123253	Job 115024 Blank																										
CL/1123254	Reference Material (% Recovery																										

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S115024

Customer Worley Parsons Komex
Site Maelor Works
Report No S115024

Consignment No 21430
Date Logged 15-Jun-2011

Report Due 22-Jun-2011

ID Number	Description	MethodID	SFAPI	SSP3	Sub042	TMSS	TPHFIDUS		VOCHSAS	WSLM59
		Sampled	Thiocyanate(SCN) (AR)	Stone Content %	^Asbestos (screen)	Tot.Moisture @ 105C	TPH Band (C10-C35)	TPH by GCFID (AR)	BTEX-HsaMS analysis	Total Organic Carbon
Accredited to ISO17025			✓		✓	✓		✓	✓	
CL/1123244	MW11-13 2.1	06/06/11							E	
CL/1123245	MW11-13 3.2	06/06/11							E	
CL/1123246	MW11-17 1 0.2	06/06/11							E	
CL/1123247	MW11-17 2 3.5-3.7	06/06/11							E	
CL/1123248	MW11-18 1 0.4	07/06/11							E	
CL/1123249	MW11-18 2 1.1-1.2	07/06/11							E	
CL/1123250	MW11-18 3 1.9-2.0	07/06/11							E	
CL/1123251	MW11-15 1.0-1.1	07/06/11							E	
CL/1123252	MW11-15 3 4.0-4.1	07/06/11							E	
CL/1123253	Job 115024 Blank									
CL/1123254	Reference Material (% Recovery									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ELESULP	Air Dried	Determination of Elemental Sulphur using Solvent Extraction followed by HPLC detection.
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Air Dried	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	ICPSOIL	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPOES detection
Soil	ICPWSS	Air Dried	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	KONECL	Air Dried	Determination of Chloride in Soil using water extraction at the stated water:soil ratio, discrete colorimetric detection
Soil	LOI(%MM)	Air Dried	Determination of loss on ignition for soil samples at specified temperature by gravimetry
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHEHPLC	As Received	Determination of Phenols by methanol extraction followed by HPLC detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SSP3	As Received	Determination of stones content by dry sieving at the required particle size
Soil	Subcon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Sample Descriptions

Client : Worley Parsons Komex

Site : Maelor Works

Report Number : S11_5024M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1123244	MW11-13 2.1	Brown CLAY
CL/1123245	MW11-13 3.2	Brown Clay SILT Stone
CL/1123246	MW11-17 1 0.2	Brown Stone SILT
CL/1123247	MW11-17 2 3.5-3.7	Brown CLAY
CL/1123248	MW11-18 1 0.4	Brown Stone SILT
CL/1123249	MW11-18 2 1.1-1.2	Brown Stone SILT
CL/1123250	MW11-18 3 1.9-2.0	Brown Stone SILT
CL/1123251	MW11-15 1.0-1.1	Brown Stone SILT
CL/1123252	MW11-15 3 4.0-4.1	Brown CLAY

END OF REPORT

Our Ref: EFS/115087M (Ver. 1)
Your Ref: 50065-29

June 30, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

SOIL Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Where appropriate the samples will be kept until 28/07/11 when they will be discarded. Please call 01283 554547 for an extension of this date.
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

JNColbourne

J Colbourne
Project Co-ordinator
01283 554547

Scientifics, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Scientifics is a trading name of Environmental Scientifics Group Limited.
Registered No: 2880501

TEST REPORT
SOIL SAMPLE ANALYSIS

1252

Report No. EFS/115087M (Ver. 1)

Worley Parsons Komex
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 8 samples described in this report were logged for analysis by Scientifics on 16-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 30-Jun-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (80) Results (Pages 5 to 12)
Table of GRO Results (Page 13)
Table of TPH (Si) banding (std) (Page 14)
GC-FID Chromatograms (Pages 15 to 34)
Asbestos Screening Results (Page 35)
Analytical and Deviating Sample Overview (Pages 36 to 37)
Table of Method Descriptions (Page 38)
Table of Report Notes (Page 39)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 30-Jun-2011

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105°C unless otherwise stated. (except QC samples)
Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pH Units
Method Codes :		ELESULP	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPSOIL	ICPWSS	PAHMSUS	PHSOIL
Method Reporting Limits :		20	0.2	0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	0.5	16	36	10	0.08	
Accreditation Code:		UM	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM		UM
Laboratory ID Number CL/	**Client Sample Description**	**Elemental Sulphur**	**GRO**	**Boron (H20 Soluble)**	**Arsenic (MS)**	**Cadmium (MS)**	**Chromium (MS)**	**Copper (MS)**	**Lead (MS)**	**Mercury (MS)**	**Nickel (MS)**	**Selenium (MS)**	**Zinc (MS)**	**Iron**	**SO4-- (H2O sol) mg/l**	**PAH by MS.16(0.08)**	**pH units (AR)**
1123528	MW11-04/2 2.3-2.4 (NVM)	101‡		<0.5‡	10.9‡	0.3‡	26.7‡	20.8‡	19.7‡	<0.5‡	28‡	<0.5‡	62.2‡	32700‡	164‡	Req	6.8
1123529	MW11-04/3 4.3-4.5	<20		0.7	7.7	0.23	42.3	23.4	23.3	<0.5	45.6	<0.5	78.3	37100	229	Req	8.9
1123530	MW11-05/1 2.4-2.5 (NVM)	<20‡	<0.2	0.7‡	2.3‡	0.22‡	7.1‡	4.9‡	11.6‡	<0.50‡	9.6‡	0.6‡	<16.0‡	1940‡	211‡	Req	8.8
1123531	MW11-06/1 0.4	51	<0.2	0.8	9.7	0.71	16.9	24.4	118.5	<0.5	22.2	0.9	220.4	18500	303	Req	8.6
1123532	MW11-06/2 1.1	<21		<0.5	8.4	0.22	22.5	17.3	131.6	<0.5	23.2	<0.5	72.7	28100	67	Req	12.0
1123987	MW11-06/3 2.7-2.8	<20		<0.5	11	0.25	40	22.6	24.9	<0.5	44.1	<0.5	77.9	36200	113	Req	9.0
1123533	QC Blank (NVM)	<20‡	<0.1	<0.5‡	<0.3‡	<0.2‡	<1.2‡	<1.6‡	<0.7‡	<0.5‡	<2.0‡	<0.5‡	<16.0‡	<36‡	<20‡	Req	7.00
1123534	Reference Material (% Recovery) (NVM)	101‡	85	110‡	101‡	100‡	109‡	100‡	101‡	101‡	101‡	98‡	103‡	89‡	188‡	Req	101

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	30-Jun-11
Report Number	**EFS/115087M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Units :		mg/kg	mg/kg	mg/kg	mg/kg		%	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	%	%	mg/kg	% M/M	
Method Codes :		SFAPI	SFAPI	SFAPI	SFAPI	Sub042	TMSS	TPHFIDUS	TPHUSSI	AMMAR	GROHSA	KONECL	LOI(%MM)	SSP3	TPHFIDUS	WSLM59	
Method Reporting Limits :		0.5	0.5	0.5	2		0.2	10.0	10.0	0.5	0.2	1.0	0.2	0.1	10.0	0.01	
Accreditation Code:		N	UM	UM	UM	U	U	UM		UM		N	N	N	N	N	
Laboratory ID Number CL/	**Client Sample Description**	**Cyanide(Complex)(AR)**	**Cyanide(Free) (AR)**	**Cyanide(Total) (AR)**	**Thiocyanate(SCN)(AR)**	**^Asbestos Screen EX**	**Tot.Moisture @ 105C**	**TPH by GCFID (AR)**	**TPH by GCFID (AR/Si)**	**Exchange.Ammonium AR**	**GRO (AA)**	**Chloride:(2:1)**	**L.O.I. % @ 450C**	**Stone Content %**	**TPH Band (>C10-C35)**	**Total Organic Carbon**	
1123528	MW11-04/2 2.3-2.4 (NVM)	<0.6	<0.6‡	<0.6‡	<2.2‡		10.2	<11.1‡	Req	20.8‡	Req	15.2	1.2	23.2	<11.1		
1123529	MW11-04/3 4.3-4.5	<0.6	<0.6	<0.6	<2.5		21.0	13.9	Req	184	Req	18	2.8	<0.1	<12.7		
1123530	MW11-05/1 2.4-2.5 (NVM)	<0.5	<0.5‡	<0.5‡	<2.1‡		6.4	109‡		<0.5‡		18	0.8	22.8	96		
1123531	MW11-06/1 0.4	<15.5	<0.5	15.5	<2.2	NAIIS	8.8	664		7.6		25	2.9	23.9	610	1.94	
1123532	MW11-06/2 1.1	<0.6	<0.6	<0.6	<2.4		18.0	680	Req	17.8	Req	76	3.4	20.6	155	0.93	
1123987	MW11-06/3 2.7-2.8	<0.6	<0.6	<0.6	<2.6		22.0	<12.8	Req	358	Req	18	3		<12.8	0.4	
1123533	QC Blank (NVM)	<0.5	<0.5‡	<0.5‡	<2.0‡			<10.0‡	Req	<0.5‡	Req	<1.0			<10.0	<0.02	
1123534	Reference Material (% Recovery) (NVM)		87‡	87‡	100‡			96‡	Req	94‡	Req	96	100		96	106	

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	30-Jun-11
Report Number	**EFS/115087M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Units :		ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
Method Codes :		VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC						
Method Reporting Limits :		1	5	2	3	0.3	0.3	0.3	0.3	0.3	0.3						
Accreditation Code:		UM	UM	UM	UM	UM	U	U	U	U	U						
Laboratory ID Number CL/	**Client Sample Description**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Xylenols**	**Naphthols**	**Trimethylphenols**	**Total Phenols**						
1123528	MW11-04/2 2.3-2.4 (NVM)	7‡	<6‡	<2‡	<7‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.7						
1123529	MW11-04/3 4.3-4.5	828	151	19	97	<0.4	<0.4	<0.4	<0.4	<0.4	<1.9						
1123530	MW11-05/1 2.4-2.5 (NVM)	2‡	<5‡	3‡	7‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.6						
1123531	MW11-06/1 0.4	5	<5	2	9	<0.3	<0.3	<0.3	<0.3	<0.3	<1.6						
1123532	MW11-06/2 1.1	10	<6	<2	<7	1.7	1.2	0.5	<0.4	<0.4	<4.1						
1123987	MW11-06/3 2.7-2.8	10	<6	23	50	<0.4	<0.4	0.6	<0.4	<0.4	<2.2						
1123533	QC Blank (NVM)	<1‡	<5‡	<2‡	<6‡	<0.3‡	<0.3	<0.3	<0.3	<0.3	<1.5						
1123534	Reference Material (% Recovery) (NVM)	88‡	86‡	97‡	94‡	99‡	111	92	102	78	104						

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Soils Sample Analysis

Date Printed	30-Jun-11
Report Number	**EFS/115087M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105ºC where appr opriate, in accordance with the MCERTS standard.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-04/2 2.3-2.4 (NVM)	**Job Number:**	s11_5087M
LIMS ID Number:	CL1123528	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.21	0.10	88	**U**
Acenaphthylene	208-96-8	-	< 0.09	-	U
Acenaphthene	83-32-9	-	< 0.09	-	U
Fluorene	86-73-7	-	< 0.09	-	U
Phenanthrene	85-01-8	-	< 0.09	-	U
Anthracene	120-12-7	-	< 0.09	-	U
Fluoranthene	206-44-0	-	< 0.09	-	U
Pyrene	129-00-0	-	< 0.09	-	U
Benzo[a]anthracene	56-55-3	-	< 0.09	-	U
Chrysene	218-01-9	-	< 0.09	-	U
Benzo[b]fluoranthene	205-99-2	-	< 0.09	-	U
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	U
Benzo[a]pyrene	50-32-8	-	< 0.09	-	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	U
Total (USEPA16) PAHs	-	-	< 1.44	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	105
Phenanthrene-d10	107
Chrysene-d12	102
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	98

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-04/3 4.3-4.5	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123529	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.10	-	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 1.62	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	86
Acenaphthene-d10	91
Phenanthrene-d10	92
Chrysene-d12	89
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	103

Concentrations are reported on a dry weight basis.

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-05/1 2.4-2.5 (NVM)	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123530	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.21	0.89	92	**U**
Acenaphthylene	208-96-8	4.26	0.14	88	U
Acenaphthene	83-32-9	4.37	0.09	86	U
Fluorene	86-73-7	4.75	0.18	45	U
Phenanthrene	85-01-8	5.57	0.71	98	U
Anthracene	120-12-7	5.63	0.14	97	U
Fluoranthene	206-44-0	6.89	0.33	92	U
Pyrene	129-00-0	7.17	0.24	92	U
Benzo[a]anthracene	56-55-3	8.84	0.17	82	U
Chrysene	218-01-9	8.89	0.15	85	U
Benzo[b]fluoranthene	205-99-2	10.37	0.15	86	U
Benzo[k]fluoranthene	207-08-9	-	< 0.09	-	U
Benzo[a]pyrene	50-32-8	10.79	0.10	82	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.09	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.09	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.09	-	U
Total (USEPA16) PAHs	-	-	< 3.62	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	93
Phenanthrene-d10	97
Chrysene-d12	98
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	101

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-06/1 0.4	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123531	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.21	0.54	90	**UM**
Acenaphthylene	208-96-8	4.25	0.84	99	U
Acenaphthene	83-32-9	4.37	0.10	95	UM
Fluorene	86-73-7	4.75	0.50	98	UM
Phenanthrene	85-01-8	5.57	2.24	99	UM
Anthracene	120-12-7	5.62	1.15	96	U
Fluoranthene	206-44-0	6.88	3.90	95	UM
Pyrene	129-00-0	7.17	3.41	94	UM
Benzo[a]anthracene	56-55-3	8.84	2.48	99	UM
Chrysene	218-01-9	8.89	1.51	97	UM
Benzo[b]fluoranthene	205-99-2	10.36	2.38	99	UM
Benzo[k]fluoranthene	207-08-9	10.39	0.90	95	UM
Benzo[a]pyrene	50-32-8	10.78	2.38	96	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.16	1.60	100	UM
Dibenzo[a,h]anthracene	53-70-3	12.19	0.34	57	UM
Benzo[g,h,i]perylene	191-24-2	12.44	1.28	94	UM
Total (USEPA16) PAHs	-	-	25.63	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	102
Phenanthrene-d10	109
Chrysene-d12	136
Perylene-d12	170

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	97
Terphenyl-d14	103

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-06/2 1.1	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123532	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.21	2.98	94	**UM**
Acenaphthylene	208-96-8	4.25	0.96	99	U
Acenaphthene	83-32-9	4.37	0.16	95	UM
Fluorene	86-73-7	4.75	0.54	99	UM
Phenanthrene	85-01-8	5.57	1.85	99	UM
Anthracene	120-12-7	5.62	0.54	98	U
Fluoranthene	206-44-0	6.89	1.30	95	UM
Pyrene	129-00-0	7.17	0.93	94	UM
Benzo[a]anthracene	56-55-3	8.84	0.50	93	UM
Chrysene	218-01-9	8.89	0.33	91	UM
Benzo[b]fluoranthene	205-99-2	10.36	0.40	73	UM
Benzo[k]fluoranthene	207-08-9	10.40	0.16	77	UM
Benzo[a]pyrene	50-32-8	10.79	0.39	94	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.16	0.23	94	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	12.45	0.16	76	UM
Total (USEPA16) PAHs	-	-	< 11.52	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	97
Phenanthrene-d10	101
Chrysene-d12	102
Perylene-d12	116

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	99

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Job 115087 Blank (NVM)	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123533	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.08	-	**U**
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	U
Fluorene	86-73-7	-	< 0.08	-	U
Phenanthrene	85-01-8	-	< 0.08	-	U
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	U
Pyrene	129-00-0	-	< 0.08	-	U
Benzo[a]anthracene	56-55-3	-	< 0.08	-	U
Chrysene	218-01-9	-	< 0.08	-	U
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	U
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	U
Benzo[a]pyrene	50-32-8	-	< 0.08	-	U
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	U
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	U
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	U
Total (USEPA16) PAHs	-	-	< 1.28	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	105
Phenanthrene-d10	105
Chrysene-d12	105
Perylene-d12	106

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	101
Terphenyl-d14	104

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Reference Material (% Rec	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123534	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	21-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit	Accr. code
Naphthalene	91-20-3	3.21	86	97	**U**
Acenaphthylene	208-96-8	4.25	91	99	U
Acenaphthene	83-32-9	4.37	85	99	U
Fluorene	86-73-7	4.74	85	99	U
Phenanthrene	85-01-8	5.57	82	99	U
Anthracene	120-12-7	5.62	95	99	U
Fluoranthene	206-44-0	6.88	89	96	U
Pyrene	129-00-0	7.17	83	93	U
Benzo[a]anthracene	56-55-3	8.84	98	99	U
Chrysene	218-01-9	8.89	84	99	U
Benzo[b]fluoranthene	205-99-2	10.36	85	98	U
Benzo[k]fluoranthene	207-08-9	10.39	80	96	U
Benzo[a]pyrene	50-32-8	10.78	93	95	U
Indeno[1,2,3-cd]pyrene	193-39-5	12.15	98	97	U
Dibenzo[a,h]anthracene	53-70-3	12.18	84	97	U
Benzo[g,h,i]perylene	191-24-2	12.44	86	97	U
Total (USEPA16) PAHs	-	-	88	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	109
Phenanthrene-d10	113
Chrysene-d12	129
Perylene-d12	154

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	94

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-06/3 2.7-2.8	**Job Number:**	S11_5087M
LIMS ID Number:	CL1123987	**Date Booked in:**	16-Jun-11
QC Batch Number:	111335	**Date Extracted:**	21-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	22-Jun-11
Directory:	111PAH.MS14\	**Matrix:**	Soil
Dilution:	1.0	**Ext Method:**	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	3.21	2.41	92	**UM**
Acenaphthylene	208-96-8	-	< 0.10	-	U
Acenaphthene	83-32-9	-	< 0.10	-	UM
Fluorene	86-73-7	-	< 0.10	-	UM
Phenanthrene	85-01-8	-	< 0.10	-	UM
Anthracene	120-12-7	-	< 0.10	-	U
Fluoranthene	206-44-0	-	< 0.10	-	UM
Pyrene	129-00-0	-	< 0.10	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.10	-	UM
Chrysene	218-01-9	-	< 0.10	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.10	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.10	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.10	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.10	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.10	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.10	-	UM
Total (USEPA16) PAHs	-	-	< 3.95	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	94
Phenanthrene-d10	98
Chrysene-d12	101
Perylene-d12	107

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	101
Terphenyl-d14	104

Concentrations are reported on a dry weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Gasoline Range Organics
(BTEX and Aliphatic Carbon Ranges)

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: S11_5087
Directory: D:\TES\DATA\Y2011\0622HSA_GC9\062211 2011-06-22 13-25-51\014F1401.D
Method: Headspace GCFID
Accreditation Code: N

Matrix: Soil
Date Booked in: 16-Jun-11
Date extracted: 22-Jun-11
Date Analysed: 22-Jun-11, 17:4

			Concentration, (mg/kg) - as dry weight.					Aliphatics				
	Sample ID	Client ID	Benzene	Toluene	Ethyl benzene	m/p-Xylene	o-Xylene	C5 - C6	>C6 - C7	>C7 - C8	>C8 - C10	Total GRO
*	CL1123528	MW11-04/2 2.3-2.4 (NVM)	0.013	<0.011	<0.011	0.027	<0.011	<0.2	<0.2	<0.2	<0.2	0.3
*	CL1123529	MW11-04/3 4.3-4.5	1.284	0.182	0.018	0.058	0.043	<0.3	<0.3	<0.3	<0.3	1.3
*	CL1123532	MW11-06/2 1.1	<0.012	<0.012	<0.012	<0.012	<0.012	<0.2	<0.2	<0.2	<0.2	<0.2
*	CL1123533	Job 115087 Blank (NVM)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1
*	CL1123534	ence Material (% Recovery (	0.034	0.182	0.048	0.167	0.079	0.4	0.3	<0.2	<0.2	1.4
*	CL1123987	MW11-06/3 2.7-2.8	0.021	<0.013	0.050	0.069	0.050	<0.3	<0.3	<0.3	<0.3	0.4

Note: Benzene elutes between C6 and C7, toluene elutes between C7 and C8, ethyl benzene and the xylenes elute between C8 and C9.
Each BTEX compund is deducted from the appropriate band to give the aliphatic fractions, however aromatic compounds may still be contributing to these fractions

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: S11_5087
QC Batch Number: 111335
Directory: D:\TES\DATA\Y2010\062211TPH_GC4\088B4601.D
Method: Ultra Sonic

Separation: Silica gel
Eluents: Hexane, DCM

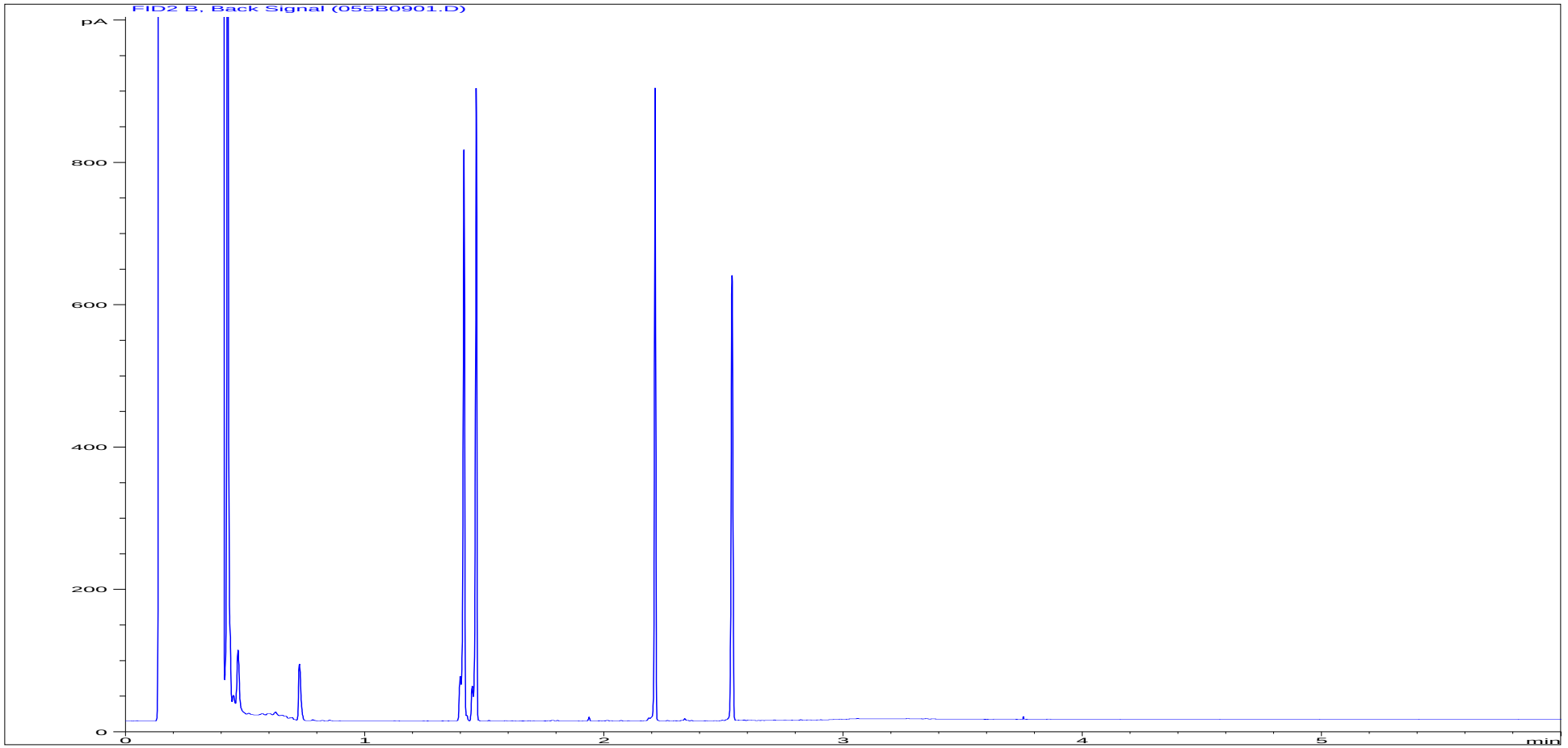
Matrix: Soil
Date Booked in 16-Jun-11
Date Extracted 21-Jun-11
Date Analysed 23-Jun-11

This sample data is not MCERTS accredited.
*** This sample data is not ISO17025 accredited.**

		Concentration, (mg/kg) - as dry weight.											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
CL1123528	MW11-04/2 2.3-2.4 (NVM)	<4	<4	<4	<4	<4	<4	<4	7.82	<9.76	11.2	<22	24.2
CL1123529	MW11-04/3 4.3-4.5	<5	<5	<5	<5	<5	<5	<5	9.47	<11.09	15.6	<25	28.7
CL1123532	MW11-06/2 1.1	<5	<5	<5	5.52	13.8	14	22.8	31.3	27.7	35.6	66.6	89.4
CL1123533	Job 115087 Blank (NVM)	<4	<4	<4	<4	<4	<4	<4	<4	<8.76	<8.76	<20	<20
CL1123534	nce Material (% Recovery	102	103	102	103	102	103	102	103	102	103	102	103
CL1123987	MW11-06/3 2.7-2.8	<5	<5	<5	<5	<5	<5	<5	<5	19	<11.23	<26	<26

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

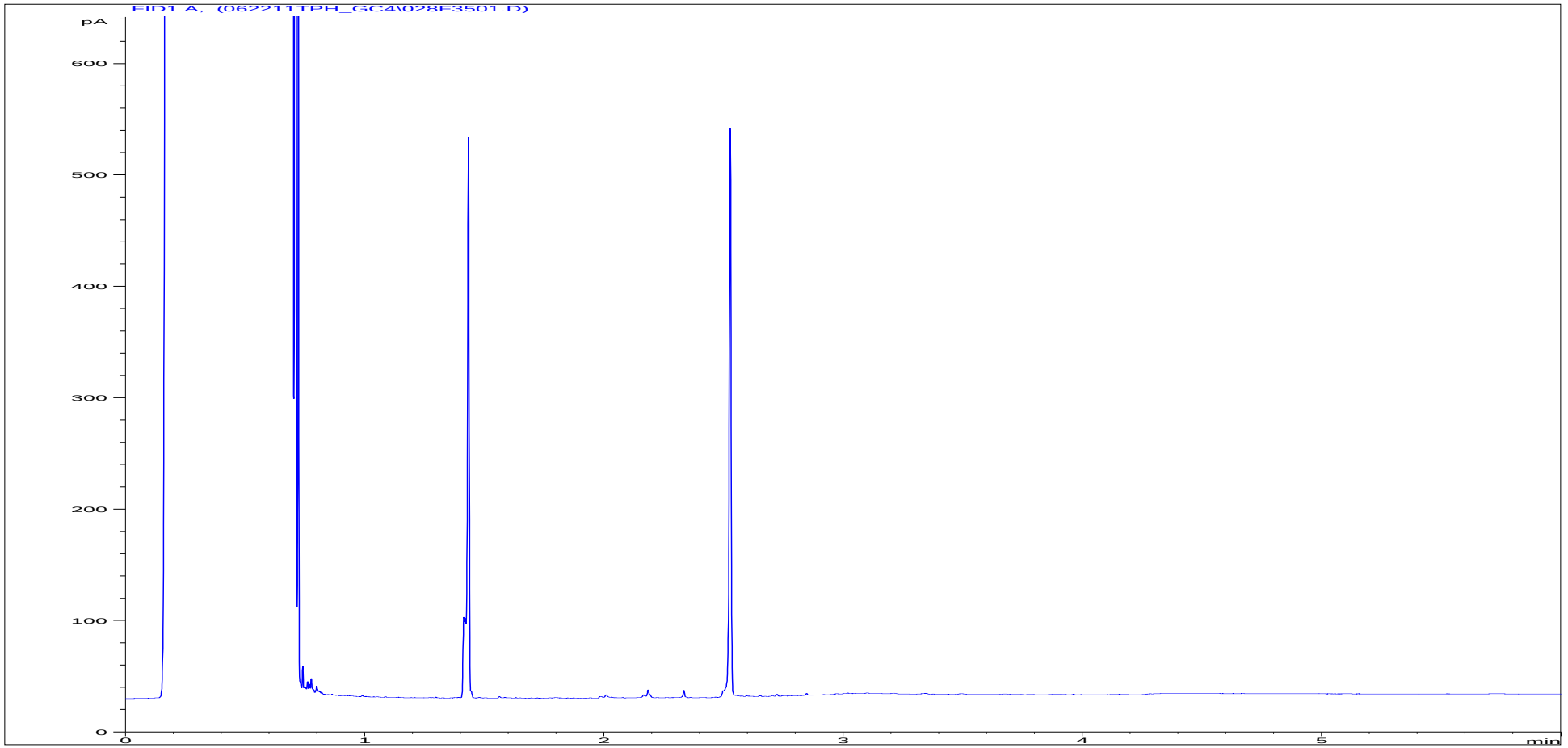
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	BLKS111335	**Job Number:**	S11_5087M
Multiplier:	1	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Job 115087 Blank (NVM)
Acquisition Date/Time:	22-Jun-11, 02:02:05		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\055B0901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

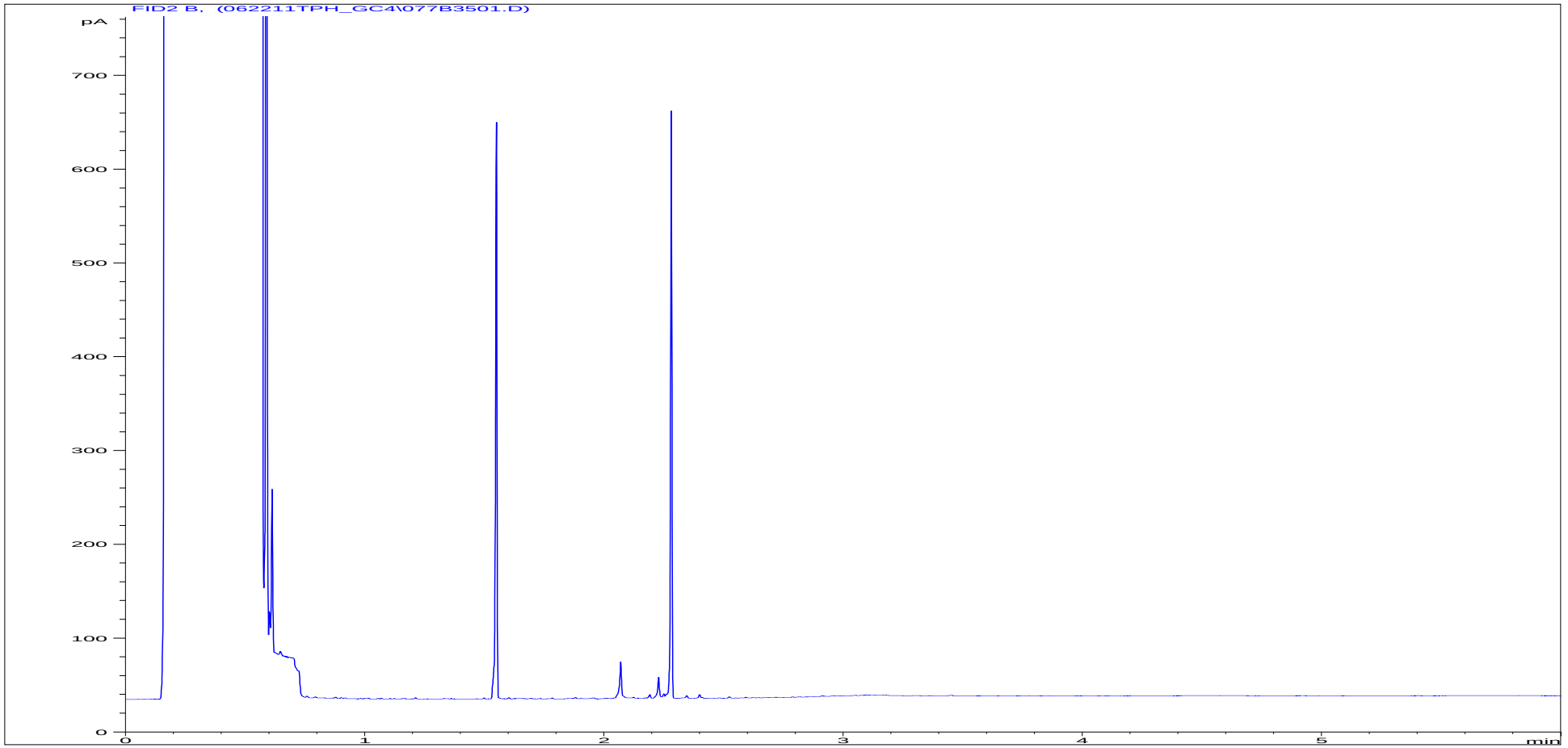
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	BLKS111335ALI	**Job Number:**	S11_5087M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Job 115087 Blank (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\028F3501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

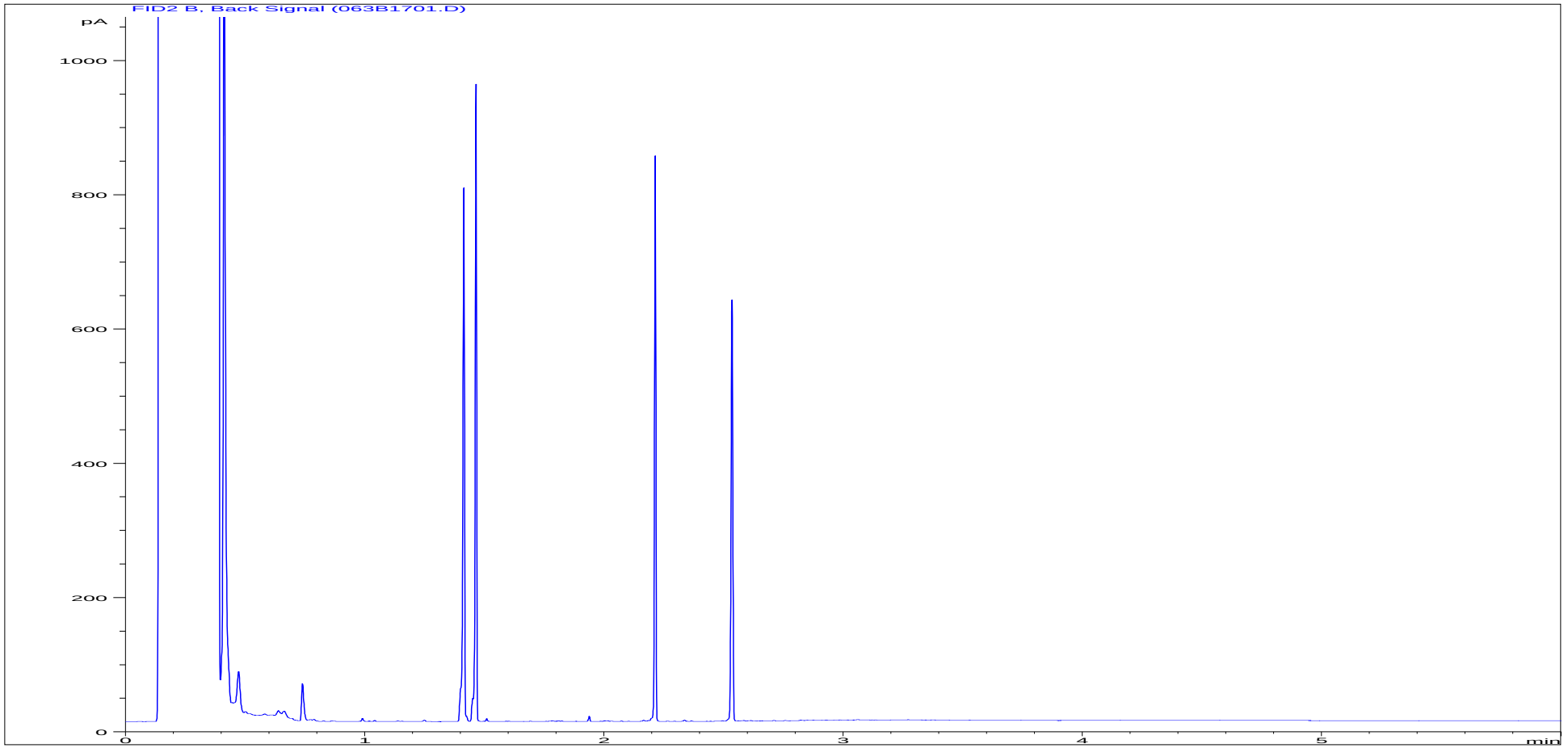
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	BLKS111335ARO	**Job Number:**	S11_5087M
Multiplier:	11.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Job 115087 Blank (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\077B3501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

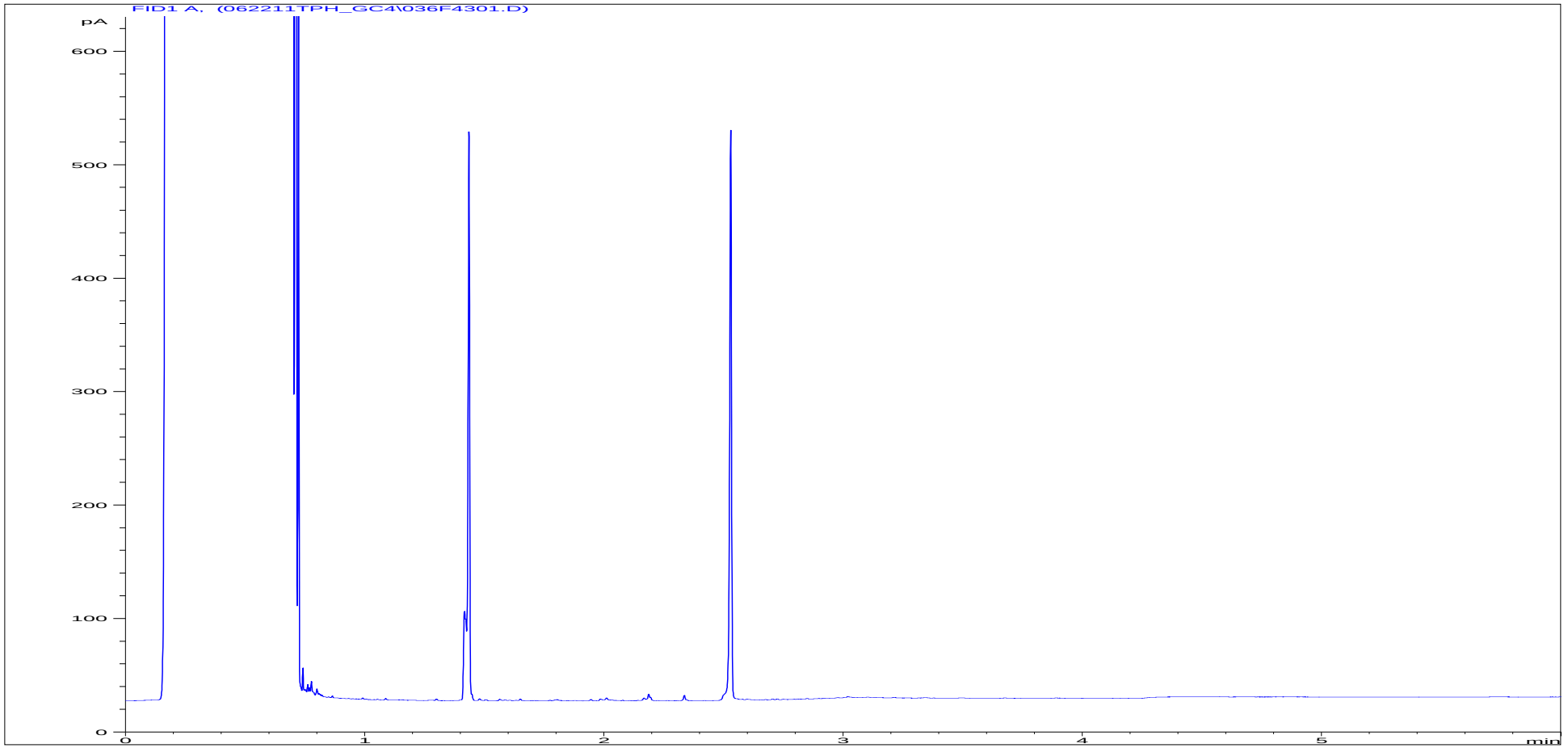
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123528	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-04/2 2.3-2.4 (NVM)
Acquisition Date/Time:	22-Jun-11, 03:37:31		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\063B1701.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

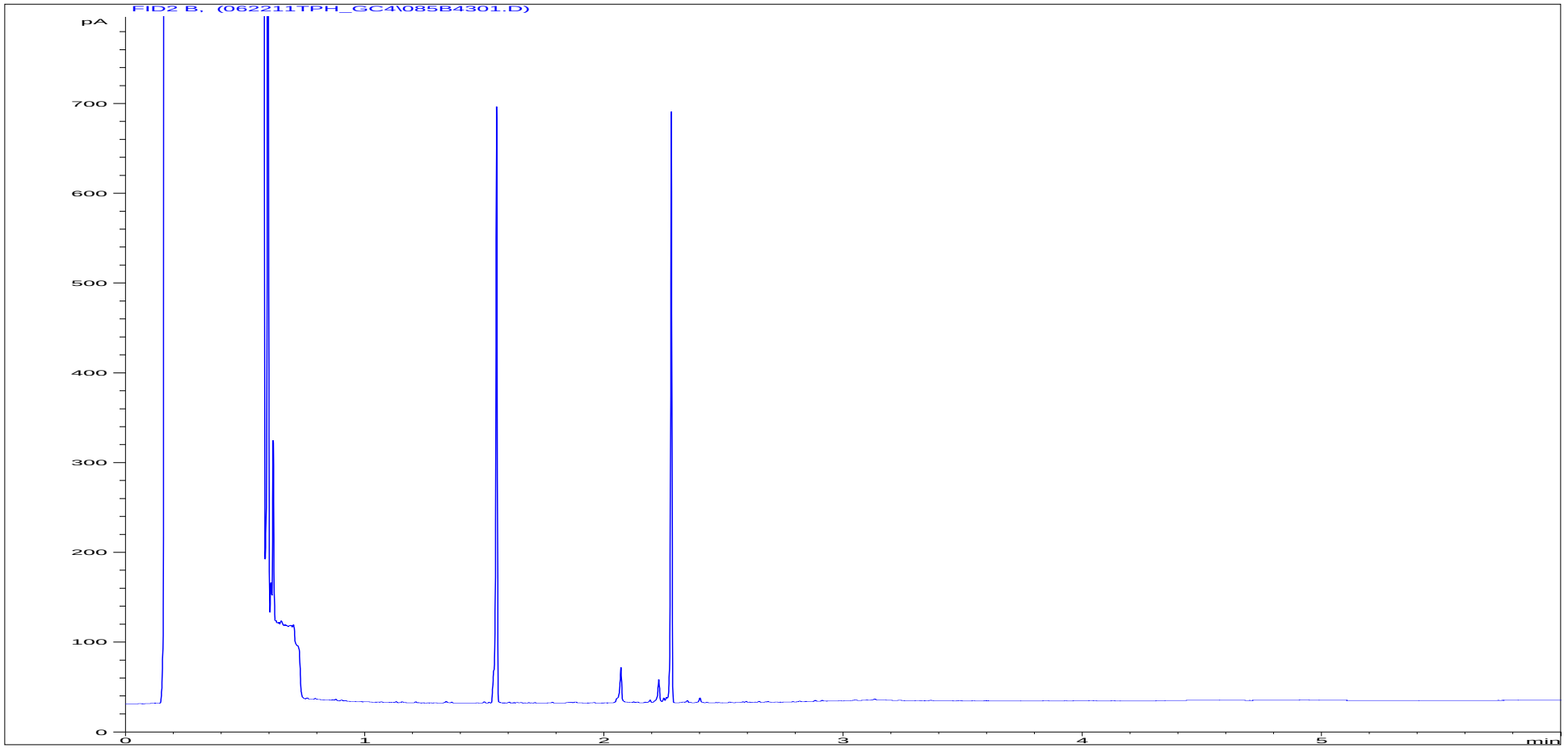
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1123528ALI	**Job Number:**	S11_5087M
Multiplier:	14.04	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-04/2 2.3-2.4 (NVM)
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\036F4301.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

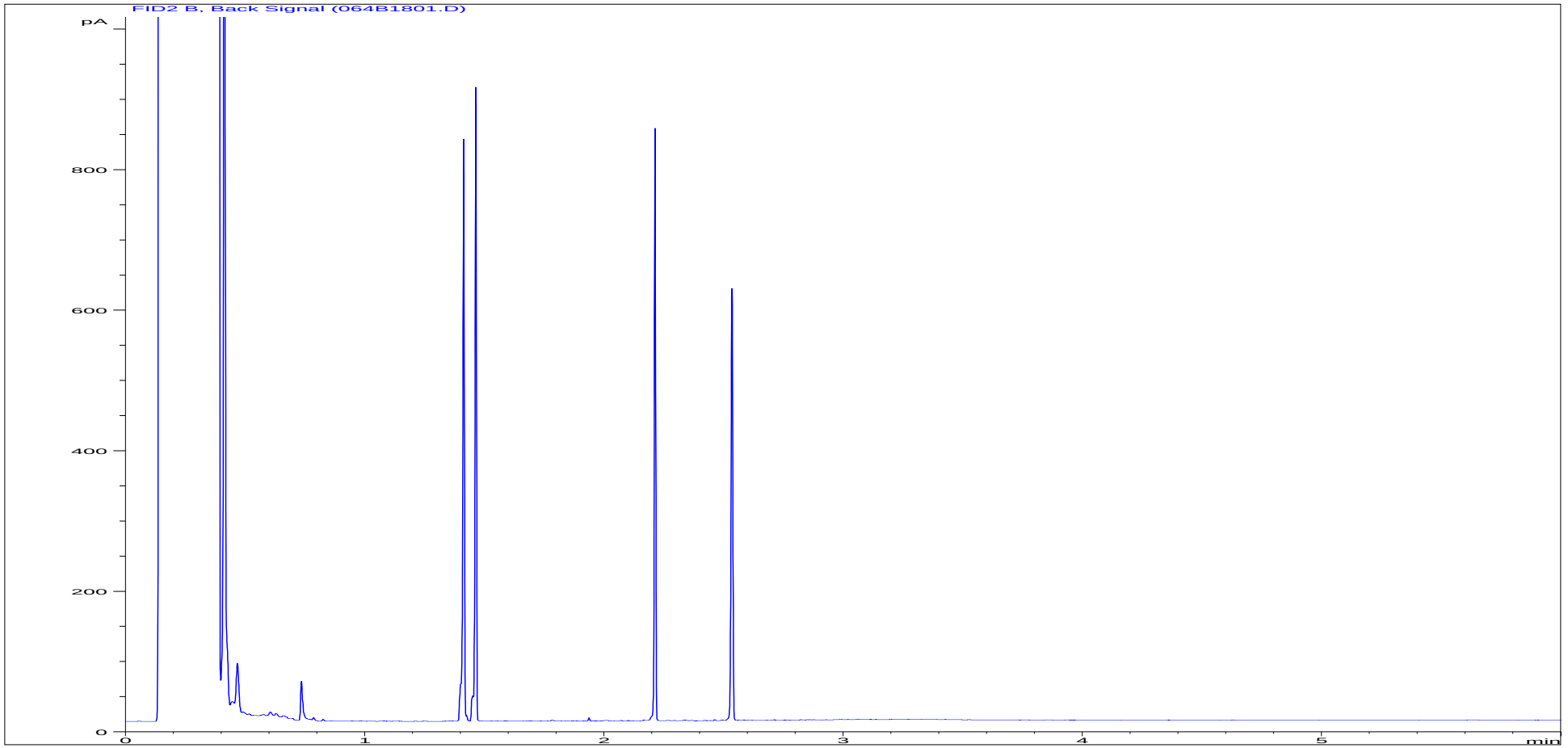
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1123528ARO	**Job Number:**	S11_5087M
Multiplier:	10.44	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-04/2 2.3-2.4 (NVM)
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\085B4301.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

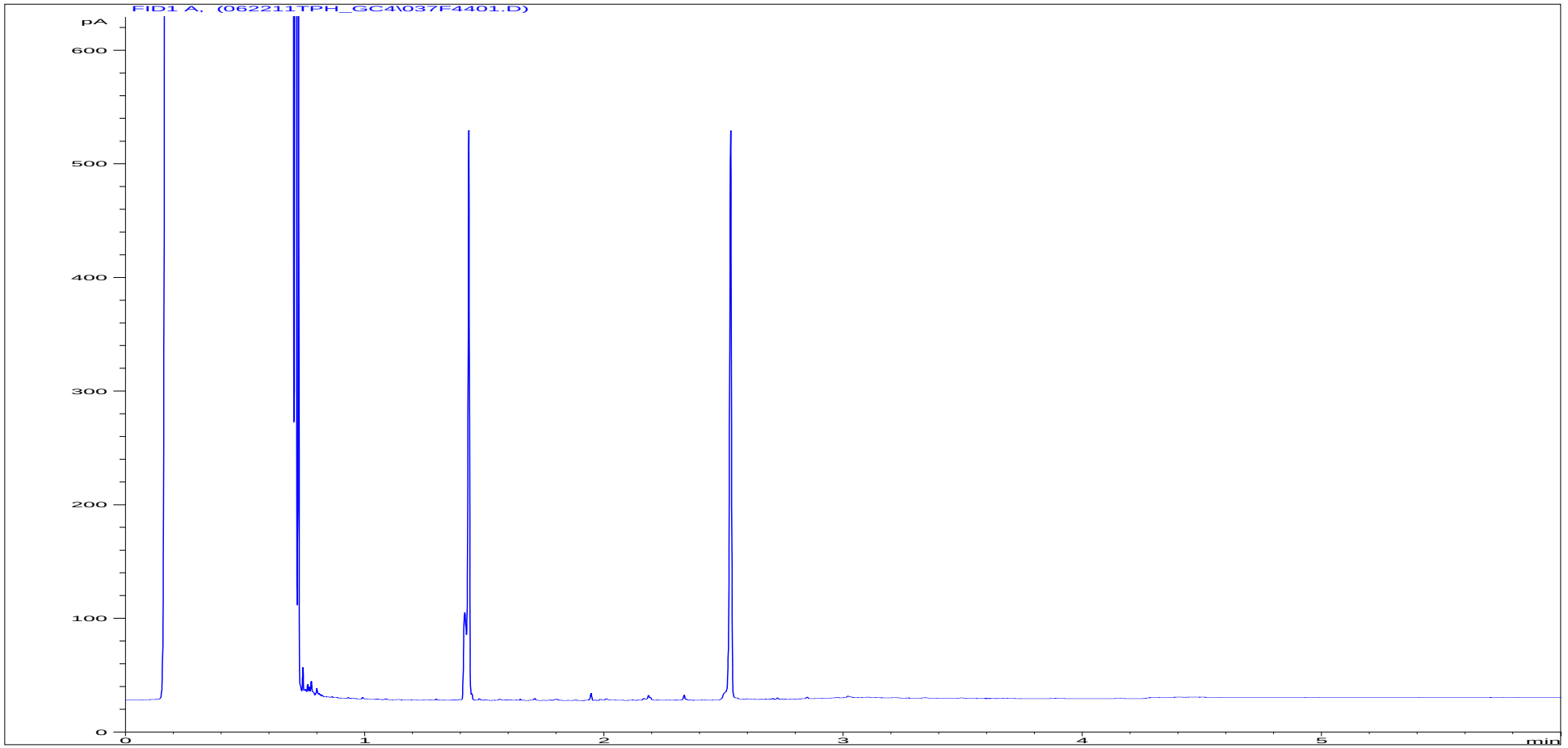
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123529	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-04/3 4.3-4.5
Acquisition Date/Time:	22-Jun-11, 03:49:25		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\064B1801.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

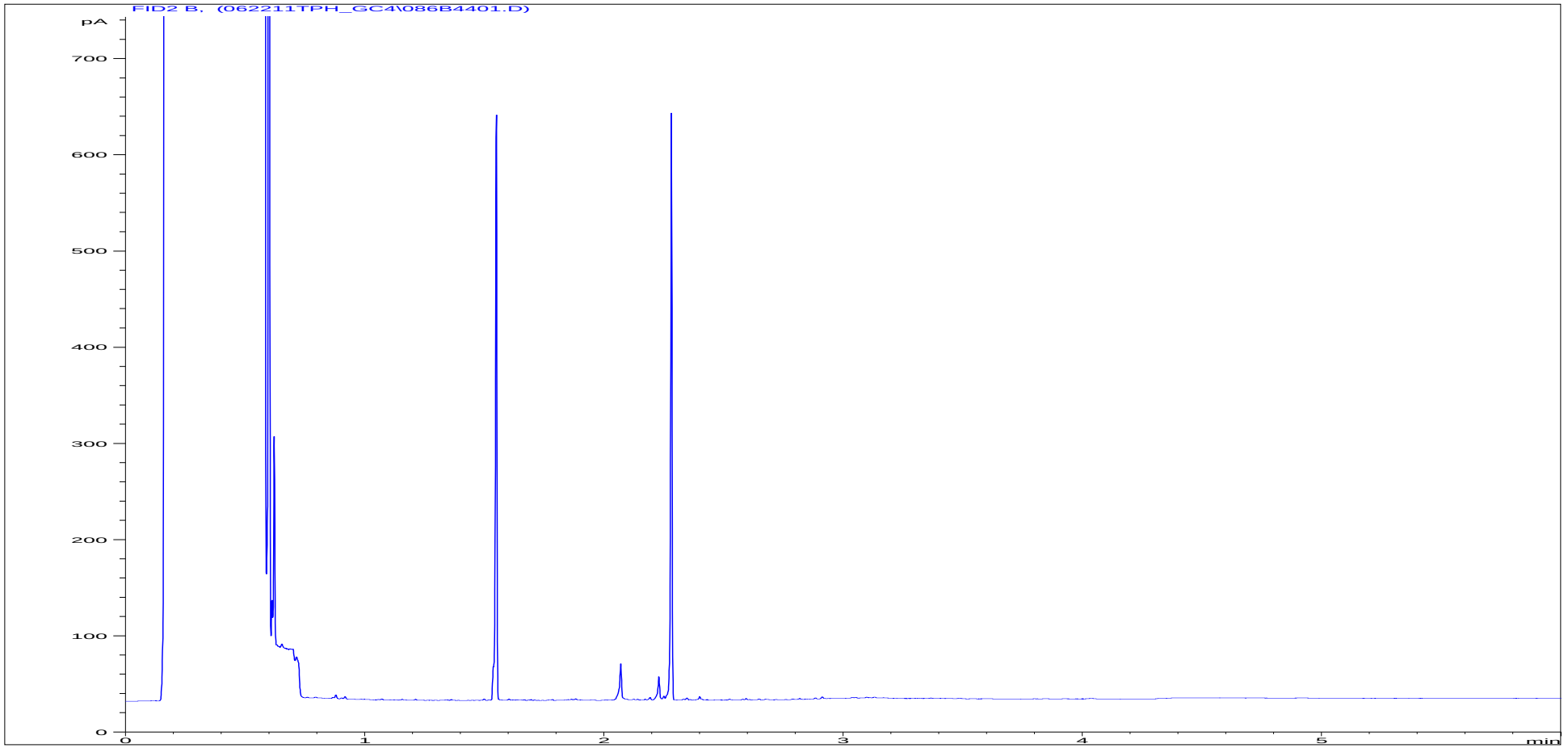
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1123529ALI	**Job Number:**	S11_5087M
Multiplier:	15.2	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-04/3 4.3-4.5
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\037F4401.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

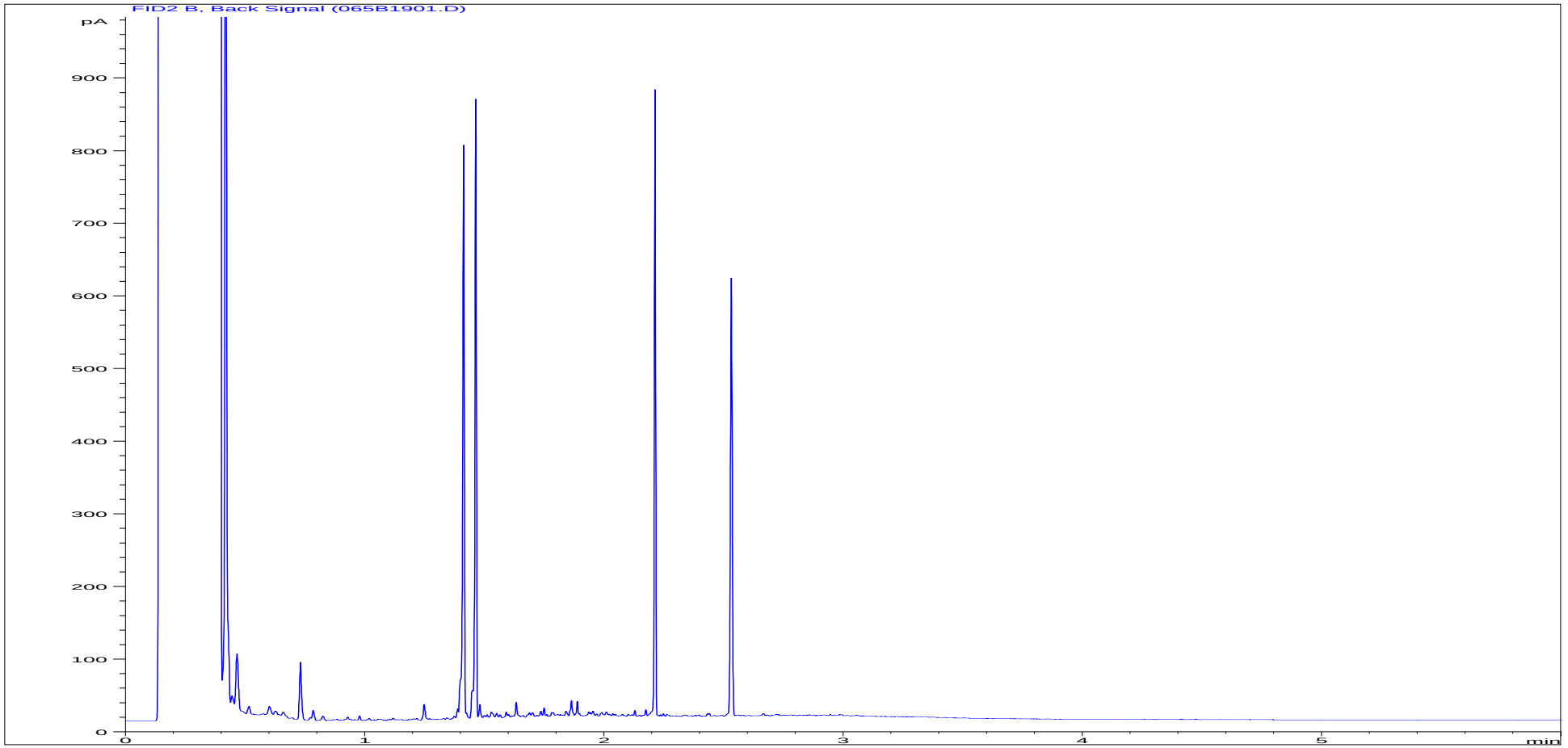
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1123529ARO	**Job Number:**	S11_5087M
Multiplier:	11.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-04/3 4.3-4.5
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\086B4401.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

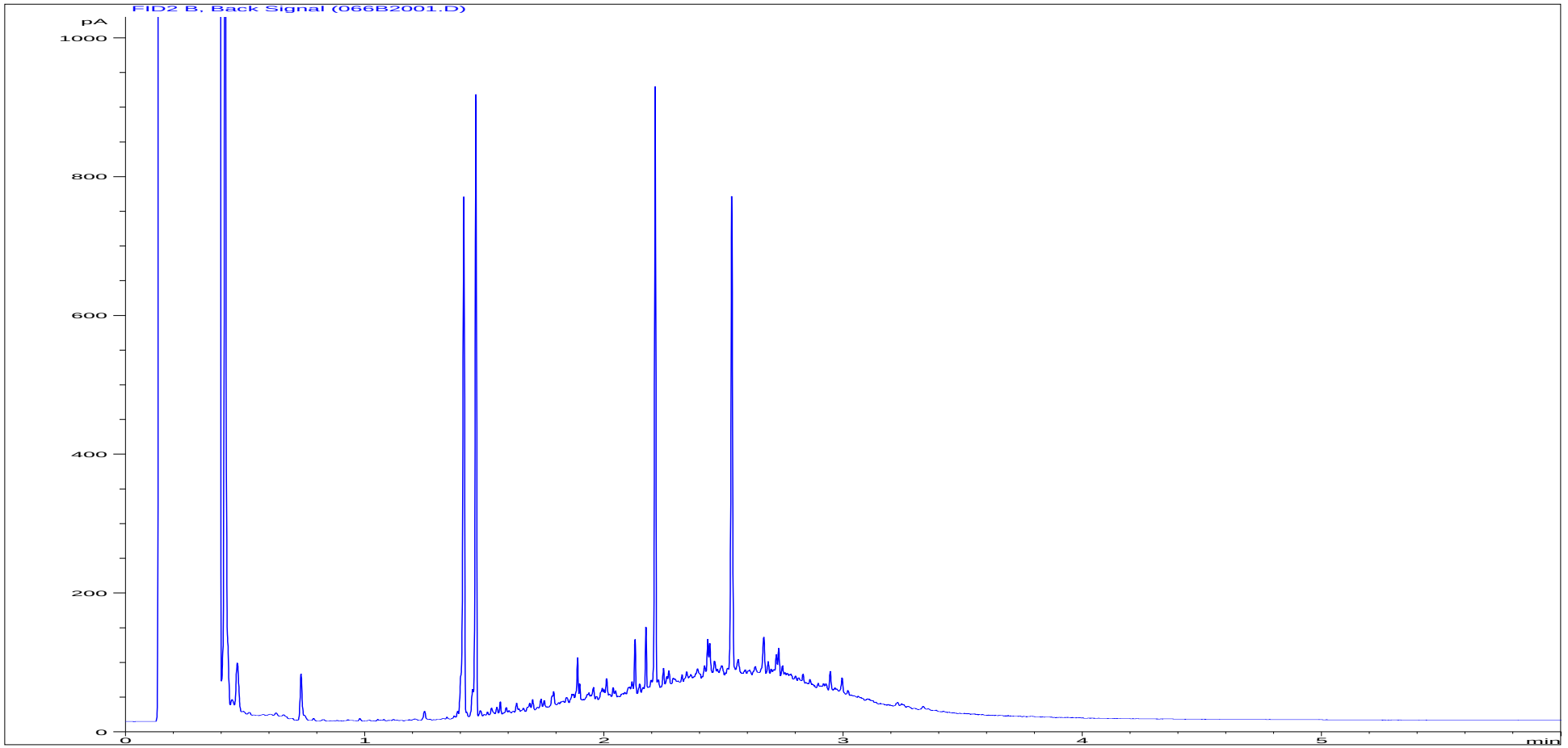
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123530	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-05/1 2.4-2.5 (NVM)
Acquisition Date/Time:	22-Jun-11, 04:01:22		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\065B1901.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

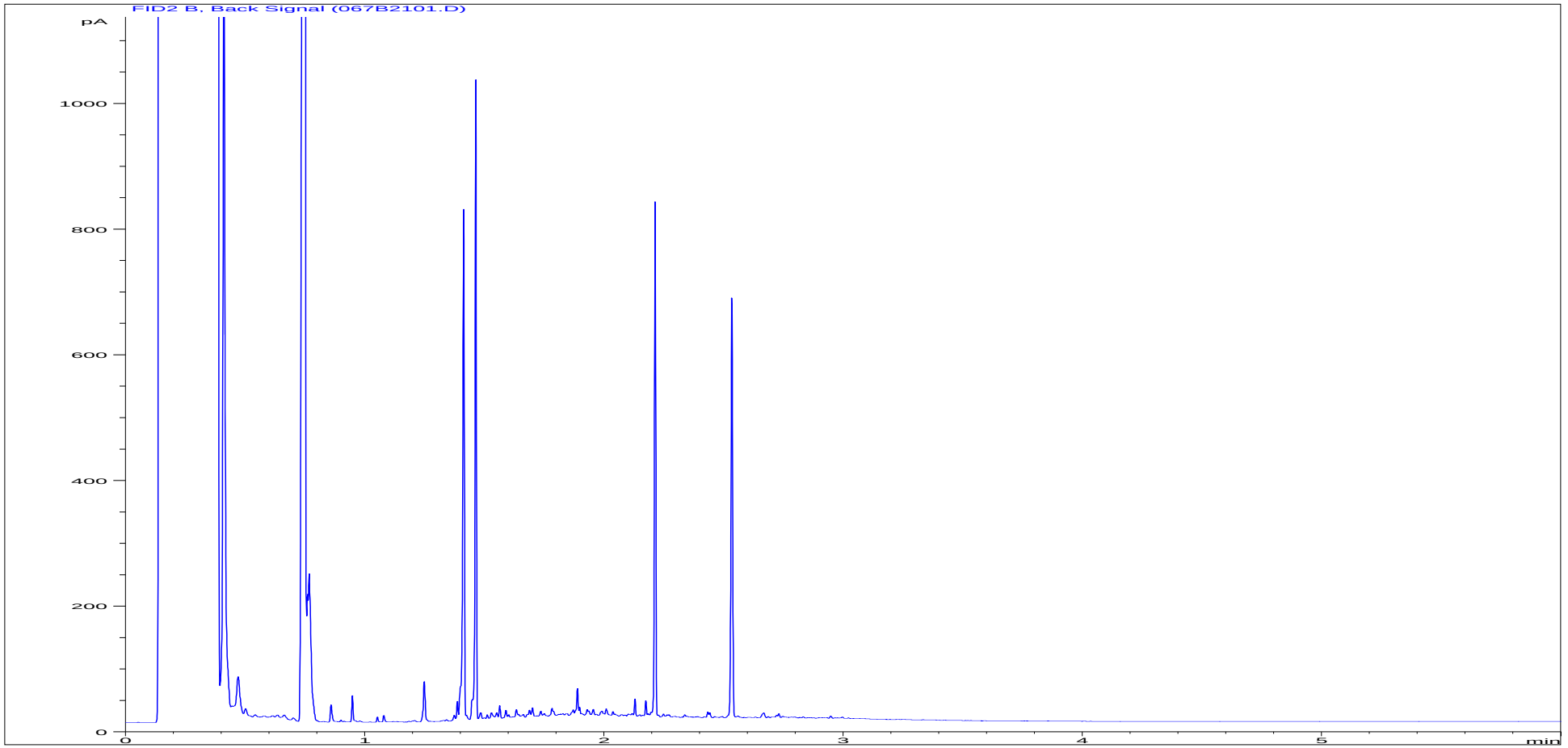
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123531	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-06/1 0.4
Acquisition Date/Time:	22-Jun-11, 04:13:20		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\066B2001.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

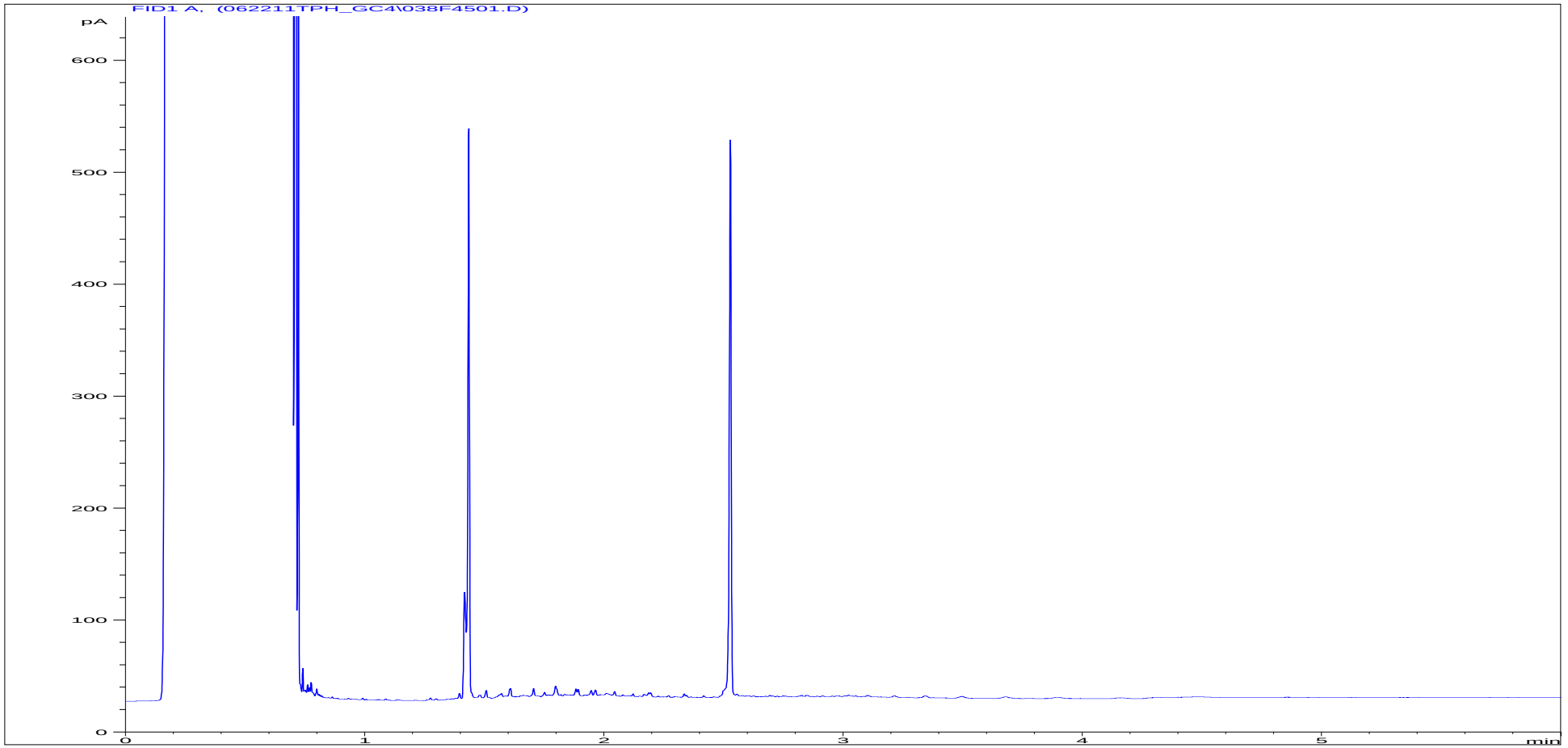
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123532	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-06/2 1.1
Acquisition Date/Time:	22-Jun-11, 04:25:00		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\067B2101.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

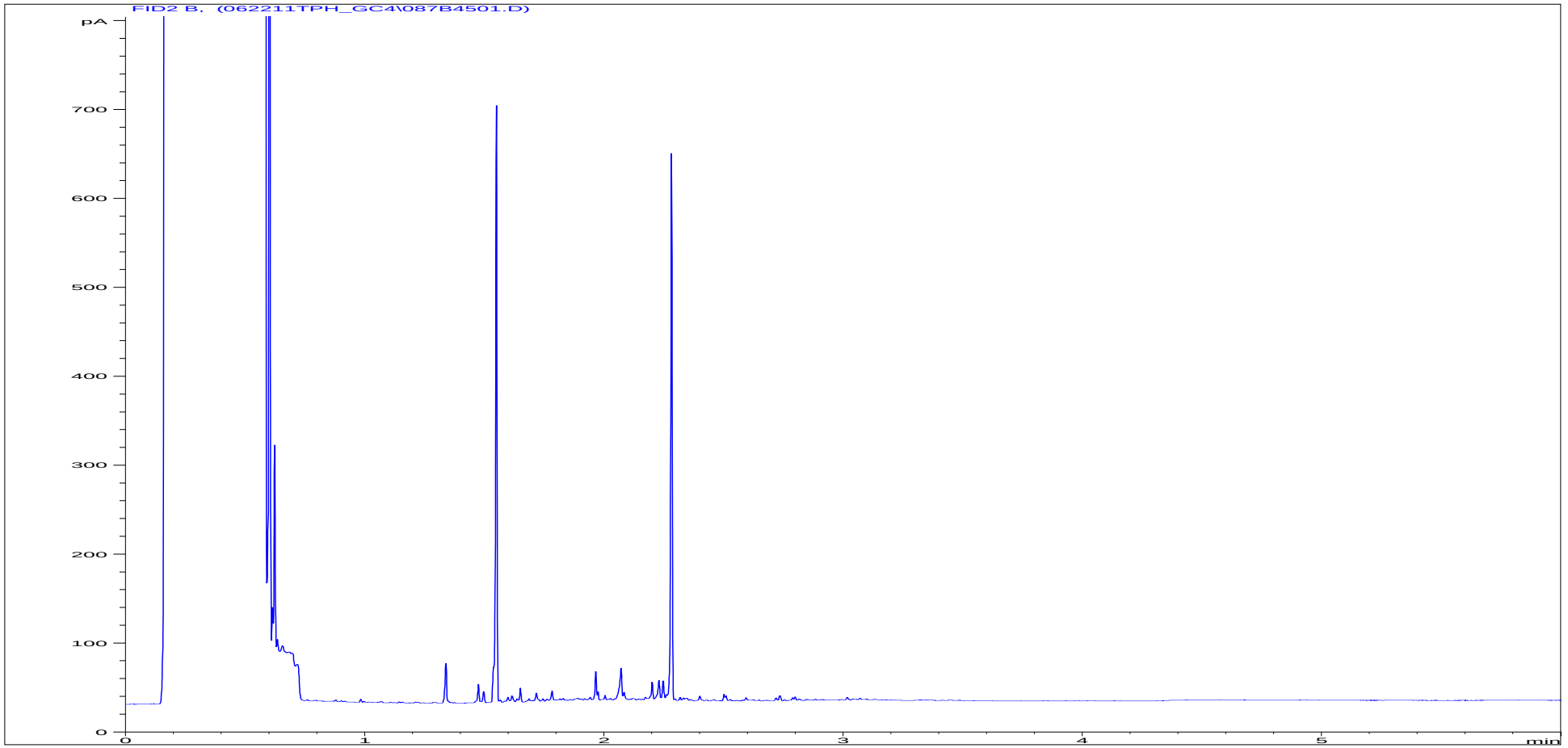
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1123532ALI	**Job Number:**	S11_5087M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-06/2 1.1
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\038F4501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

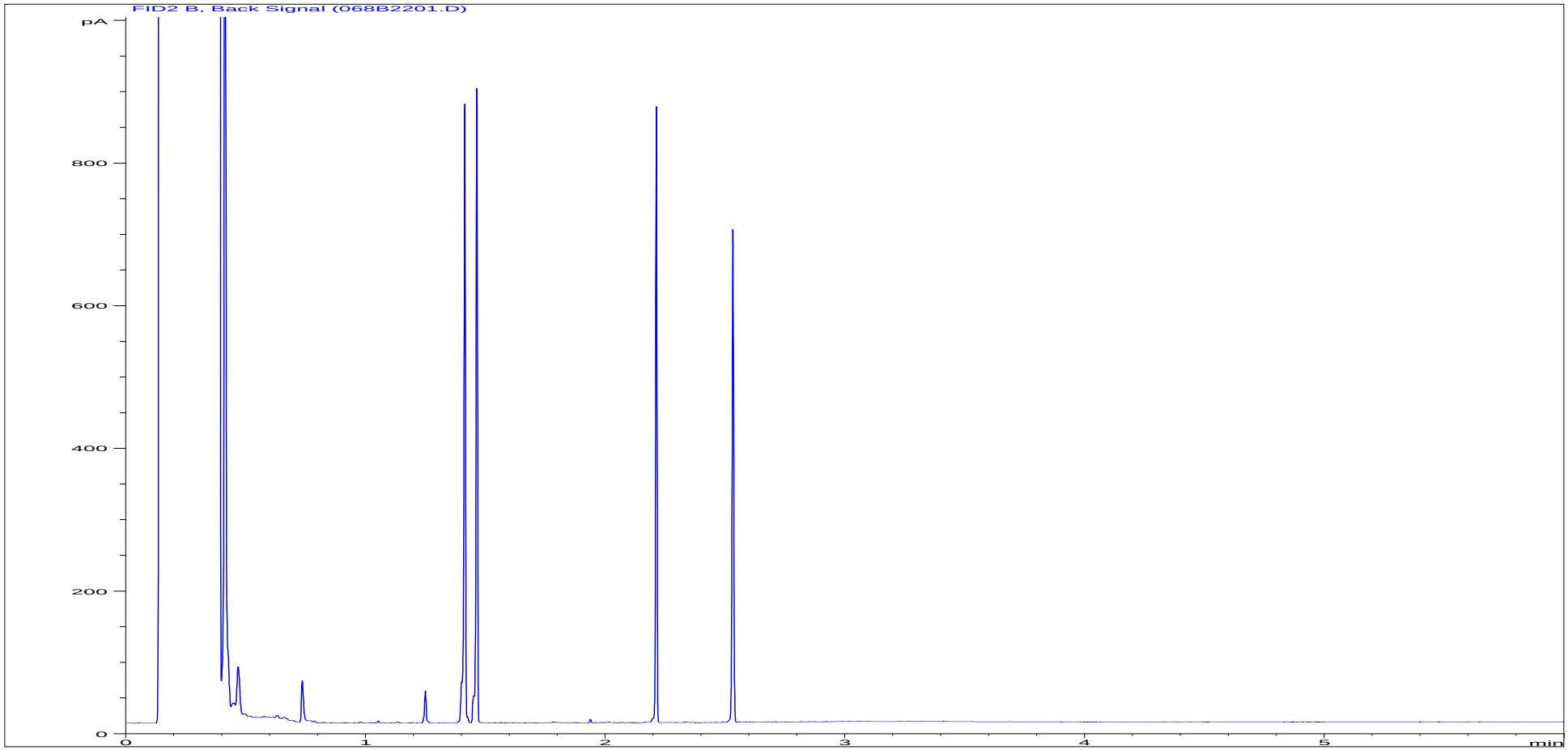
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1123532ARO	**Job Number:**	S11_5087M
Multiplier:	11.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-06/2 1.1
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\087B4501.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

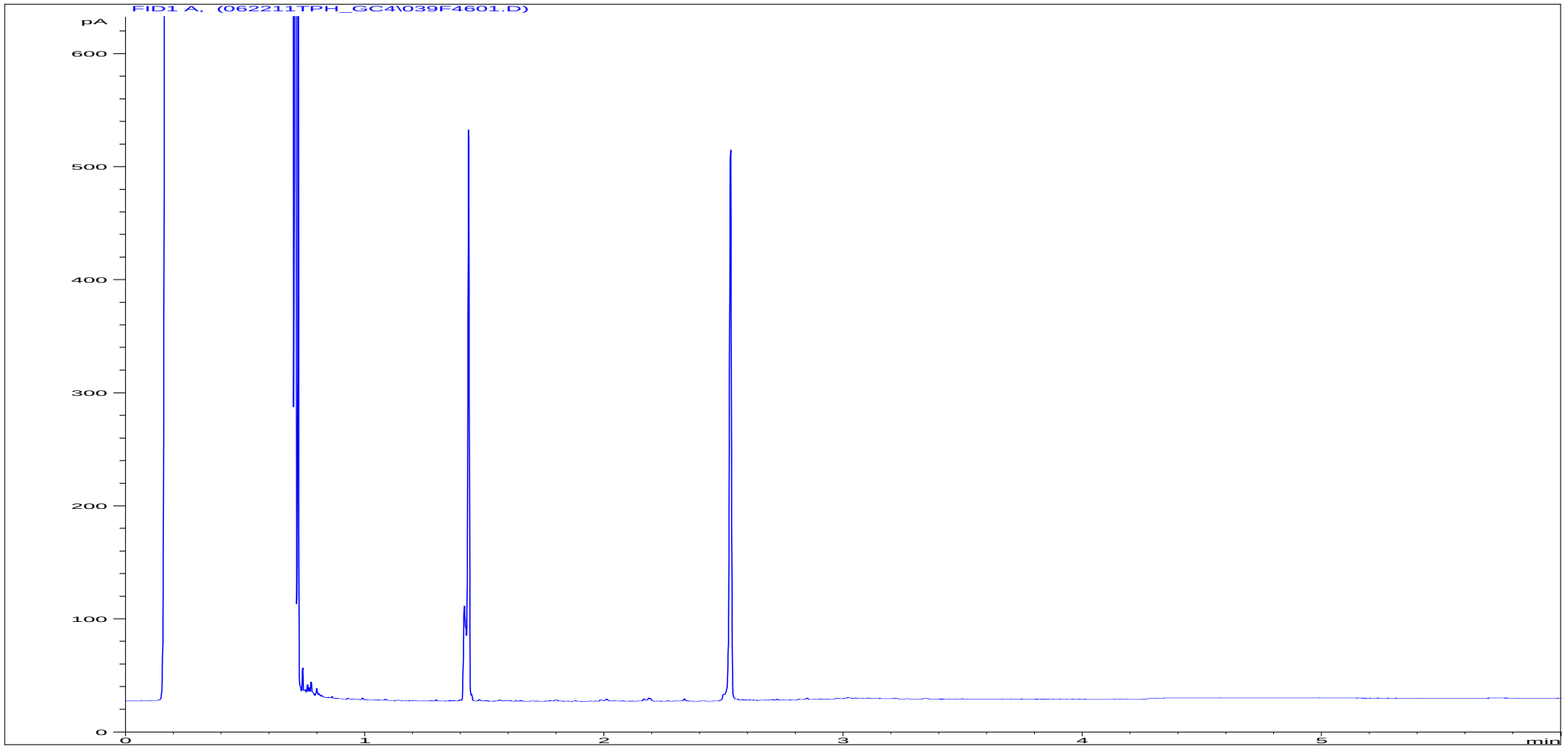
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	CL1123987	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	MW11-06/3 2.7-2.8
Acquisition Date/Time:	22-Jun-11, 04:36:55		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\068B2201.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

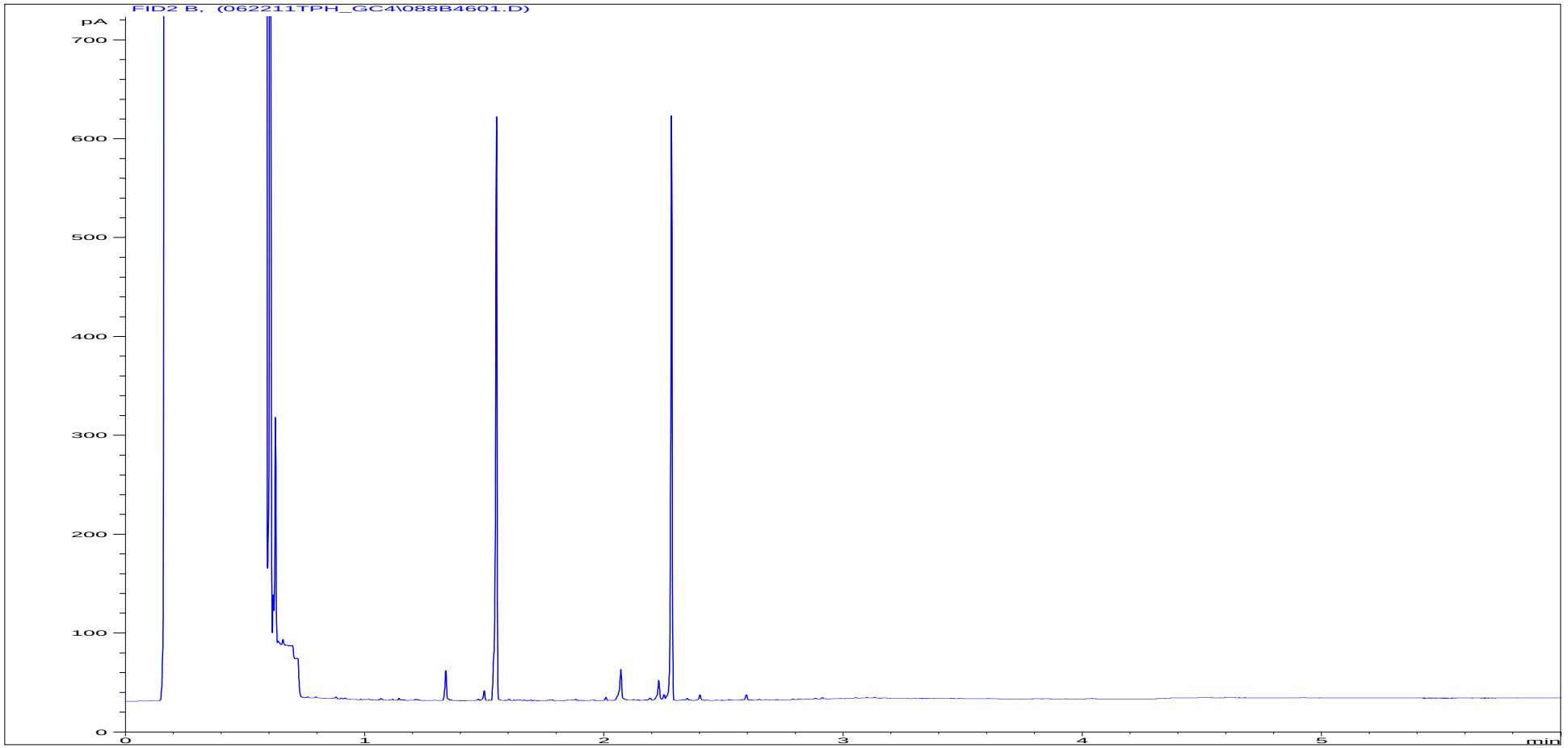
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	CL1123987ALI	**Job Number:**	S11_5087M
Multiplier:	14.82	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-06/3 2.7-2.8
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\039F4601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

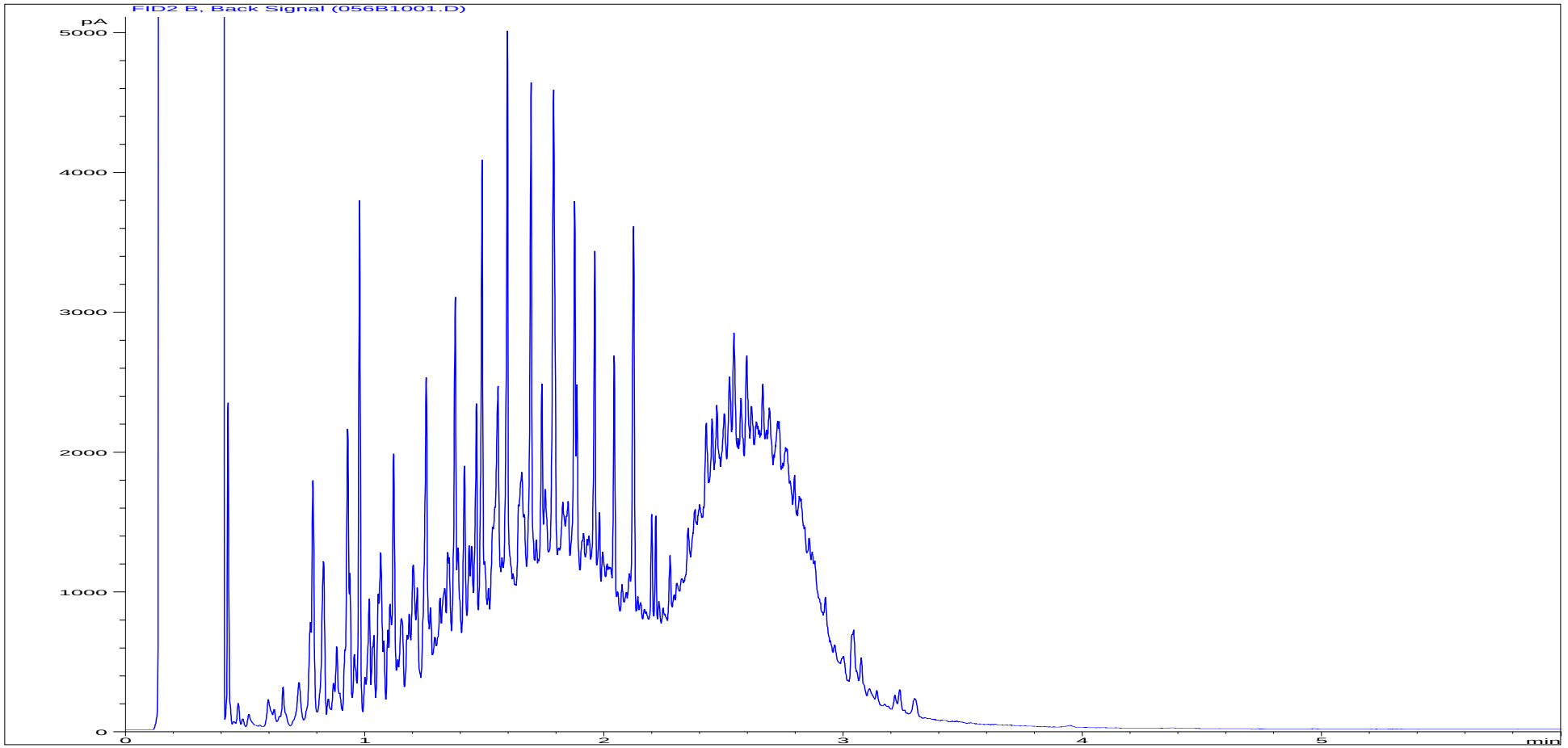
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	CL1123987ARO	**Job Number:**	S11_5087M
Multiplier:	11.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	MW11-06/3 2.7-2.8
Acquisition Date/Time:	23-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\088B4601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

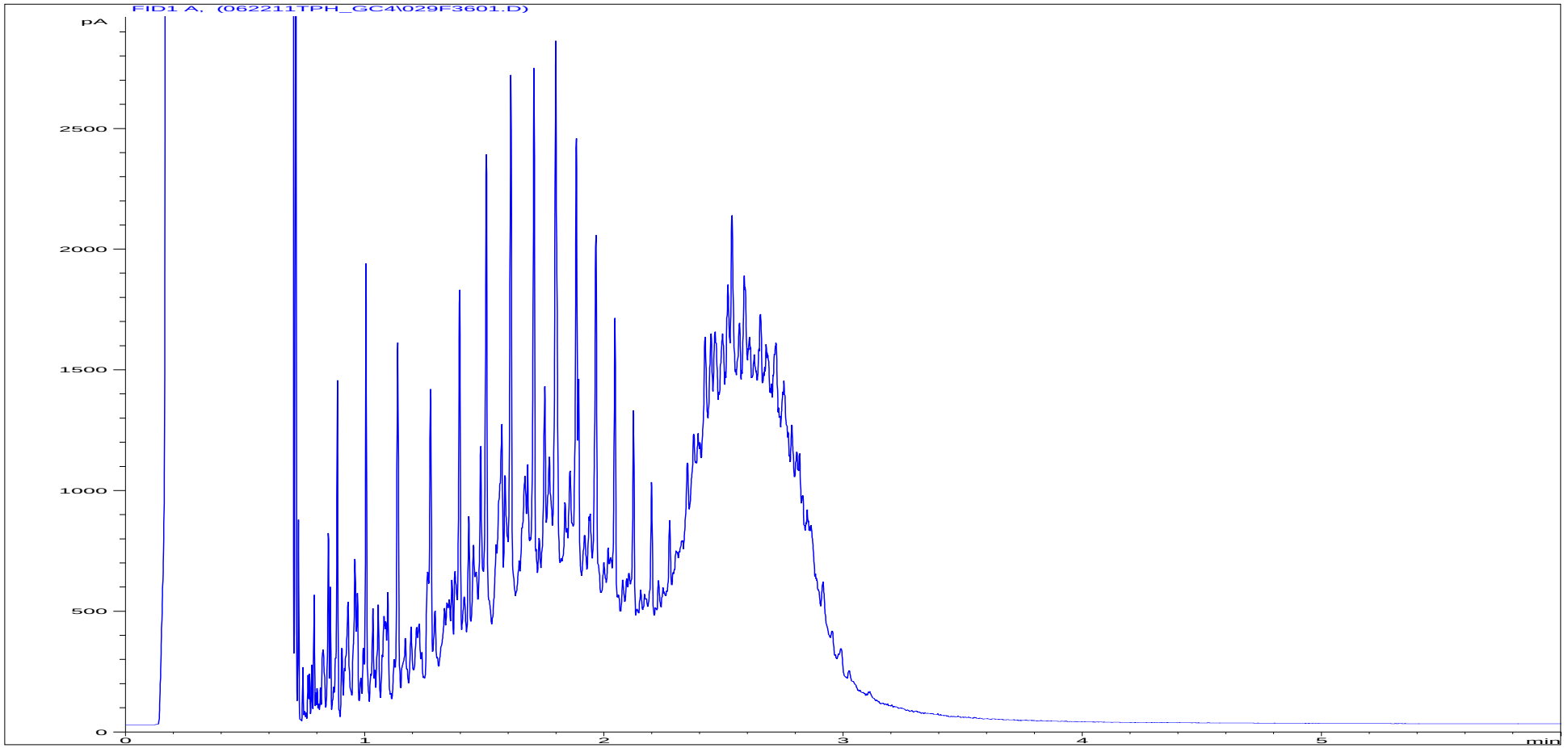
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	RMS111335	**Job Number:**	S11_5087M
Multiplier:	8	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_MAX_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	22-Jun-11, 02:14:00		
Datafile:	D:\TES\DATA\Y2011\0621ATPH_GC14\062111A 2011-06-22 00-25-22\056B1001.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

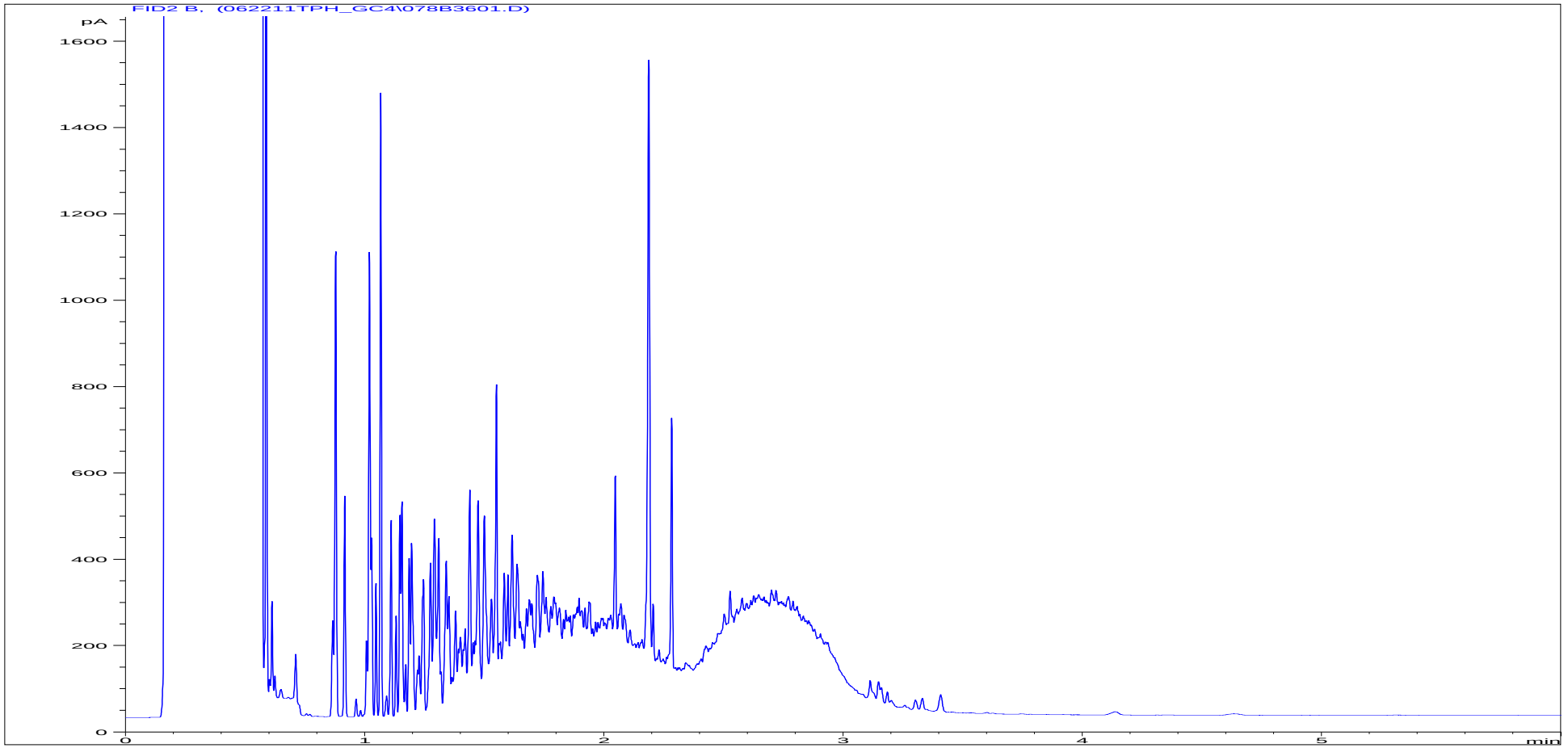
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	RMS111335ALI	**Job Number:**	S11_5087M
Multiplier:	15.38	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\029F3601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	RMS111335ARO	**Job Number:**	S11_5087M
Multiplier:	12.18	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	5UL_RUNF.M	**Client Sample Ref:**	Reference Material (% Recovery (NVM)
Acquisition Date/Time:	22-Jun-11		
Datafile:	D:\TES\DATA\Y2010\062211TPH_GC4\078B3601.D		

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105℃ where appr opriate, in accordance with the MCERTS standard.

Exova (UK) Ltd
70 Montrose Avenue
Hillington
Glasgow

G52 4LA

T: 0141-941-2022
F: 0141-952-7099
E: glasgow.asbestos@exova.com
W: www.exova.com

Test Certificate

Scientifics
ESG House
Ashby Road
Bretby
Burton Upon Trent
DE15 0XD
Attn: Claire Pickering

REF No A 511454 : Issue 1
Page 1 of 1
Ord No 50354
Date Tested 27/06/11
Date Reported 29/06/11
Date Received 22/06/11

Item - Analysis of soil for the presence of asbestos
Maelor Works. Job No: S115087

Sample No Description	001514 CL/1123531			
Asbestos Asbestos in soils	ND -			

Certificate Comments

Sampling was carried out by the client or his agent.

Sampling location details and sample information were supplied with the sample.

Bulk analysis carried out in accordance with DIHM ASB/01 which is based on Health & Safety Executive procedure Appendix 2: Asbestos in Bulk materials: Sampling and identification by polarised light microscopy (PLM) set out in HSG248.

Analysis carried out at Glasgow Laboratory.

ND : Not Detected

This is an electronic copy. See original certificate for terms and conditions.

---------- End of Text ----------

Tested by **W French**

David Cook

.....
D Cook
Operations Manager - Asbestos
For and on the authority of
Exova (UK) Ltd

UKAS TESTING
0568

This document may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
These results pertain only to the item(s) tested as sampled by the client unless otherwise indicated.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S115087

Customer Worley Parsons Komex
Site Maelor Works
Report No S115087

Consignment No 21482
Date Logged 16-Jun-2011

Report Due 24-Jun-2011

ID Number	Description	MethodID	AMMAR	CustServ	ELESULP	GROHSA		ICPBOR	ICPMSS									ICPSOIL	ICPWSS	KONECL	LOI(%MM)	MCertS	PAHMSUS	PHEHPLC	PHSOIL	SFAPI	
		Sampled	Exchangeable Ammonium as N (AR)	Report B	Elemental Sulphur	GRO	GRO (AA)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Iron	SO4-- (H2O sol) mg/l	Chloride (2:1)	LOI % @ 450°C	MCertS Analysis	PAH by MS.16(0.08)	Phenol - HPLC	pH units (AR)	Cyanide(Complex) (AR)	Cyanide(Free) (AR)
Accredited to ISO17025				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
CL/1123528	MW11-04/2 2.3-2.4	09/06/11					E																				
CL/1123529	MW11-04/3 4.3-4.5	09/06/11					E																				
CL/1123530	MW11-05/1 2.4-2.5	09/06/11				E																					
CL/1123531	MW11-06/1 0.4	09/06/11				E																					
CL/1123532	MW11-06/2 1.1	09/06/11					E																				
CL/1123533	Job 115087 Blank																										
CL/1123534	Reference Material (% Recovery																										
CL/1123987	MW11-06/3 2.7-2.8	09/06/11					E																				

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

SOIL Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

S115087

Customer Worley Parsons Komex
Site Maelor Works
Report No S115087

Consignment No 21482
Date Logged 16-Jun-2011

Report Due 24-Jun-2011

ID Number	Description	MethodID	SFAPI		SSP3	Sub042	TMSS	TPHFIDUS		TPHUSSI	VOCHSAS	WSLM59
		Sampled	Cyanide(Total) (AR)	Thiocyanate(SCN) (AR)	Stone Content %	^Asbestos (screen)	Tot.Moisture @ 105C	TPH Band (C10-C35)	TPH by GCFID (AR)	TPH by GCFID (AR/Si)	BTEX-HsaMS analysis	Total Organic Carbon
Accredited to ISO17025			✓	✓		✓	✓		✓	✓	✓	
CL/1123528	MW11-04/2 2.3-2.4	09/06/11									E	
CL/1123529	MW11-04/3 4.3-4.5	09/06/11									E	
CL/1123530	MW11-05/1 2.4-2.5	09/06/11									E	
CL/1123531	MW11-06/1 0.4	09/06/11									E	
CL/1123532	MW11-06/2 1.1	09/06/11									E	
CL/1123533	Job 115087 Blank											
CL/1123534	Reference Material (% Recovery											
CL/1123987	MW11-06/3 2.7-2.8	09/06/11									E	

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	AMMAR	As Received	Determination of Exchangeable Ammonium in Soil using potassium chloride extraction, discrete colorimetric detection
Soil	ELESULP	Air Dried	Determination of Elemental Sulphur using Solvent Extraction followed by HPLC detection.
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Air Dried	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPMS
Soil	ICPSOIL	Air Dried	Determination of Metals in soil samples by aqua regia digestion followed by ICPOES detection
Soil	ICPWSS	Air Dried	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	KONECL	Air Dried	Determination of Chloride in Soil using water extraction at the stated water:soil ratio, discrete colorimetric detection
Soil	LOI(%MM)	Air Dried	Determination of loss on ignition for soil samples at specified temperature by gravimetry
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHEHPLC	As Received	Determination of Phenols by methanol extraction followed by HPLC detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SSP3	As Received	Determination of stones content by dry sieving at the required particle size
Soil	Subcon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	TPHUSSI	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including quantitation of Aromatic and Aliphatic fractions.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS
Soil	WSLM59	Air Dried	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : Worley Parsons Komex

Site : Maelor Works

Report Number : S11_5087M

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1123528	MW11-04/2 2.3-2.4 (NVM)	Brown Sand STONE
CL/1123529	MW11-04/3 4.3-4.5	Brown CLAY
CL/1123530	MW11-05/1 2.4-2.5 (NVM)	Grey Sand STONE
CL/1123531	MW11-06/1 0.4	Brown MADE GROUND
CL/1123532	MW11-06/2 1.1	Brown Sand SILT Stone
CL/1123987	MW11-06/3 2.7-2.8	Brown CLAY

END OF REPORT

Our Ref: EXR/123554 (Ver. 1)
Your Ref: 50065-29

August 10, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123554 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 29-Jul-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 10-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 10-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1132549	MW11-11	27-Jul-11	7.3	934	1524	325	51	158	107	14	50	12	0.003	0.004	<0.0001	Req	0.002	<0.001
1132550	MW11-11A	27-Jul-11	7.3	773	610	281	25	148	104	5	30	16	0.003	0.004	<0.0001	Req	0.003	<0.001
1132551	MW11-12	27-Jul-11	8.2	1140	2318	320	103	96	113	9	66	67	0.002	0.005	<0.0001	Req	0.002	<0.001
1132552	QC Blank		7.09	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132553	Blank Spike (% Recovery)				100		99	98	97	98	99	101	102	97	96	Req	102	98

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1132549	MW11-11	**27-Jul-11**	<0.002	0.33	0.76	1.09	<0.01	0.001	<0.0001	0.003	0.07	2.6	<0.2	<0.02	<0.02	<0.05	4.6	<0.1
1132550	MW11-11A	**27-Jul-11**	0.004	0.69	0.50	1.19	<0.01	0.002	<0.0001	0.005	0.14	1.4	<0.2	<0.02	<0.02	<0.05	3.8	<0.1
1132551	MW11-12	**27-Jul-11**	<0.002	6.16	1.47	7.63	<0.01	0.004	<0.0001	0.003	0.3	2.1	<0.2	<0.02	<0.02	<0.05	4.4	<0.1
1132552	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132553	Blank Spike (% Recovery)		97	100	100	100	96	97	99	93	99		102	97	99	107	98	95

scientifics

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1132549	MW11-11	27-Jul-11	Req	0.09	<0.02	4.9	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132550	MW11-11A	27-Jul-11	Req	0.08	<0.02	2.0	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132551	MW11-12	27-Jul-11	Req	1.18	<0.02	3.0	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132552	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132553	Blank Spike (% Recovery)		Req	102			89	84	82	81	246	99	98	94	101	97		

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11	**Job Number:**	W12_3554
LIMS ID Number:	EX1132549	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	83
Acenaphthene-d10	83
Phenanthrene-d10	82
Chrysene-d12	84
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	94

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11A	**Job Number:**	W12_3554
LIMS ID Number:	EX1132550	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	81
Acenaphthene-d10	82
Phenanthrene-d10	82
Chrysene-d12	78
Perylene-d12	69

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-12	**Job Number:**	W12_3554
LIMS ID Number:	EX1132551	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	84
Acenaphthene-d10	84
Phenanthrene-d10	84
Chrysene-d12	82
Perylene-d12	74

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123554 Blank	**Job Number:**	W12_3554
LIMS ID Number:	EX1132552	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	94
Phenanthrene-d10	91
Chrysene-d12	95
Perylene-d12	87

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123554 Blank Spike	**Job Number:**	W12_3554
LIMS ID Number:	EX1132553	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.26	94	
Acenaphthylene	208-96-8	4.31	83	
Acenaphthene	83-32-9	4.43	83	
Fluorene	86-73-7	4.81	84	
Phenanthrene	85-01-8	5.65	92	
Anthracene	120-12-7	5.71	86	
Fluoranthene	206-44-0	6.99	89	
Pyrene	129-00-0	7.28	87	
Benzo[a]anthracene	56-55-3	8.96	100	
Chrysene	218-01-9	9.01	92	
Benzo[b]fluoranthene	205-99-2	10.49	90	
Benzo[k]fluoranthene	207-08-9	10.53	83	
Benzo[a]pyrene	50-32-8	10.92	83	
Indeno[1,2,3-cd]pyrene	193-39-5	12.30	68	
Dibenzo[a,h]anthracene	53-70-3	12.34	67	
Benzo[g,h,i]perylene	191-24-2	12.60	80	
Total (USEPA16) PAHs	-	-	85	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	90
Phenanthrene-d10	92
Chrysene-d12	96
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	110

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3554
QC Batch Number: 110708
Directory: D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\062B2301.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

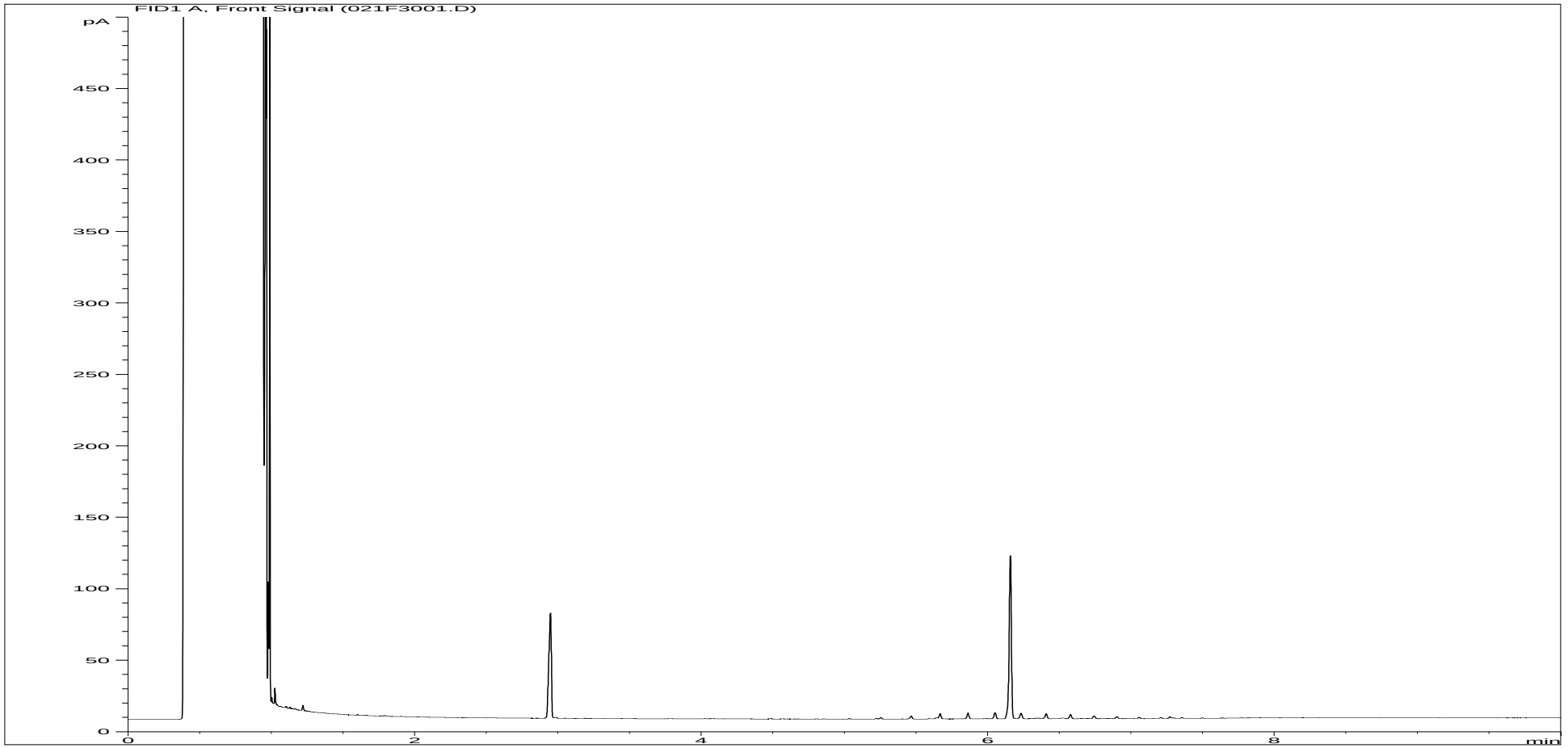
Matrix: Water
Date Booked in 29-Jul-11
Date Extracted 03-Aug-11
Date Analysed 04-Aug-11, 20:22:48

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1132549	MW11-11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132550	MW11-11A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132551	MW11-12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132552	Report 123554 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132553	Report 123554 Blank Spike	0.699	0.209	1.07	0.34	1.91	0.606	1.12	0.309	2.91	0.756	7.78	2.24

Where individual results are flagged see report notes for status.

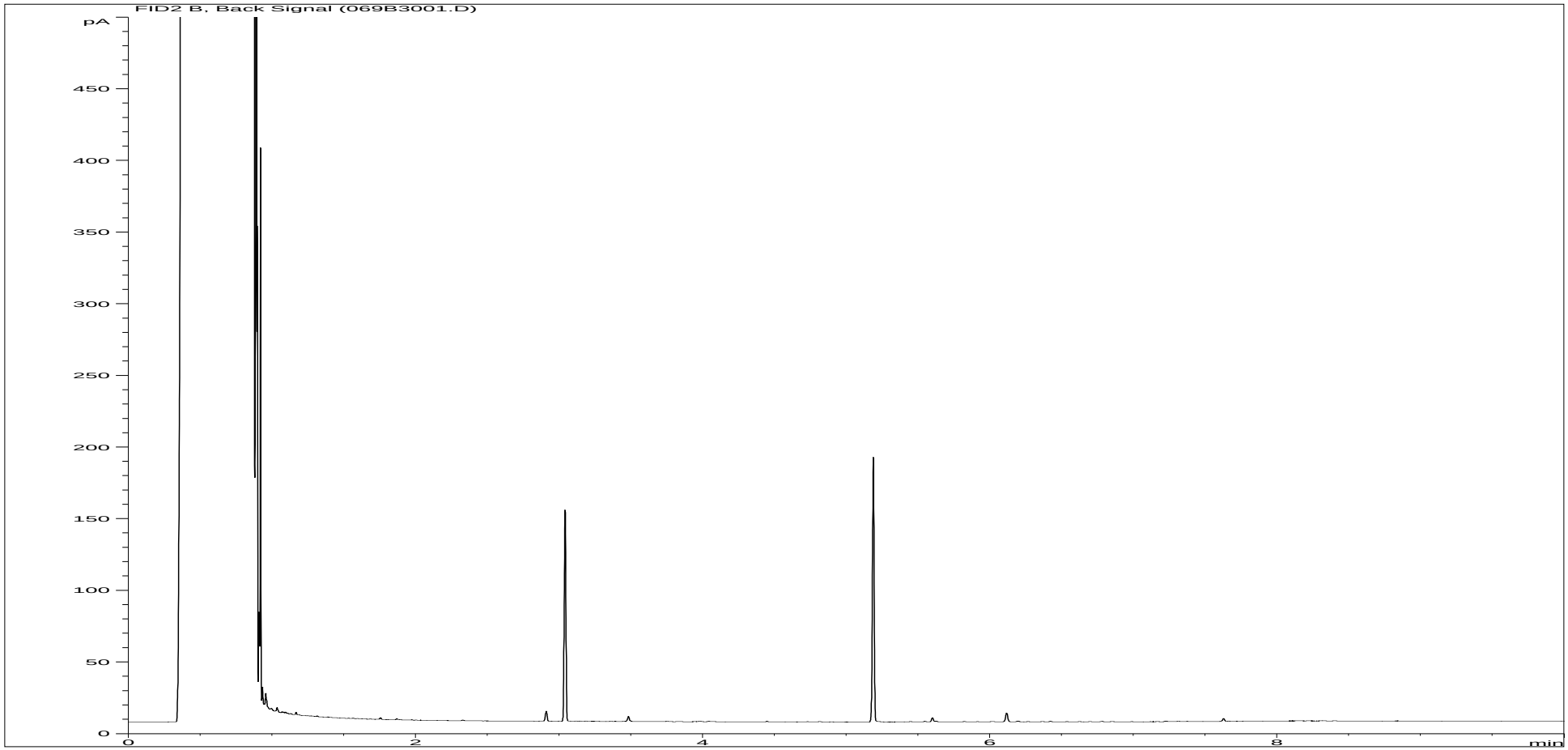
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132549ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	04-Aug-11, 22:23:26		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\021F3001.D		

Where individual results are flagged see report notes for status.

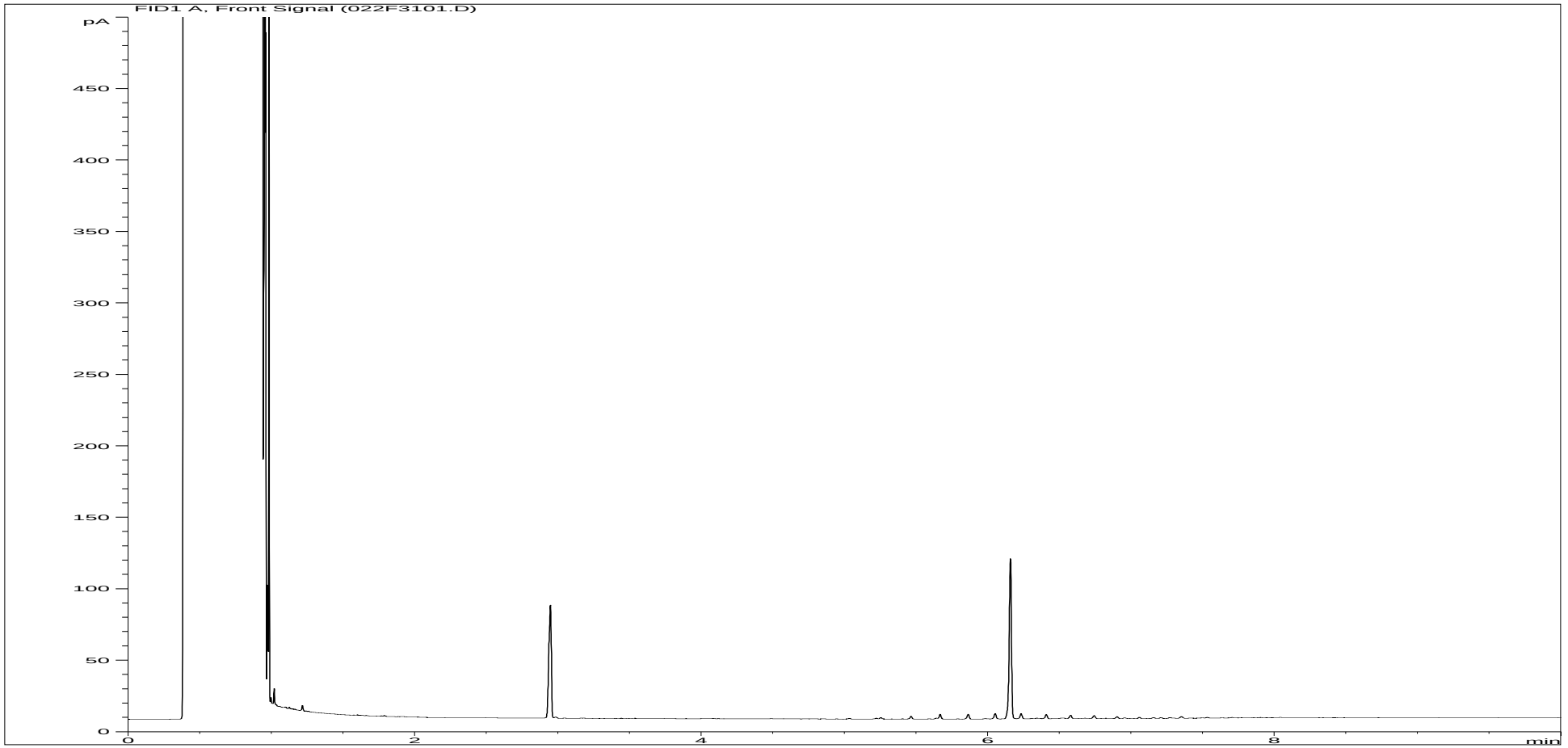
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132549ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	04-Aug-11, 22:23:26		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\069B3001.D		

Where individual results are flagged see report notes for status.

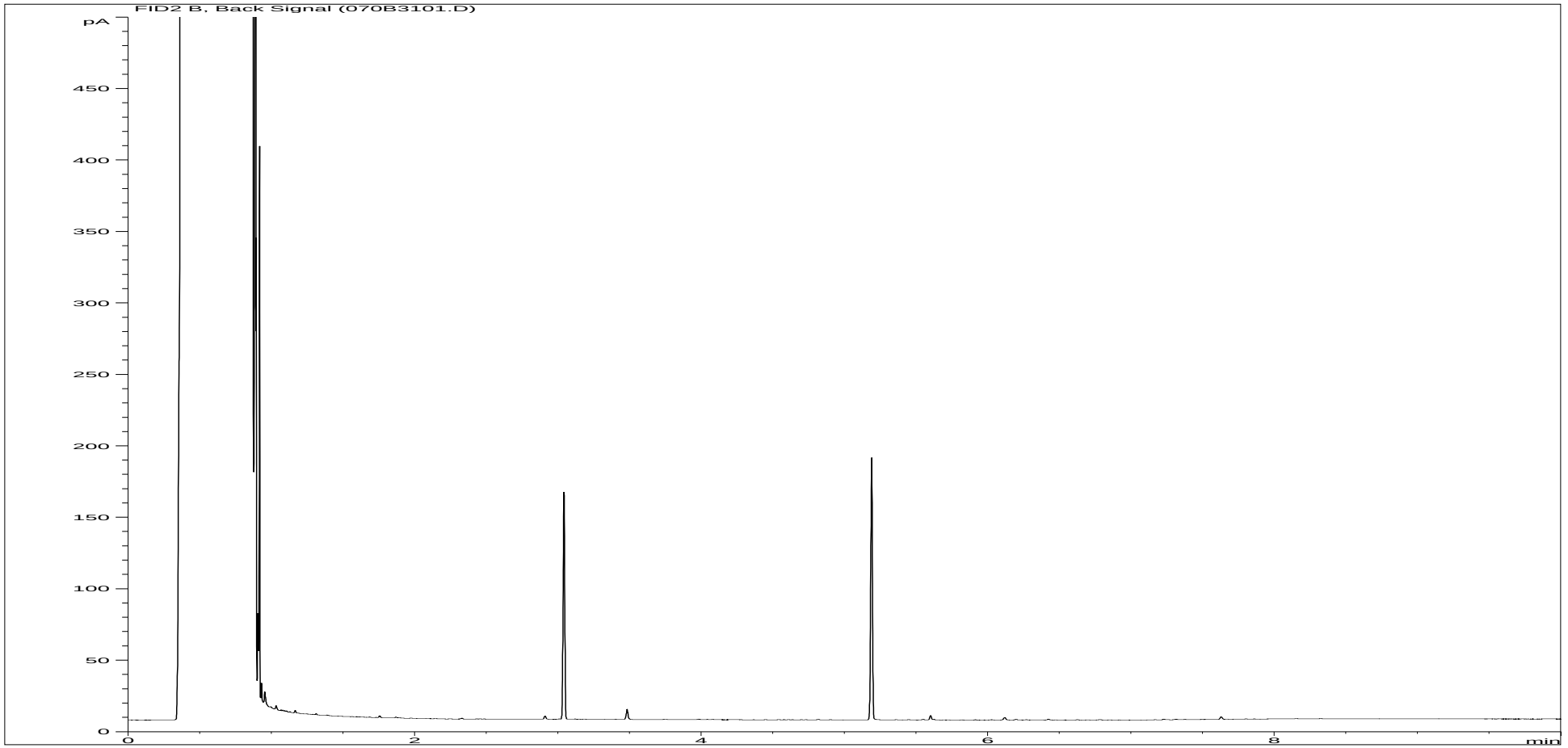
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132550ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11A
Acquisition Date/Time:	04-Aug-11, 22:40:37		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\022F3101.D		

Where individual results are flagged see report notes for status.

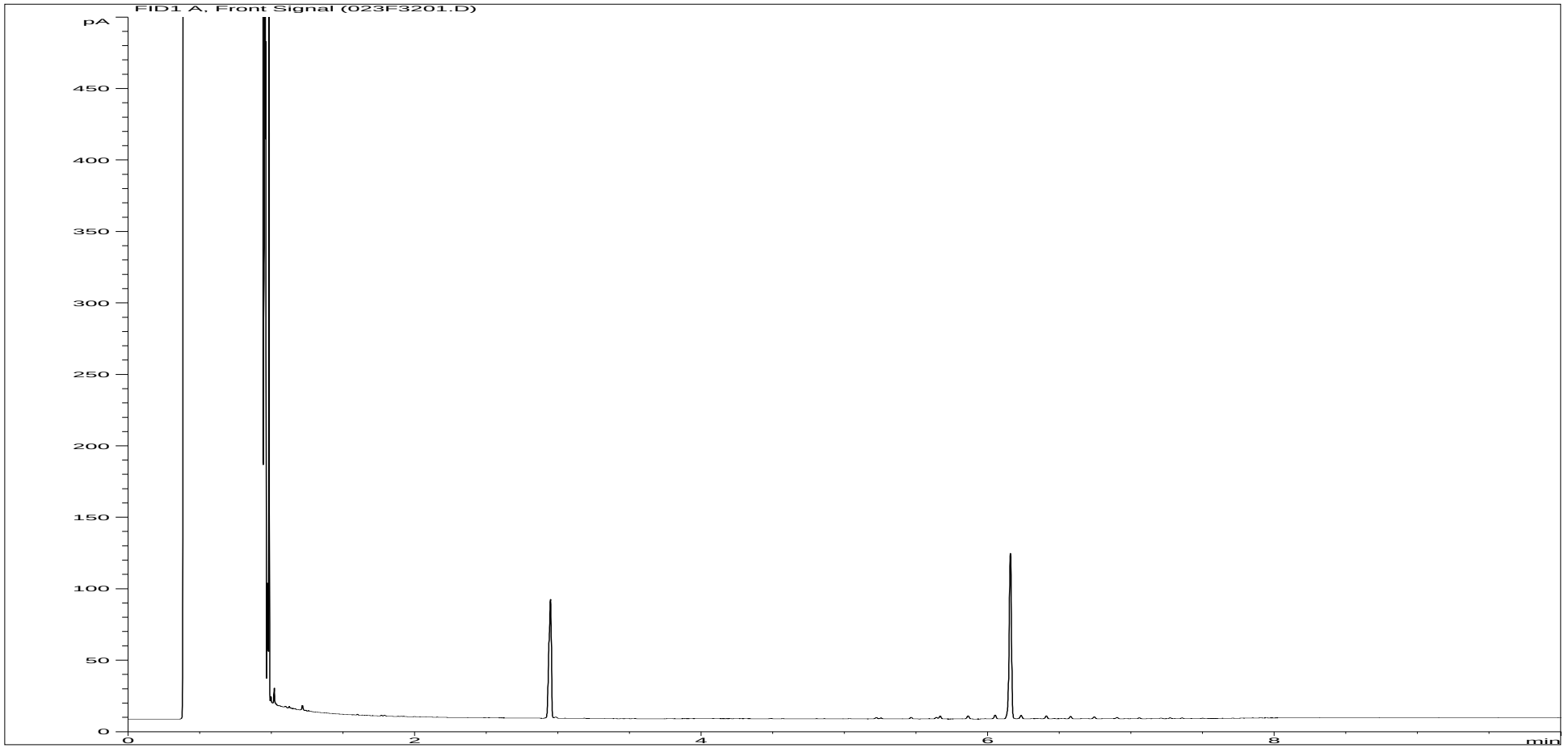
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132550ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11A
Acquisition Date/Time:	04-Aug-11, 22:40:37		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\070B3101.D		

Where individual results are flagged see report notes for status.

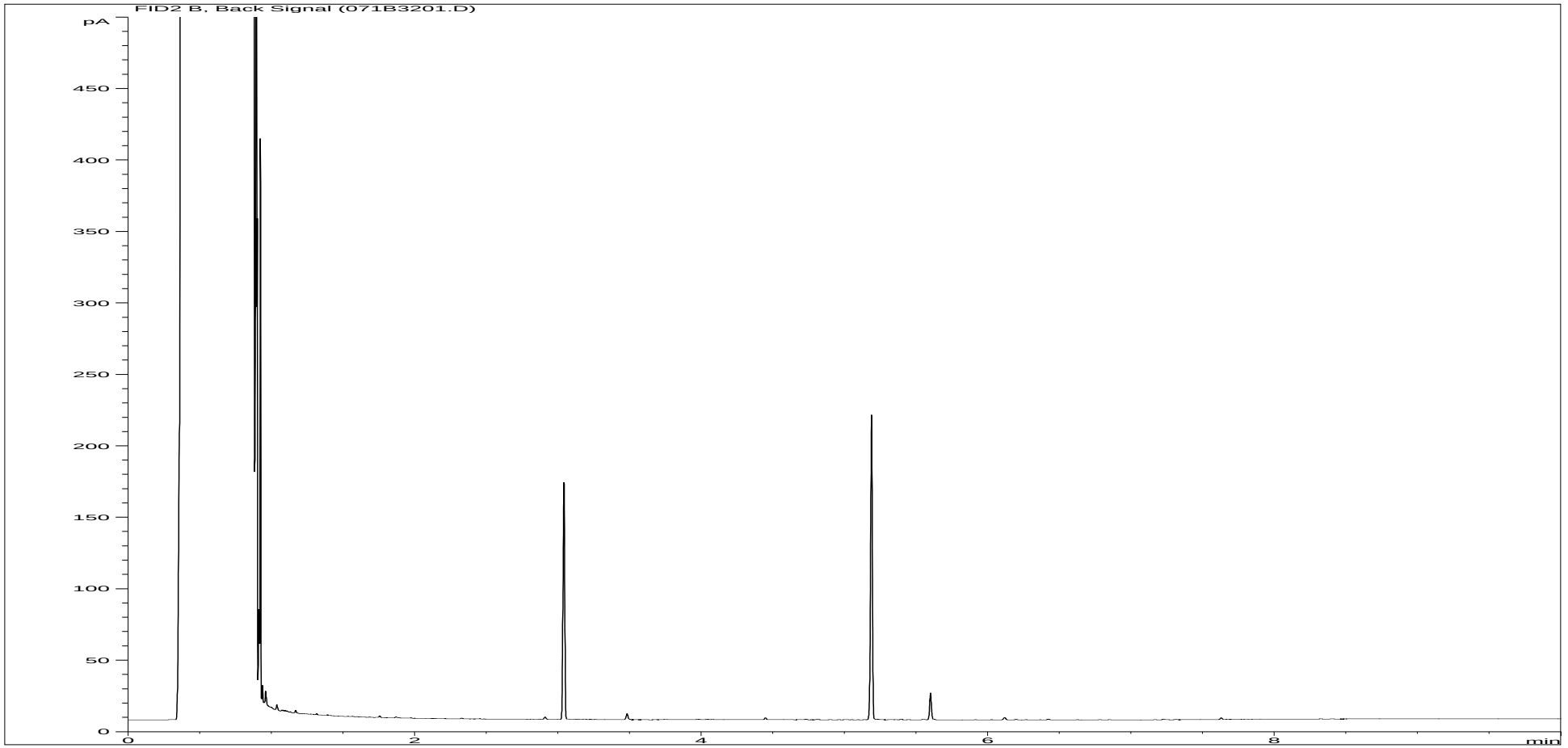
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132551ALI	**Job Number:**	W12_3554
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	04-Aug-11, 22:57:57		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\023F3201.D		

Where individual results are flagged see report notes for status.

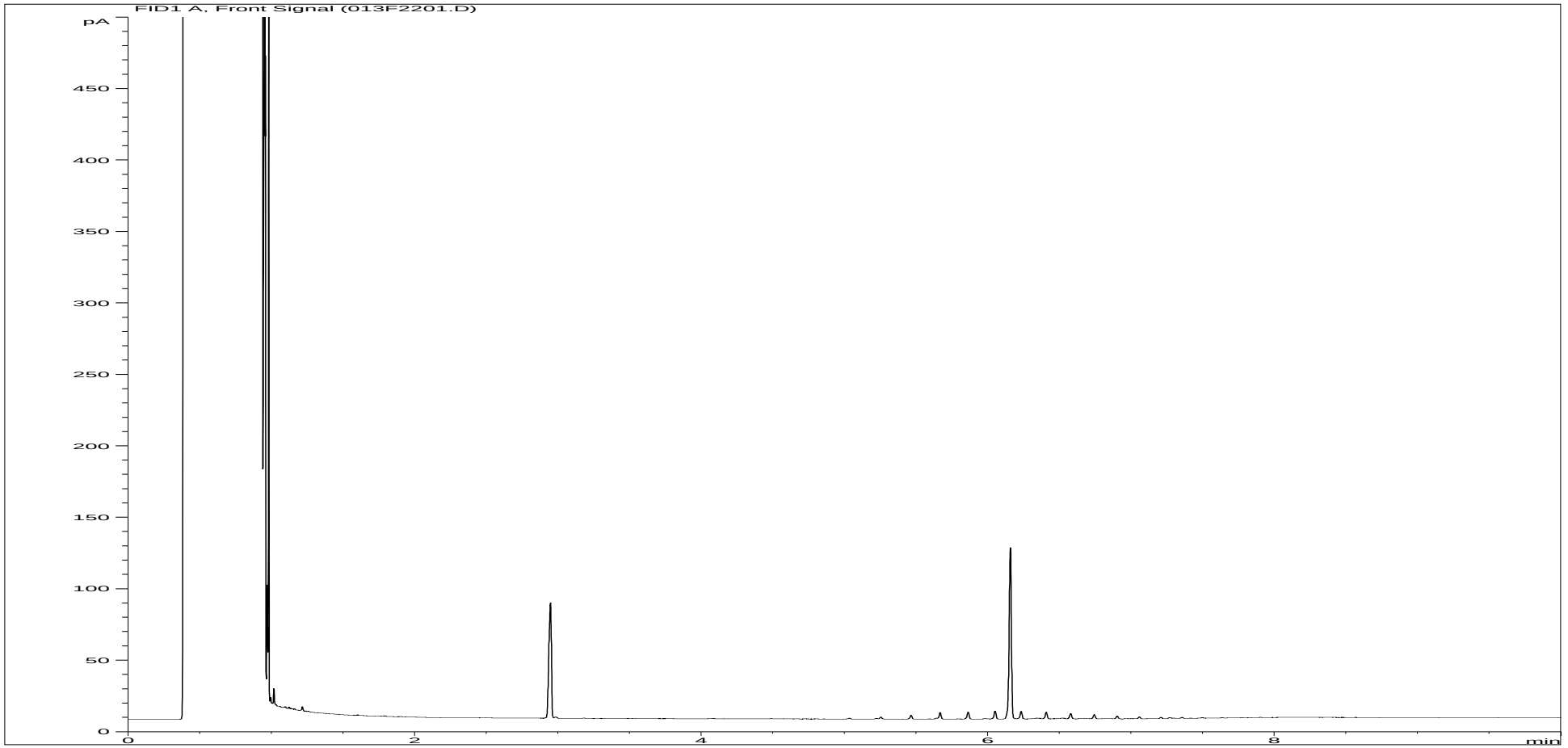
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132551ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	04-Aug-11, 22:57:57		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\071B3201.D		

Where individual results are flagged see report notes for status.

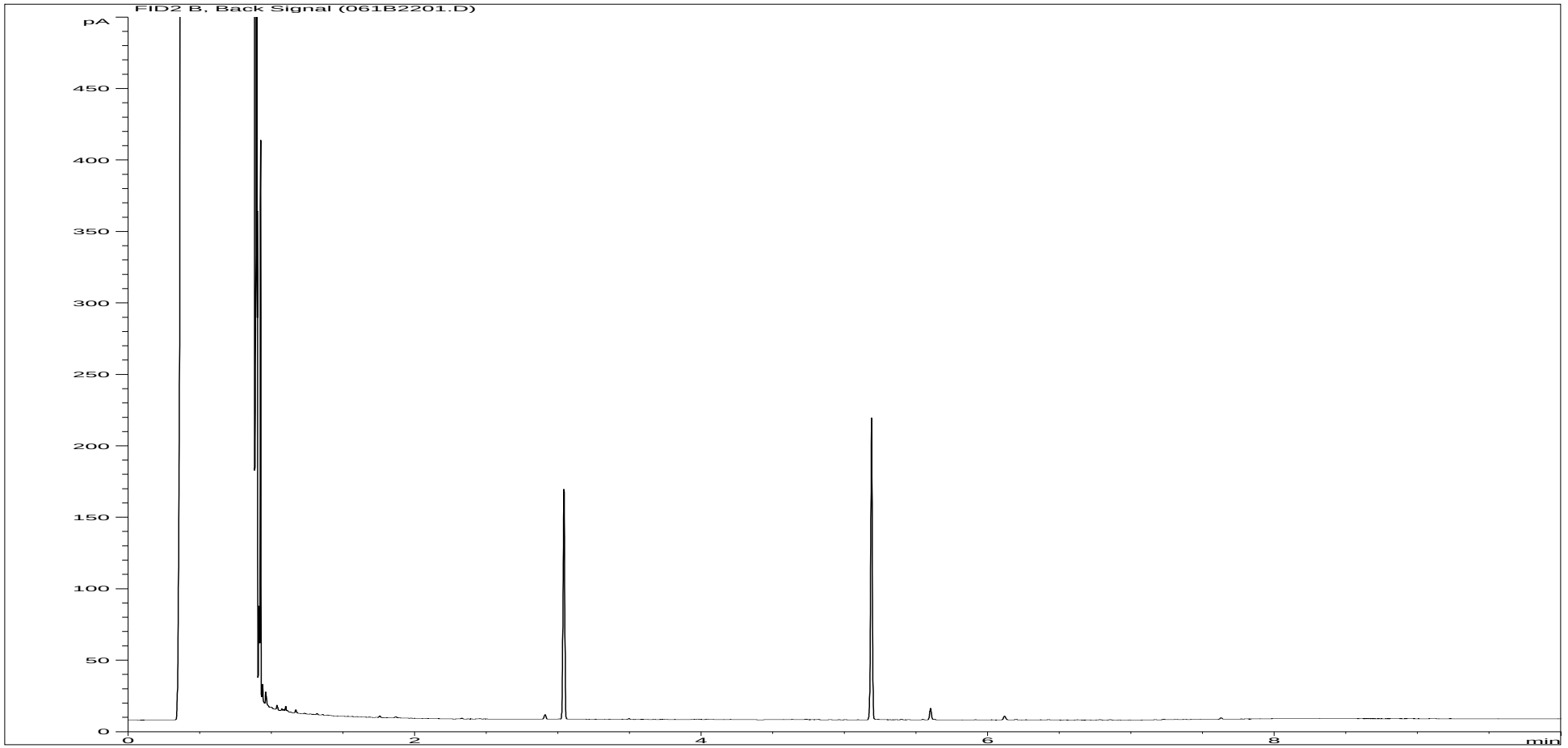
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132552ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank
Acquisition Date/Time:	04-Aug-11, 20:05:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\013F2201.D		

Where individual results are flagged see report notes for status.

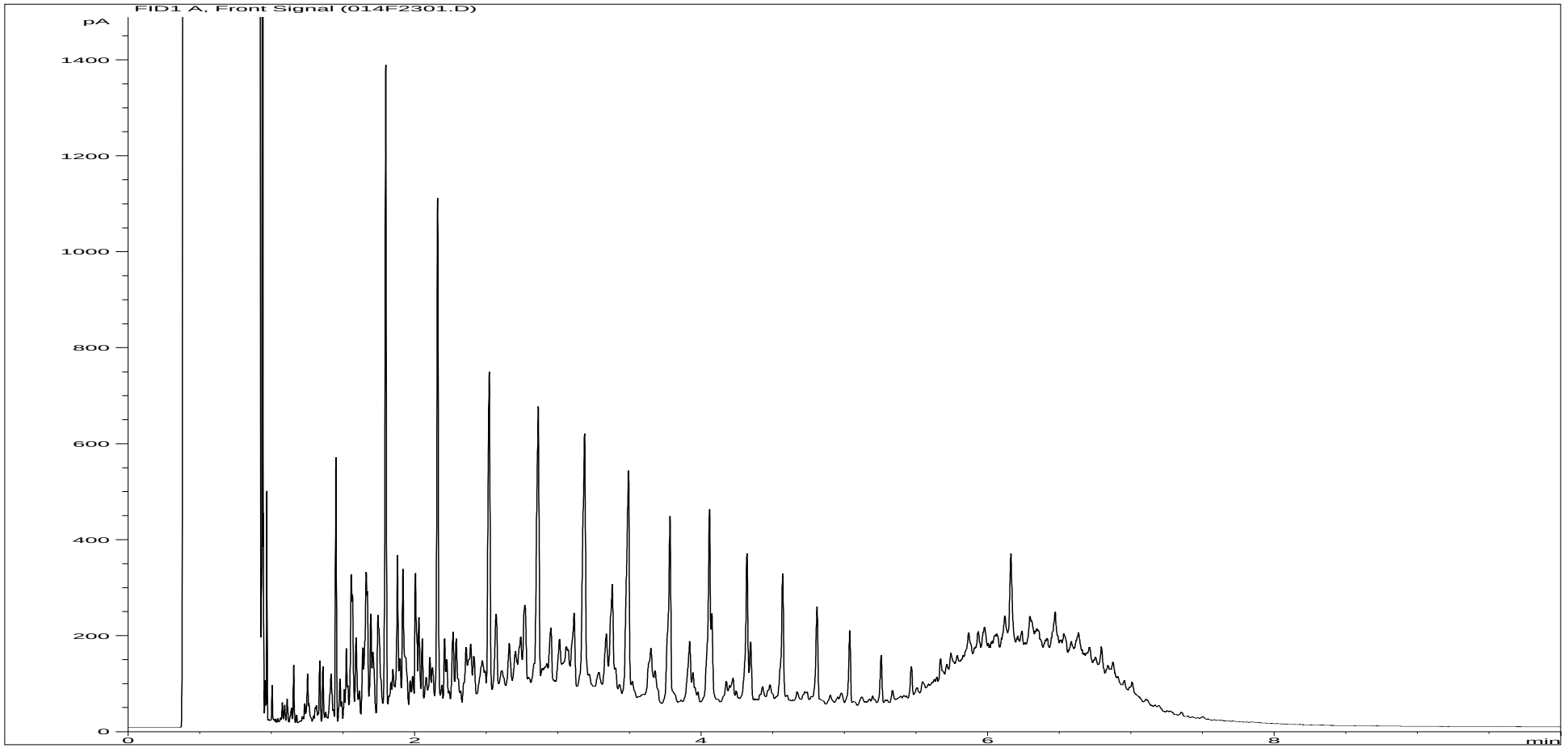
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132552ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank
Acquisition Date/Time:	04-Aug-11, 20:05:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\061B2201.D		

Where individual results are flagged see report notes for status.

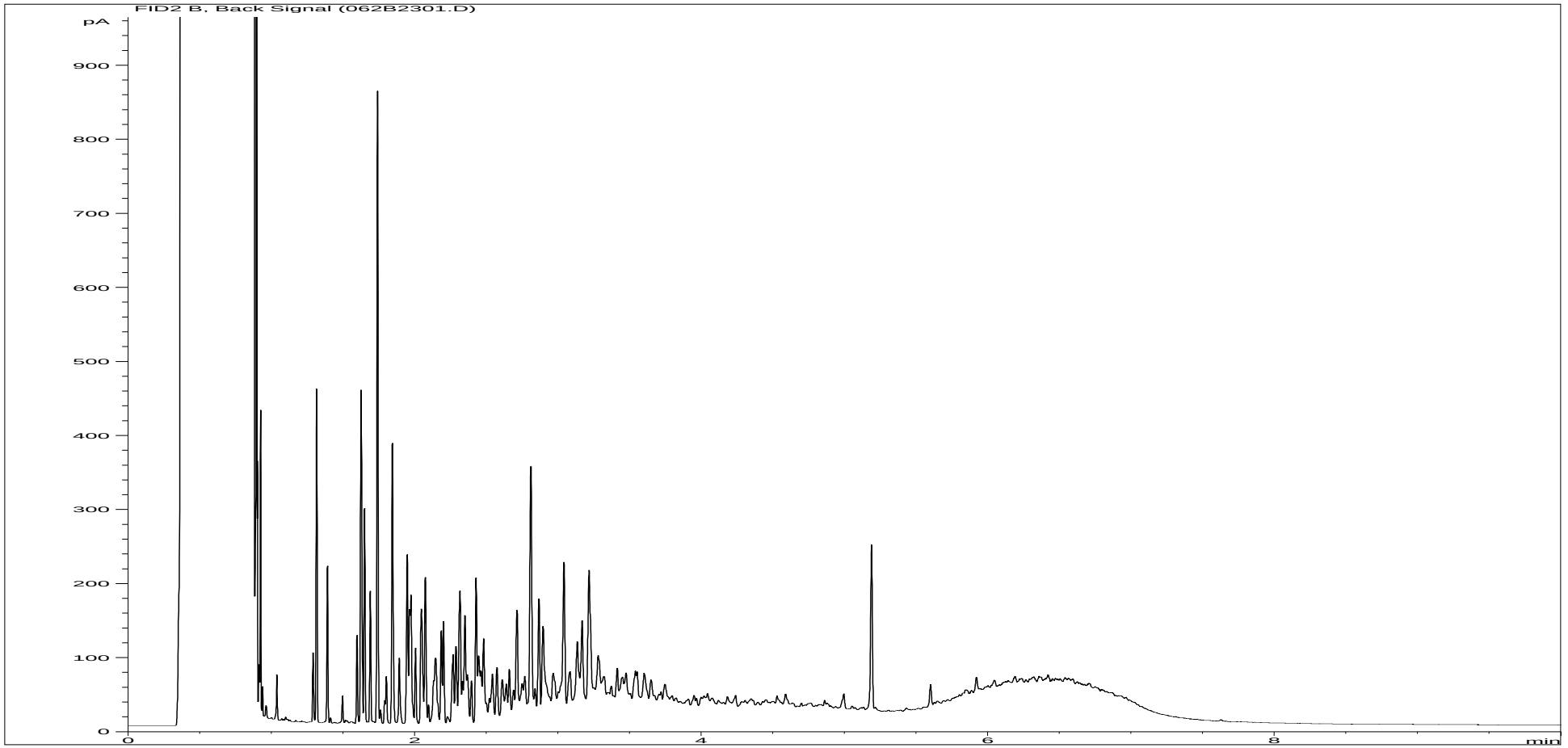
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132553ALI	**Job Number:**	W12_3554
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank Spike
Acquisition Date/Time:	04-Aug-11, 20:22:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\014F2301.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132553ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank Spike
Acquisition Date/Time:	04-Aug-11, 20:22:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\062B2301.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123554

Customer Worley Parsons Komex
Site Maelor Works
Report No W123554

Consignment No 28164
Date Logged 29-Jul-2011

Report Due 10-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1132549	MW11-11	27/07/11																										
EX/1132550	MW11-11A	27/07/11																										
EX/1132551	MW11-12	27/07/11																										
EX/1132552	Report 123554 Blank	27/07/11																										
EX/1132553	Report 123554 Blank Spike	27/07/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123554

Customer Worley Parsons Komex
Site Maelor Works
Report No W123554

Consignment No 28164
Date Logged 29-Jul-2011

Report Due 10-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1132549	MW11-11	27/07/11															
EX/1132550	MW11-11A	27/07/11															
EX/1132551	MW11-12	27/07/11															
EX/1132552	Report 123554 Blank	27/07/11															
EX/1132553	Report 123554 Blank Spike	27/07/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123572 (Ver. 1)
Your Ref: 305001-50065-29

August 11, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123572 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 8 samples described in this report were logged for analysis by Scientifics on 29-Jul-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 11-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 12)
Table of TPH (Si) banding (0.01) (Page 13)
GC-FID Chromatograms (Pages 14 to 29)
Analytical and Deviating Sample Overview (Pages 30 to 31)
Table of Method Descriptions (Page 32)
Table of Report Notes (Page 33)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 11-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

		Units :		uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
		Method Codes :	WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
		Method Reporting Limits :		100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1132641	MW11-13	**27-Jul-11**	7.1	671	1580	260	26	32	89	9	39	6	0.002	0.006	<0.0001	Req	<0.001	<0.001
1132642	MW11-16	**28-Jul-11**	7.0	1570	26	920	19	215	317	31	22	3	0.009	0.017	<0.0001	Req	0.002	<0.001
1132643	MW99-104	**28-Jul-11**	6.9	1620	118	549	22	301	180	24	20	7	0.003	0.012	<0.0001	Req	<0.001	<0.001
1132644	MW11-2	**28-Jul-11**	7.6	3420	587	1631	100	1630	575	47	260	31	0.007	0.007	<0.0001	Req	0.005	0.001
1132645	MW99-106	**28-Jul-11**	7.4	2350	35	485	37	280	151	26	11	5	0.002	0.016	<0.0001	Req	<0.001	<0.001
1132646	MW99-102	**28-Jul-11**	7.0	1030	21	385	31	57	131	14	9	3	0.002	0.009	<0.0001	Req	<0.001	<0.001
1132647	QC Blank		7.06	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132648	Blank Spike (% Recovery)				101		99	97	96	97	100	100	96	95	95	Req	94	94

scientifics

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1132641	MW11-13	**27-Jul-11**	<0.002	5.74	6.86	12.6	<0.01	0.002	<0.0001	0.001	0.2	<0.2	<0.2	<0.02	0.06	<0.05	2.6	<0.1
1132642	MW11-16	**28-Jul-11**	0.004	1.63	3.28	4.91	0.03	0.003	<0.0001	0.001	1.9	<0.2	<0.2	0.02	0.24	<0.05	23	<0.1
1132643	MW99-104	**28-Jul-11**	<0.002	5.70	29.3	35.0	0.12	0.002	<0.0001	0.001	64.0	<0.2	5.05	0.04	0.43	<0.05	14	<0.1
1132644	MW11-2	**28-Jul-11**	0.004	3.21	4.52	7.73	1.91	0.013	<0.0001	0.003	9.9	<0.2	2.94	0.42	3.98	<0.05	45	<0.1
1132645	MW99-106	**28-Jul-11**	<0.002	1.39	3.28	4.67	0.1	0.006	<0.0001	0.002	164	<0.2	<0.2	0.06	0.32	0.18	21	0.2
1132646	MW99-102	**28-Jul-11**	<0.002	0.67	5.92	6.59	<0.01	0.001	<0.0001	<0.001	16.8	<0.2	<0.2	<0.02	0.04	<0.05	6.2	<0.1
1132647	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132648	Blank Spike (% Recovery)		99	100	100	100	95	96	103	98	99		100	99	99	106	107	99

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1132641	MW11-13	27-Jul-11	Req	1.27	<0.06	4.8	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132642	MW11-16	28-Jul-11	Req	38	0.22	6.4	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132643	MW99-104	28-Jul-11	Req	6.9	0.39	3.2	68	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132644	MW11-2	28-Jul-11	Req	2.9	3.56	4.1	14	<1	<1	<1	<2	0.0123	0.0029	0.0069	<0.1	0.0313		
1132645	MW99-106	28-Jul-11	Req	9.3	0.26	0.7	171	<1	<1	<1	<3	0.216	0.228	0.117	0.1	0.231		
1132646	MW99-102	28-Jul-11	Req	5.3	<0.04	3.8	16	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132647	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132648	Blank Spike (% Recovery)		Req	96			89	85	79	81	244	89	100	105	99	106		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13	**Job Number:**	W12_3572
LIMS ID Number:	EX1132641	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.22	0.018	33
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.168	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	89
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	101
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	88
Terphenyl-d14	106

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-16	**Job Number:**	W12_3572
LIMS ID Number:	EX1132642	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	87
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	93
Perylene-d12	104

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-104	**Job Number:**	W12_3572
LIMS ID Number:	EX1132643	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.038	91
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.38	0.011	89
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.65	0.018	75
Pyrene	129-00-0	6.92	0.014	97
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.201	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	90
Phenanthrene-d10	91
Chrysene-d12	82
Perylene-d12	87

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-2	**Job Number:**	W12_3572
LIMS ID Number:	EX1132644	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.11	0.032	86
Acenaphthene	83-32-9	4.23	0.441	97
Fluorene	86-73-7	4.59	0.091	60
Phenanthrene	85-01-8	5.38	0.064	96
Anthracene	120-12-7	5.42	0.049	95
Fluoranthene	206-44-0	6.65	0.540	99
Pyrene	129-00-0	6.92	0.339	100
Benzo[a]anthracene	56-55-3	8.56	0.091	85
Chrysene	218-01-9	8.61	0.048	58
Benzo[b]fluoranthene	205-99-2	10.07	0.071	61
Benzo[k]fluoranthene	207-08-9	10.10	0.034	62
Benzo[a]pyrene	50-32-8	10.49	0.065	85
Indeno[1,2,3-cd]pyrene	193-39-5	11.86	0.033	60
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.14	0.032	79
Total (USEPA16) PAHs	-	-	< 1.950	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	93
Phenanthrene-d10	97
Chrysene-d12	104
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	67
Terphenyl-d14	79

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-106	**Job Number:**	W12_3572
LIMS ID Number:	EX1132645	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.689	83
Acenaphthylene	208-96-8	4.11	4.090	99
Acenaphthene	83-32-9	4.23	7.400	98
Fluorene	86-73-7	4.59	0.142	57
Phenanthrene	85-01-8	5.37	0.036	80
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.65	0.012	65
Pyrene	129-00-0	6.92	0.010	61
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 12.469	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	120
Acenaphthene-d10	90
Phenanthrene-d10	98
Chrysene-d12	106
Perylene-d12	121

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	95

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_3572
LIMS ID Number:	EX1132646	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.014	73
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.22	0.022	68
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.176	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	90
Phenanthrene-d10	92
Chrysene-d12	100
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123572 Blank	**Job Number:**	W12_3572
LIMS ID Number:	EX1132647	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	94
Phenanthrene-d10	96
Chrysene-d12	98
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	86
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123572 Blank Spike	**Job Number:**	W12_3572
LIMS ID Number:	EX1132648	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.07	88	91
Acenaphthylene	208-96-8	4.11	79	99
Acenaphthene	83-32-9	4.23	89	95
Fluorene	86-73-7	4.59	80	99
Phenanthrene	85-01-8	5.38	85	97
Anthracene	120-12-7	5.42	72	98
Fluoranthene	206-44-0	6.65	79	72
Pyrene	129-00-0	6.92	76	78
Benzo[a]anthracene	56-55-3	8.56	96	97
Chrysene	218-01-9	8.61	84	96
Benzo[b]fluoranthene	205-99-2	10.07	75	91
Benzo[k]fluoranthene	207-08-9	10.11	90	92
Benzo[a]pyrene	50-32-8	10.49	81	88
Indeno[1,2,3-cd]pyrene	193-39-5	11.86	73	92
Dibenzo[a,h]anthracene	53-70-3	11.90	73	83
Benzo[g,h,i]perylene	191-24-2	12.14	83	70
Total (USEPA16) PAHs	-	-	80	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	85
Acenaphthene-d10	86
Phenanthrene-d10	87
Chrysene-d12	92
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	109

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3572
QC Batch Number: 110722
Directory: D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\025F1601.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

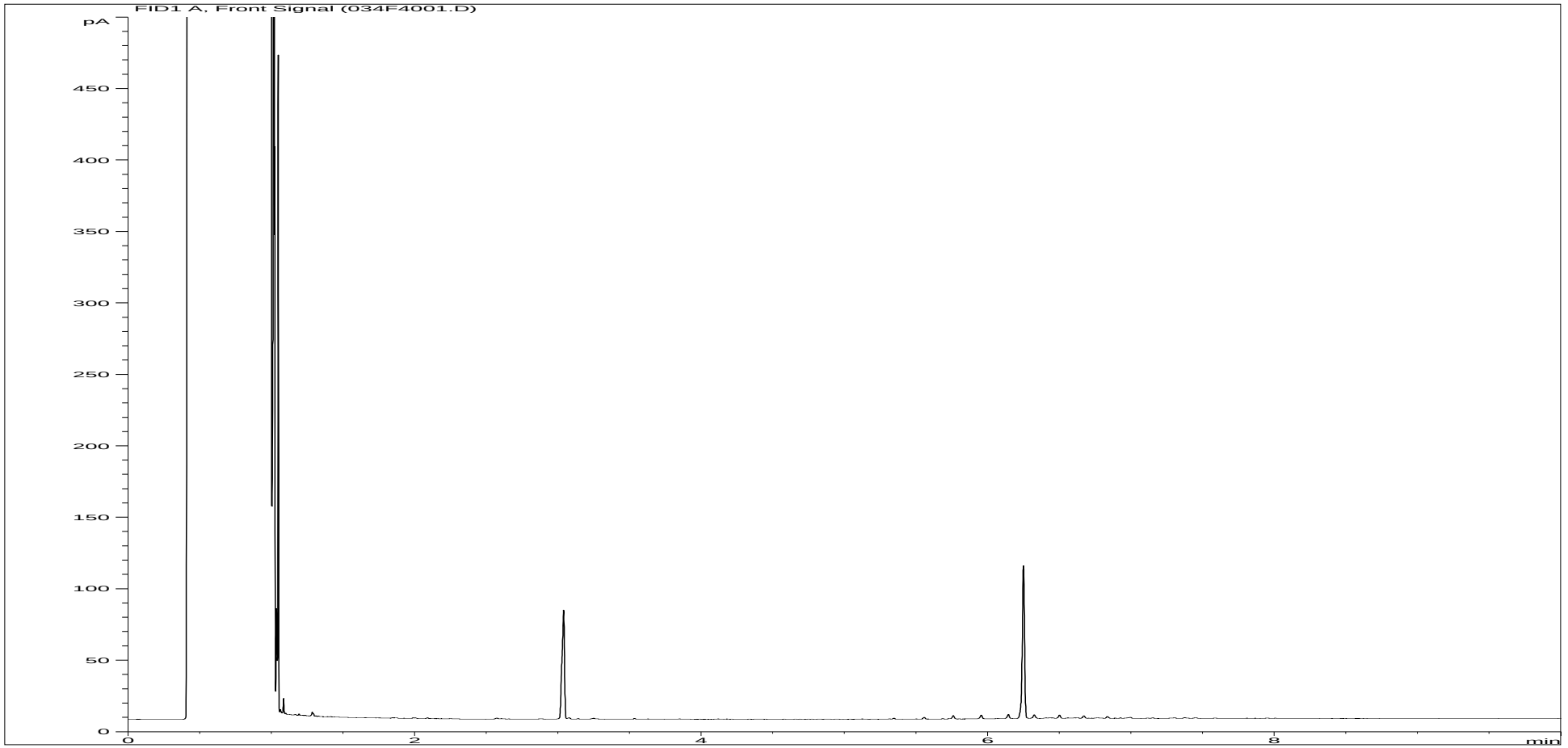
Matrix: Water
Date Booked in 29-Jul-11
Date Extracted 09-Aug-11
Date Analysed 09-Aug-11, 15:02:49

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1132641	MW11-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	0.015	<0.01
EX1132642	MW11-16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132643	MW99-104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132644	MW11-2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.018
EX1132645	MW99-106	<0.01	0.033	<0.01	0.169	<0.01	0.065	<0.01	<0.01	<0.01	<0.01	<0.01	0.275
EX1132646	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132647	Report 123572 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132648	Report 123572 Blank Spike	0.638	0.19	1	0.311	1.73	0.545	1.01	0.281	2.61	0.685	7.03	2.05

Where individual results are flagged see report notes for status.

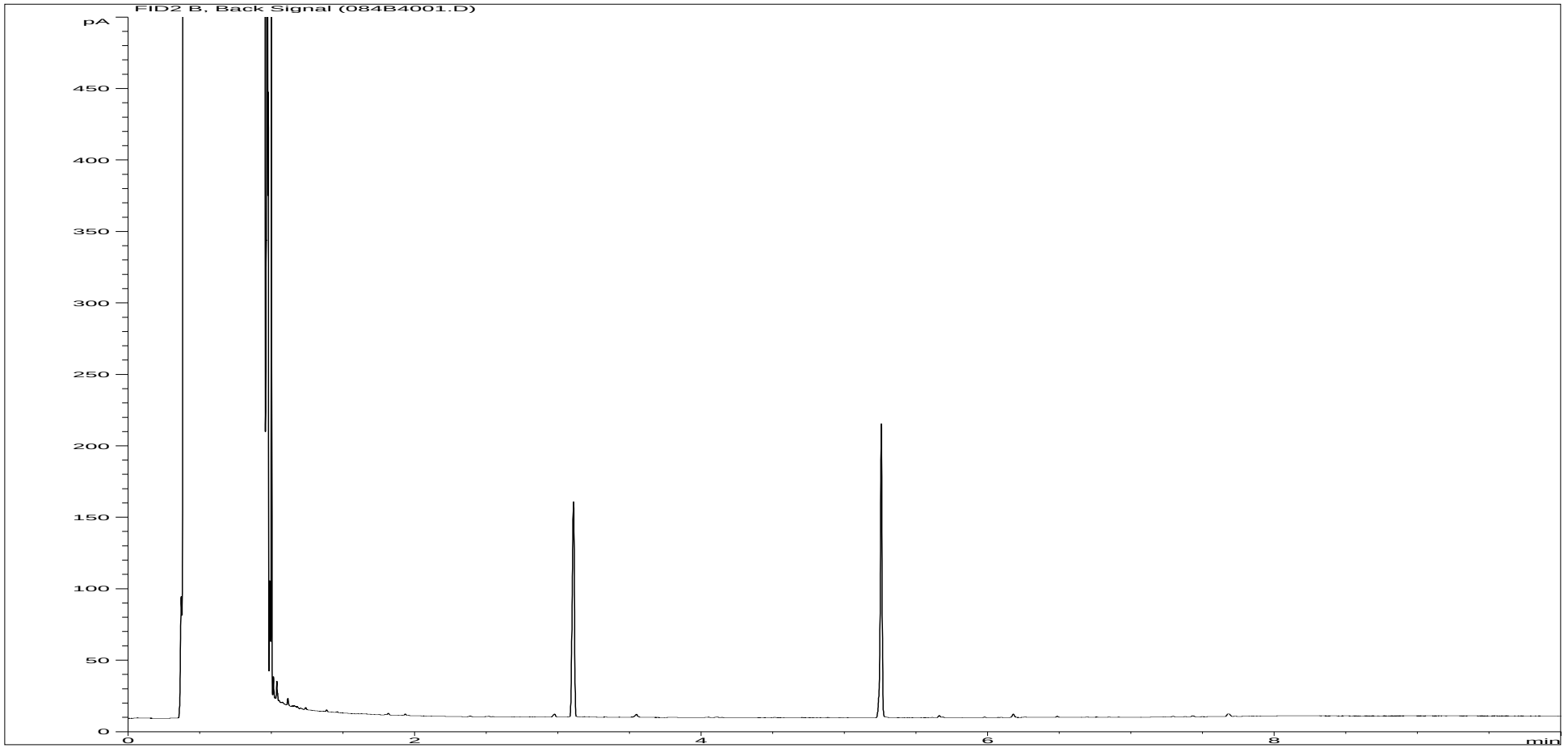
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132641ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	04-Aug-11, 22:21:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\034F4001.D		

Where individual results are flagged see report notes for status.

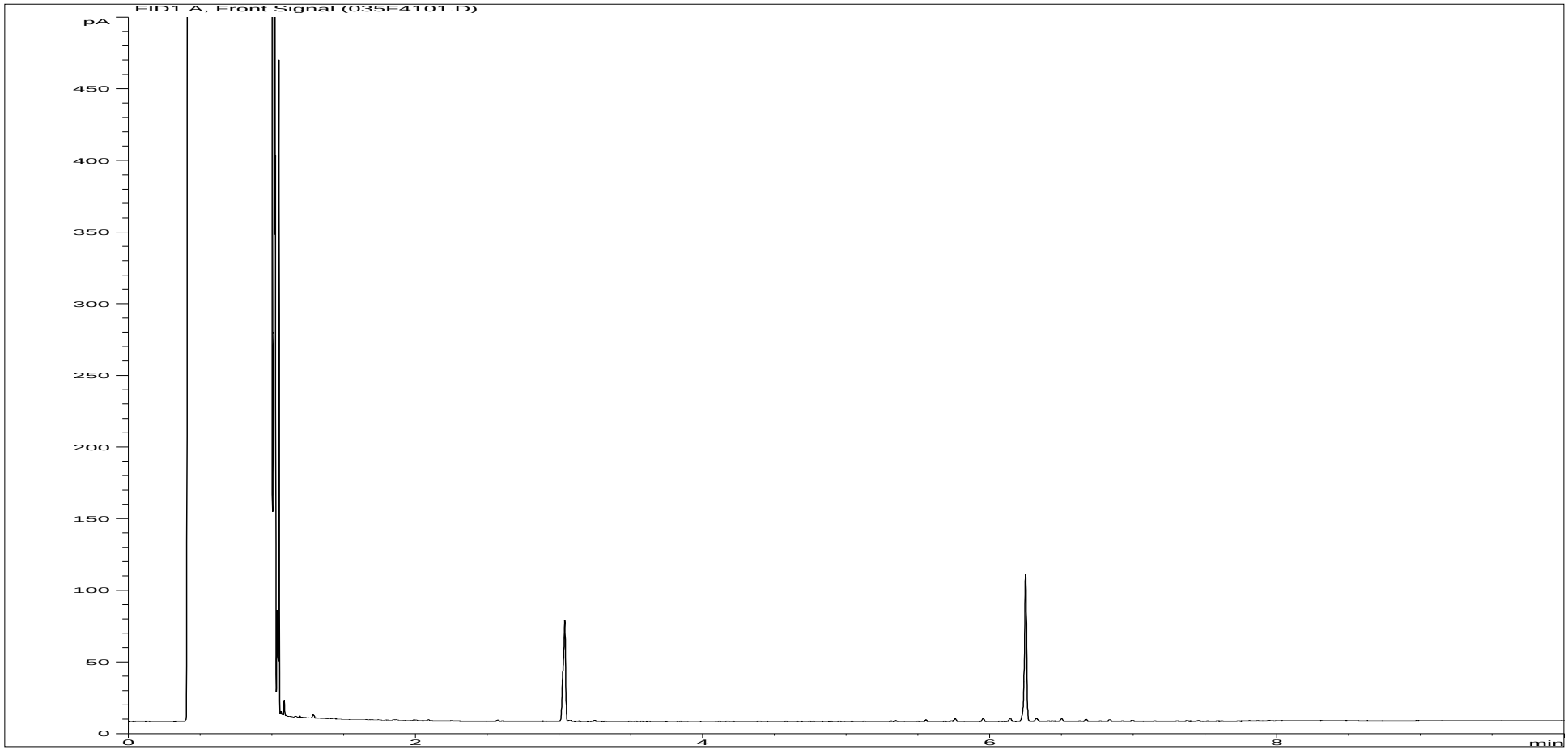
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132641ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	04-Aug-11, 22:21:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\084B4001.D		

Where individual results are flagged see report notes for status.

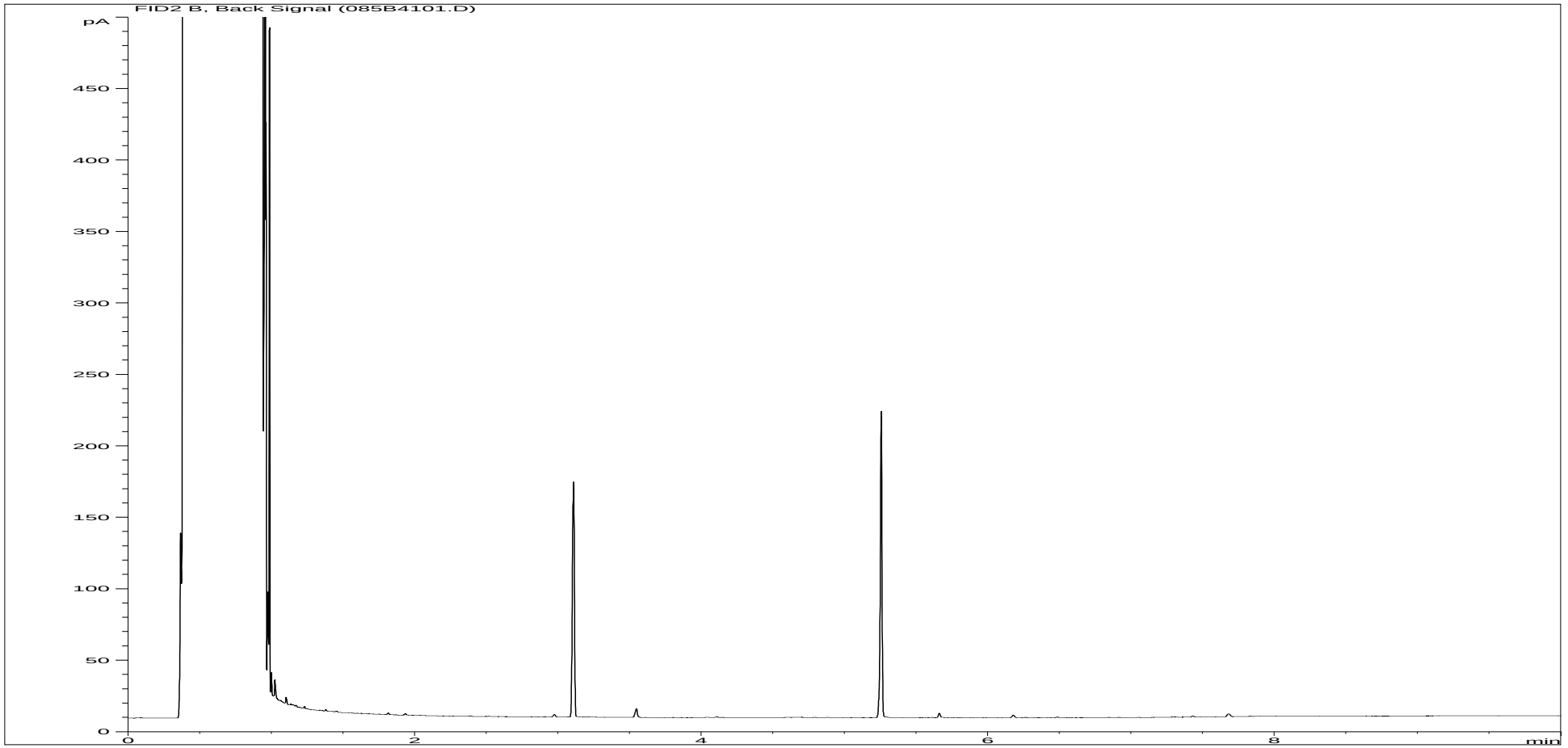
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132642ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	04-Aug-11, 22:38:51		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\035F4101.D		

Where individual results are flagged see report notes for status.

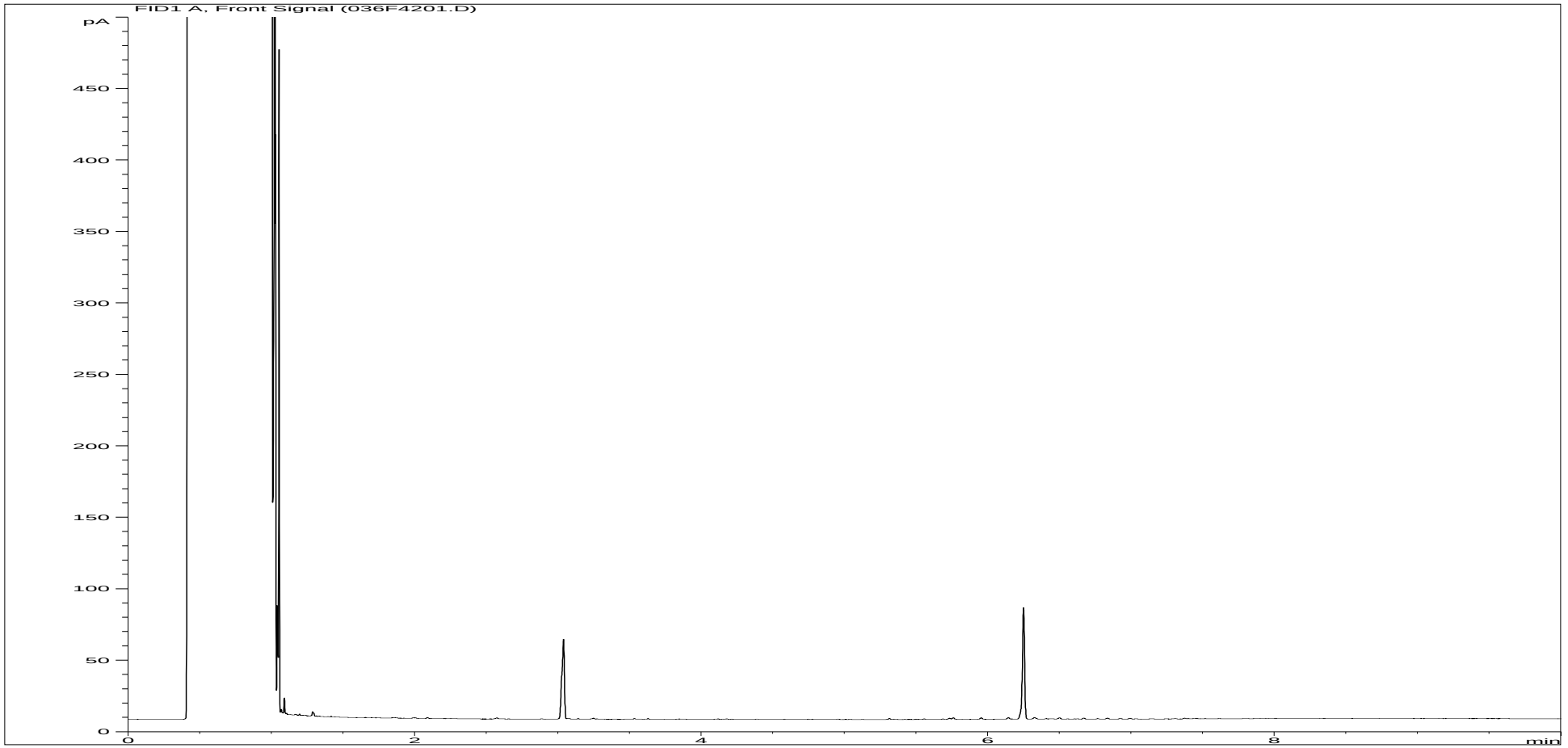
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132642ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	04-Aug-11, 22:38:51		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\085B4101.D		

Where individual results are flagged see report notes for status.

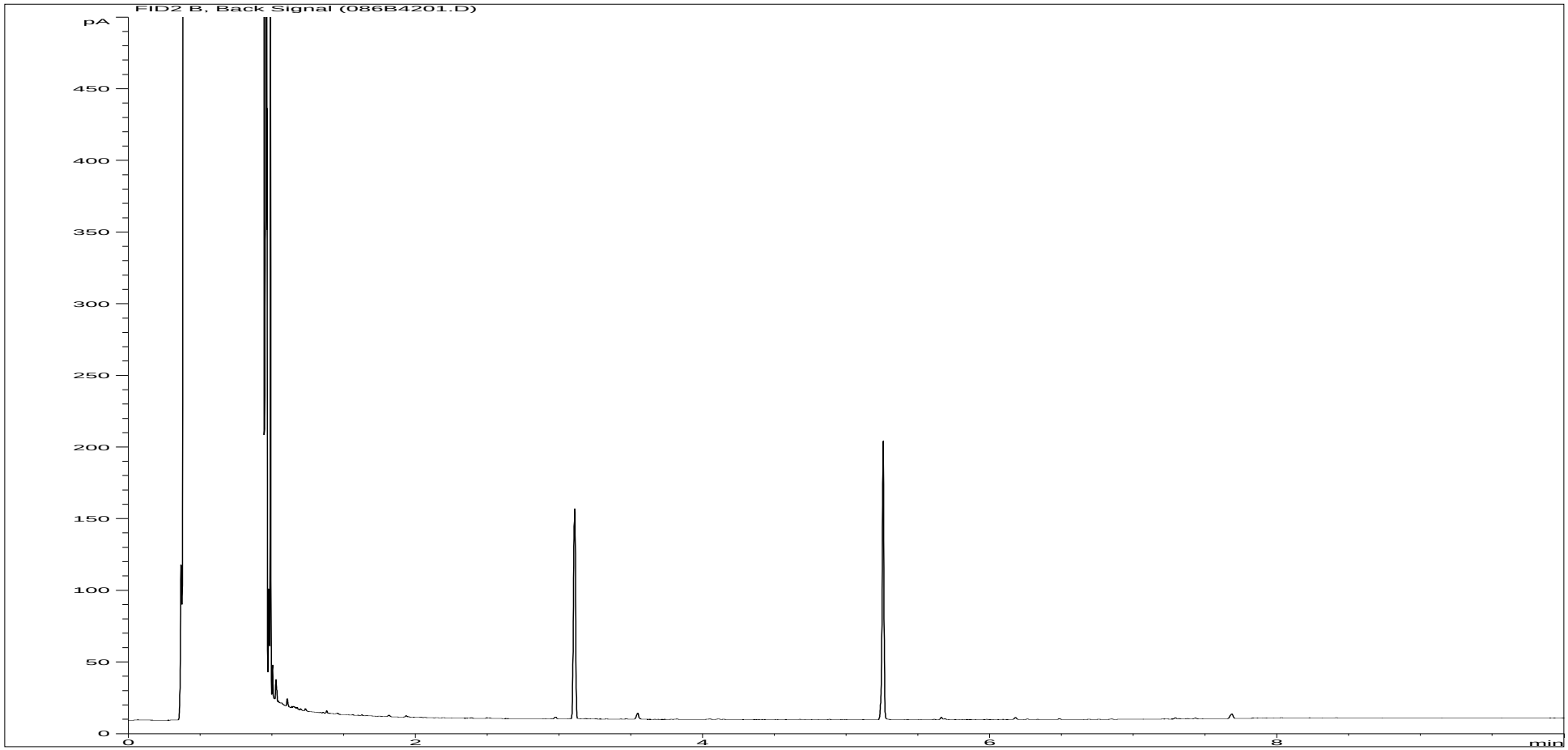
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132643ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	04-Aug-11, 22:56:09		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\036F4201.D		

Where individual results are flagged see report notes for status.

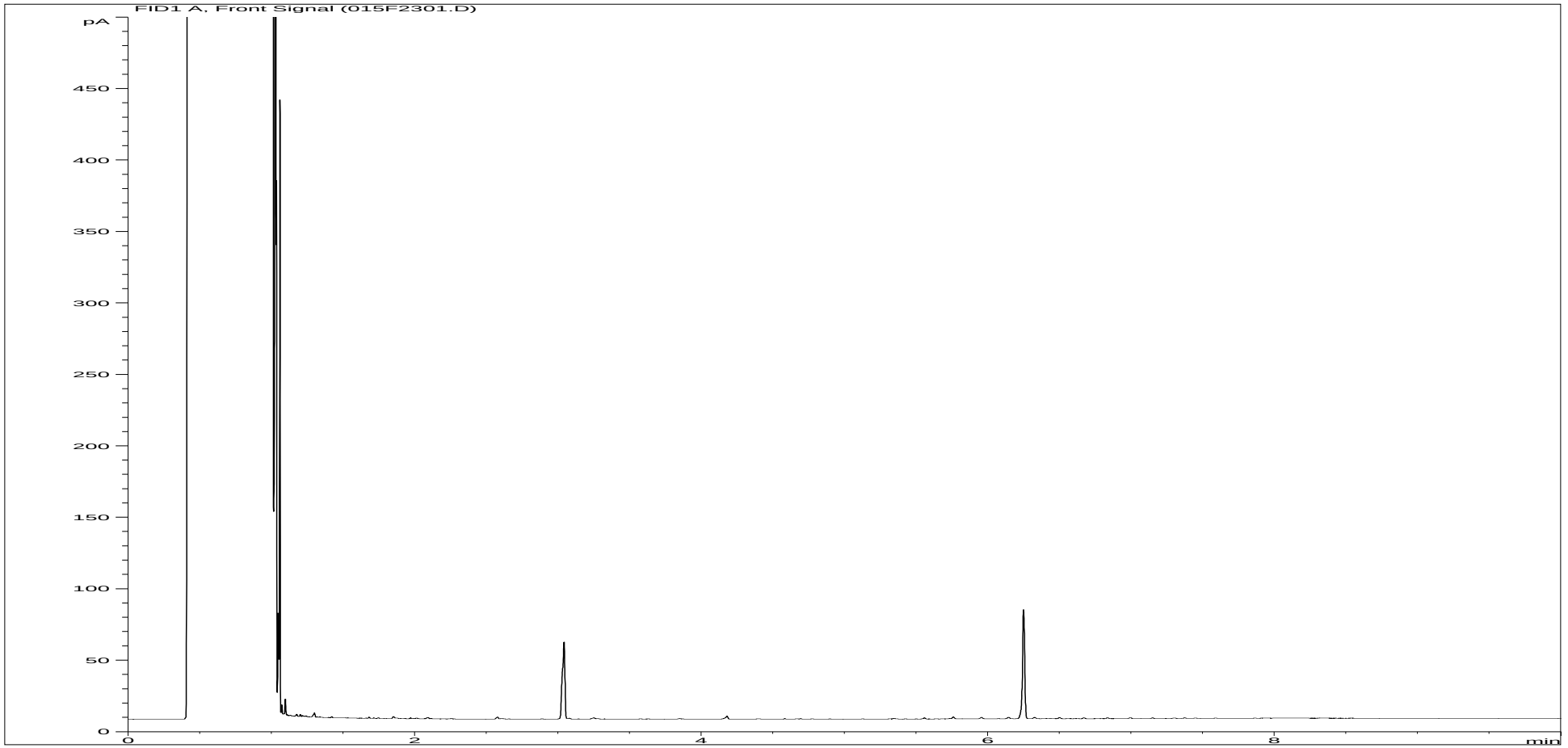
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132643ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	04-Aug-11, 22:56:09		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\086B4201.D		

Where individual results are flagged see report notes for status.

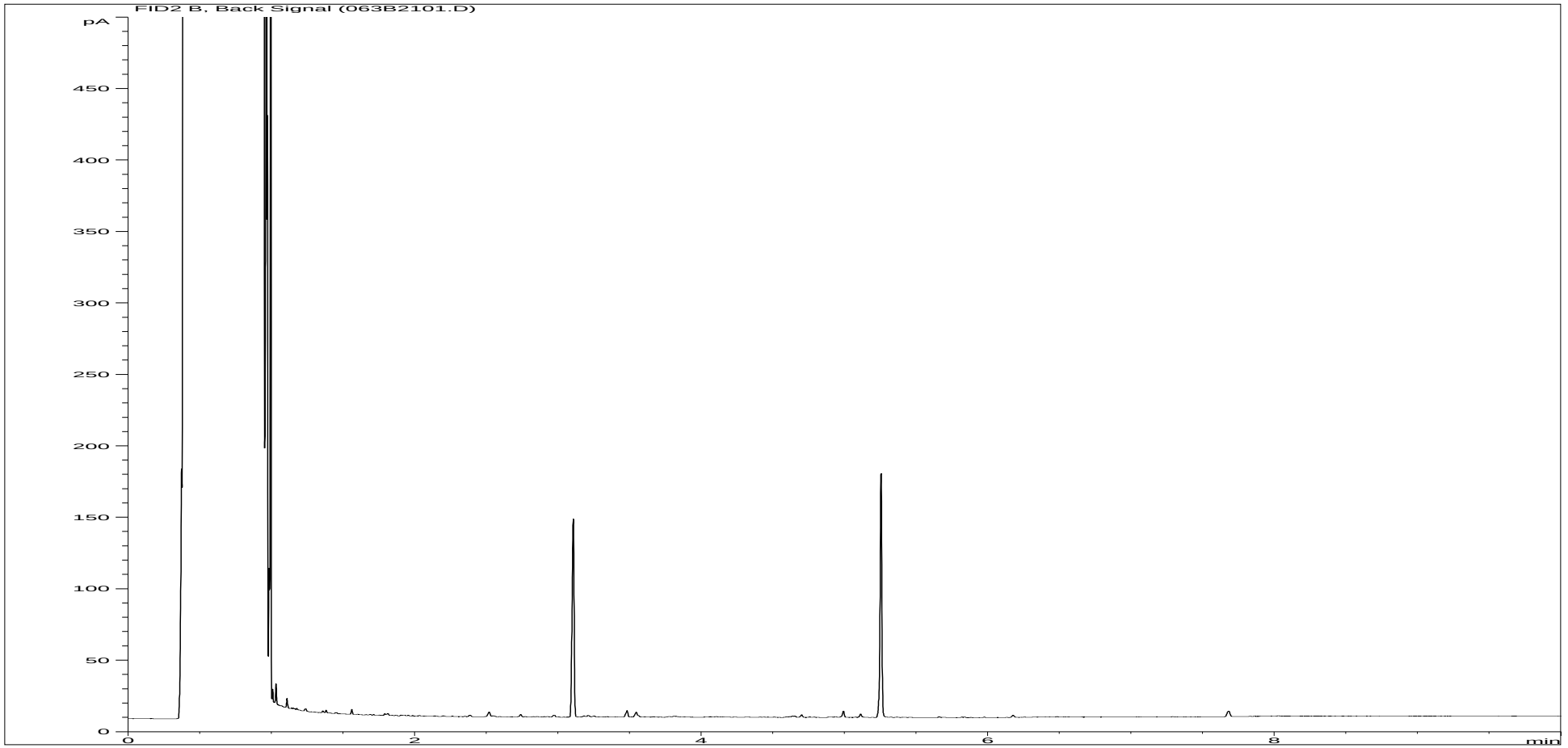
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132644ALI	**Job Number:**	W12_3572
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Aug-11, 17:02:57		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\015F2301.D		

Where individual results are flagged see report notes for status.

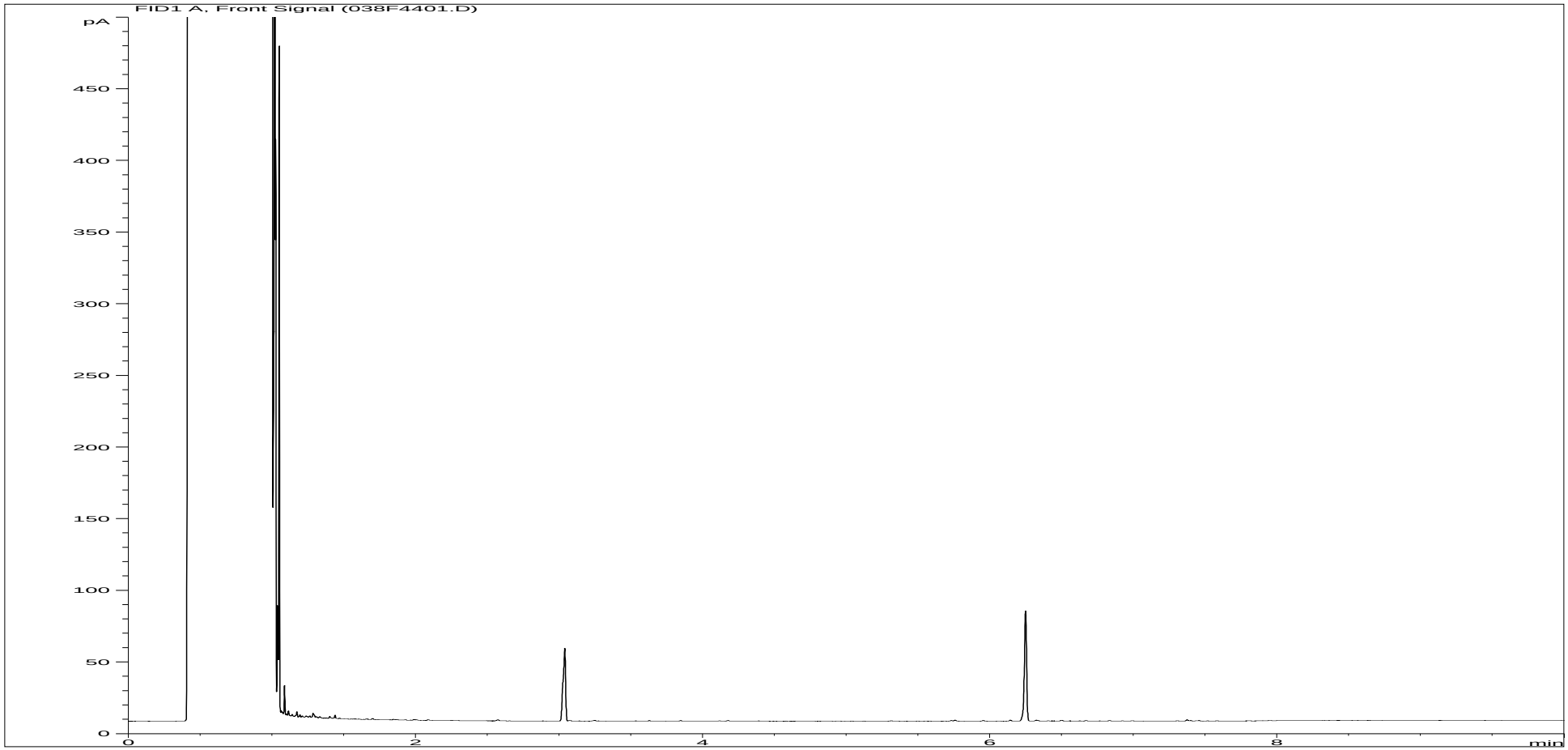
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132644ARO	**Job Number:**	W12_3572
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Aug-11, 16:28:55		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\063B2101.D		

Where individual results are flagged see report notes for status.

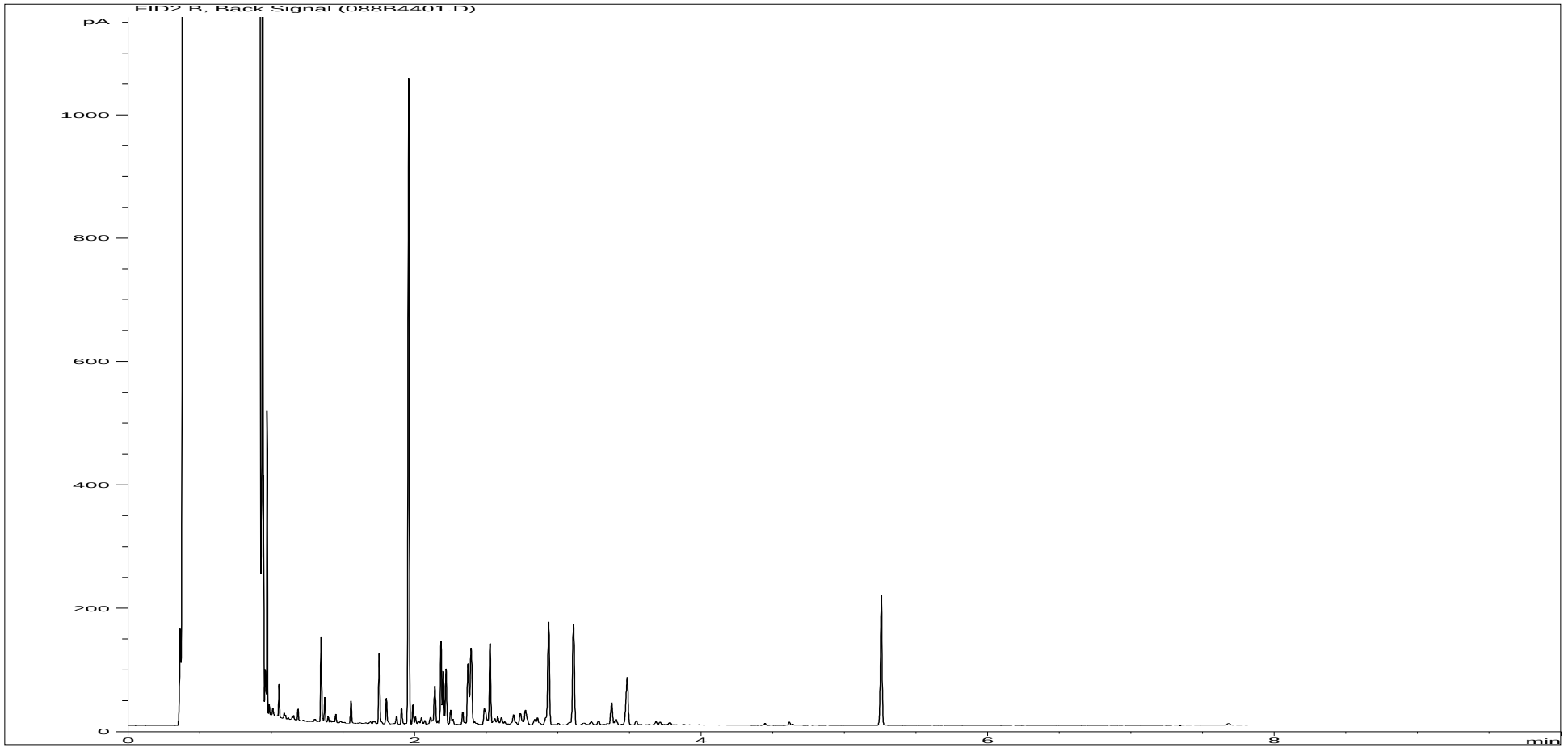
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132645ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	04-Aug-11, 23:30:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\038F4401.D		

Where individual results are flagged see report notes for status.

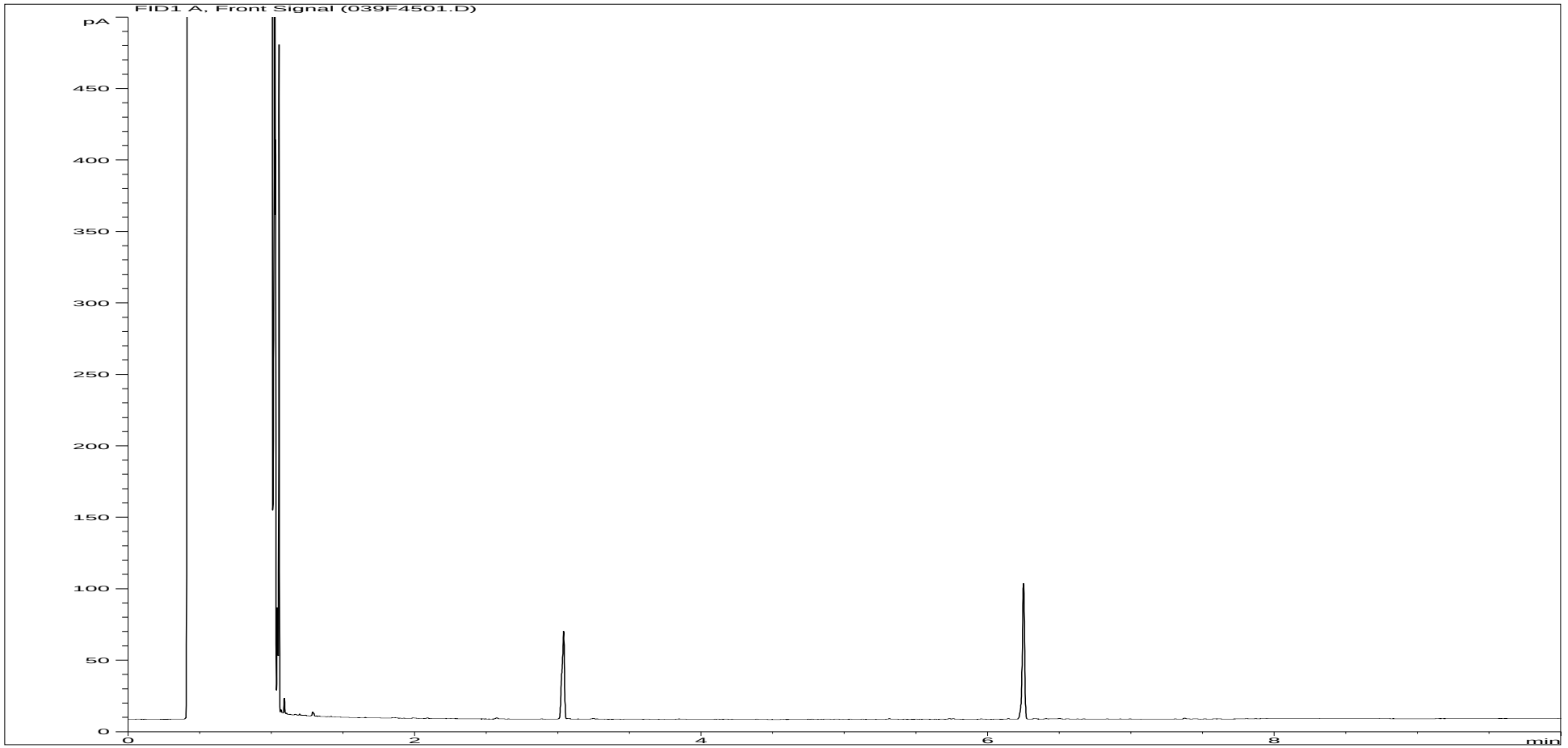
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132645ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	04-Aug-11, 23:30:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\088B4401.D		

Where individual results are flagged see report notes for status.

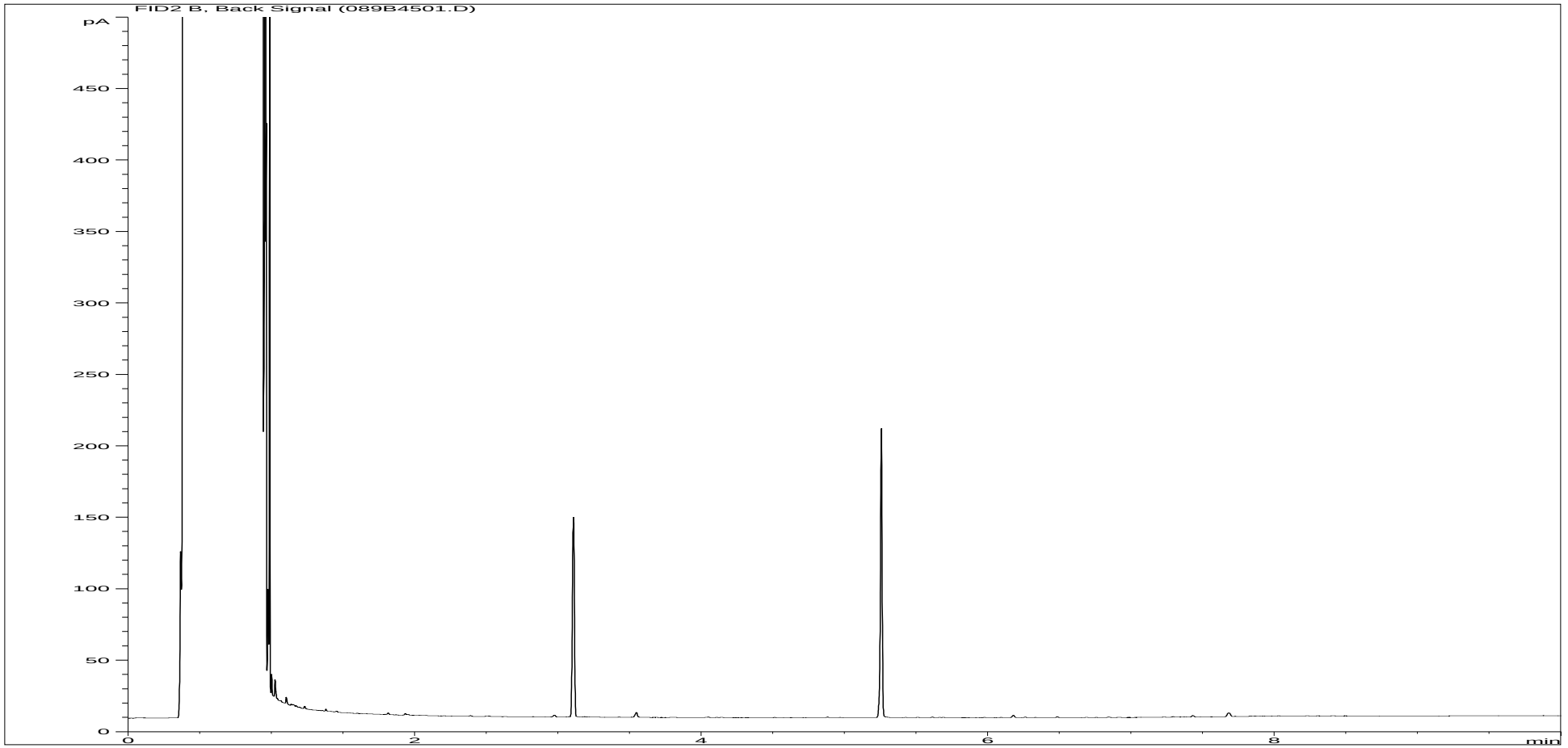
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132646ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	04-Aug-11, 23:48:06		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\039F4501.D		

Where individual results are flagged see report notes for status.

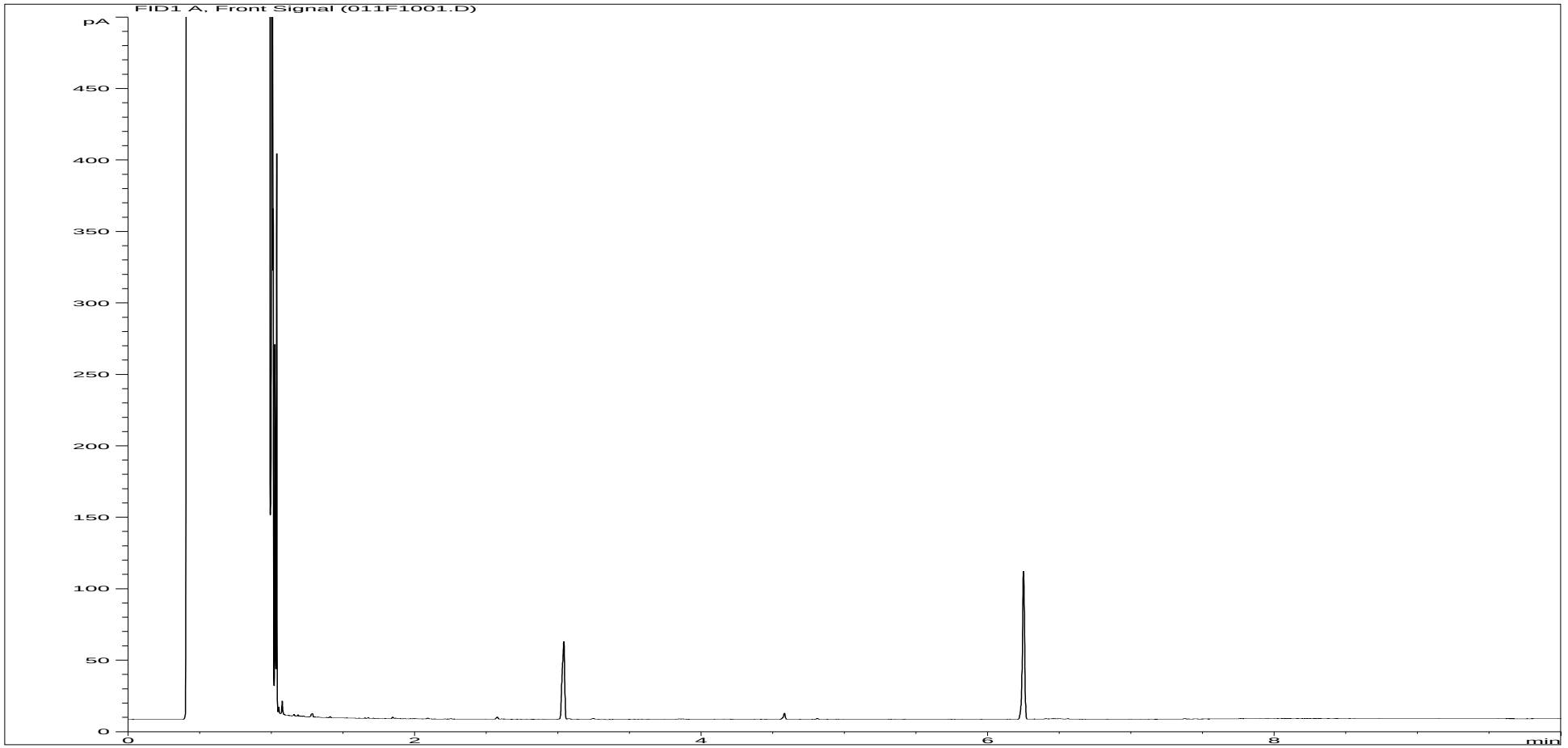
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132646ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	04-Aug-11, 23:48:06		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\089B4501.D		

Where individual results are flagged see report notes for status.

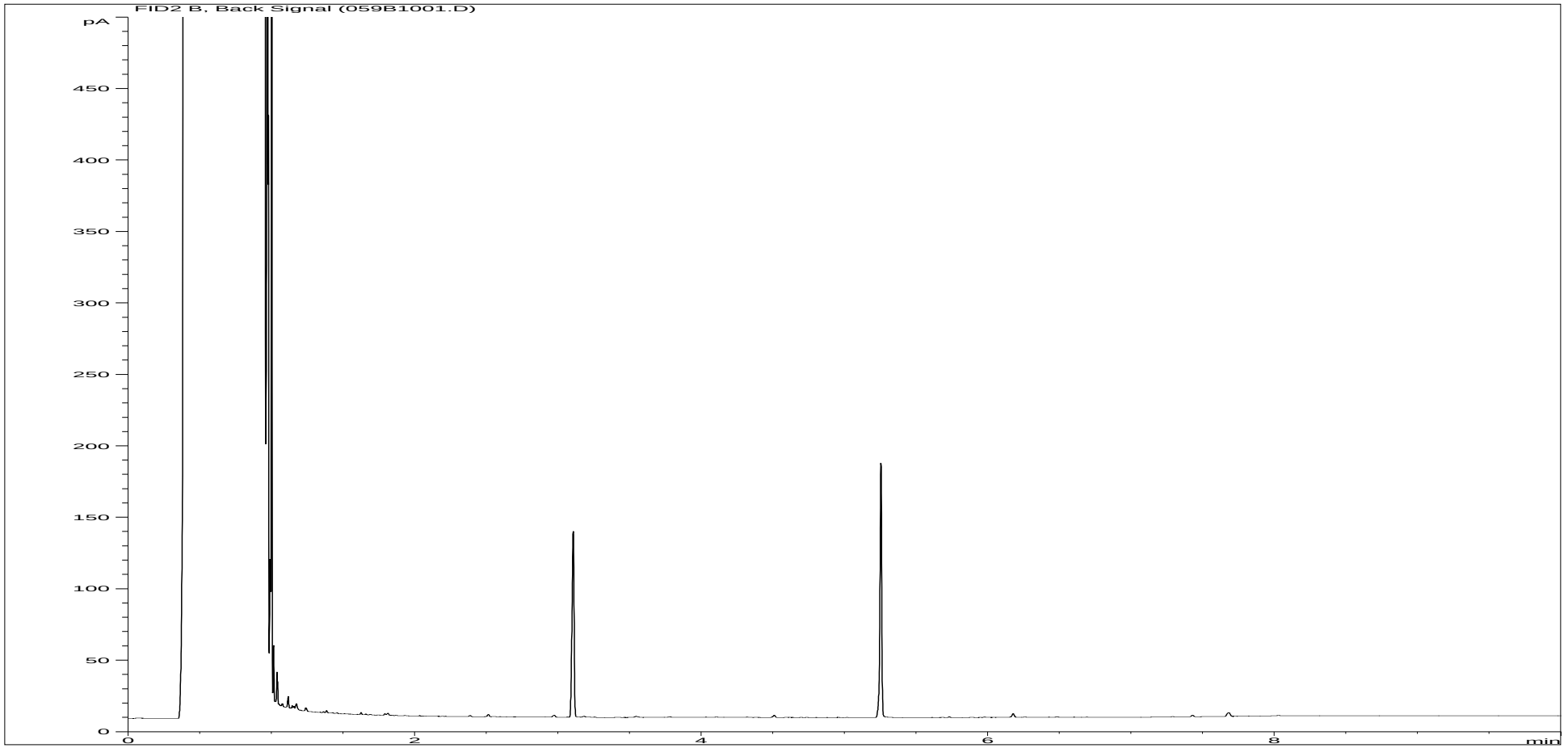
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132647ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank
Acquisition Date/Time:	09-Aug-11, 13:19:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\011F1001.D		

Where individual results are flagged see report notes for status.

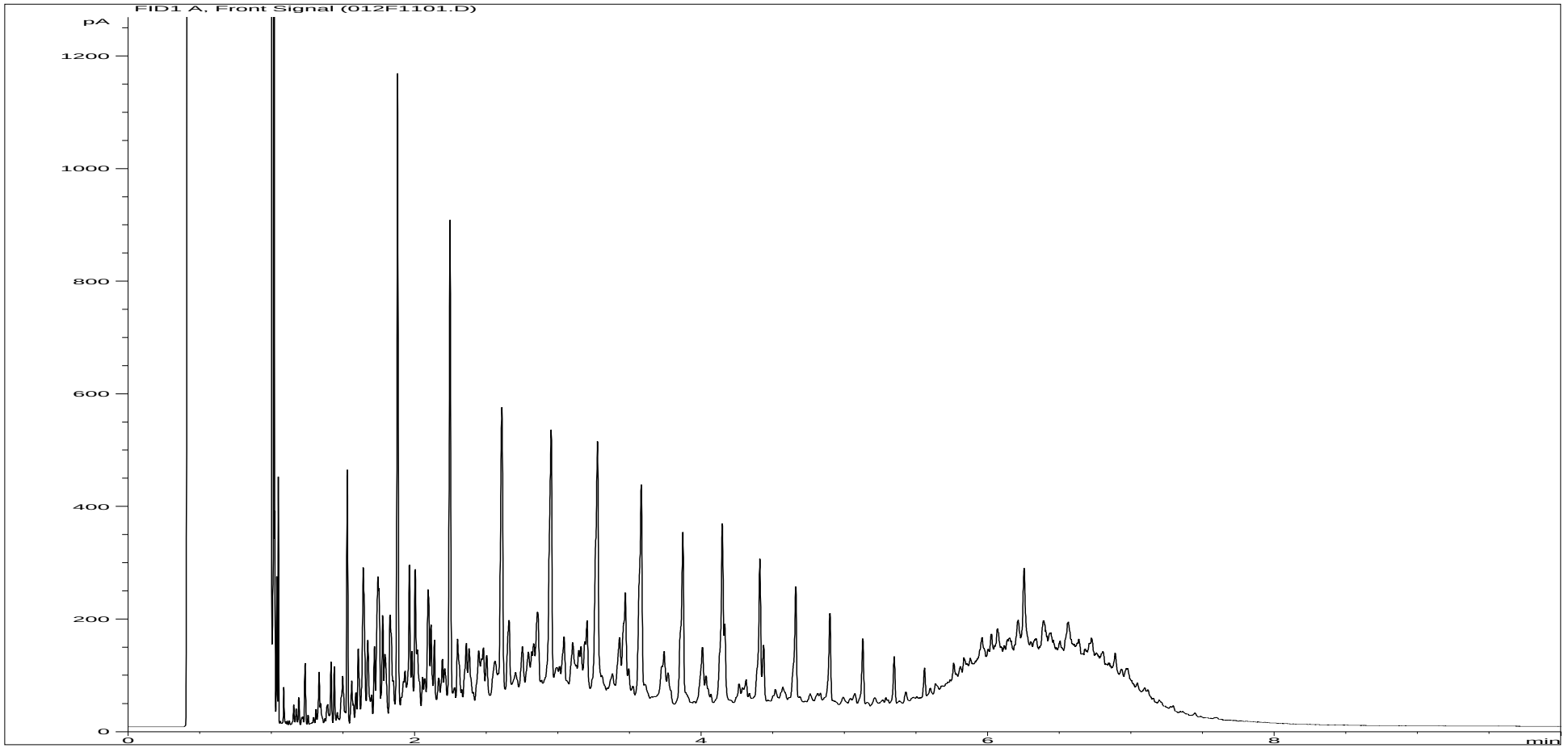
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132647ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank
Acquisition Date/Time:	09-Aug-11, 13:19:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\059B1001.D		

Where individual results are flagged see report notes for status.

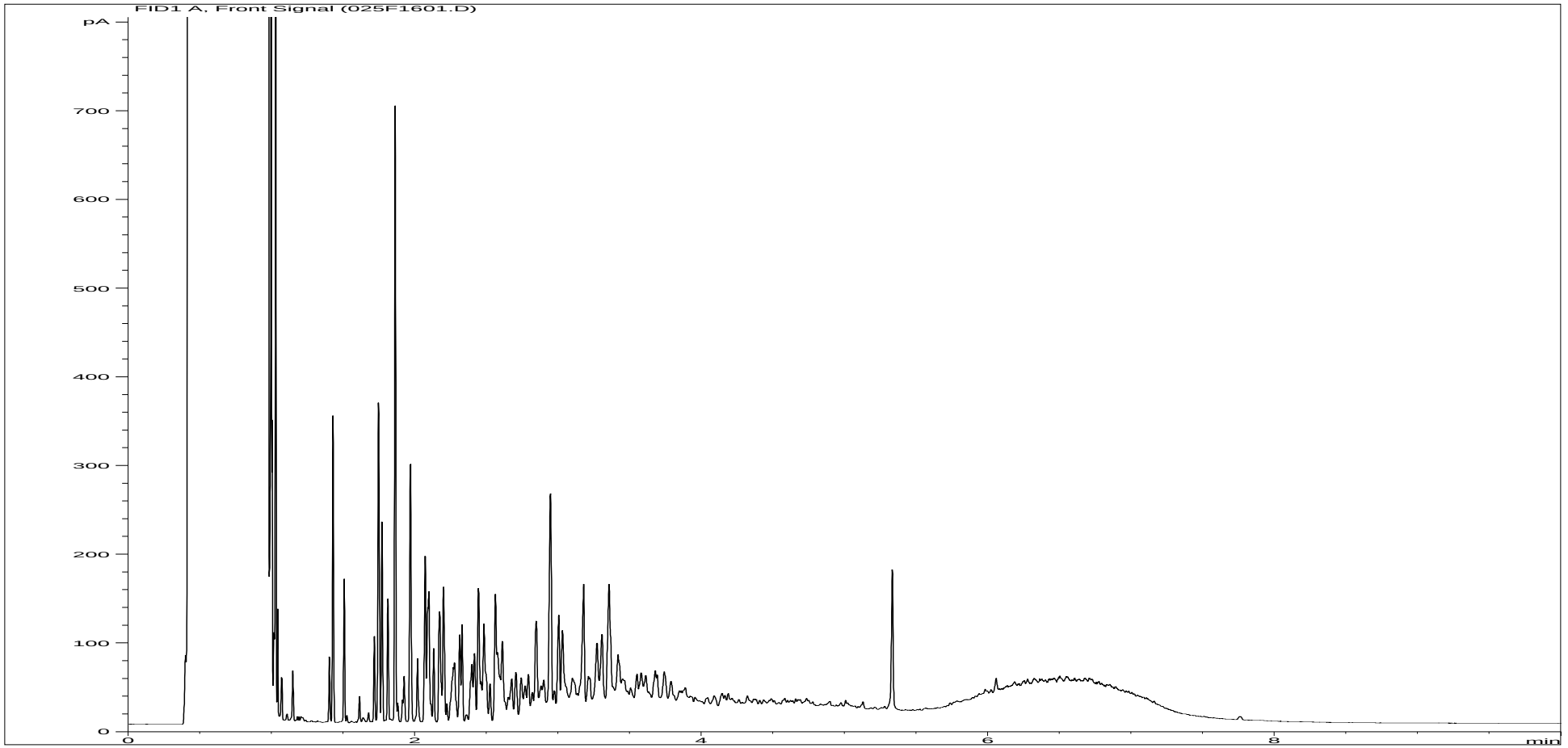
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132648ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank Spike
Acquisition Date/Time:	09-Aug-11, 13:36:38		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\012F1101.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132648ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank Spike
Acquisition Date/Time:	09-Aug-11, 15:02:49		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\025F1601.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W123572

Consignment No 28176
Date Logged 29-Jul-2011

Report Due 11-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1132641	MW11-13	27/07/11																										
EX/1132642	MW11-16	28/07/11																										
EX/1132643	MW99-104	28/07/11																										
EX/1132644	MW11-2	28/07/11																										
EX/1132645	MW99-106	28/07/11																										
EX/1132646	MW99-102	28/07/11																										
EX/1132647	Report 123572 Blank	27/07/11																										
EX/1132648	Report 123572 Blank Spike	27/07/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123572

Customer Worley Parsons Komex
Site Maelor Works
Report No W123572

Consignment No 28176
Date Logged 29-Jul-2011

Report Due 11-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1132641	MW11-13	27/07/11															
EX/1132642	MW11-16	28/07/11															
EX/1132643	MW99-104	28/07/11															
EX/1132644	MW11-2	28/07/11															
EX/1132645	MW99-106	28/07/11															
EX/1132646	MW99-102	28/07/11															
EX/1132647	Report 123572 Blank	27/07/11															
EX/1132648	Report 123572 Blank Spike	27/07/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123605 (Ver. 1)
Your Ref: 305001-50065-29

August 12, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123605 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 9 samples described in this report were logged for analysis by Scientifics on 01-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 12-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 13)
Table of TPH (Si) banding (0.01) (Page 14)
GC-FID Chromatograms (Pages 15 to 32)
Analytical and Deviating Sample Overview (Pages 33 to 34)
Table of Method Descriptions (Page 35)
Table of Report Notes (Page 36)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 12-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132782	MW11-1	28-Jul-11	7.2	1010	98	363	87	181	89	34	69	4	0.002	0.002	<0.0001	Req	0.002	<0.001
1132783	MW11-4	29-Jul-11	7.0	1040	286	314	79	11	109	10	25	4	0.002	0.004	<0.0001	Req	<0.001	<0.001
1132784	MW99-107	29-Jul-11	6.9	4780	182	2161	1350	111	576	175	124	3	0.006	0.004	0.0003	Req	<0.001	<0.001
1132785	MW11-15	29-Jul-11	7.2	955	52	351	18	6	109	19	10	2	<0.001	0.004	<0.0001	Req	<0.001	<0.001
1132786	MW99-110	29-Jul-11	7.2	906	124	216	129	69	75	7	76	5	0.003	0.002	<0.0001	Req	<0.001	<0.001
1132787	MW99-204	29-Jul-11	7.4	436	33	156	16	51	56	4	10	9	<0.001	0.002	<0.0001	Req	<0.001	<0.001
1132788	QC Blank		7.06	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132789	Blank Spike (% Recovery)				100		101	97	96	98	99	99	97	95	92	Req	97	98

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
Method Reporting Limits :			0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132782	MW11-1	28-Jul-11	0.009	1.08	0.98	2.06	<0.01	<0.001	<0.0001	0.003	0.02	0.4	<0.2	<0.02	0.04	<0.05	3.7	<0.1
1132783	MW11-4	29-Jul-11	<0.002	2.7	37.6	40.3	0.07	0.002	<0.0001	0.001	34.3	<0.2	<0.2	<0.02	0.02	<0.05	18	4
1132784	MW99-107	29-Jul-11	0.006	1.92	2.15	4.07	<0.01	0.001	<0.0001	0.003	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.1	<0.1
1132785	MW11-15	29-Jul-11	<0.002	0.9	12.7	13.6	<0.01	0.002	<0.0001	<0.001	3.3	<0.2	<0.2	<0.02	<0.02	0.25	11	<0.1
1132786	MW99-110	29-Jul-11	0.012	1.94	0.63	2.57	<0.01	<0.001	<0.0001	<0.001	1.4	0.3	<0.2	<0.02	<0.02	0.05	2.5	<0.1
1132787	MW99-204	29-Jul-11	<0.002	21.5	0.88	22.4	0.06	<0.001	<0.0001	0.002	0.05	0.2	<0.2	<0.02	<0.02	<0.05	2.4	<0.1
1132788	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132789	Blank Spike (% Recovery)		94		96	99	96	96	96	91	100		99	99	97	104	102	99

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
UKAS Accredited :			yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1132782	MW11-1	**28-Jul-11**	Req	0.12	<0.04	6.3	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132783	MW11-4	**29-Jul-11**	Req	5.22	<0.02	1.6	38	<1	2	133	831	0.184	0.0640	0.153	<0.1	0.0647		
1132784	MW99-107	**29-Jul-11**	Req	0.29	<0.02	4.5	<1	4	<1	<1	<7	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132785	MW11-15	**29-Jul-11**	Req	4.23	<0.02	1.9	4	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132786	MW99-110	**29-Jul-11**	Req	6.14	<0.02	3.7	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132787	MW99-204	**29-Jul-11**	Req	1.35	<0.02	5.2	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132788	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132789	Blank Spike (% Recovery)		Req	101			97	85	79	81	244	89	100	105	99	106		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1	**Job Number:**	W12_3605
LIMS ID Number:	EX1132782	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.017	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.167	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	76
Phenanthrene-d10	76
Chrysene-d12	74
Perylene-d12	67

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	94

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-4	**Job Number:**	W12_3605
LIMS ID Number:	EX1132783	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	451.000	100
Acenaphthylene	208-96-8	4.31	0.125	M
Acenaphthene	83-32-9	4.43	0.441	71
Fluorene	86-73-7	4.81	0.061	M
Phenanthrene	85-01-8	5.65	0.044	M
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.99	0.016	M
Pyrene	129-00-0	7.28	0.015	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 451.792	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	56
Acenaphthene-d10	88
Phenanthrene-d10	88
Chrysene-d12	88
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	70
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-107	**Job Number:**	W12_3605
LIMS ID Number:	EX1132784	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	0.086	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.236	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	77
Acenaphthene-d10	76
Phenanthrene-d10	76
Chrysene-d12	74
Perylene-d12	66

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	92

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15	**Job Number:**	W12_3605
LIMS ID Number:	EX1132785	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	38.700	100
Acenaphthylene	208-96-8	4.31	0.050	M
Acenaphthene	83-32-9	4.43	0.452	74
Fluorene	86-73-7	4.81	0.164	M
Phenanthrene	85-01-8	5.65	0.066	M
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 39.542	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	78
Acenaphthene-d10	78
Phenanthrene-d10	79
Chrysene-d12	77
Perylene-d12	68

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	84
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-110	**Job Number:**	W12_3605
LIMS ID Number:	EX1132786	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	7.00	0.011	M
Pyrene	129-00-0	7.28	0.013	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.164	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	72
Acenaphthene-d10	74
Phenanthrene-d10	74
Chrysene-d12	70
Perylene-d12	63

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	91
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-204	**Job Number:**	W12_3605
LIMS ID Number:	EX1132787	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.28	0.014	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.164	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	74
Phenanthrene-d10	74
Chrysene-d12	72
Perylene-d12	63

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123605 Blank	**Job Number:**	W12_3605
LIMS ID Number:	EX1132788	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	72
Acenaphthene-d10	72
Phenanthrene-d10	72
Chrysene-d12	68
Perylene-d12	59

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	88
Terphenyl-d14	99

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123605 Blank Spike	**Job Number:**	W12_3605
LIMS ID Number:	EX1132789	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.26	87	0
Acenaphthylene	208-96-8	4.31	84	0
Acenaphthene	83-32-9	4.43	88	0
Fluorene	86-73-7	4.81	90	0
Phenanthrene	85-01-8	5.66	99	0
Anthracene	120-12-7	5.71	91	0
Fluoranthene	206-44-0	6.99	94	0
Pyrene	129-00-0	7.28	92	0
Benzo[a]anthracene	56-55-3	8.96	104	0
Chrysene	218-01-9	9.01	99	0
Benzo[b]fluoranthene	205-99-2	10.49	97	0
Benzo[k]fluoranthene	207-08-9	10.53	84	0
Benzo[a]pyrene	50-32-8	10.92	89	0
Indeno[1,2,3-cd]pyrene	193-39-5	12.30	68	0
Dibenzo[a,h]anthracene	53-70-3	12.34	73	0
Benzo[g,h,i]perylene	191-24-2	12.60	77	0
Total (USEPA16) PAHs	-	-	88	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	68
Acenaphthene-d10	66
Phenanthrene-d10	65
Chrysene-d12	62
Perylene-d12	56

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	101
Terphenyl-d14	112

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3605
QC Batch Number: 110715
Directory: D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\065B3101.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

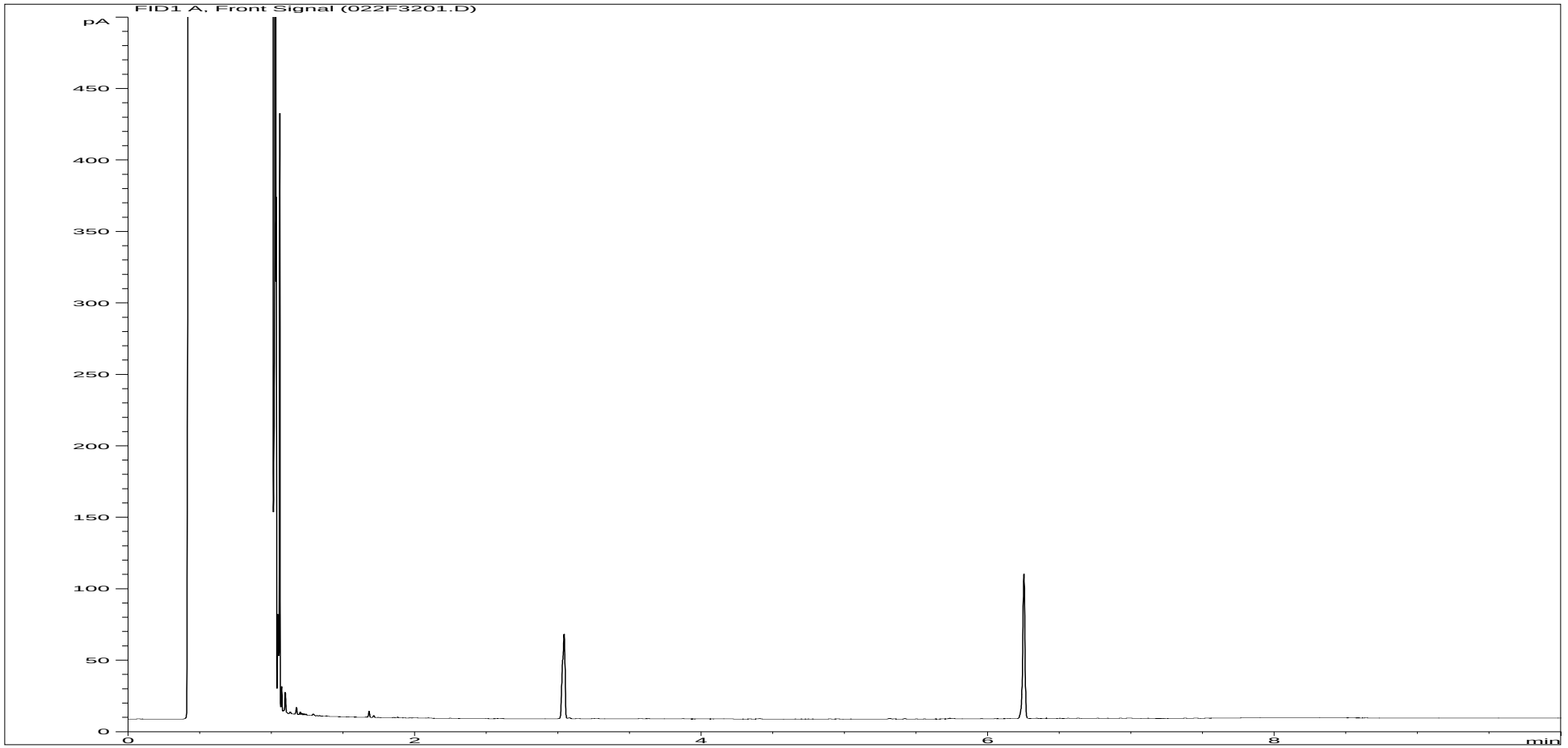
Matrix: Water
Date Booked in 01-Aug-11
Date Extracted 04-Aug-11
Date Analysed 05-Aug-11, 20:09:14

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1132782	MW11-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011
EX1132783	MW11-4	<0.01	1.15	<0.01	1.33	<0.01	0.051	<0.01	<0.01	<0.01	<0.01	0.011	2.53
EX1132784	MW99-107	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132785	MW11-15	<0.01	0.022	<0.01	0.116	<0.01	0.029	<0.01	<0.01	<0.01	<0.01	<0.01	0.173
EX1132786	MW99-110	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132787	MW99-204	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132788	Report 123605 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132789	Report 123605 Blank Spike	0.576	0.189	0.93	0.309	1.75	0.568	1.04	0.288	2.72	0.68	7.08	2.06

Where individual results are flagged see report notes for status.

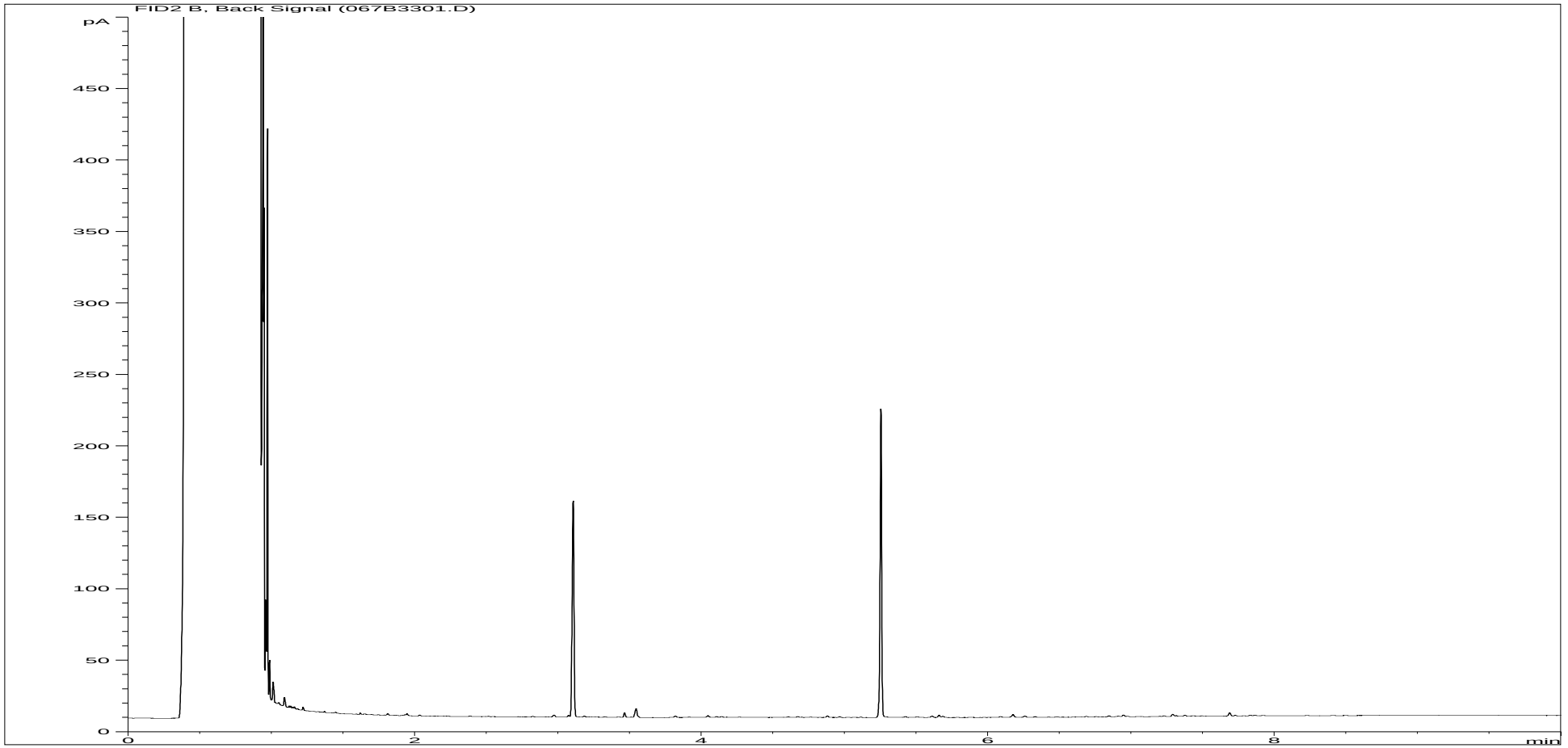
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132782ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	05-Aug-11, 20:27:03		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\022F3201.D		

Where individual results are flagged see report notes for status.

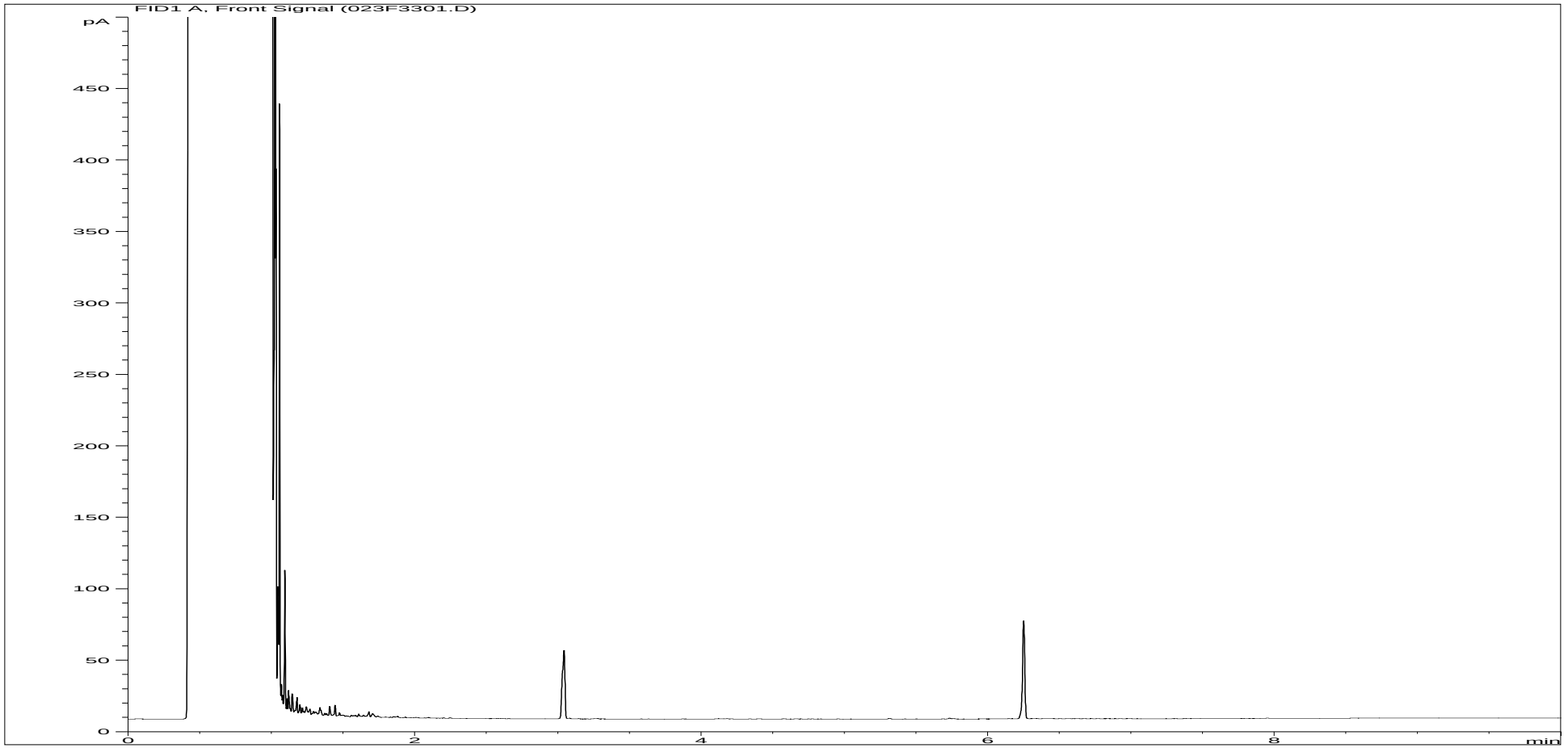
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132782ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	05-Aug-11, 20:44:31		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\067B3301.D		

Where individual results are flagged see report notes for status.

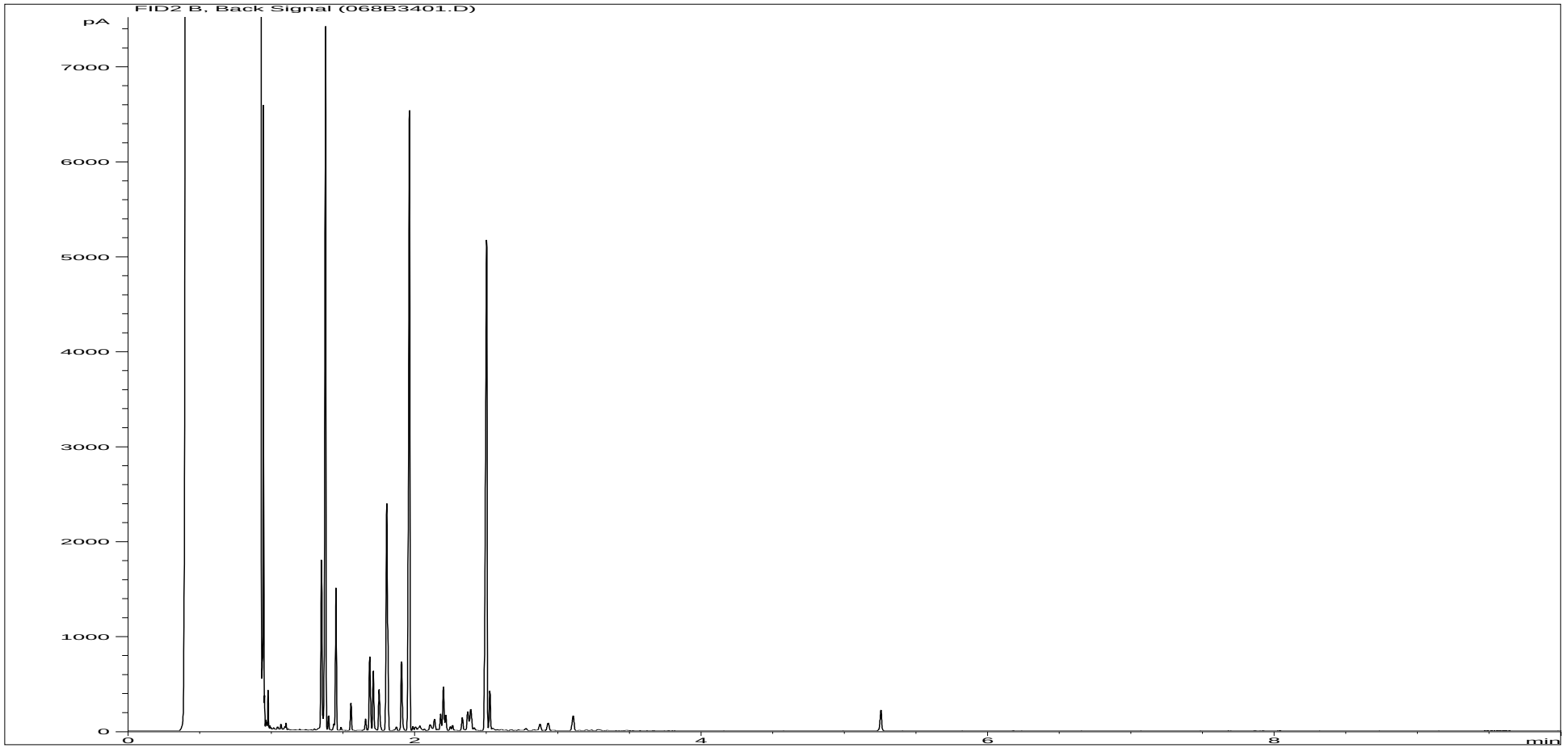
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132783ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	05-Aug-11, 20:44:31		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\023F3301.D		

Where individual results are flagged see report notes for status.

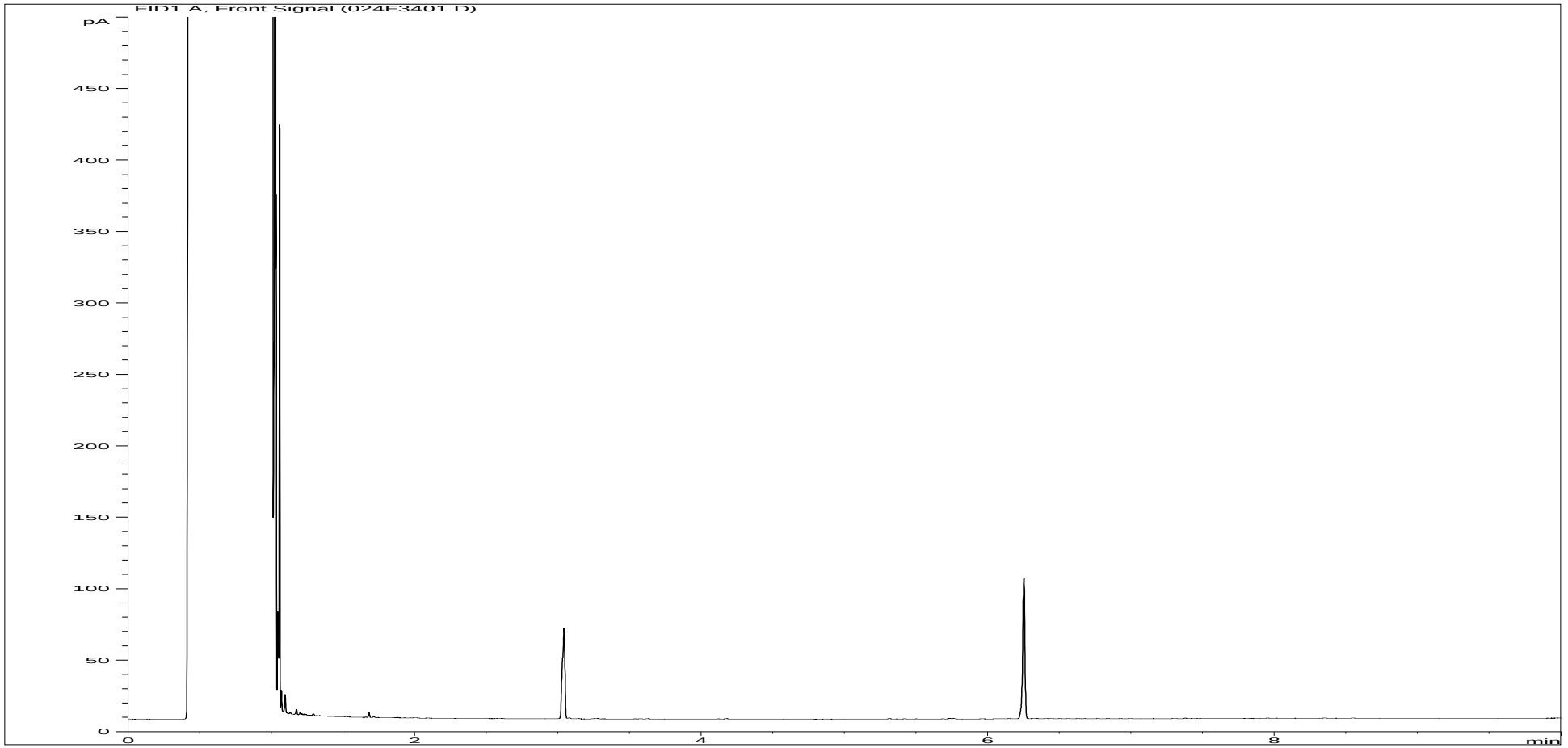
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132783ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	05-Aug-11, 21:01:52		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\068B3401.D		

Where individual results are flagged see report notes for status.

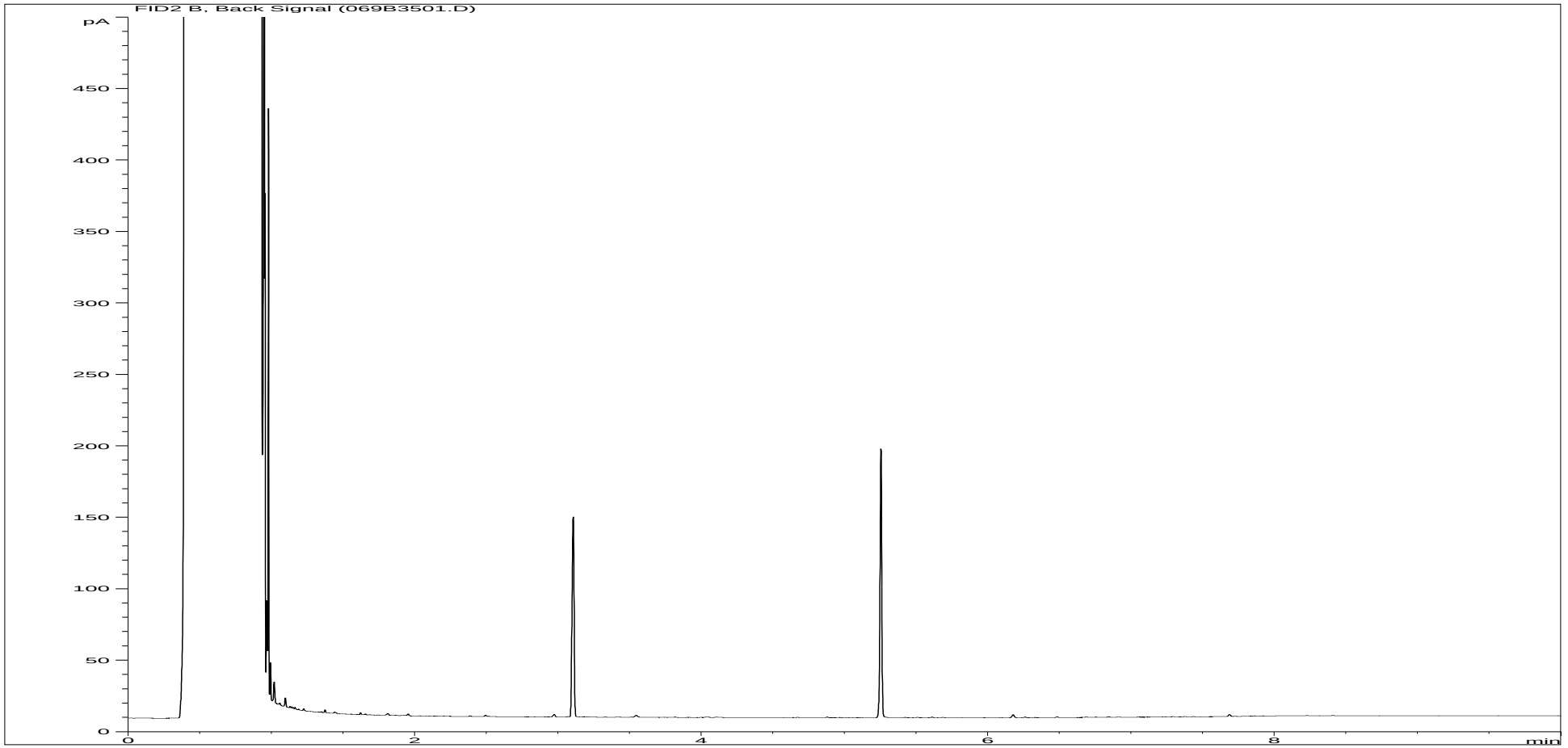
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132784ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	05-Aug-11, 21:01:52		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\024F3401.D		

Where individual results are flagged see report notes for status.

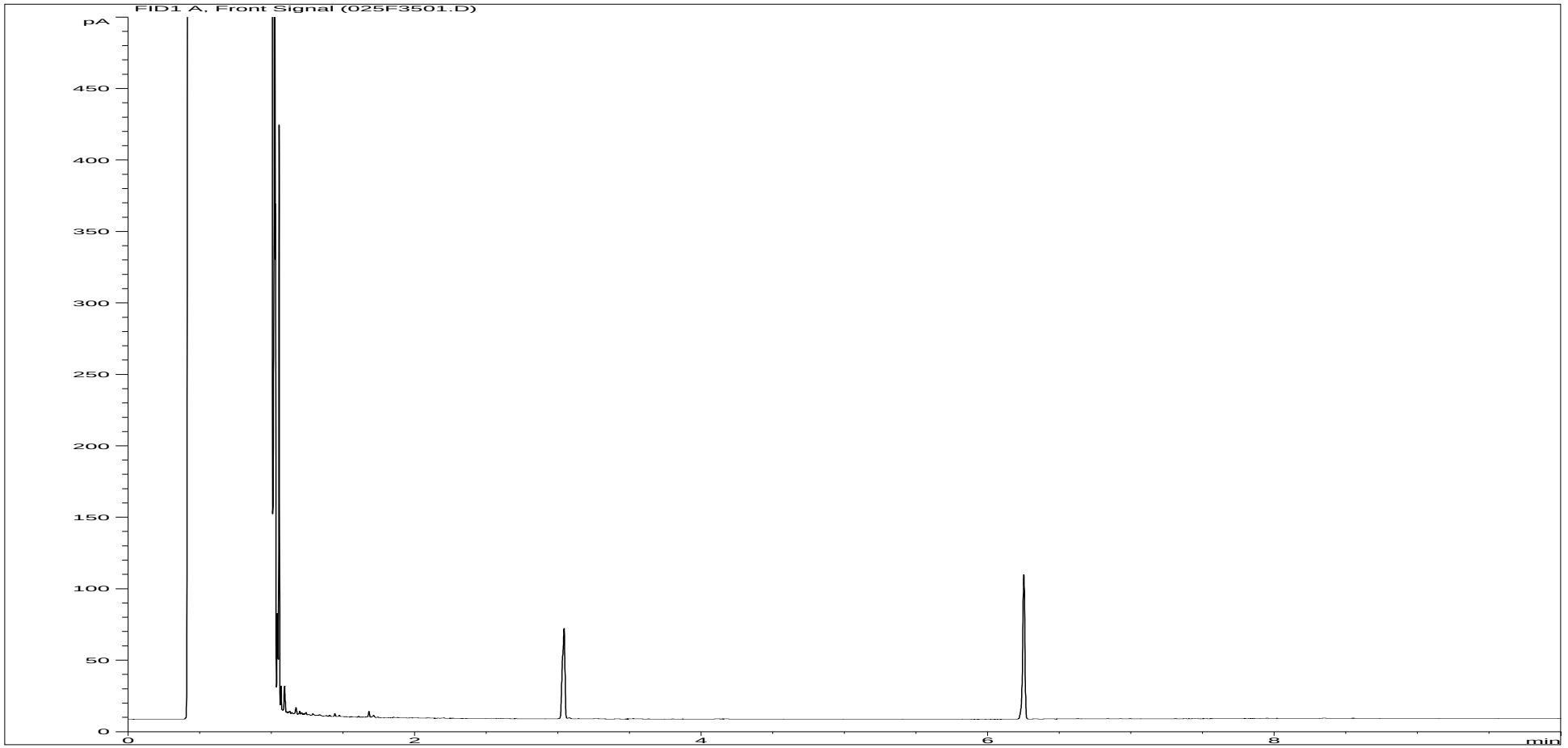
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132784ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	05-Aug-11, 21:19:10		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\069B3501.D		

Where individual results are flagged see report notes for status.

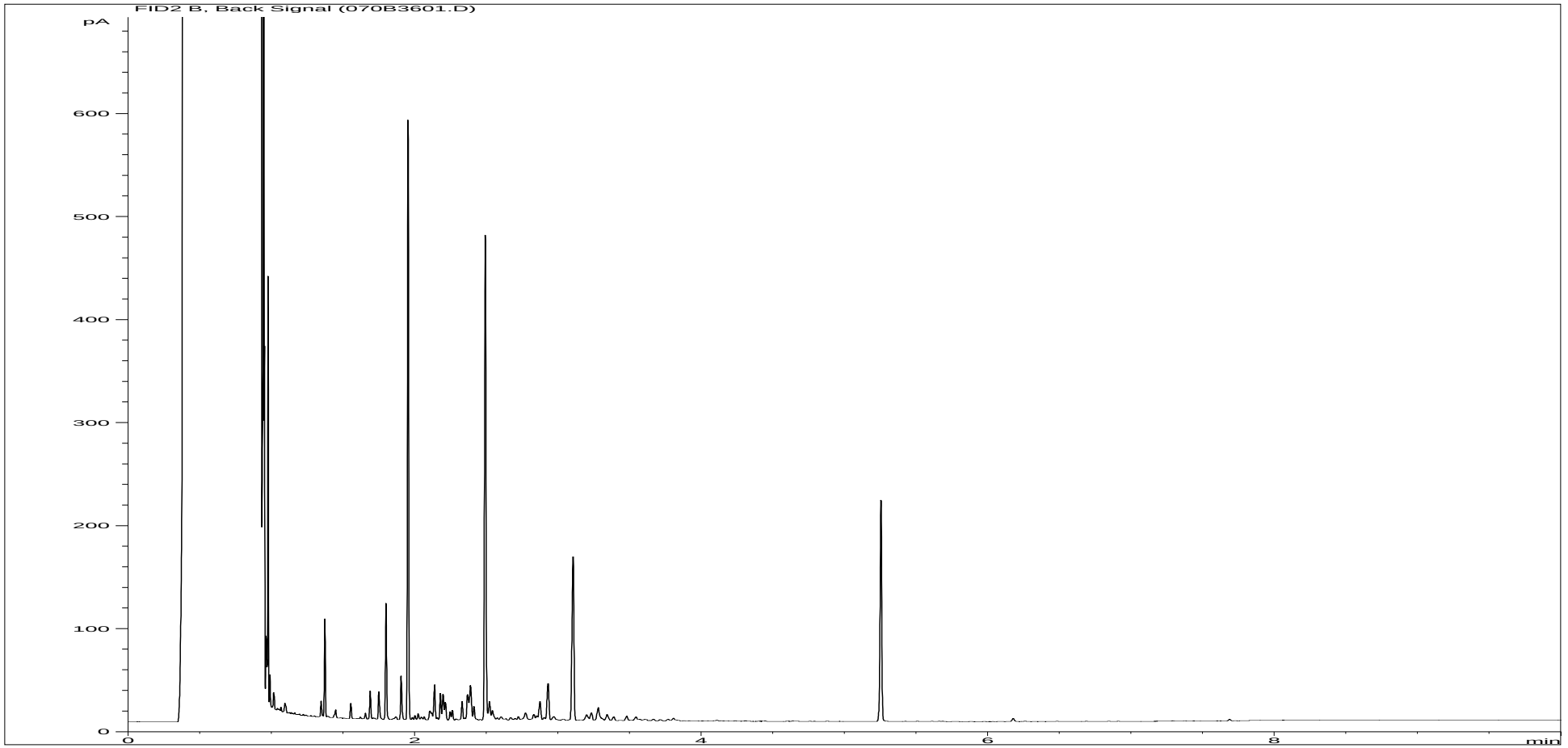
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132785ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15
Acquisition Date/Time:	05-Aug-11, 21:19:10		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\025F3501.D		

Where individual results are flagged see report notes for status.

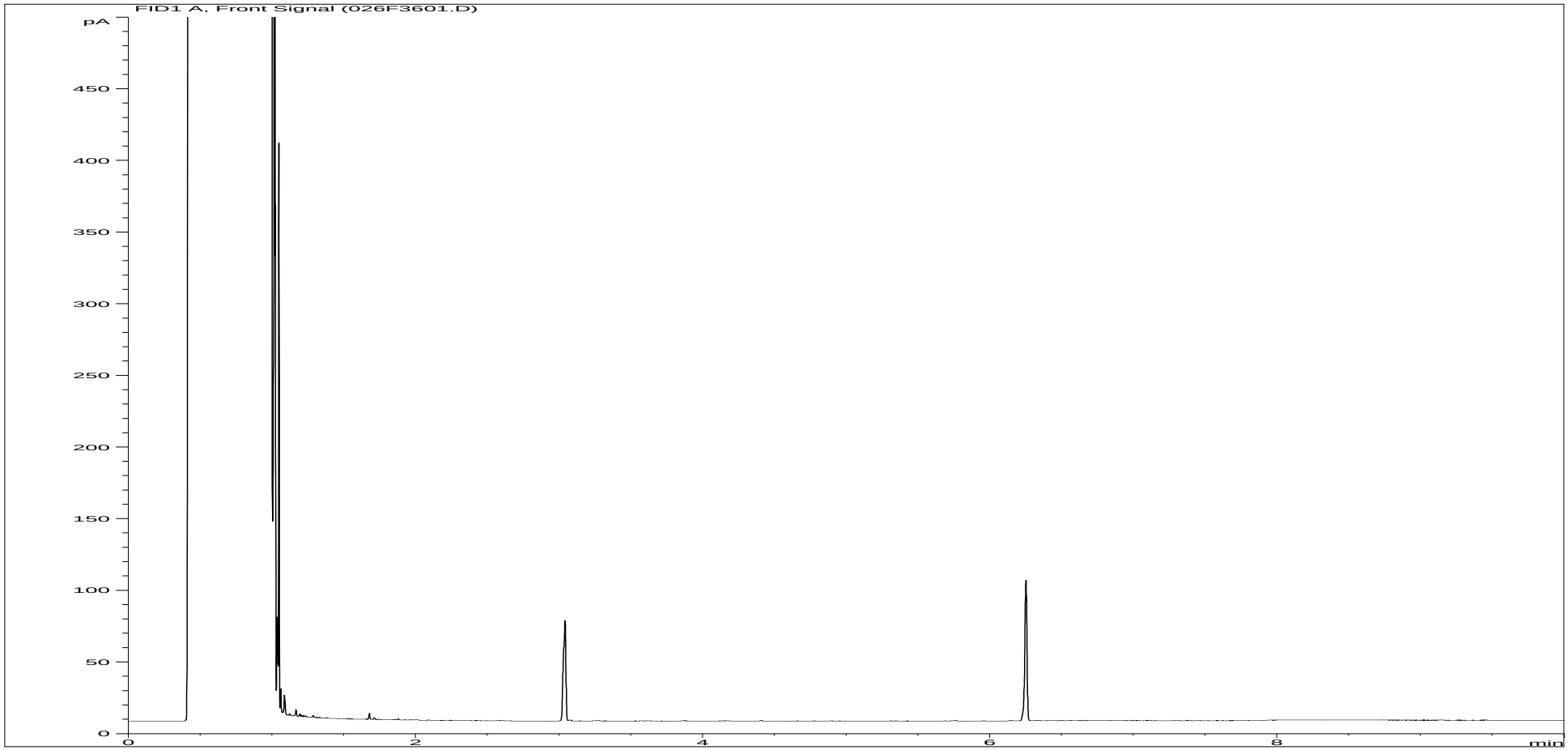
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132785ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15
Acquisition Date/Time:	05-Aug-11, 21:36:37		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\070B3601.D		

Where individual results are flagged see report notes for status.

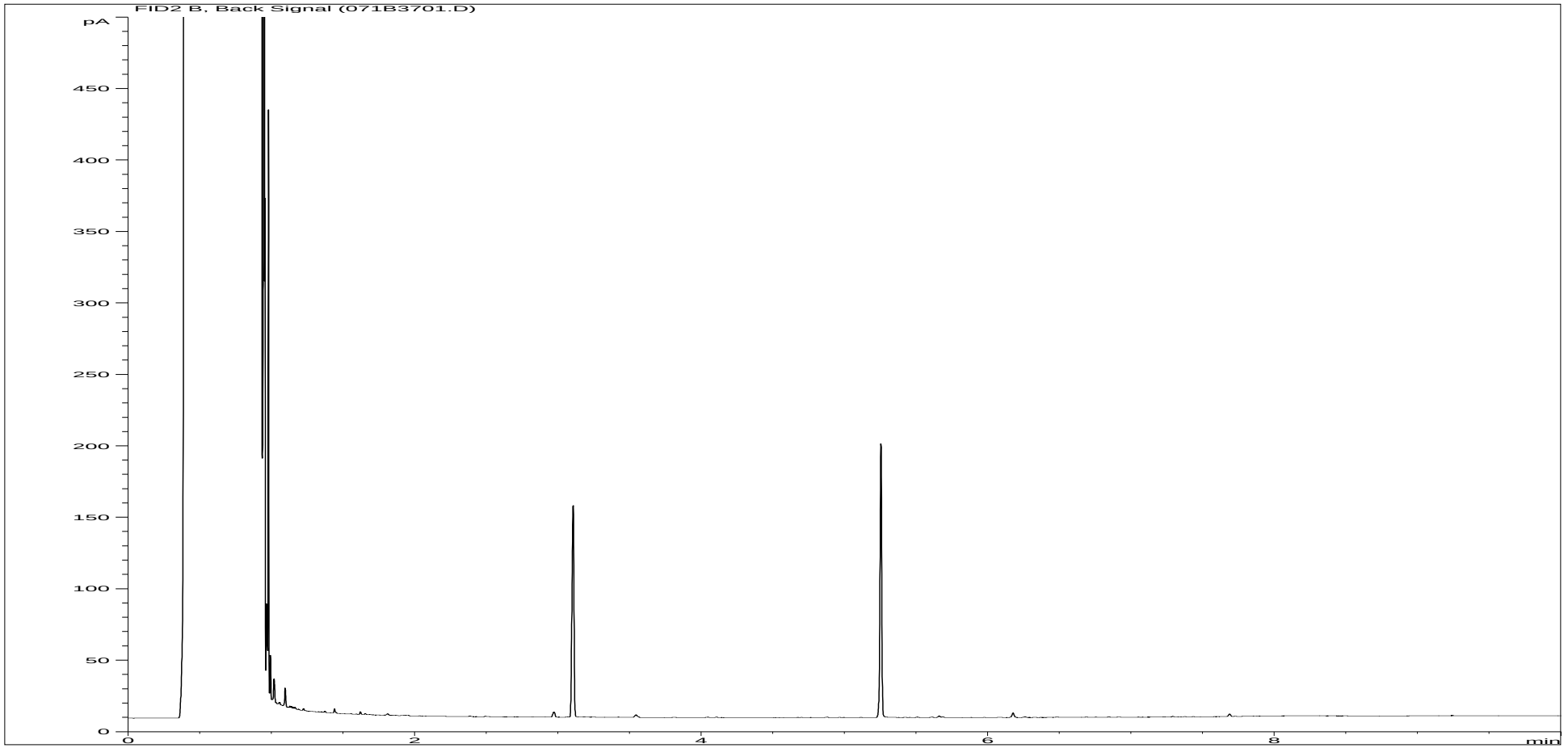
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132786ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	05-Aug-11, 21:36:37		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\026F3601.D		

Where individual results are flagged see report notes for status.

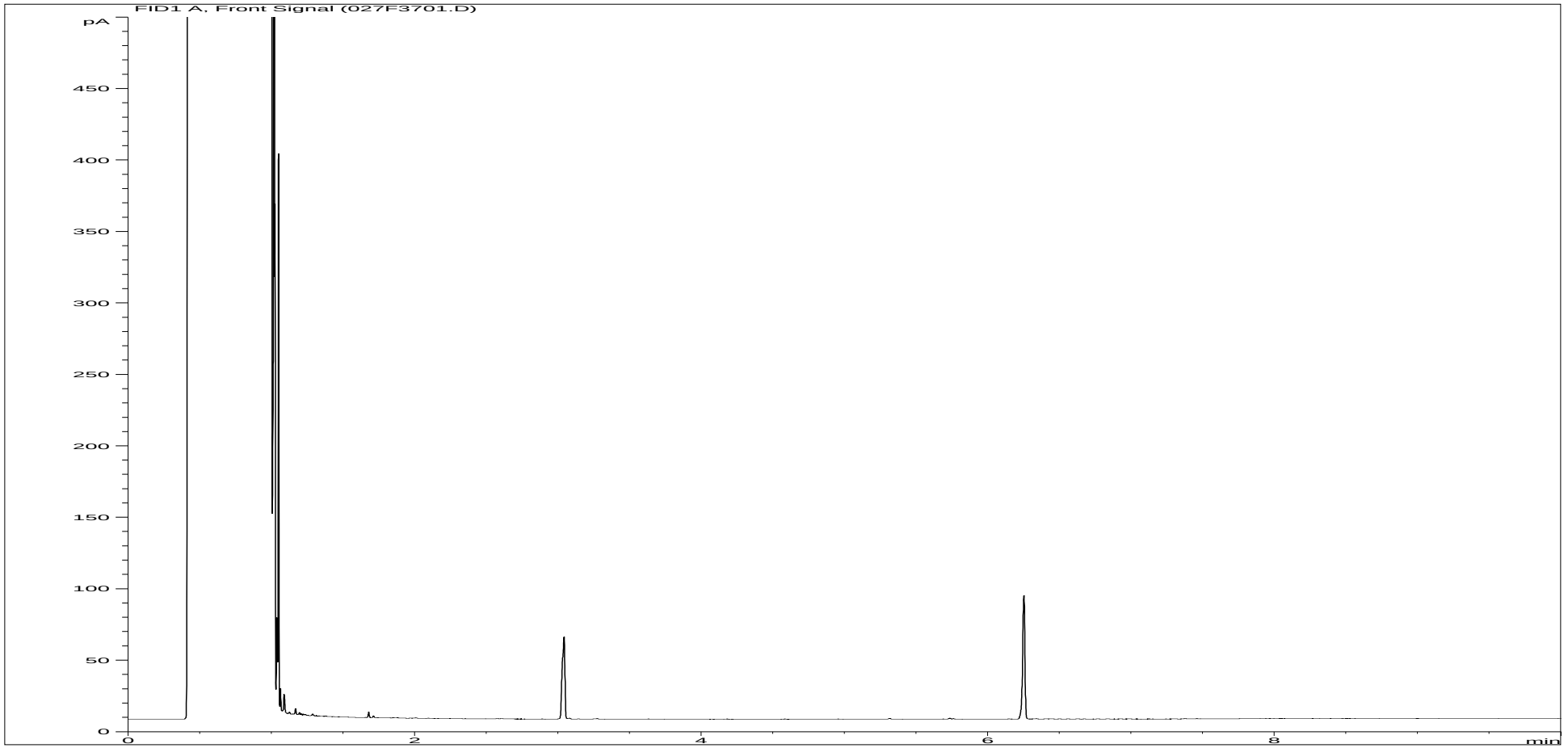
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132786ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	05-Aug-11, 21:54:02		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\071B3701.D		

Where individual results are flagged see report notes for status.

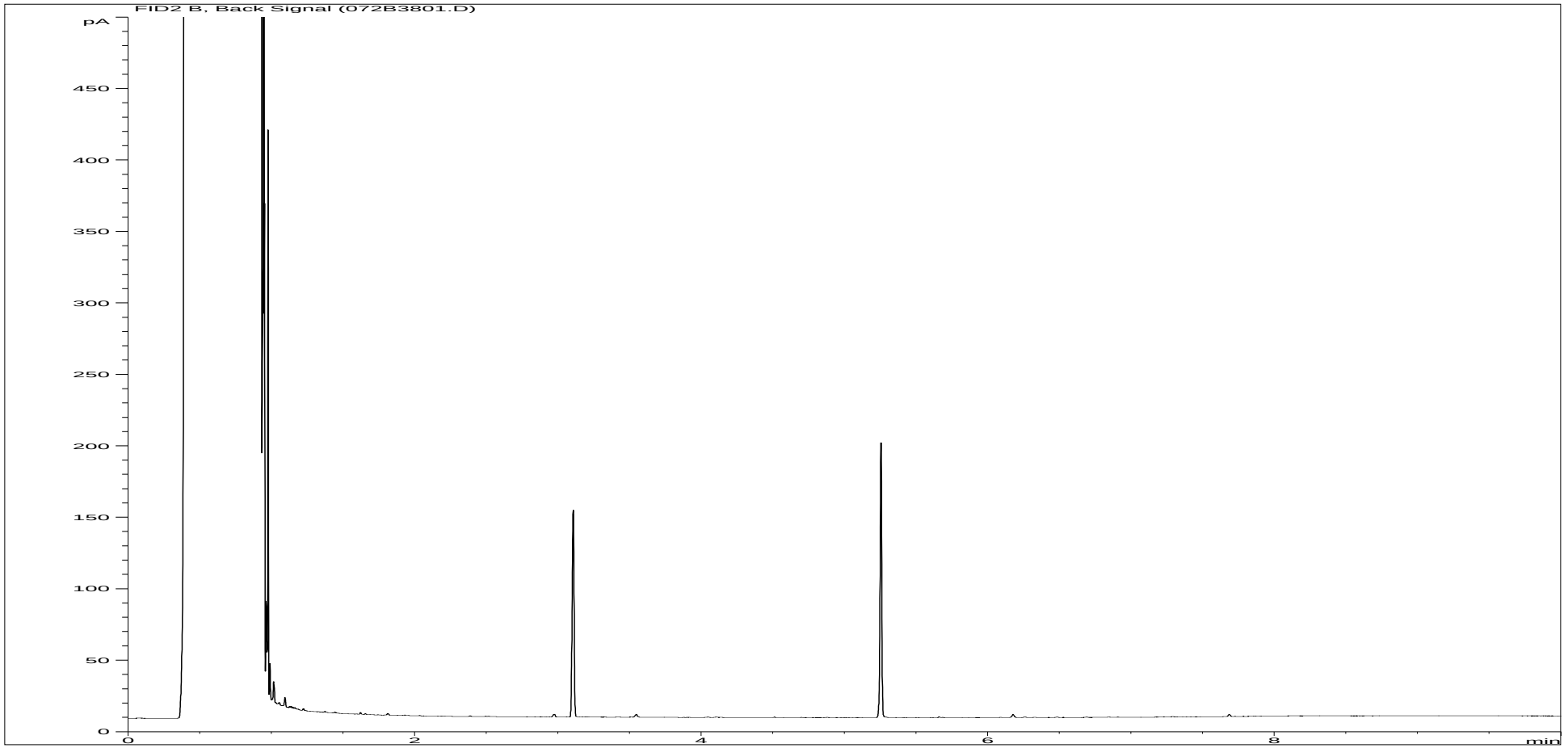
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132787ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	05-Aug-11, 21:54:02		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\027F3701.D		

Where individual results are flagged see report notes for status.

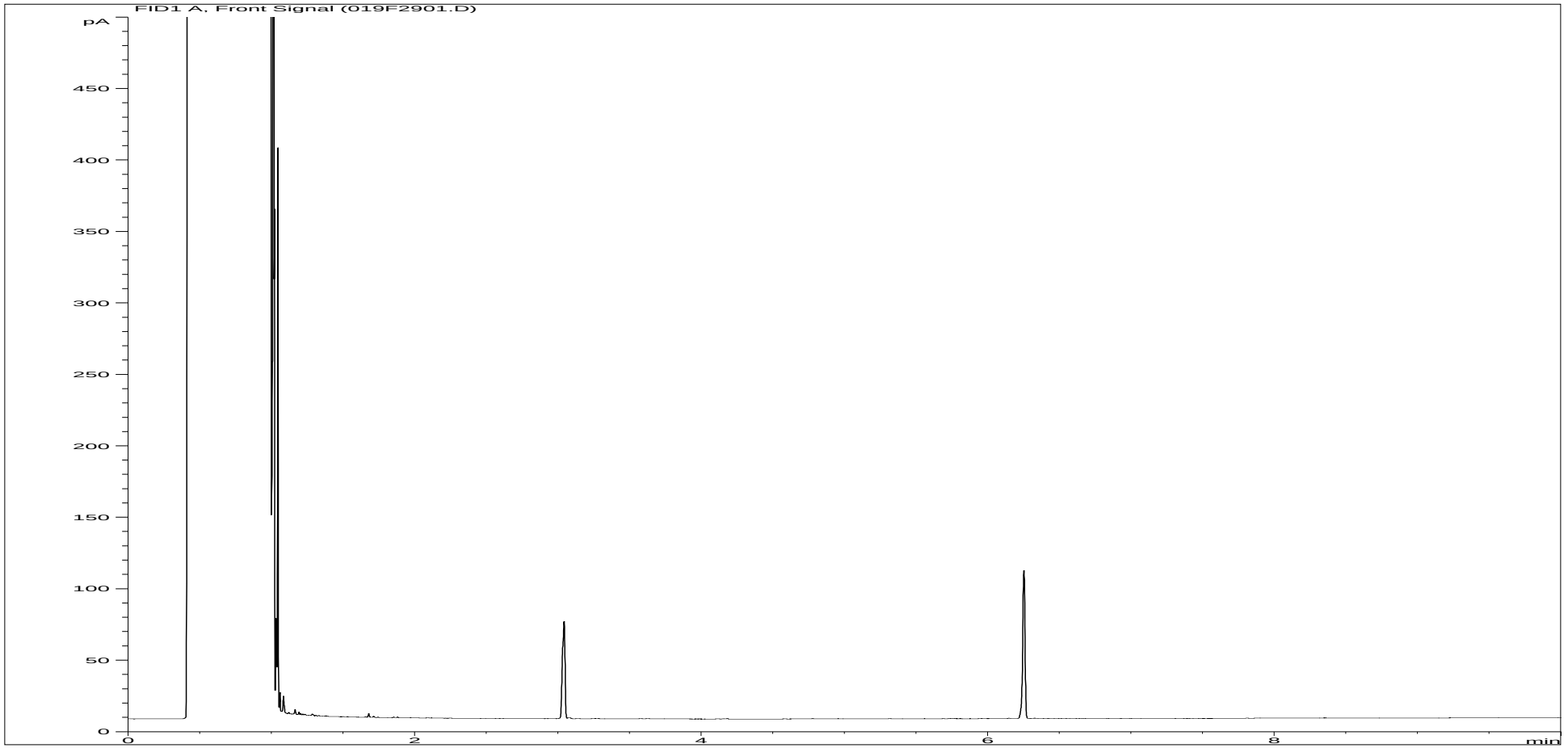
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132787ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	05-Aug-11, 22:11:18		
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Where individual results are flagged see report notes for status.

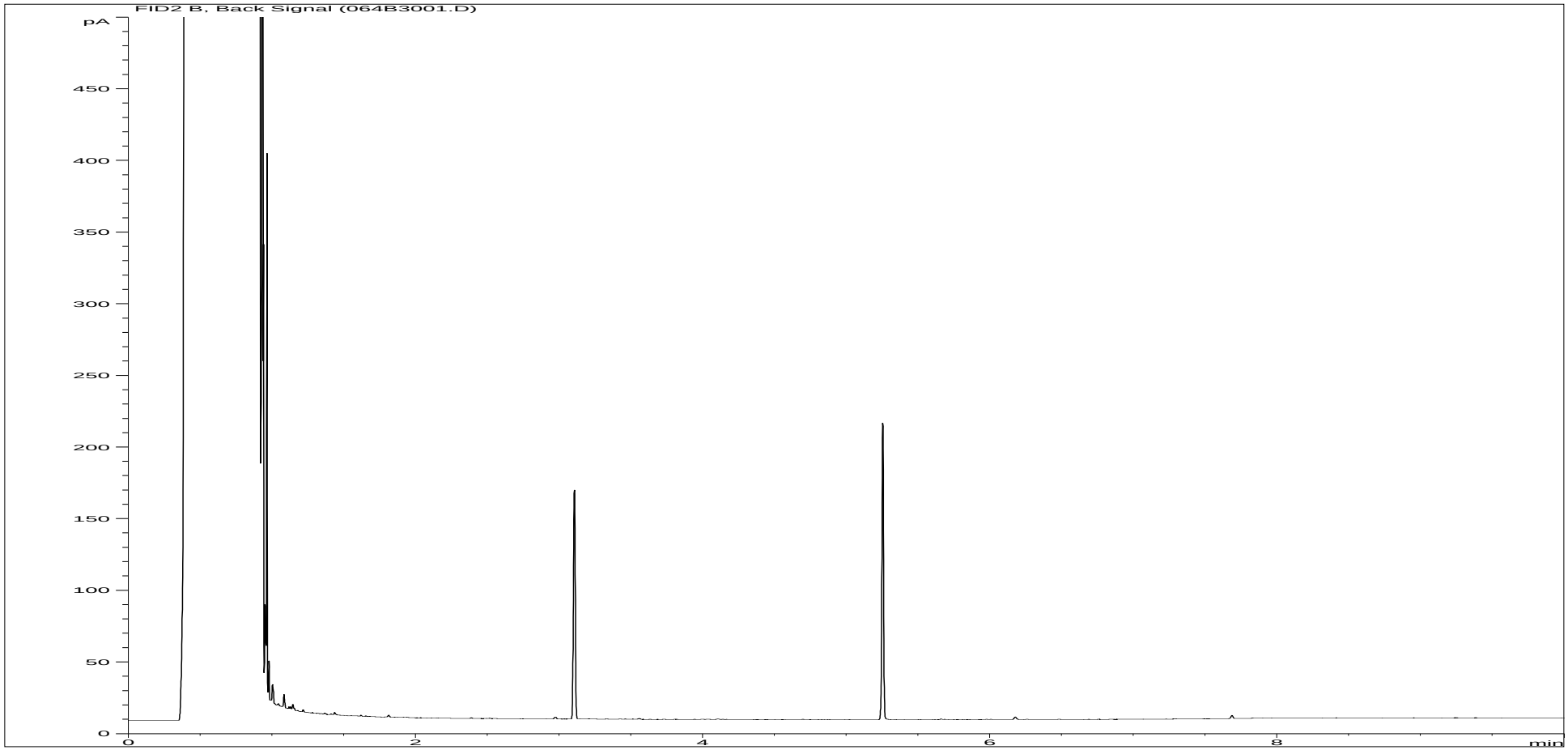
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132788ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank
Acquisition Date/Time:	05-Aug-11, 19:34:07		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\019F2901.D		

Where individual results are flagged see report notes for status.

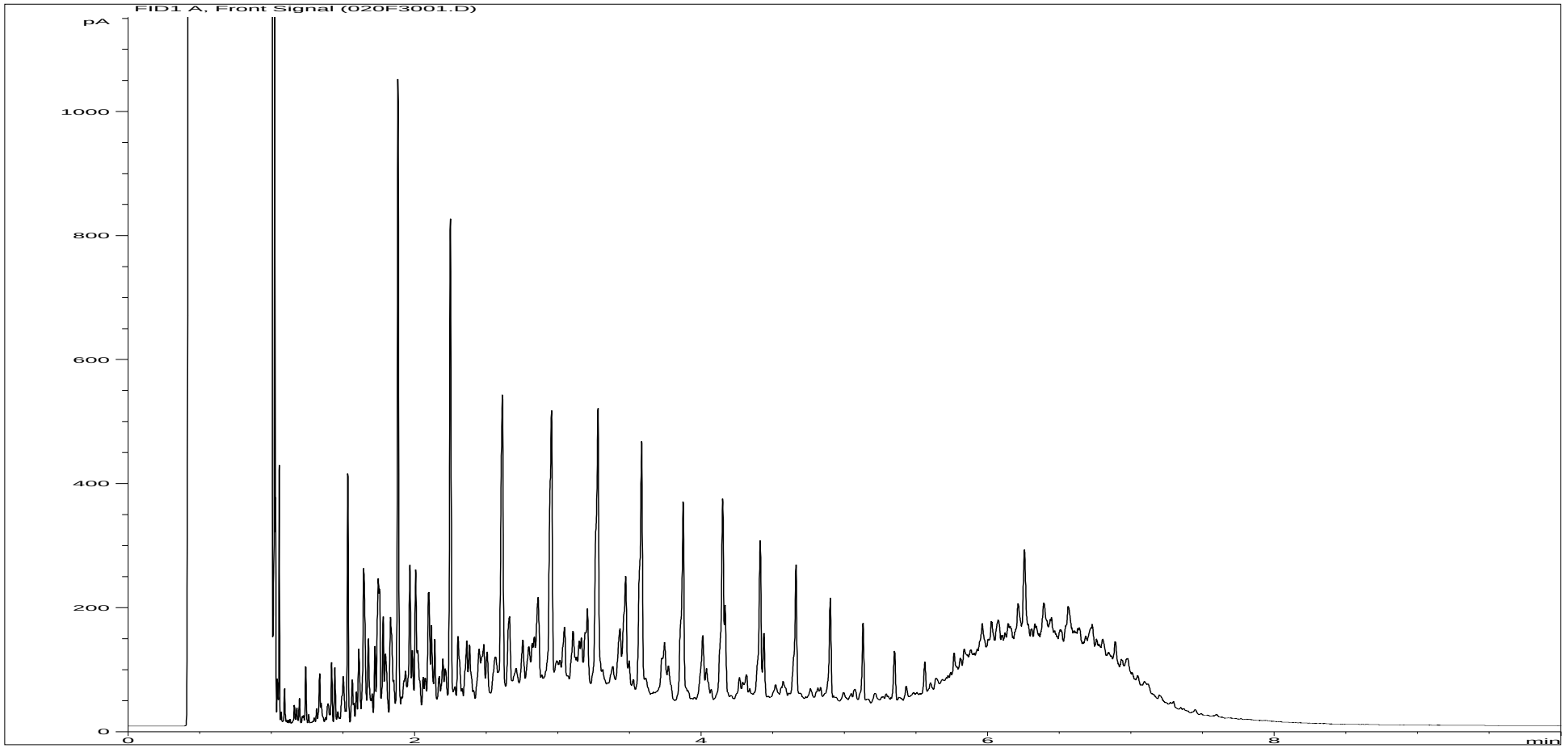
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132788ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank
Acquisition Date/Time:	05-Aug-11, 19:51:34		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\064B3001.D		

Where individual results are flagged see report notes for status.

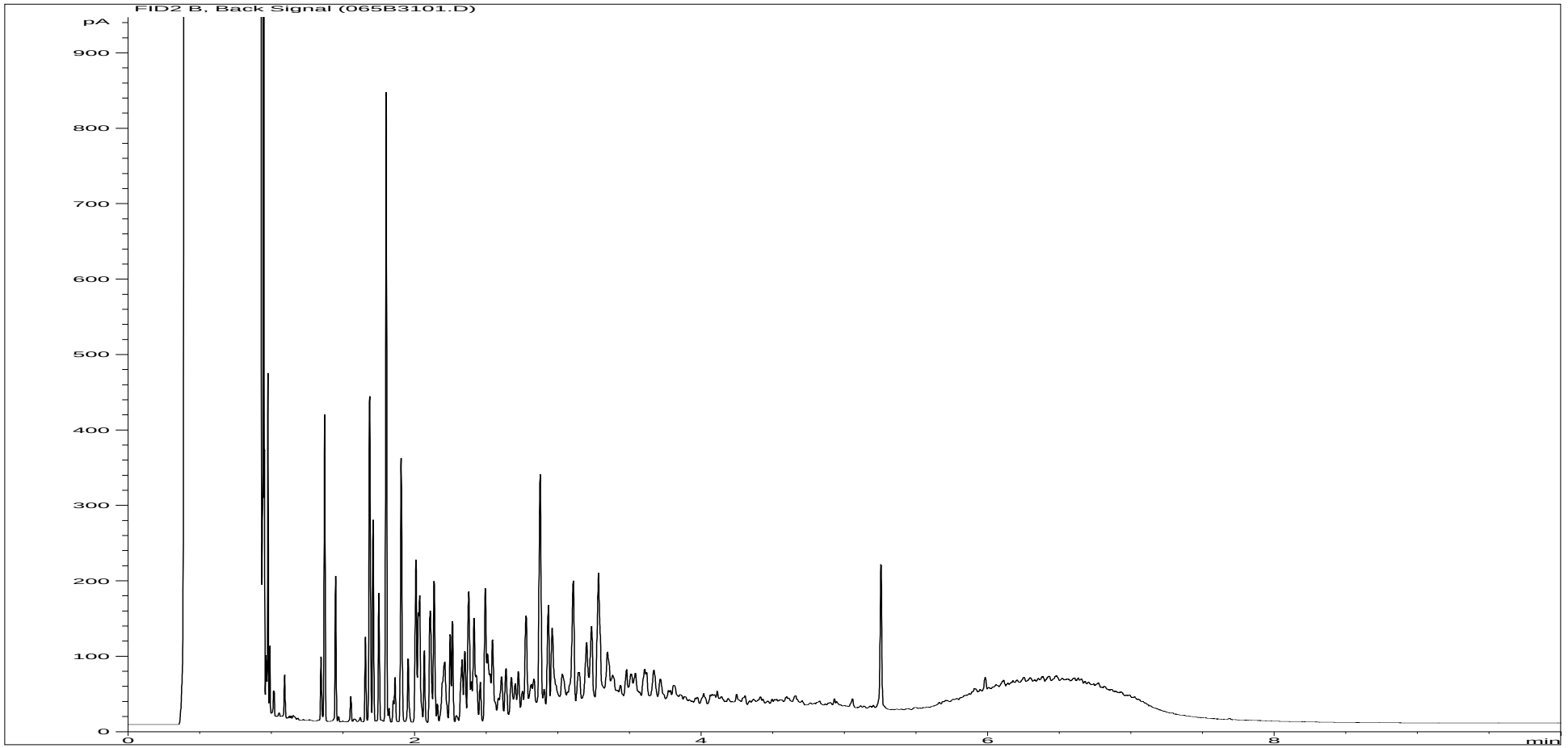
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132789ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank Spike
Acquisition Date/Time:	05-Aug-11, 19:51:34		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\020F3001.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132789ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank Spike
Acquisition Date/Time:	05-Aug-11, 20:09:14		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\065B3101.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123605

Customer Worley Parsons Komex
Site Maelor Works
Report No W123605

Consignment No 28243
Date Logged 01-Aug-2011

Report Due 12-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
	Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[redacted]	[redacted]	[redacted]																									
EX/1132782	MW11-1	28/07/11																									
EX/1132783	MW11-4	29/07/11																									
EX/1132784	MW99-107	29/07/11																									
EX/1132785	MW11-15	29/07/11																									
EX/1132786	MW99-110	29/07/11																									
EX/1132787	MW99-204	29/07/11																									
EX/1132788	Report 123605 Blank																										
EX/1132789	Report 123605 Blank Spike																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123605

Customer Worley Parsons Komex
Site Maelor Works
Report No W123605

Consignment No 28243
Date Logged 01-Aug-2011

Report Due 12-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
[redacted]	[redacted]	[redacted]															
EX/1132782	MW11-1	28/07/11															
EX/1132783	MW11-4	29/07/11															
EX/1132784	MW99-107	29/07/11															
EX/1132785	MW11-15	29/07/11															
EX/1132786	MW99-110	29/07/11															
EX/1132787	MW99-204	29/07/11															
EX/1132788	Report 123605 Blank																
EX/1132789	Report 123605 Blank Spike																

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123669 (Ver. 1)
Your Ref: 305001-50065-29

August 15, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123669 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 02-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 15-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1133058	MW11-10	01-Aug-11	11.8	958	36	215	27	45	86	<1	27	19	0.007	<0.001	<0.0001	Req	0.001	0.001
1133059	MW3	01-Aug-11	8.8	513	14	225	22	30	77	8	9	5	0.001	0.001	<0.0001	Req	0.001	<0.001
1133060	MW11-17	01-Aug-11	7.7	939	1807	439	24	68	85	55	33	2	0.002	0.003	0.0001	Req	0.002	<0.001
1133061	QC Blank		7.01	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1133062	Blank Spike (% Recovery)				100		99	98	96	98	98	101	104	97	97	Req	104	104

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1133058	MW11-10	01-Aug-11	0.004	0.03	0.08	0.11	<0.01	0.04	0.0001	0.002	2.0	<0.2	<0.2	<0.02	<0.02	<0.05	4.8	<0.1
1133059	MW3	01-Aug-11	0.004	0.45	0.16	0.61	<0.01	<0.001	<0.0001	0.002	0.02	1.6	<0.2	<0.02	<0.02	<0.05	1.5	<0.1
1133060	MW11-17	01-Aug-11	0.003	4.12	3.09	7.21	<0.01	0.001	0.0001	0.001	0.03	<0.2	<0.2	<0.02	<0.02	<0.05	2.8	<0.1
1133061	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1133062	Blank Spike (% Recovery)		101		104	99	96	98	102	95	100		99	99	99	103	109	98

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1133058	MW11-10	01-Aug-11	Req	0.01	<0.02	7.1	3	<1	<1	<1	<2	<0.0005	0.0045	<0.0005	<0.1	<0.0005		
1133059	MW3	01-Aug-11	Req	1.35	<0.02	6.8	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133060	MW11-17	01-Aug-11	Req	0.58	<0.02	6.7	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133061	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133062	Blank Spike (% Recovery)		Req	101			97	98	96	97	290	102	111	111	111	105		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-10	**Job Number:**	W12_3669
LIMS ID Number:	EX1133058	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.180	100
Acenaphthylene	208-96-8	4.29	0.031	M
Acenaphthene	83-32-9	4.41	0.150	M
Fluorene	86-73-7	4.79	0.080	M
Phenanthrene	85-01-8	5.63	0.268	100
Anthracene	120-12-7	5.68	0.078	100
Fluoranthene	206-44-0	6.96	0.310	100
Pyrene	129-00-0	7.25	0.246	100
Benzo[a]anthracene	56-55-3	8.93	0.034	M
Chrysene	218-01-9	8.98	0.036	M
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 1.473	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	99
Phenanthrene-d10	102
Chrysene-d12	103
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW3	**Job Number:**	W12_3669
LIMS ID Number:	EX1133059	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.010	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	91
Phenanthrene-d10	93
Chrysene-d12	91
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-17	**Job Number:**	W12_3669
LIMS ID Number:	EX1133060	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	100
Chrysene-d12	100
Perylene-d12	94

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	69
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123669 Blank	**Job Number:**	W12_3669
LIMS ID Number:	EX1133061	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	99
Phenanthrene-d10	102
Chrysene-d12	104
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123669 Blank Spike	**Job Number:**	W12_3669
LIMS ID Number:	EX1133062	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.24	76	M
Acenaphthylene	208-96-8	4.29	71	M
Acenaphthene	83-32-9	4.41	71	M
Fluorene	86-73-7	4.79	74	M
Phenanthrene	85-01-8	5.63	77	100
Anthracene	120-12-7	5.68	76	100
Fluoranthene	206-44-0	6.96	74	100
Pyrene	129-00-0	7.25	71	M
Benzo[a]anthracene	56-55-3	8.93	91	M
Chrysene	218-01-9	8.98	83	M
Benzo[b]fluoranthene	205-99-2	10.46	85	M
Benzo[k]fluoranthene	207-08-9	10.50	79	M
Benzo[a]pyrene	50-32-8	10.89	75	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.27	68	M
Dibenzo[a,h]anthracene	53-70-3	12.30	67	M
Benzo[g,h,i]perylene	191-24-2	12.56	75	M
Total (USEPA16) PAHs	-	-	76	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	101
Phenanthrene-d10	104
Chrysene-d12	106
Perylene-d12	100

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3669
QC Batch Number: 110723
Directory: D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\074B3501.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

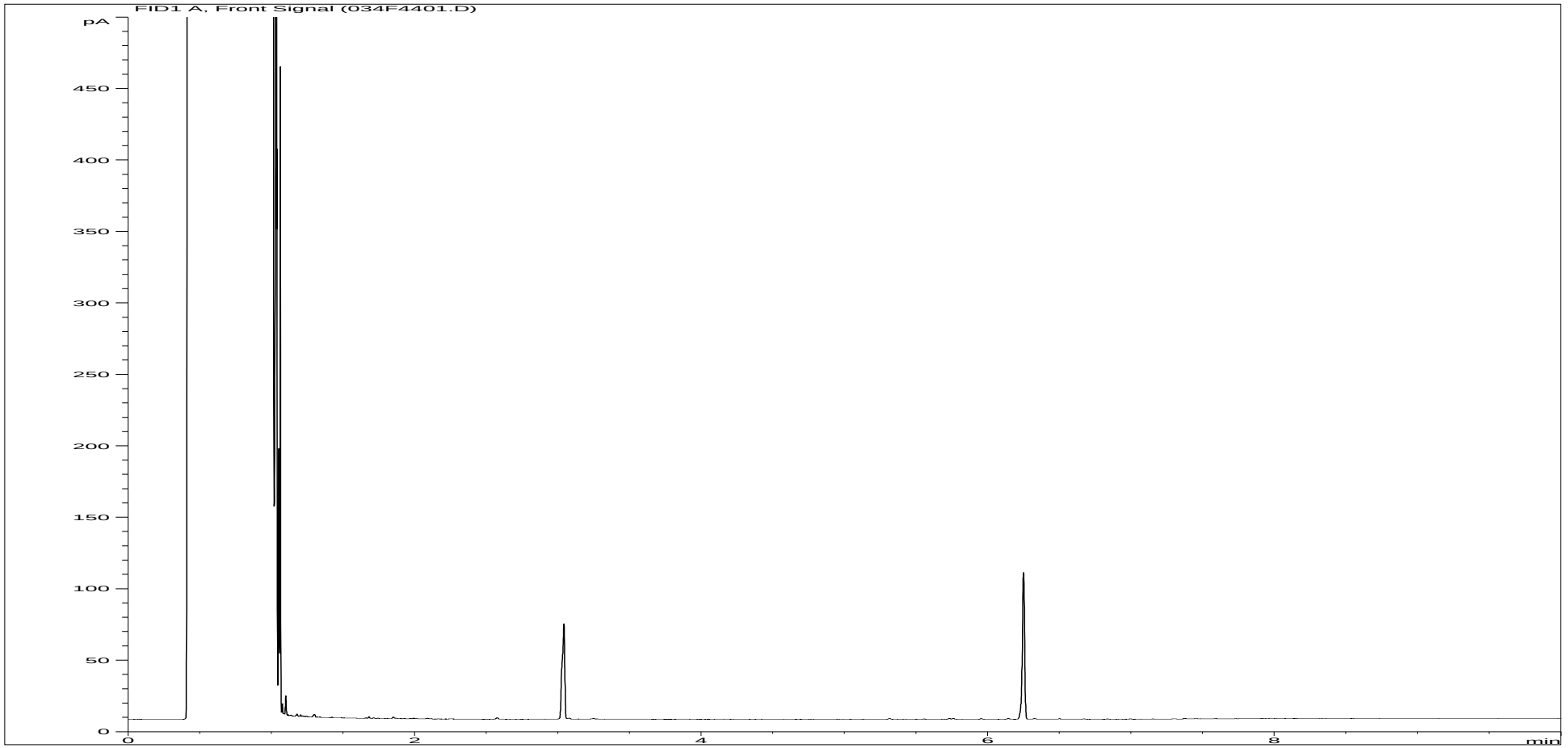
Matrix: Water
Date Booked in 02-Aug-11
Date Extracted 09-Aug-11
Date Analysed 09-Aug-11, 20:30:17

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1133058	MW11-10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.014
EX1133059	MW3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
EX1133060	MW11-17	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	<0.01
EX1133061	Report 123669 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133062	Report 123669 Blank Spik	0.725	0.221	1.11	0.353	1.88	0.6	1.08	0.288	2.78	0.679	7.64	2.16

Where individual results are flagged see report notes for status.

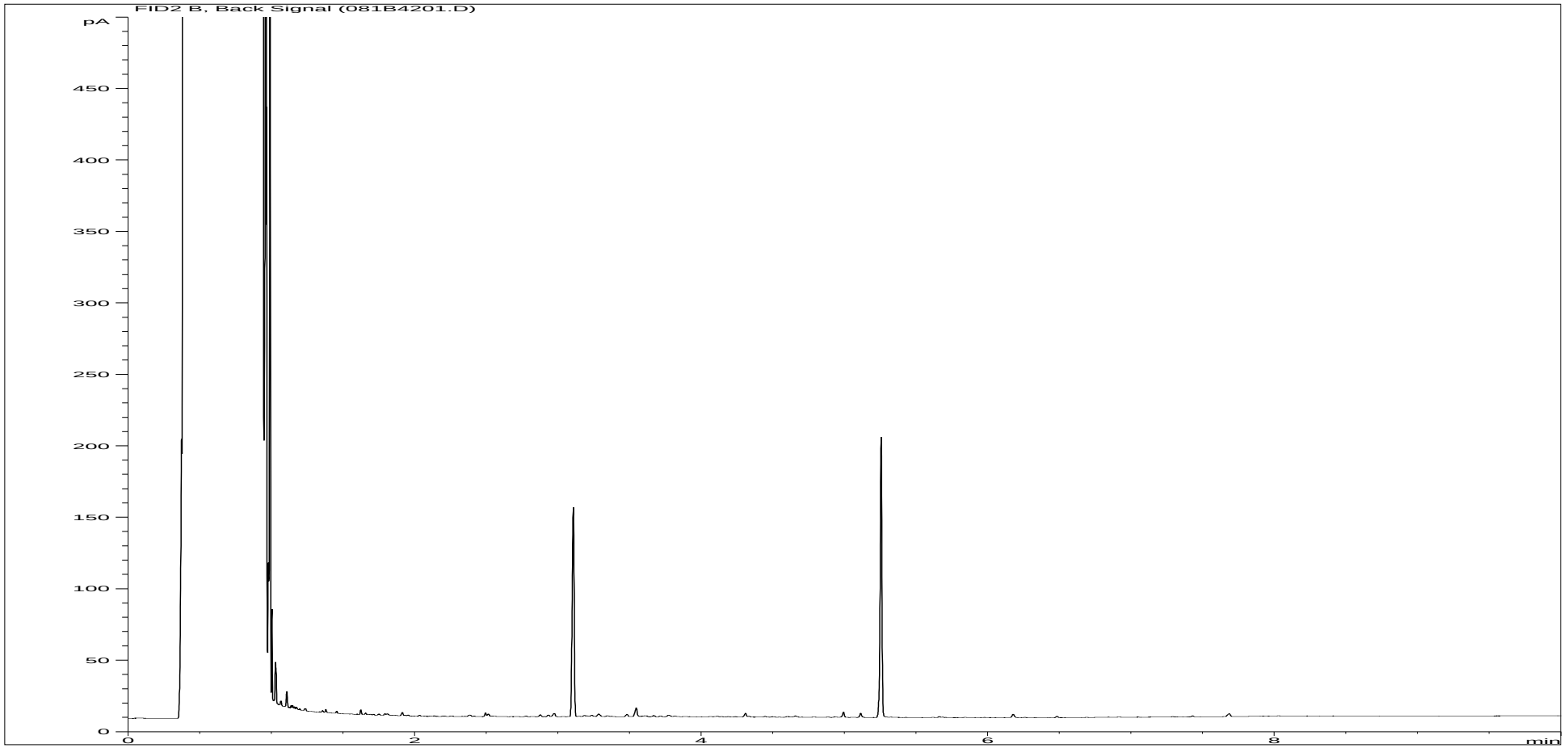
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133058ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	09-Aug-11, 23:05:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\034F4401.D		

Where individual results are flagged see report notes for status.

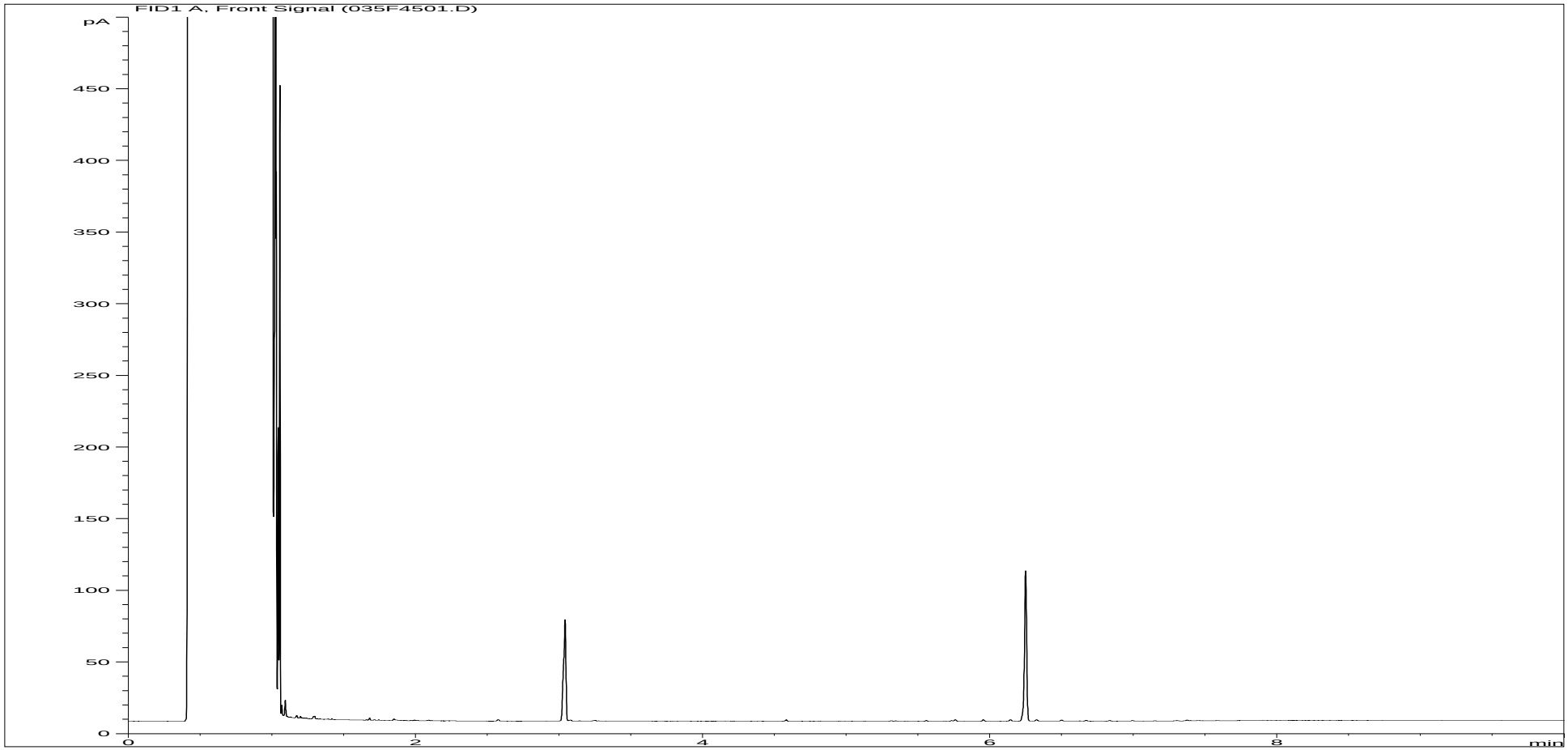
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133058ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	09-Aug-11, 22:31:16		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\081B4201.D		

Where individual results are flagged see report notes for status.

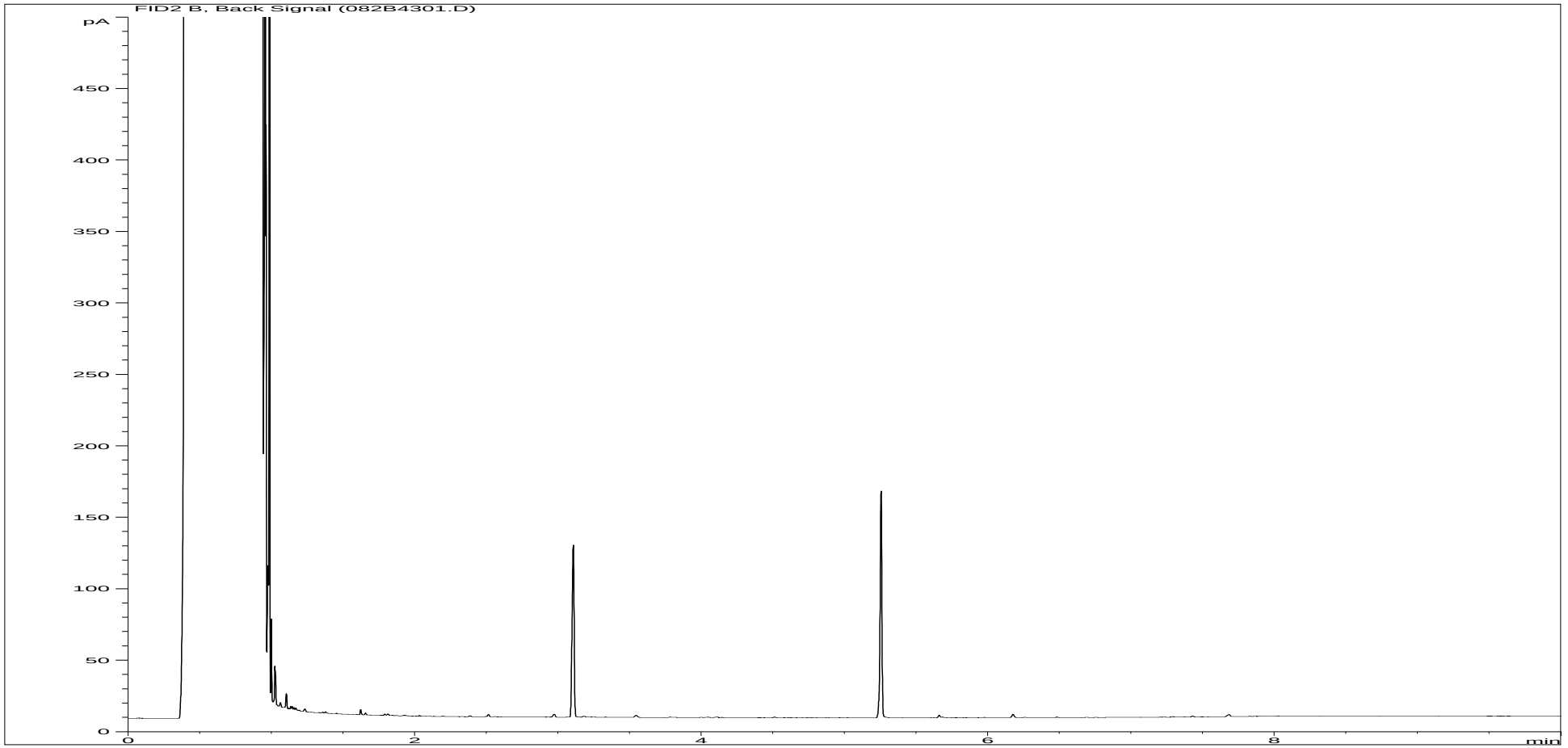
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133059ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	09-Aug-11, 23:22:42		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\035F4501.D		

Where individual results are flagged see report notes for status.

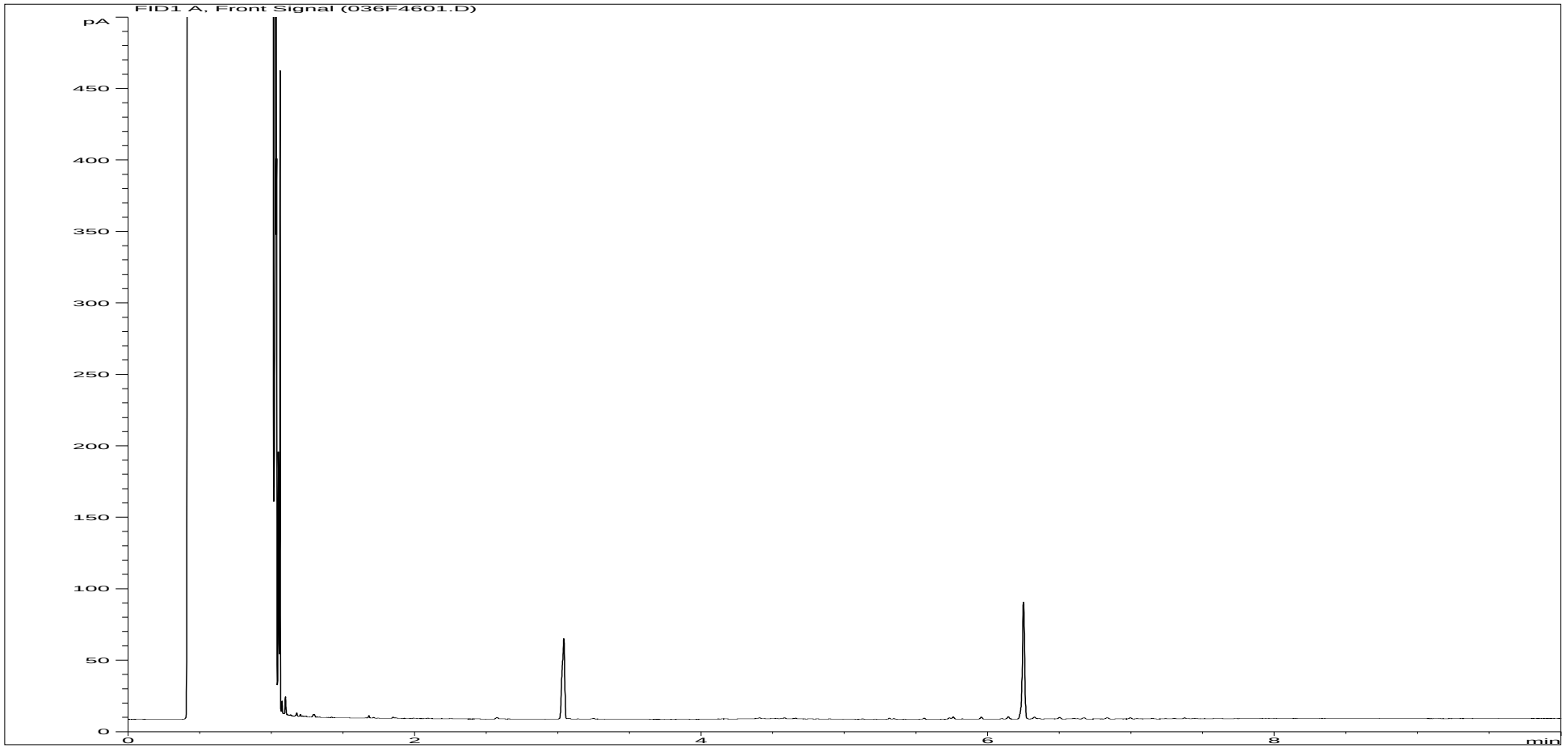
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133059ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	09-Aug-11, 22:48:25		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\082B4301.D		

Where individual results are flagged see report notes for status.

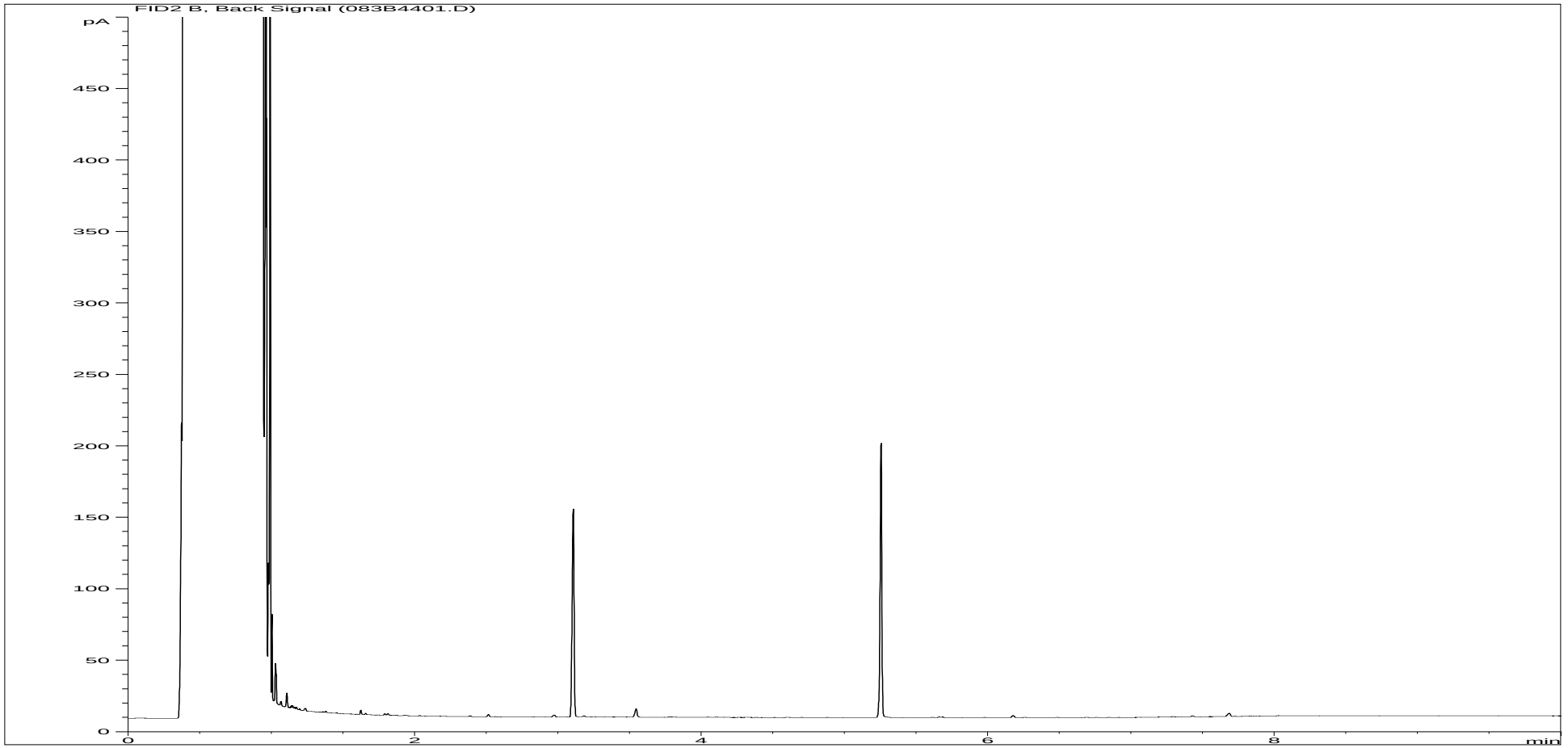
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133060ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	09-Aug-11, 23:40:02		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\036F4601.D		

Where individual results are flagged see report notes for status.

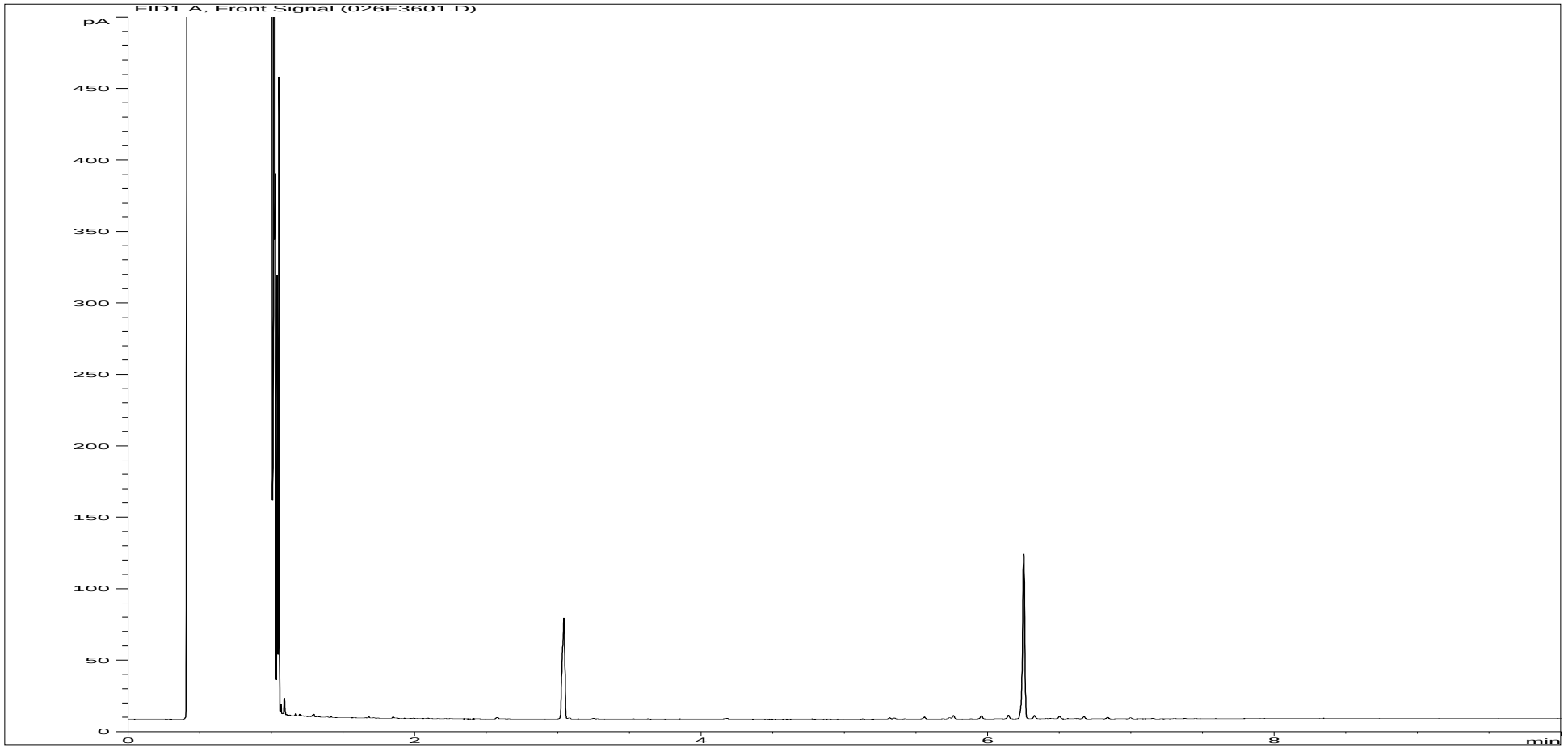
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133060ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	09-Aug-11, 23:05:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\083B4401.D		

Where individual results are flagged see report notes for status.

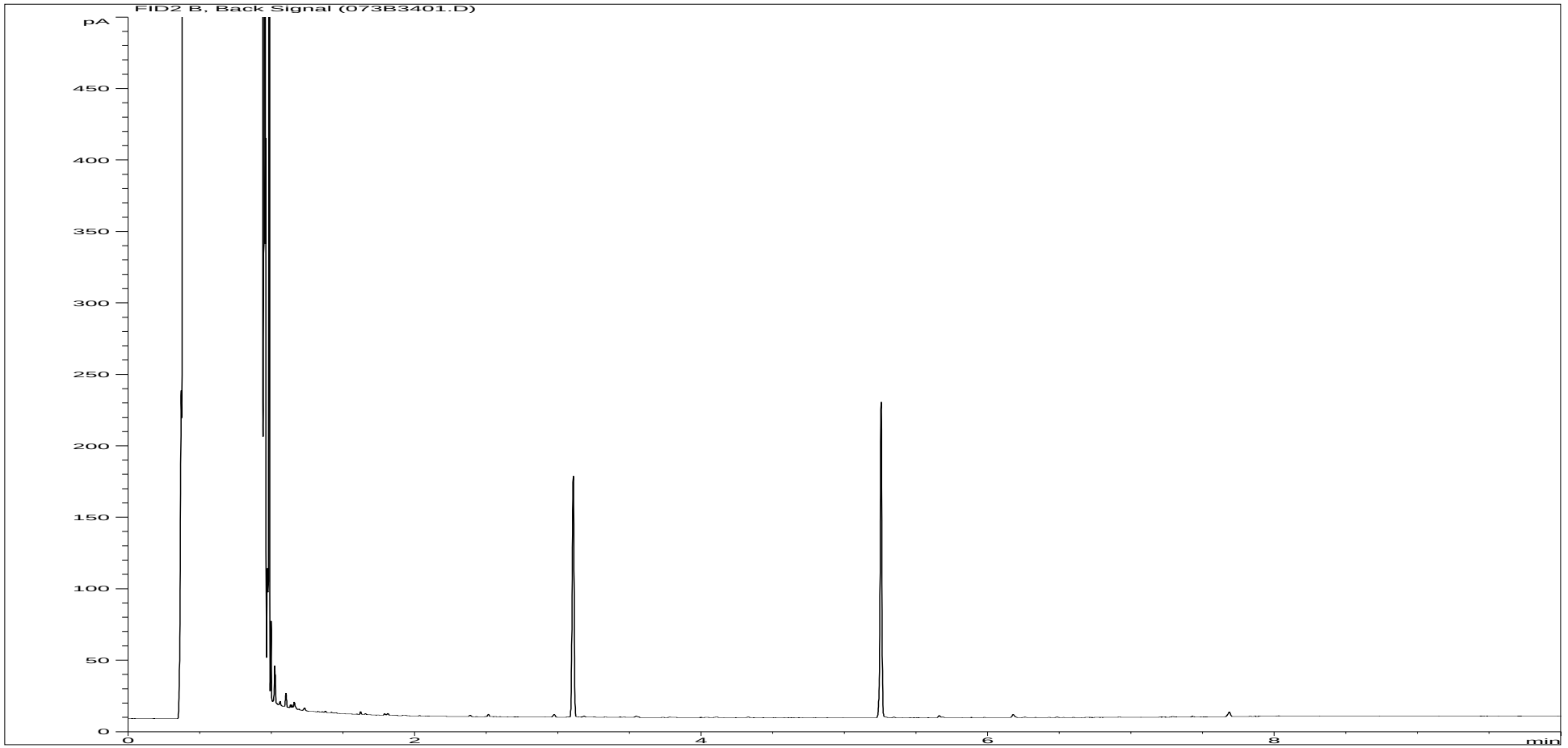
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133061ALI	**Job Number:**	W12_3669
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank
Acquisition Date/Time:	09-Aug-11, 20:47:54		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\026F3601.D		

Where individual results are flagged see report notes for status.

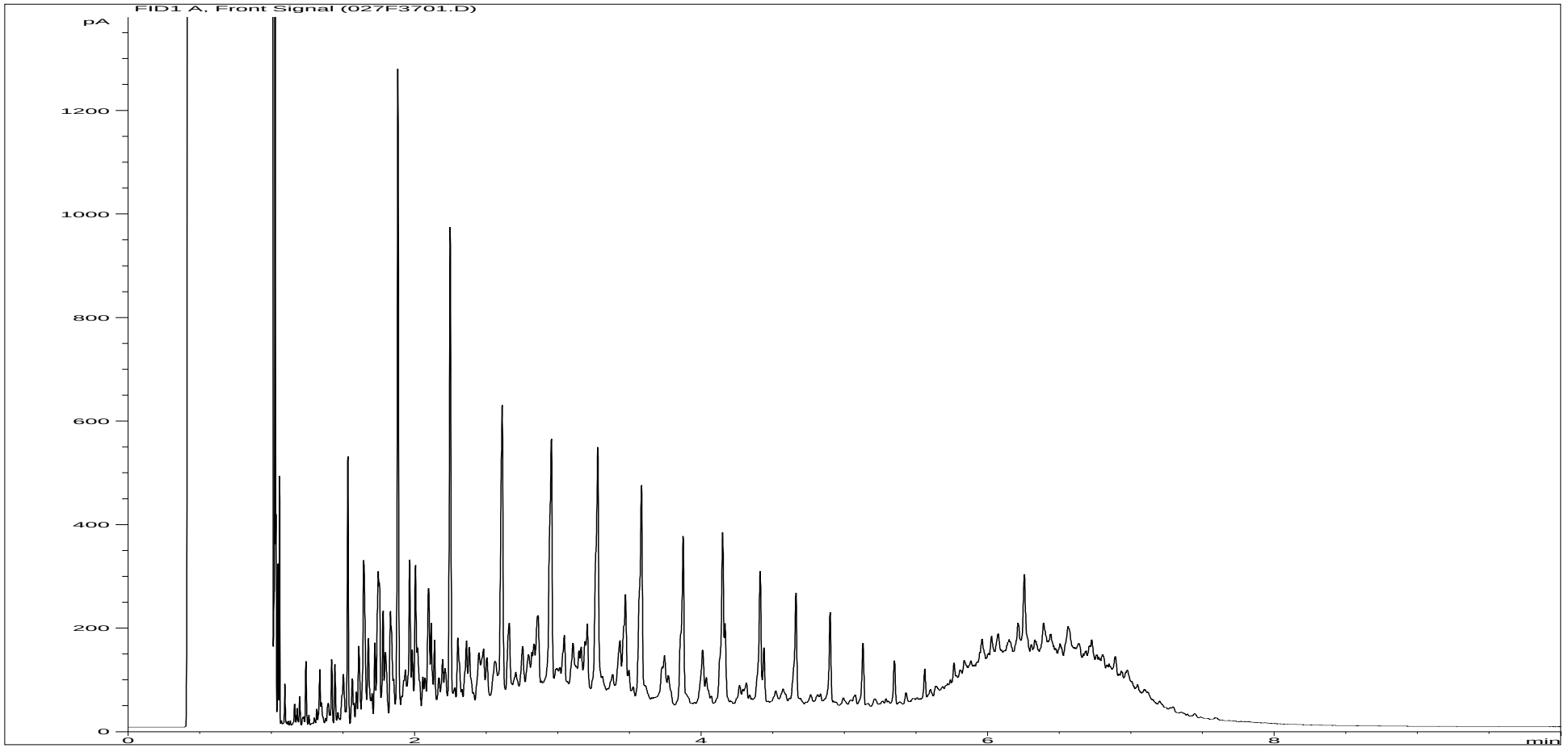
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133061ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank
Acquisition Date/Time:	09-Aug-11, 20:13:18		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\073B3401.D		

Where individual results are flagged see report notes for status.

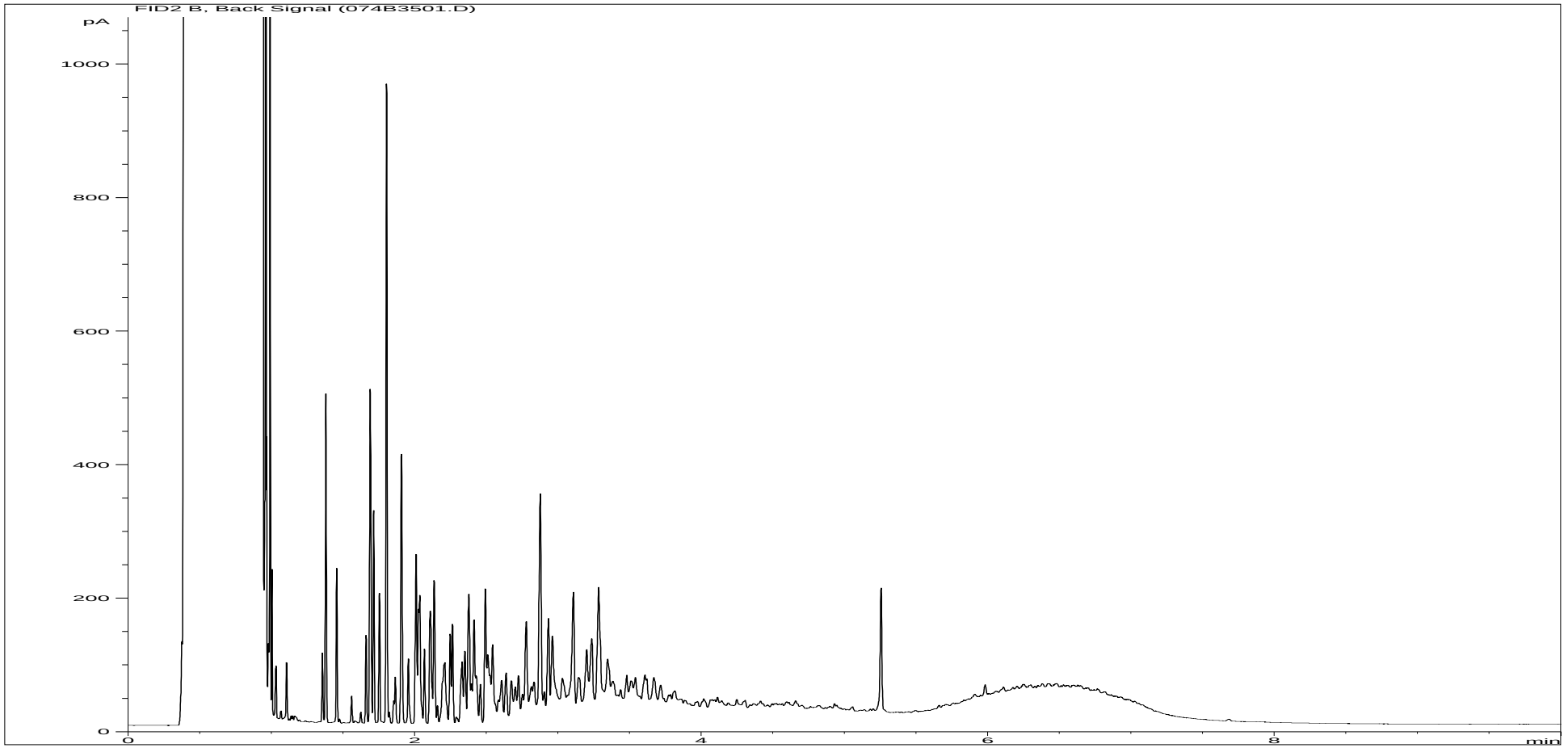
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133062ALI	**Job Number:**	W12_3669
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank Spike
Acquisition Date/Time:	09-Aug-11, 21:05:13		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\027F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133062ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank Spike
Acquisition Date/Time:	09-Aug-11, 20:30:17		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\074B3501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123669

Customer Worley Parsons Komex
Site Maelor Works
Report No W123669

Consignment No 28261
Date Logged 02-Aug-2011

Report Due 15-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1133058	MW11-10	01/08/11																									
EX/1133059	MW3	01/08/11																									
EX/1133060	MW11-17	01/08/11																									
EX/1133061	Report 123669 Blank	01/08/11																									
EX/1133062	Report 123669 Blank Spike	01/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123669

Customer **Worley Parsons Komex**
Site **Maelor Works**
Report No **W123669**

Consignment No 28261
Date Logged 02-Aug-2011

Report Due 15-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1133058	MW11-10	01/08/11															
EX/1133059	MW3	01/08/11															
EX/1133060	MW11-17	01/08/11															
EX/1133061	Report 123669 Blank	01/08/11															
EX/1133062	Report 123669 Blank Spike	01/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123725 (Ver. 1)
Your Ref: 305001-50065-29

August 17, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123725 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 10 samples described in this report were logged for analysis by Scientifics on 03-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 17-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 14)
Table of TPH (Si) banding (0.01) (Page 15)
GC-FID Chromatograms (Pages 16 to 35)
Analytical and Deviating Sample Overview (Pages 36 to 37)
Table of Method Descriptions (Page 38)
Table of Report Notes (Page 39)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 17-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1133286	MW99-202	01-Aug-11	2.9	2540	1824	2316	16	4360	577	212	25	<1	0.133	0.317	0.0038	Req	0.265	<0.001
1133287	MW11-5	02-Aug-11	4.5	4830	197	1650	216	1240	632	17	64	29	0.004	<0.001	<0.0001	Req	0.004	<0.001
1133288	MW11-5A	02-Aug-11	8.7	2840.	317	1627	213	1260	621	18	66	29	0.004	<0.001	<0.0001	Req	0.002	<0.001
1133289	MW11-6	02-Aug-11	11.6	1340	14	388	48	257	155	<1	30	42	0.009	<0.001	<0.0001	Req	0.003	0.001
1133290	MW11-6A	02-Aug-11	11.6	1200	13	383	48	257	153	<1	29	42	0.009	<0.001	<0.0001	Req	0.003	0.001
1133291	MW5	02-Aug-11	8.9	551	149	128	54	10	48	2	37	3	0.002	0.002	<0.0001	Req	0.003	<0.001
1133292	MW11-7	02-Aug-11	7.4	1020	41	326	80	76	119	7	49	12	0.007	0.005	<0.0001	Req	<0.001	<0.001
1133293	MW11-8	02-Aug-11	7.1	1110	31	338	94	8	122	8	40	30	0.004	0.006	<0.0001	Req	<0.001	<0.001
1133294	QC Blank		7.01	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1133295	Blank Spike (% Recovery)				101		102	101	98	99	100	102	109	101	103	Req	106	105

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1133286	MW99-202	01-Aug-11	8.65	111	652	763	26.3	0.017	<0.0001	<0.001	13.6	<0.2	<0.2	<0.02	<0.02	<0.05	15	<0.1
1133287	MW11-5	02-Aug-11	0.004	0.94	0.43	1.37	0.08	0.005	<0.0001	0.008	10.9	<0.2	0.72	0.03	0.27	<0.05	8.2	0.1
1133288	MW11-5A	02-Aug-11	<0.002	0.64	0.62	1.26	0.02	0.005	<0.0001	0.008	10.6	<0.2	0.75	0.02	0.29	<0.05	8.1	0.1
1133289	MW11-6	02-Aug-11	<0.002	<0.01	0.60	0.49	<0.01	0.008	<0.0001	0.006	6.6	<0.2	0.27	<0.02	0.04	0.64	21	0.2
1133290	MW11-6A	02-Aug-11	<0.002	0.02	0.23	0.25	<0.01	0.008	<0.0001	0.006	7.2	<0.2	0.23	<0.02	0.05	0.62	21	0.2
1133291	MW5	02-Aug-11	<0.002	29.8	2.35	32.1	<0.01	0.003	<0.0001	<0.001	0.17	0.9	<0.2	<0.02	<0.02	<0.05	3.6	<0.1
1133292	MW11-7	02-Aug-11	<0.002	1.88	1.88	3.76	<0.01	0.004	<0.0001	0.002	8.9	<0.2	<0.2	<0.02	<0.02	<0.05	17	<0.1
1133293	MW11-8	02-Aug-11	<0.002	2.0	15.4	17.4	4.67	0.023	<0.0001	0.001	14.3	1.0	<0.2	<0.02	<0.02	<0.05	22	4.1
1133294	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1133295	Blank Spike (% Recovery)		96	99	97	100	98	96	105	93	101	101	99	100	100	103	102	98

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1133286	MW99-202	01-Aug-11	Req	20.7	<0.02	3.1	14	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133287	MW11-5	02-Aug-11	Req	0.13	0.24	2.8	15	13	11	1	9	1.4	0.5	0.2	<0.1	0.0188		
1133288	MW11-5A	02-Aug-11	Req	0.15	0.27	2.7	11	12	11	1	11	1.0	0.3	0.1	<0.1	0.0123		
1133289	MW11-6	02-Aug-11	Req	0.02	<0.04	2.2	13	48	11	<1	14	0.9	0.8	0.3	<0.1	0.0397		
1133290	MW11-6A	02-Aug-11	Req	0.01	<0.05	1.5	8	49	10	<1	14	0.9	0.8	0.3	<0.1	0.0596		
1133291	MW5	02-Aug-11	Req	0.66	<0.02	4.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133292	MW11-7	02-Aug-11	Req	1.02	<0.02	1.7	9	<1	<1	<1	<2	0.0189	0.0080	0.0032	<0.1	<0.0005		
1133293	MW11-8	02-Aug-11	Req	4.08	<0.02	1.0	12	83	2	<1	64	0.0289	0.0046	0.0357	<0.1	0.0064		
1133294	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133295	Blank Spike (% Recovery)		Req	102			99	106	103	102	314	102	111	111	111	105		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-202	**Job Number:**	W12_3725
LIMS ID Number:	EX1133286	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.258	M
Acenaphthylene	208-96-8	4.29	0.040	M
Acenaphthene	83-32-9	4.41	0.051	M
Fluorene	86-73-7	4.79	0.073	M
Phenanthrene	85-01-8	5.63	0.169	M
Anthracene	120-12-7	5.68	0.049	M
Fluoranthene	206-44-0	6.96	0.113	M
Pyrene	129-00-0	7.25	0.099	M
Benzo[a]anthracene	56-55-3	8.92	0.030	M
Chrysene	218-01-9	8.98	0.021	M
Benzo[b]fluoranthene	205-99-2	10.46	0.025	M
Benzo[k]fluoranthene	207-08-9	10.50	0.013	M
Benzo[a]pyrene	50-32-8	10.89	0.020	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.991	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	97
Phenanthrene-d10	100
Chrysene-d12	88
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5	**Job Number:**	W12_3725
LIMS ID Number:	EX1133287	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	14.100	100
Acenaphthylene	208-96-8	4.29	3.400	100
Acenaphthene	83-32-9	4.41	0.346	69
Fluorene	86-73-7	4.79	1.100	97
Phenanthrene	85-01-8	5.63	0.163	100
Anthracene	120-12-7	5.68	0.307	100
Fluoranthene	206-44-0	6.96	0.362	100
Pyrene	129-00-0	7.25	0.241	100
Benzo[a]anthracene	56-55-3	8.93	0.051	M
Chrysene	218-01-9	8.98	0.033	M
Benzo[b]fluoranthene	205-99-2	10.46	0.018	M
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	10.89	0.015	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 20.176	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	101
Phenanthrene-d10	106
Chrysene-d12	98
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5A	**Job Number:**	W12_3725
LIMS ID Number:	EX1133288	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	6.090	100
Acenaphthylene	208-96-8	4.29	2.730	100
Acenaphthene	83-32-9	4.41	0.330	M
Fluorene	86-73-7	4.79	0.906	96
Phenanthrene	85-01-8	5.63	0.119	100
Anthracene	120-12-7	5.68	0.234	100
Fluoranthene	206-44-0	6.96	0.352	100
Pyrene	129-00-0	7.25	0.232	100
Benzo[a]anthracene	56-55-3	8.93	0.041	M
Chrysene	218-01-9	8.98	0.025	M
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 11.119	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	101
Phenanthrene-d10	106
Chrysene-d12	97
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	82

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6	**Job Number:**	W12_3725
LIMS ID Number:	EX1133289	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	87.800	100
Acenaphthylene	208-96-8	4.29	20.900	100
Acenaphthene	83-32-9	4.41	2.350	90
Fluorene	86-73-7	4.79	8.870	99
Phenanthrene	85-01-8	5.63	9.930	100
Anthracene	120-12-7	5.68	1.990	100
Fluoranthene	206-44-0	6.96	2.230	100
Pyrene	129-00-0	7.24	1.440	100
Benzo[a]anthracene	56-55-3	8.92	0.176	M
Chrysene	218-01-9	8.98	0.133	M
Benzo[b]fluoranthene	205-99-2	10.46	0.060	M
Benzo[k]fluoranthene	207-08-9	10.49	0.021	M
Benzo[a]pyrene	50-32-8	10.88	0.043	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 135.973	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	104
Phenanthrene-d10	110
Chrysene-d12	104
Perylene-d12	100

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	82

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6A	**Job Number:**	W12_3725
LIMS ID Number:	EX1133290	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	70.100	100
Acenaphthylene	208-96-8	4.29	23.100	100
Acenaphthene	83-32-9	4.41	2.610	82
Fluorene	86-73-7	4.79	9.870	99
Phenanthrene	85-01-8	5.63	11.100	100
Anthracene	120-12-7	5.68	2.250	100
Fluoranthene	206-44-0	6.96	2.490	100
Pyrene	129-00-0	7.24	1.600	100
Benzo[a]anthracene	56-55-3	8.92	0.209	M
Chrysene	218-01-9	8.98	0.158	M
Benzo[b]fluoranthene	205-99-2	10.46	0.076	M
Benzo[k]fluoranthene	207-08-9	10.49	0.027	M
Benzo[a]pyrene	50-32-8	10.88	0.057	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.020	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.56	0.014	M
Total (USEPA16) PAHs	-	-	< 123.691	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	107
Phenanthrene-d10	112
Chrysene-d12	108
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5	**Job Number:**	W12_3725
LIMS ID Number:	EX1133291	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.29	0.012	M
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.25	0.023	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.175	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	101
Chrysene-d12	90
Perylene-d12	82

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-7	**Job Number:**	W12_3725
LIMS ID Number:	EX1133292	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	0.014	M
Acenaphthylene	208-96-8	4.29	1.030	100
Acenaphthene	83-32-9	4.41	0.425	67
Fluorene	86-73-7	4.79	0.113	M
Phenanthrene	85-01-8	5.62	0.048	100
Anthracene	120-12-7	5.68	0.239	100
Fluoranthene	206-44-0	6.96	1.500	100
Pyrene	129-00-0	7.24	1.270	100
Benzo[a]anthracene	56-55-3	8.92	0.097	M
Chrysene	218-01-9	8.96	0.081	M
Benzo[b]fluoranthene	205-99-2	10.46	0.089	M
Benzo[k]fluoranthene	207-08-9	10.49	0.037	M
Benzo[a]pyrene	50-32-8	10.88	0.077	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.032	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.56	0.034	M
Total (USEPA16) PAHs	-	-	< 5.096	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	58
Acenaphthene-d10	102
Phenanthrene-d10	108
Chrysene-d12	107
Perylene-d12	106

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-8	**Job Number:**	W12_3725
LIMS ID Number:	EX1133293	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.18	1190.000	99
Acenaphthylene	208-96-8	4.29	2.280	100
Acenaphthene	83-32-9	4.34	114.000	92
Fluorene	86-73-7	4.79	18.100	100
Phenanthrene	85-01-8	5.63	19.800	100
Anthracene	120-12-7	5.68	5.650	100
Fluoranthene	206-44-0	6.96	4.050	100
Pyrene	129-00-0	7.24	3.680	100
Benzo[a]anthracene	56-55-3	8.92	0.980	100
Chrysene	218-01-9	8.98	0.782	100
Benzo[b]fluoranthene	205-99-2	10.45	0.509	100
Benzo[k]fluoranthene	207-08-9	10.47	0.289	100
Benzo[a]pyrene	50-32-8	10.88	0.514	100
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.193	M
Dibenzo[a,h]anthracene	53-70-3	12.30	0.065	M
Benzo[g,h,i]perylene	191-24-2	12.56	0.182	M
Total (USEPA16) PAHs	-	-	< 1361.074	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	121
Acenaphthene-d10	114
Phenanthrene-d10	114
Chrysene-d12	112
Perylene-d12	125

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123725 Blank	**Job Number:**	W12_3725
LIMS ID Number:	EX1133294	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	91
Phenanthrene-d10	95
Chrysene-d12	83
Perylene-d12	72

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	89
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123725 Blank Spike	**Job Number:**	W12_3725
LIMS ID Number:	EX1133295	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.23	102	M
Acenaphthylene	208-96-8	4.29	84	M
Acenaphthene	83-32-9	4.41	88	M
Fluorene	86-73-7	4.79	91	M
Phenanthrene	85-01-8	5.63	99	M
Anthracene	120-12-7	5.68	89	M
Fluoranthene	206-44-0	6.96	87	M
Pyrene	129-00-0	7.25	83	M
Benzo[a]anthracene	56-55-3	8.93	104	M
Chrysene	218-01-9	8.98	99	M
Benzo[b]fluoranthene	205-99-2	10.46	102	M
Benzo[k]fluoranthene	207-08-9	10.50	97	M
Benzo[a]pyrene	50-32-8	10.89	88	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	69	M
Dibenzo[a,h]anthracene	53-70-3	12.30	73	M
Benzo[g,h,i]perylene	191-24-2	12.56	82	M
Total (USEPA16) PAHs	-	-	1436	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	89
Phenanthrene-d10	93
Chrysene-d12	82
Perylene-d12	73

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	99

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3725
QC Batch Number: 110731
Directory: D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\059B1201.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

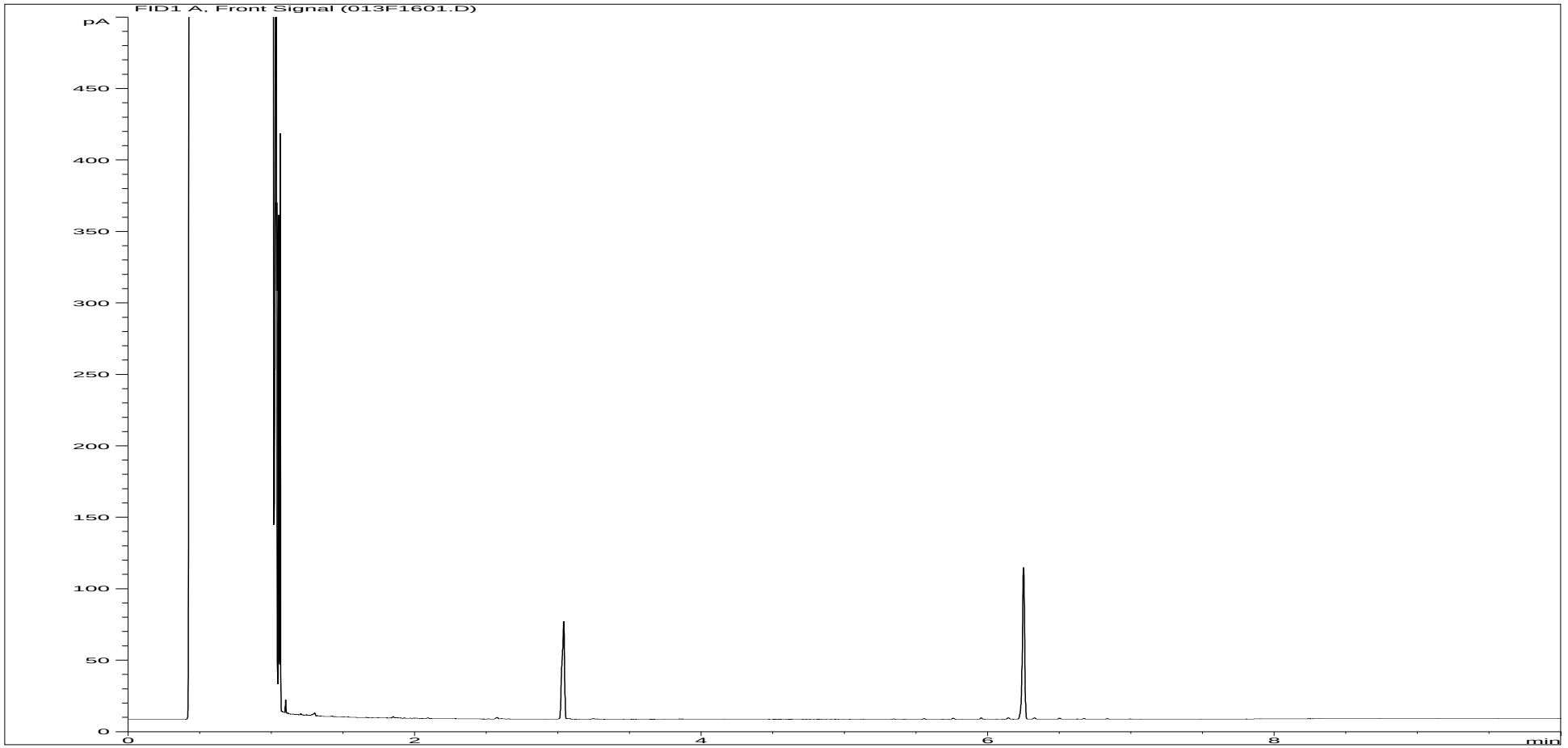
Matrix: Water
Date Booked ir 03-Aug-11
Date Extracted 11-Aug-11
Date Analysed 12-Aug-11, 12:56:29

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1133286	MW99-202	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133287	MW11-5	<0.01	0.021	<0.01	0.035	<0.01	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	0.085
EX1133288	MW11-5A	<0.01	0.018	<0.01	0.022	<0.01	0.017	<0.01	<0.01	<0.01	0.011	0.011	0.078
EX1133289	MW11-6	<0.01	0.032	<0.01	0.142	<0.01	0.12	<0.01	0.037	0.019	<0.01	0.026	0.334
EX1133290	MW11-6A	<0.01	0.033	<0.01	0.129	<0.01	0.124	<0.01	0.04	0.016	<0.01	0.021	0.332
EX1133291	MW5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133292	MW11-7	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	0.017	<0.01	<0.01	<0.01	0.054
EX1133293	MW11-8	<0.01	0.331	0.016	0.93	0.122	0.507	0.158	0.196	0.2	0.106	0.518	2.07
EX1133294	Report 123725 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133295	Report 123725 Blank Spike	0.611	0.237	0.94	0.383	1.64	0.663	0.98	0.328	2.55	0.786	6.79	2.42

Where individual results are flagged see report notes for status.

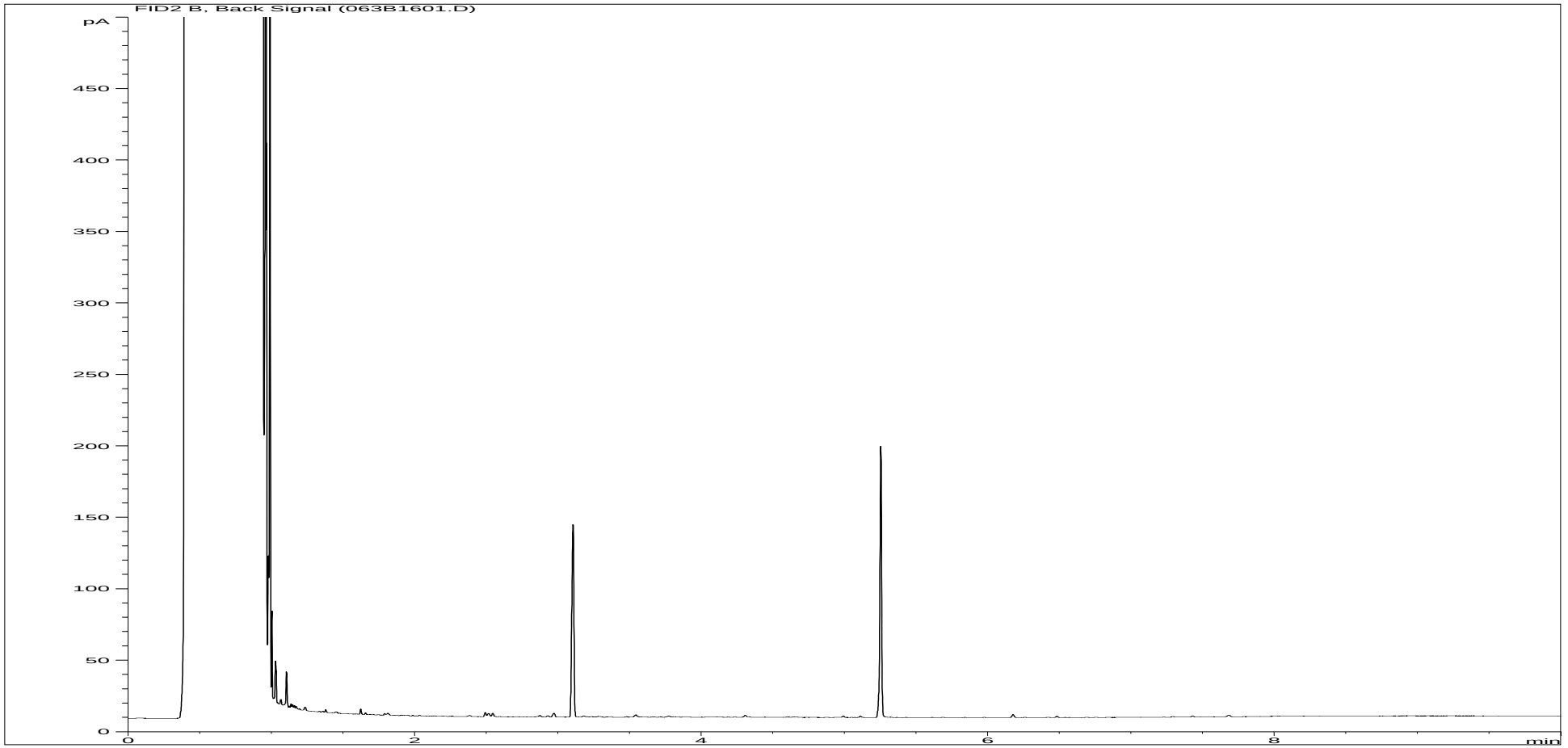
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133286ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	12-Aug-11, 14:05:54		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\013F1601.D		

Where individual results are flagged see report notes for status.

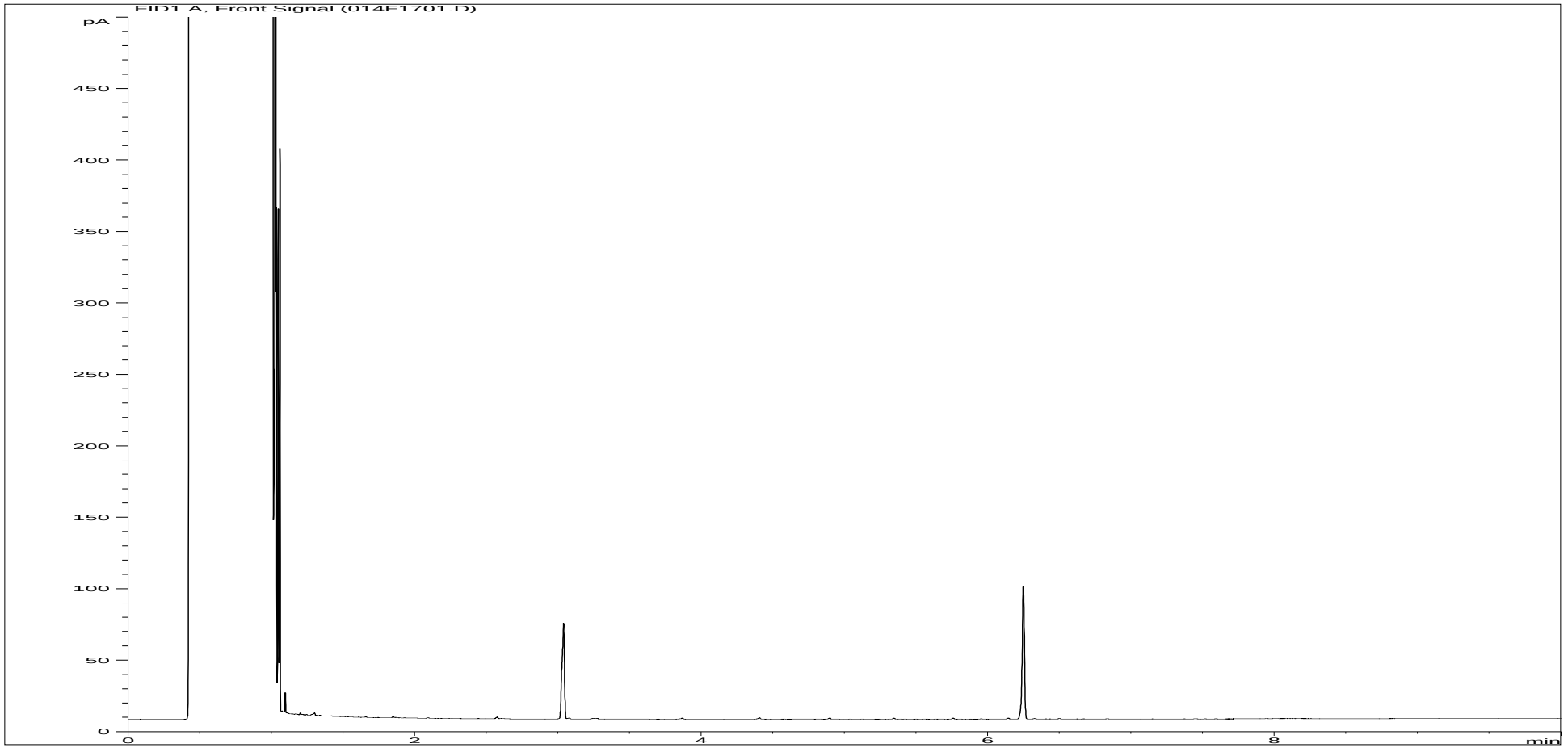
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133286ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	12-Aug-11, 14:05:54		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\063B1601.D		

Where individual results are flagged see report notes for status.

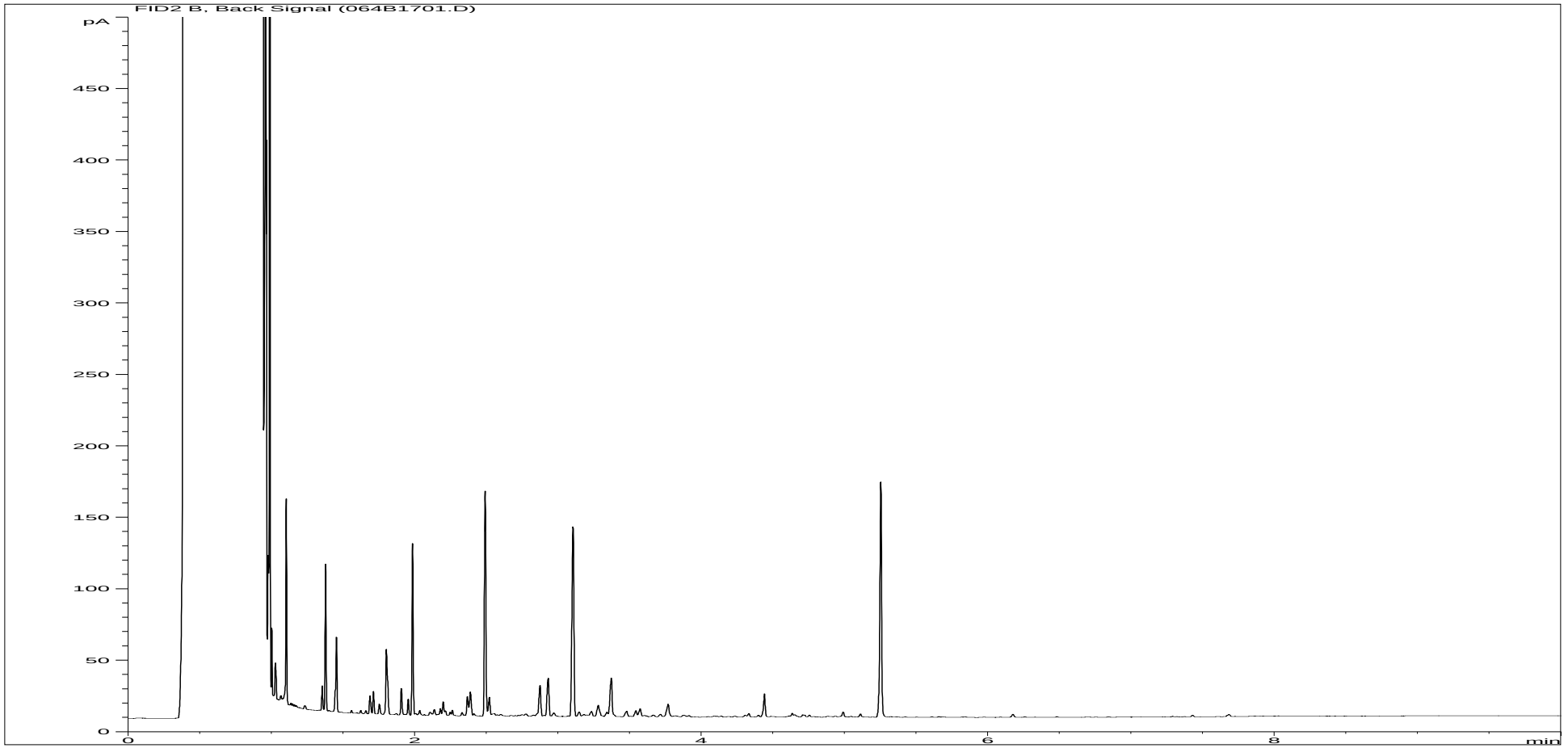
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133287ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	12-Aug-11, 14:23:19		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\014F1701.D		

Where individual results are flagged see report notes for status.

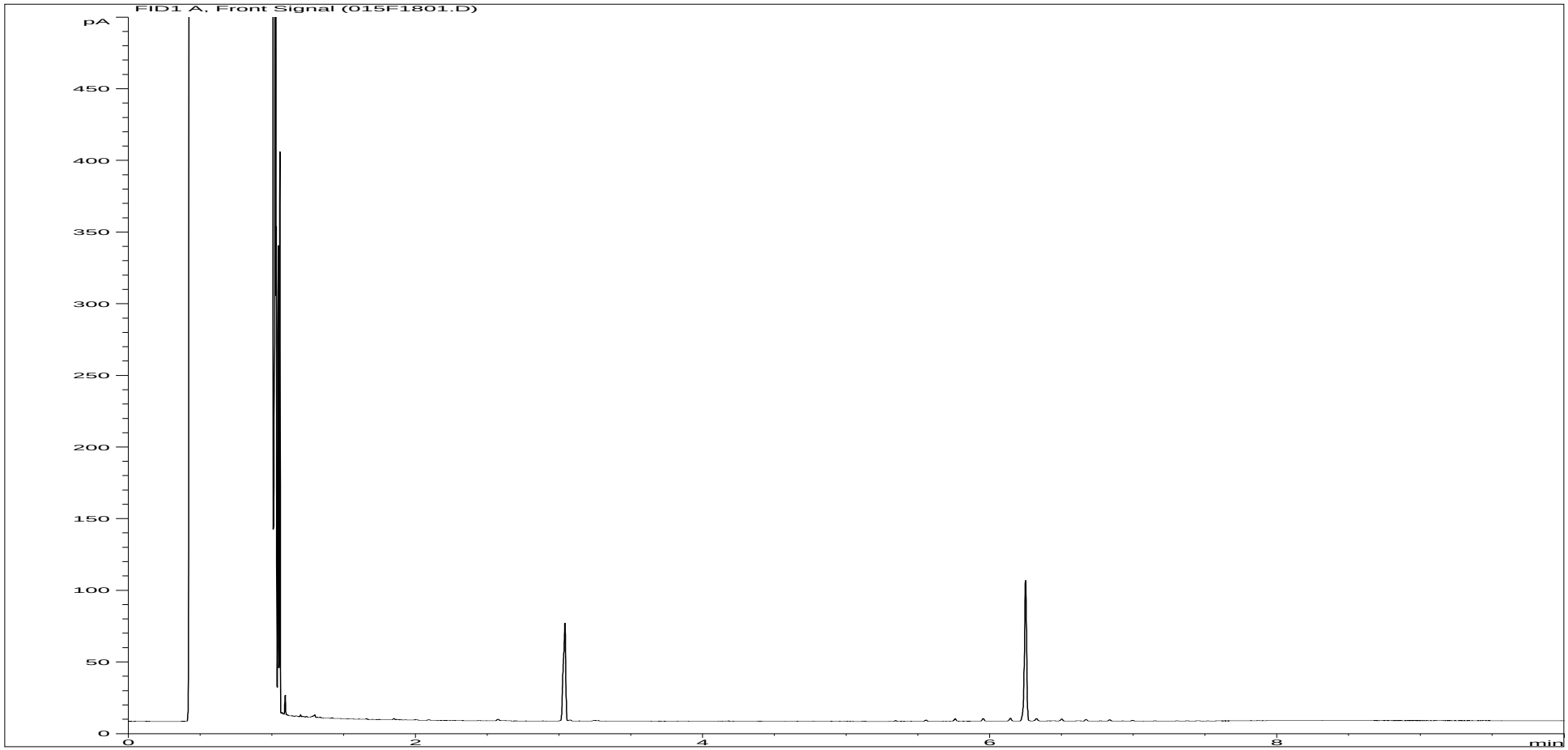
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133287ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	12-Aug-11, 14:23:19		
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Where individual results are flagged see report notes for status.

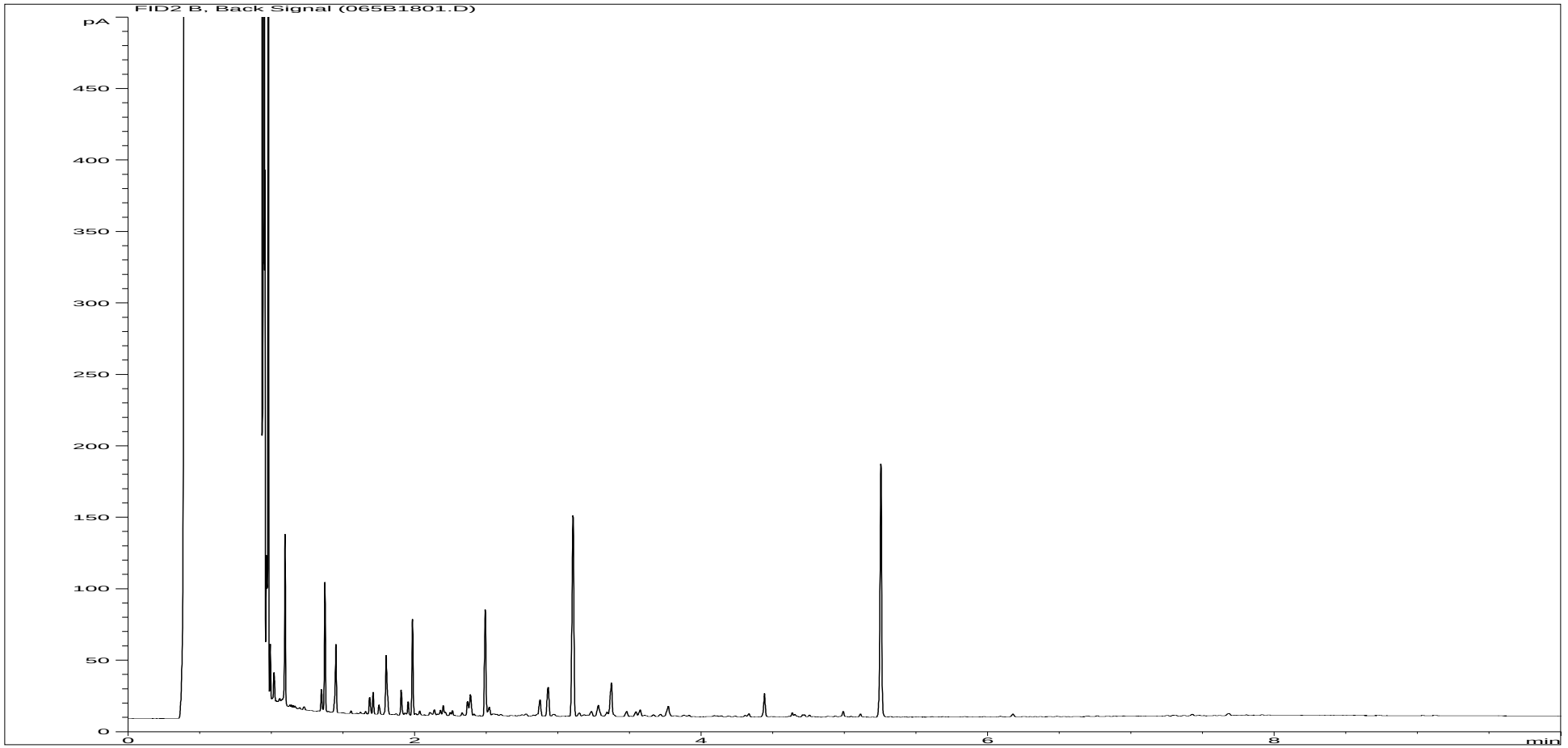
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133288ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5A
Acquisition Date/Time:	12-Aug-11, 14:40:34		
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Where individual results are flagged see report notes for status.

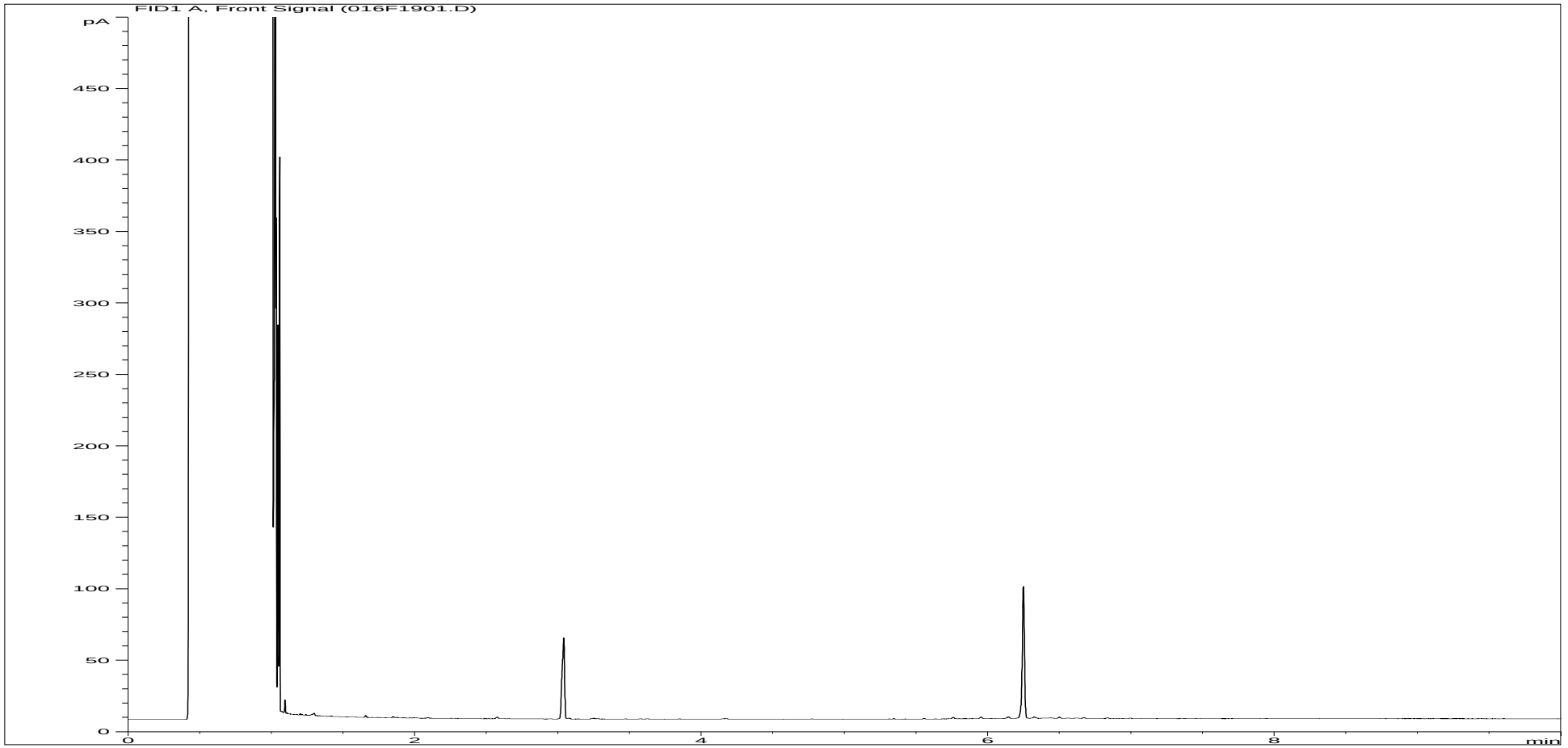
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133288ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5A
Acquisition Date/Time:	12-Aug-11, 14:40:34		
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Where individual results are flagged see report notes for status.

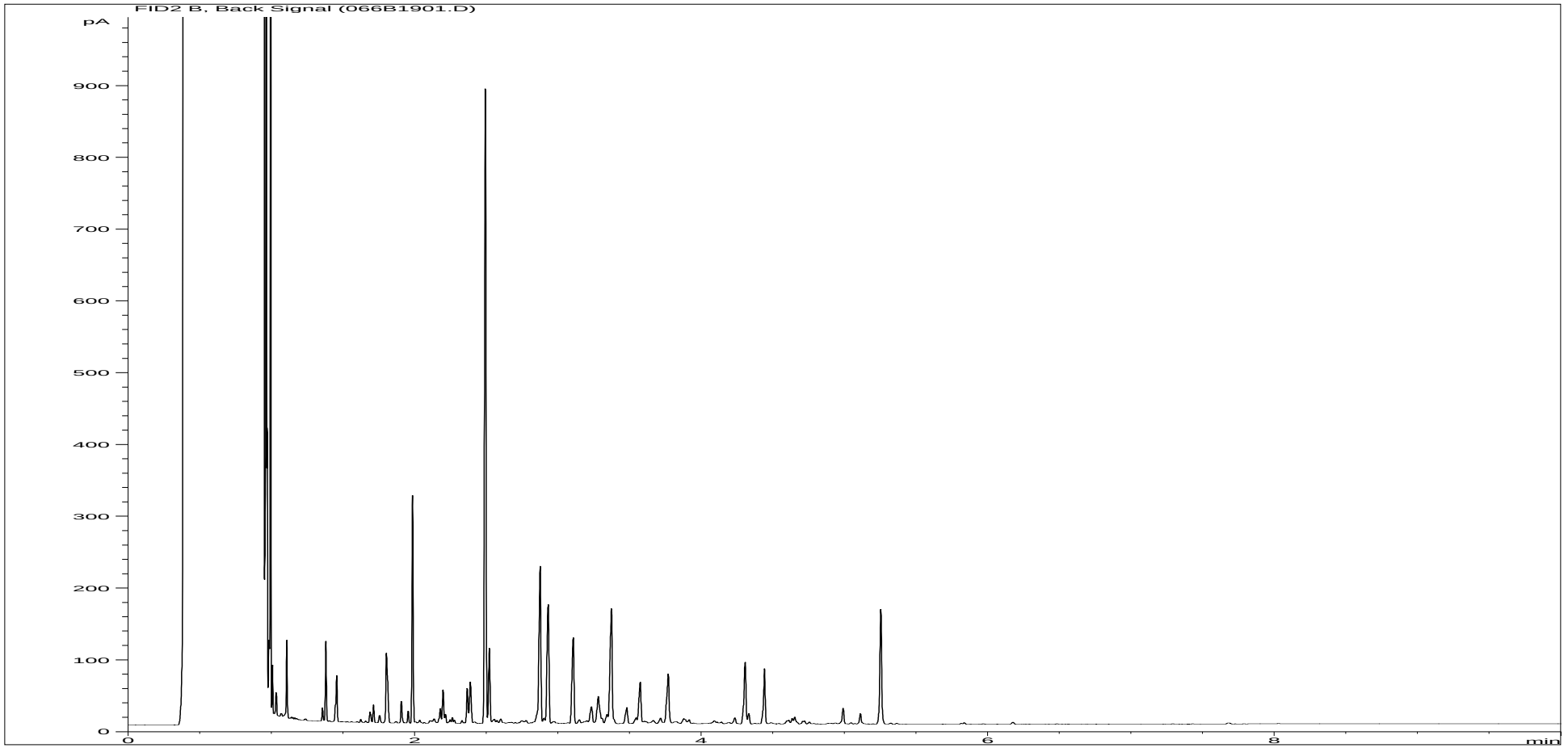
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133289ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	12-Aug-11, 14:58:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\016F1901.D		

Where individual results are flagged see report notes for status.

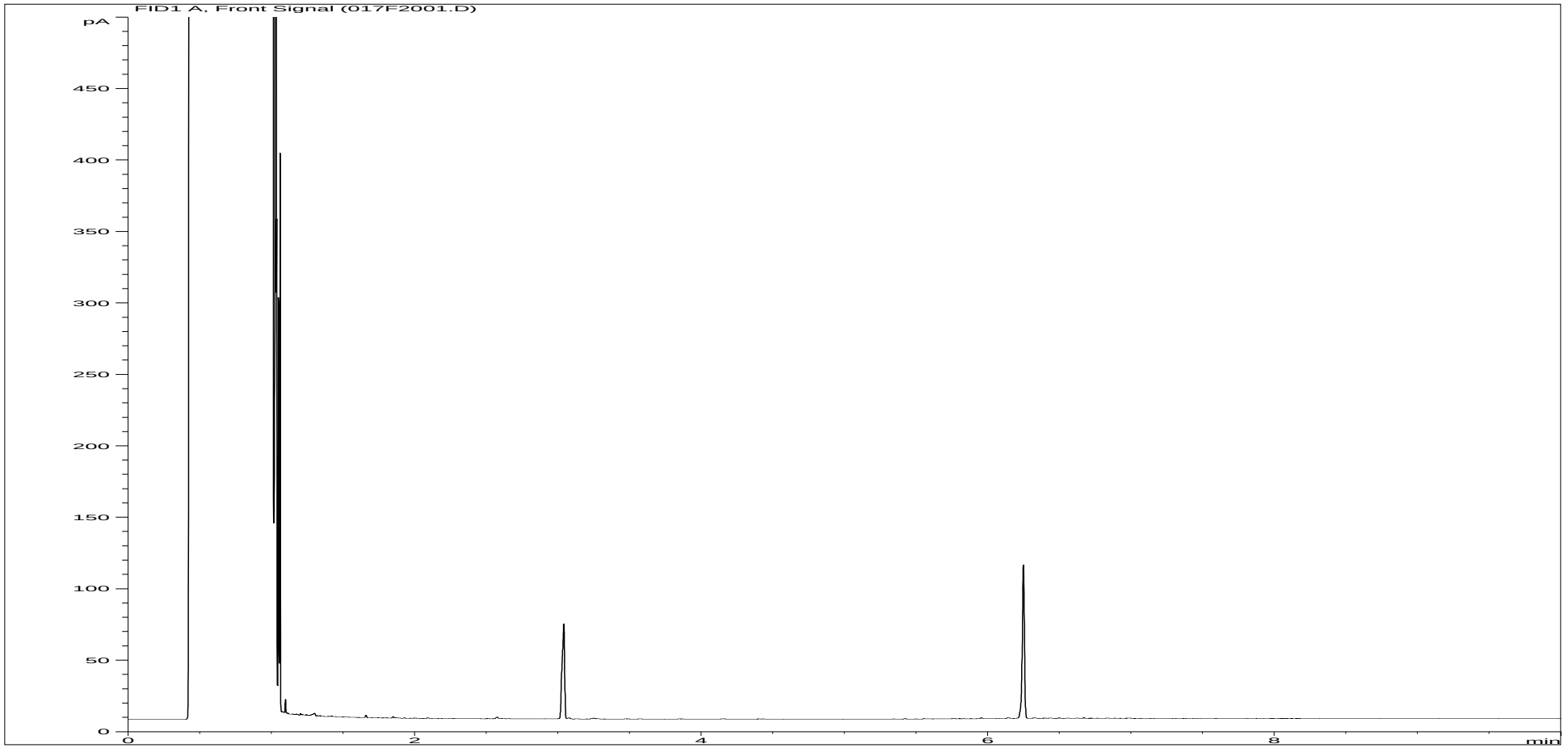
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133289ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	12-Aug-11, 14:58:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\066B1901.D		

Where individual results are flagged see report notes for status.

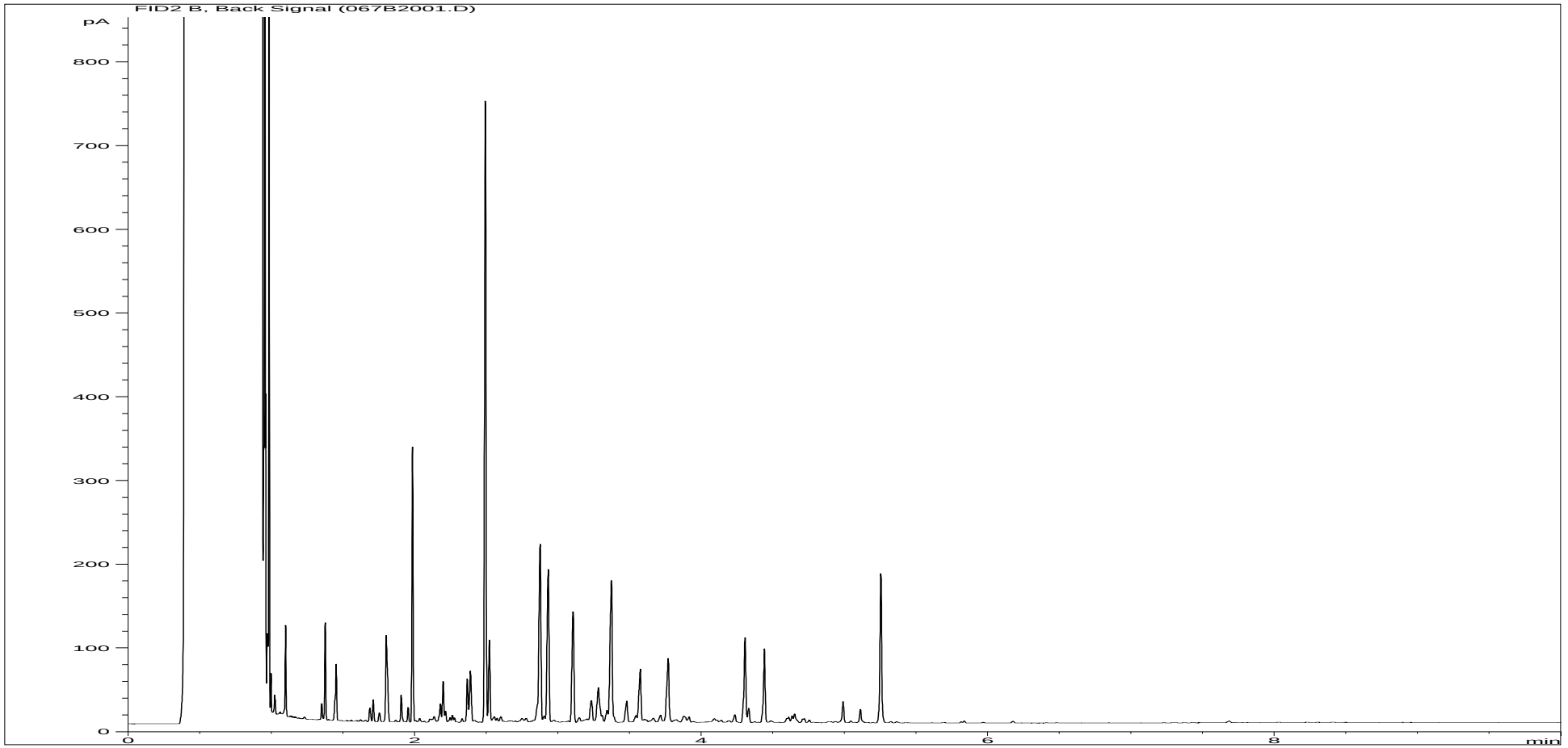
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133290ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6A
Acquisition Date/Time:	12-Aug-11, 15:15:31		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\017F2001.D		

Where individual results are flagged see report notes for status.

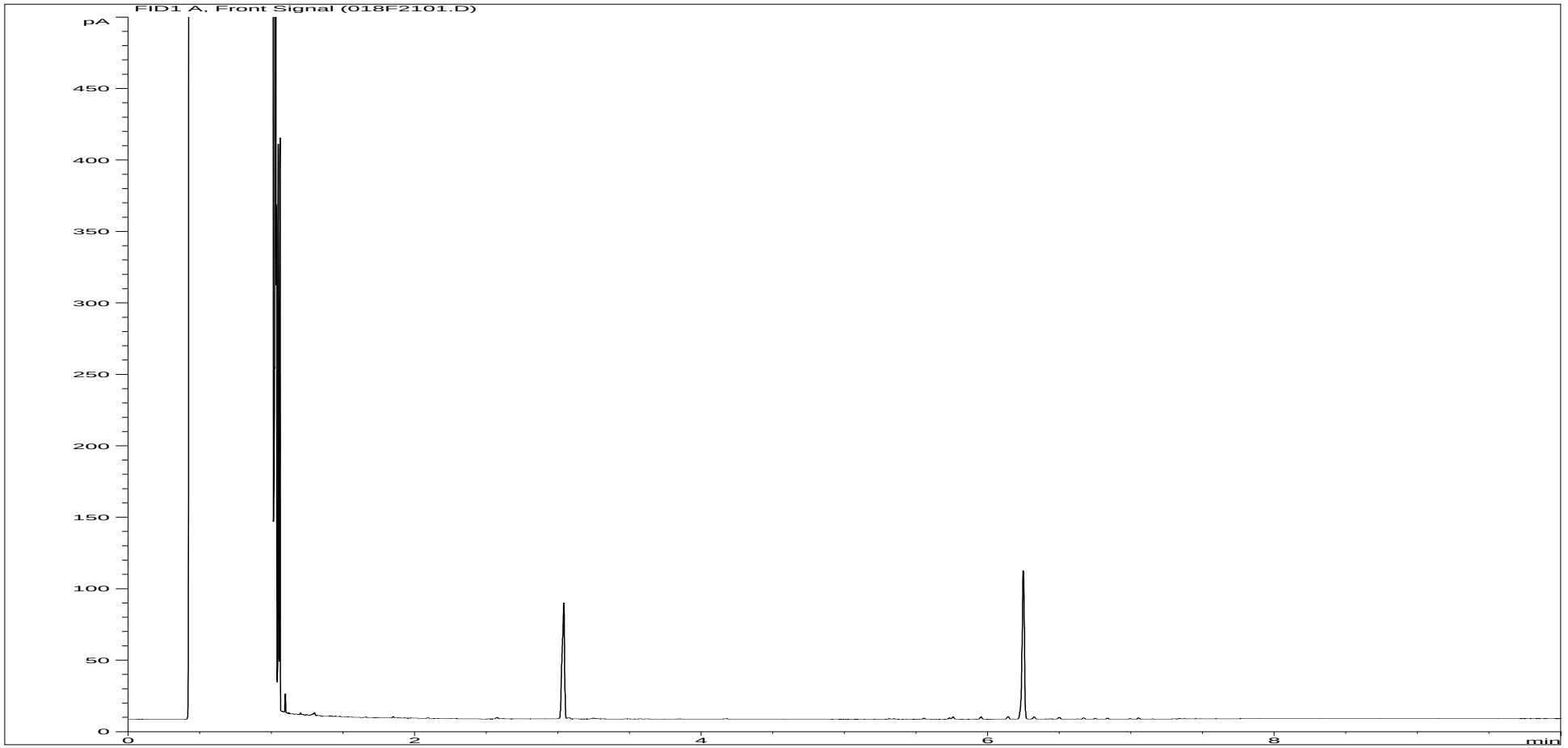
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133290ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6A
Acquisition Date/Time:	12-Aug-11, 15:15:31		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\067B2001.D		

Where individual results are flagged see report notes for status.

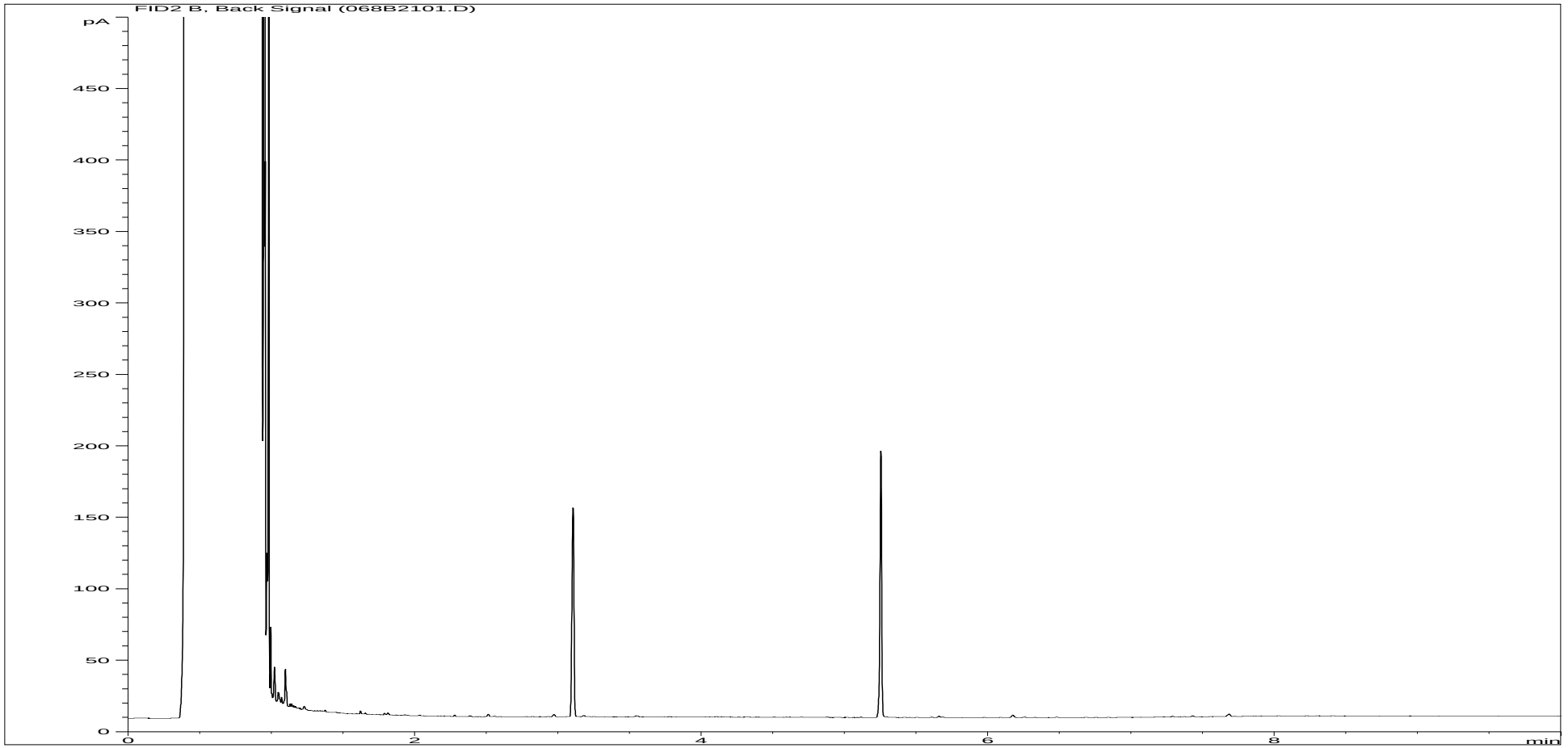
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133291ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	12-Aug-11, 15:32:50		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\018F2101.D		

Where individual results are flagged see report notes for status.

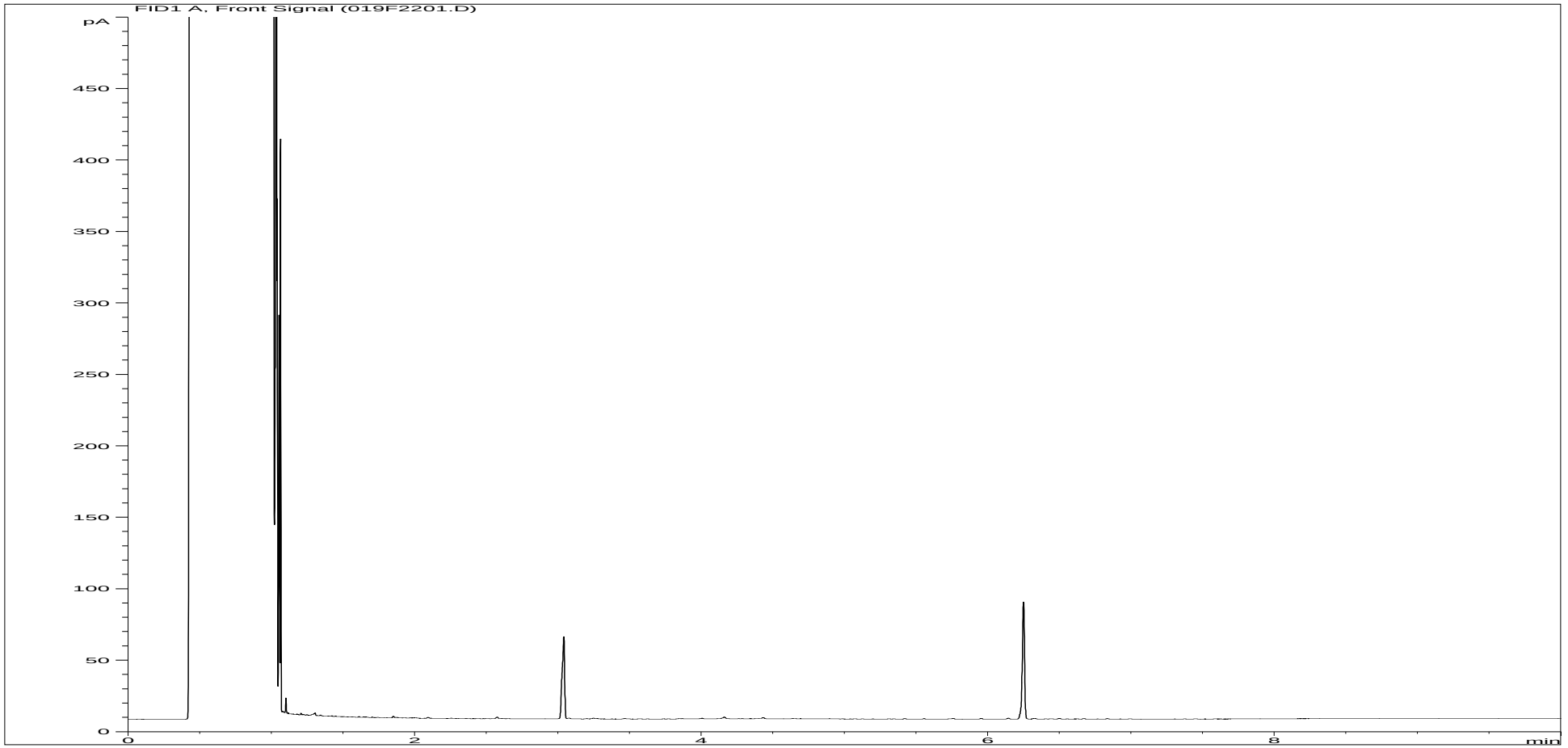
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133291ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	12-Aug-11, 15:32:50		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\068B2101.D		

Where individual results are flagged see report notes for status.

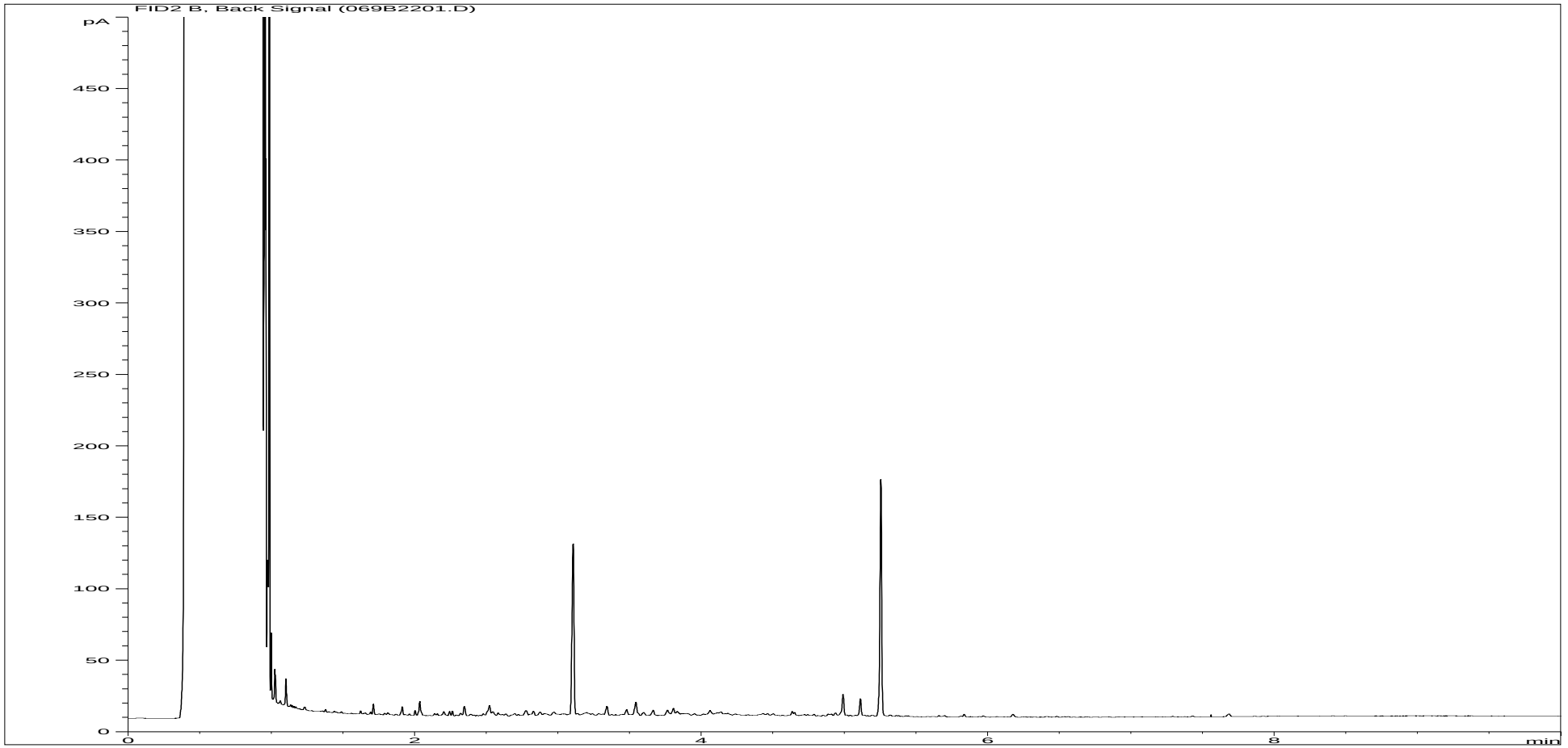
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133292ALI	**Job Number:**	W12_3725
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	12-Aug-11, 15:50:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\019F2201.D		

Where individual results are flagged see report notes for status.

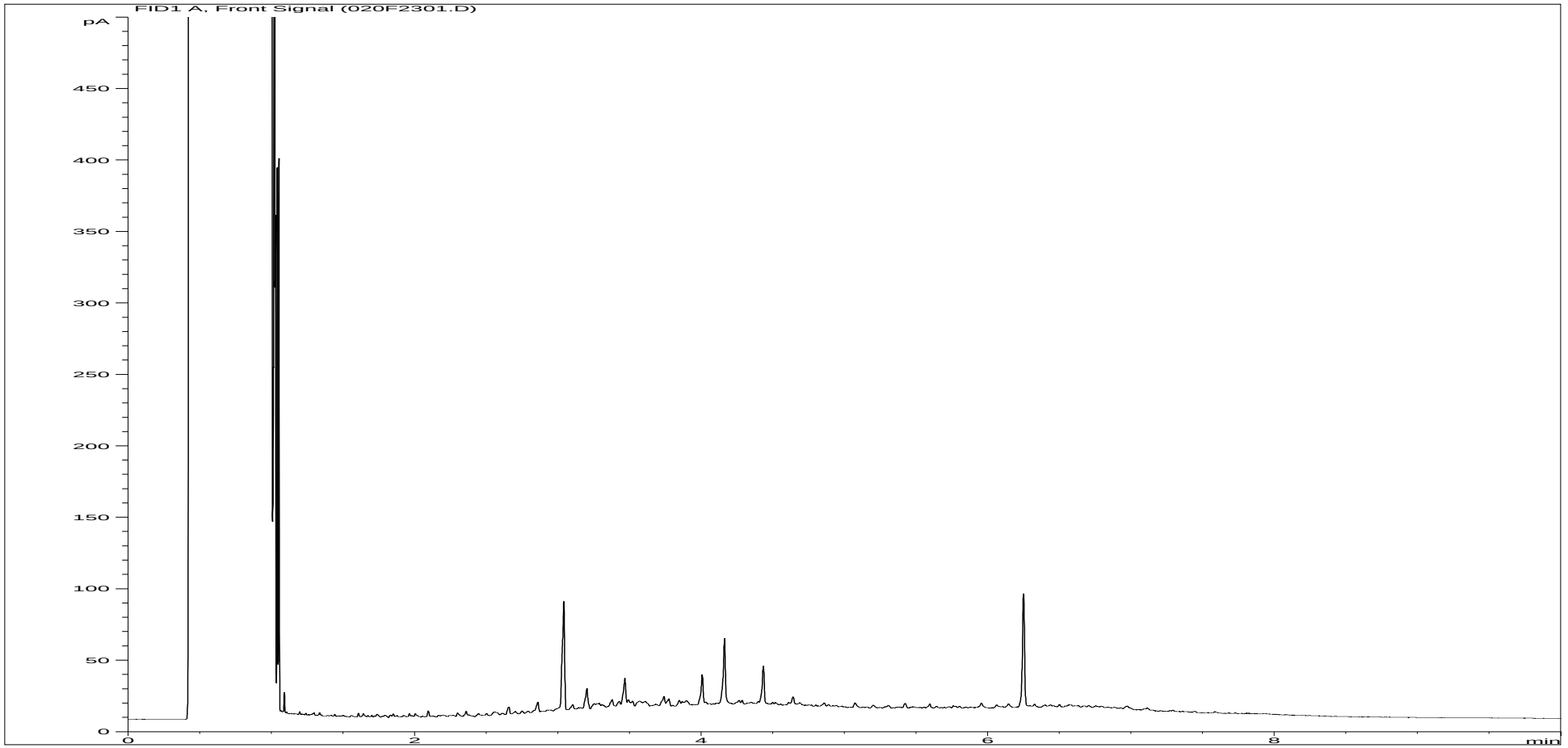
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133292ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	12-Aug-11, 15:50:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\069B2201.D		

Where individual results are flagged see report notes for status.

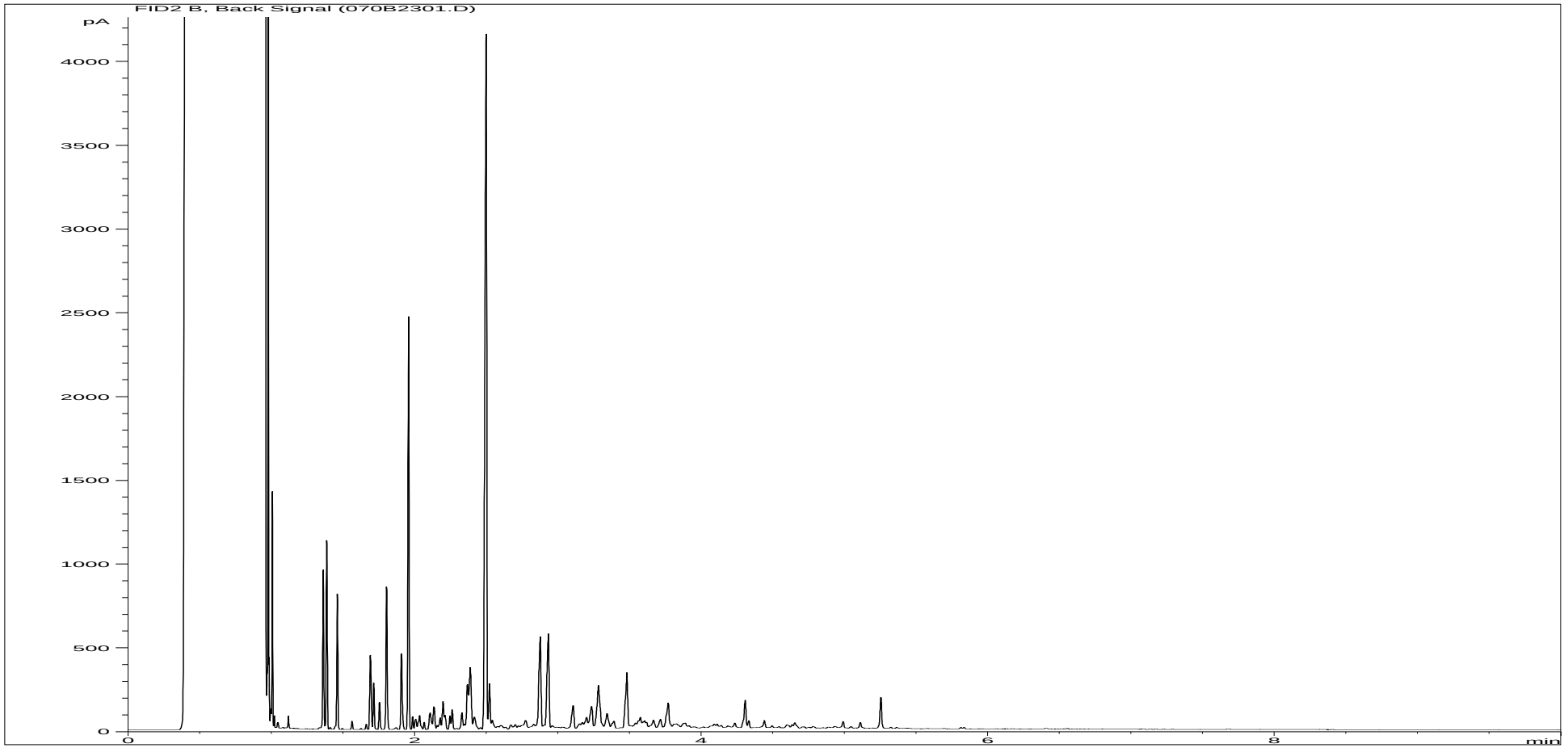
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133293ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	12-Aug-11, 16:07:41		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\020F2301.D		

Where individual results are flagged see report notes for status.

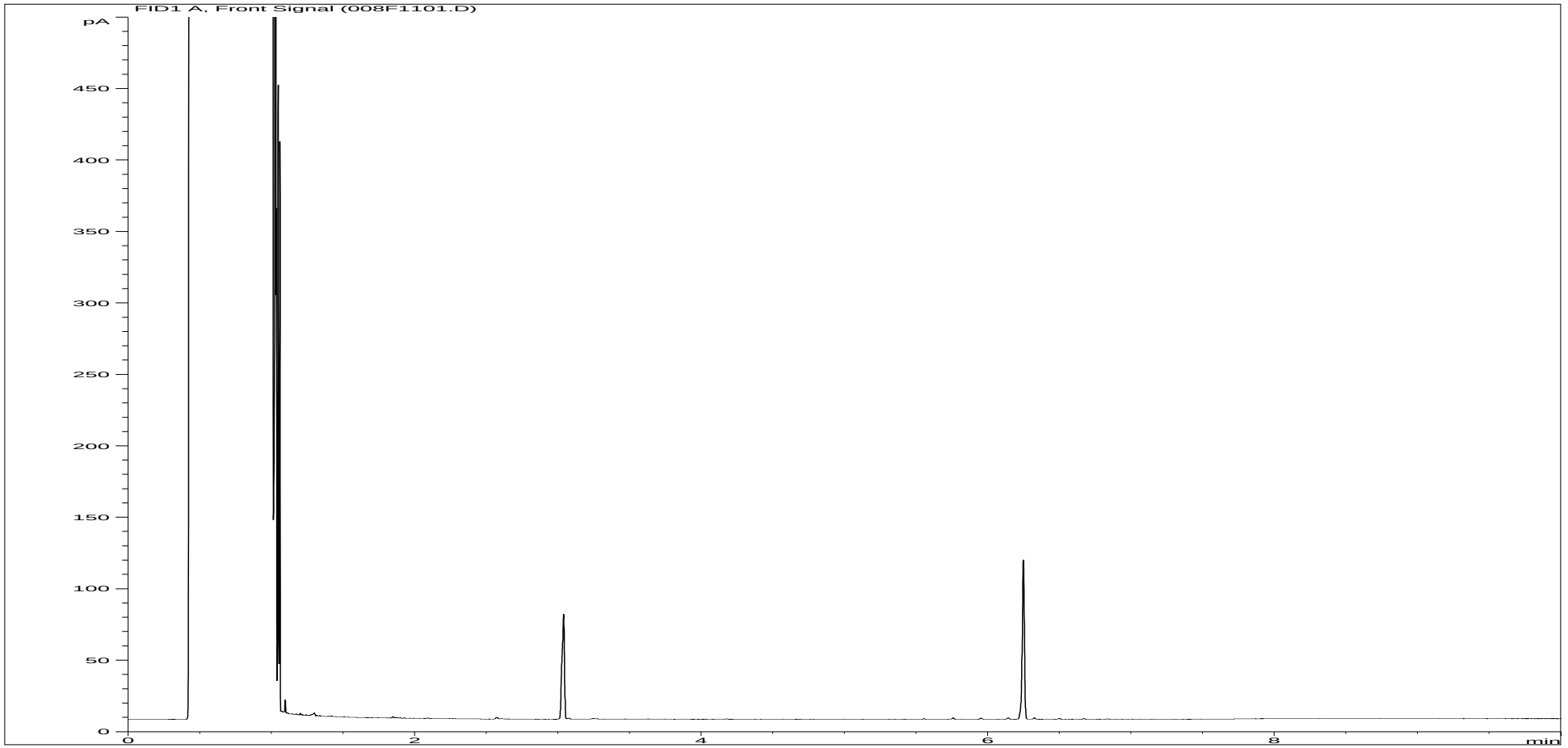
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133293ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	12-Aug-11, 16:07:41		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\070B2301.D		

Where individual results are flagged see report notes for status.

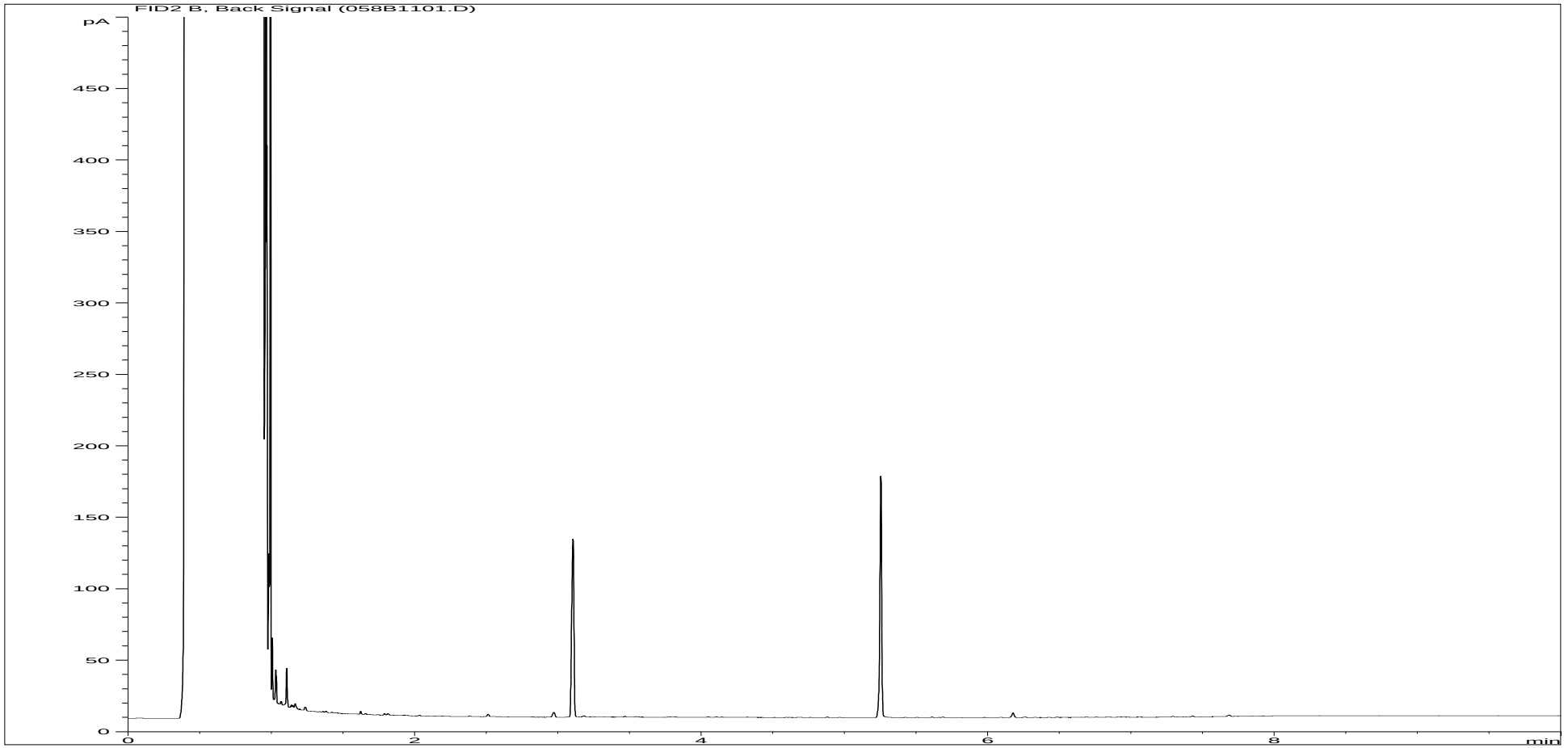
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133294ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank
Acquisition Date/Time:	12-Aug-11, 12:39:14		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\008F1101.D		

Where individual results are flagged see report notes for status.

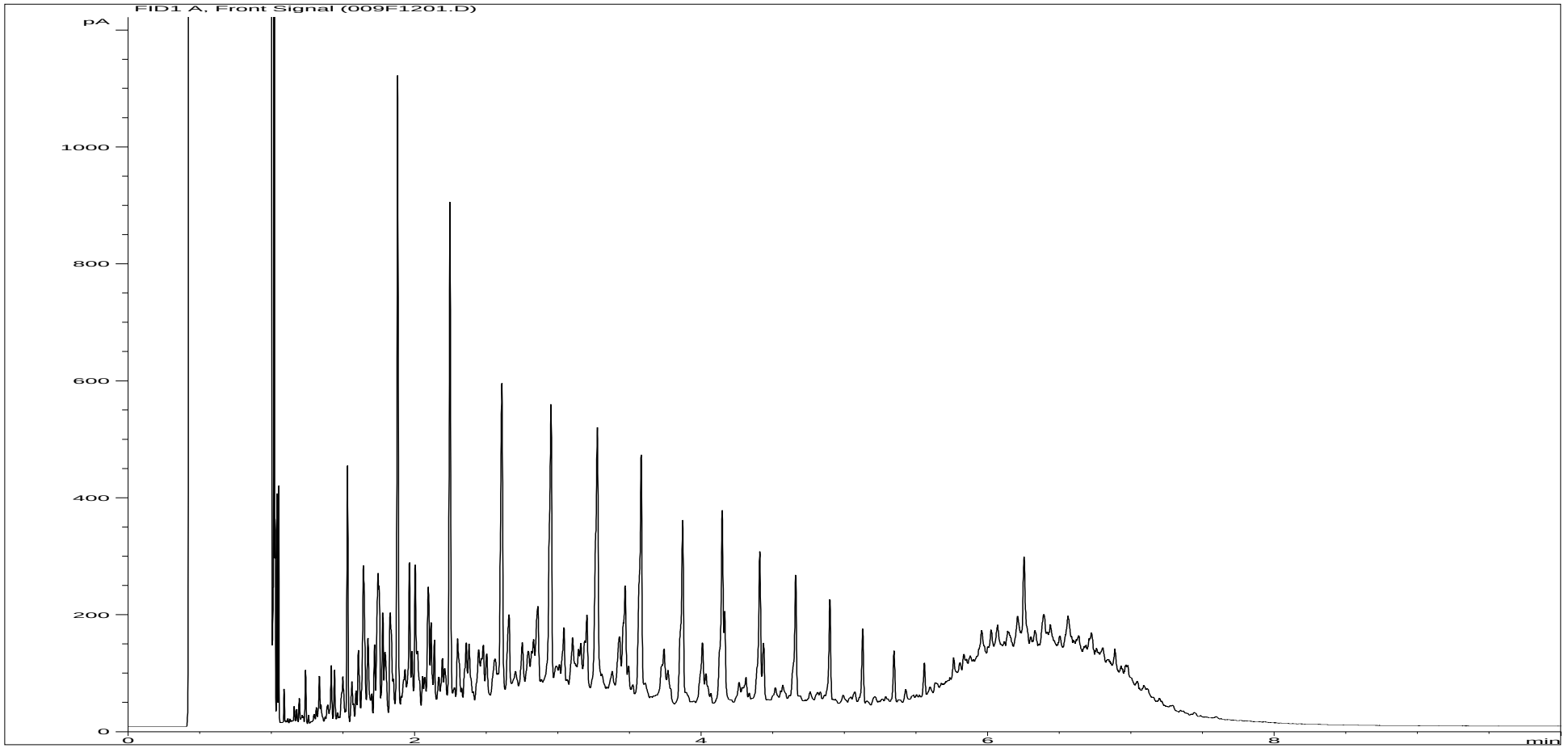
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133294ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank
Acquisition Date/Time:	12-Aug-11, 12:39:14		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\058B1101.D		

Where individual results are flagged see report notes for status.

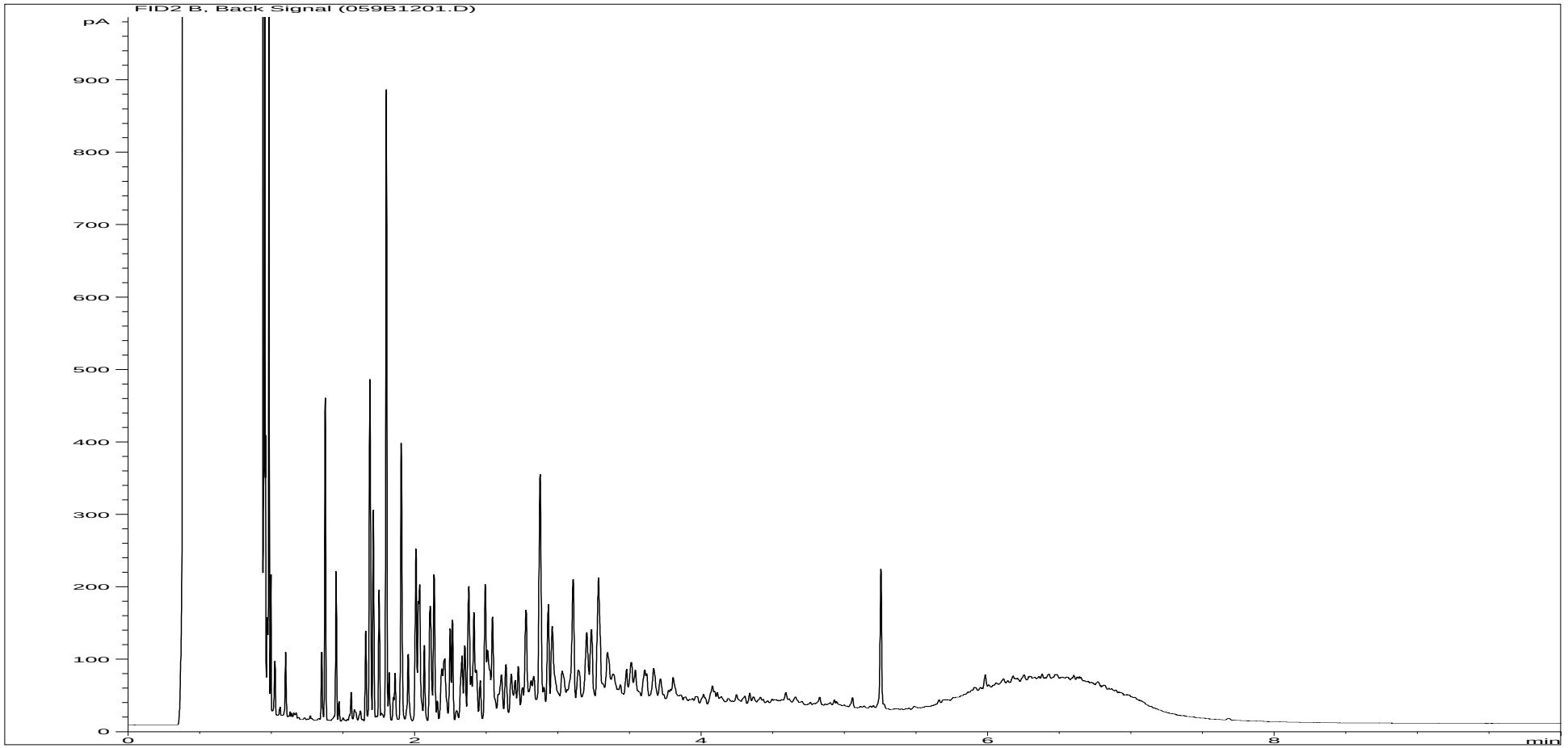
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133295ALI	**Job Number:**	W12_3725
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank Spike
Acquisition Date/Time:	12-Aug-11, 12:56:29		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\009F1201.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133295ARO	**Job Number:**	W12_3725
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank Spike
Acquisition Date/Time:	12-Aug-11, 12:56:29		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\059B1201.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W123725

Consignment No 28293
Date Logged 03-Aug-2011

Report Due 16-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1133286	MW99-202	01/08/11																									
EX/1133287	MW11-5	02/08/11																									
EX/1133288	MW11-5A	02/08/11																									
EX/1133289	MW11-6	02/08/11																									
EX/1133290	MW11-6A	02/08/11																									
EX/1133291	MW5	02/08/11																									
EX/1133292	MW11-7	02/08/11																									
EX/1133293	MW11-8	02/08/11																									
EX/1133294	Report 123725 Blank	01/08/11																									
EX/1133295	Report 123725 Blank Spike	01/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123725

Customer Worley Parsons Komex
Site Maelor Works
Report No W123725

Consignment No 28293
Date Logged 03-Aug-2011

Report Due 16-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1133286	MW99-202	01/08/11															
EX/1133287	MW11-5	02/08/11															
EX/1133288	MW11-5A	02/08/11															
EX/1133289	MW11-6	02/08/11															
EX/1133290	MW11-6A	02/08/11															
EX/1133291	MW5	02/08/11															
EX/1133292	MW11-7	02/08/11															
EX/1133293	MW11-8	02/08/11															
EX/1133294	Report 123725 Blank	01/08/11															
EX/1133295	Report 123725 Blank Spike	01/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124560 (Ver. 1)
Your Ref: 305001-50065-29

September 8, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124560 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 25-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 08-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 08-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1136560	MW11-10	23-Aug-11	11.7	760	41	198	25	50	79	<1	26	19	0.006	<0.001	<0.0001	Req	<0.001	<0.001
1136561	MW3	23-Aug-11	8.0	513	15	228	23	28	78	8	9	5	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136562	MW11-11	24-Aug-11	7.4	732	98	274	24	64	103	4	25	16	0.003	0.001	0.0001	Req	0.003	<0.001
1136563	MW11-17	24-Aug-11	7.4	951	15052	425	26	51	81	54	37	3	0.003	0.002	0.0001	Req	0.002	<0.001
1136564	QC Blank		7.03	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136565	Blank Spike (% Recovery)				98		102	97	94	97	99	99	99	96	100	Req	99	100

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
Method Reporting Limits :			0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1136560	MW11-10	**23-Aug-11**	<0.002	0.01	0.07	0.08	<0.01	0.044	0.0001	<0.001	1.5	<0.2	<0.2	<0.02	0.03	<0.05	4.8	<0.1
1136561	MW3	**23-Aug-11**	0.003	0.52	0.45	0.97	<0.01	<0.001	<0.0001	0.001	0.04	1.8	<0.2	<0.02	0.03	<0.05	2.5	<0.1
1136562	MW11-11	**24-Aug-11**	<0.002	0.52	0.26	0.78	<0.01	0.005	0.0001	0.001	4.1	1.7	<0.2	<0.02	0.03	<0.05	8.7	<0.1
1136563	MW11-17	**24-Aug-11**	<0.002	5.53	3.19	8.72	<0.01	0.001	<0.0001	<0.001	0.10	0.8	<0.2	<0.02	<0.02	<0.05	4.5	<0.1
1136564	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1
1136565	Blank Spike (% Recovery)		99	99	98	99	96	99	98	97	100	100	99	101	104	109	96	101

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1136560	MW11-10	**23-Aug-11**	Req	0.02	<0.03	6.1	3	<1	<1	<1	<2	0.0015	0.0012	<0.0005	<0.1	<0.0005		
1136561	MW3	**23-Aug-11**	Req	1.64	<0.03	6.7	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136562	MW11-11	**24-Aug-11**	Req	0.2	<0.03	1.2	6	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136563	MW11-17	**24-Aug-11**	Req	0.72	<0.02	5.3	8	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136564	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136565	Blank Spike (% Recovery)		Req	96			95	102	100	102	313	91	90	105	94	99		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-10	**Job Number:**	W12_4560
LIMS ID Number:	EX1136560	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.147	94
Acenaphthylene	208-96-8	4.50	0.037	99
Acenaphthene	83-32-9	4.62	0.140	96
Fluorene	86-73-7	5.01	0.053	95
Phenanthrene	85-01-8	5.89	0.052	97
Anthracene	120-12-7	5.95	0.041	96
Fluoranthene	206-44-0	7.27	0.326	98
Pyrene	129-00-0	7.56	0.250	97
Benzo[a]anthracene	56-55-3	9.27	0.036	94
Chrysene	218-01-9	9.31	0.039	97
Benzo[b]fluoranthene	205-99-2	10.80	0.011	65
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 1.182	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	100
Phenanthrene-d10	107
Chrysene-d12	114
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW3	**Job Number:**	W12_4560
LIMS ID Number:	EX1136561	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.027	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.177	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	99
Phenanthrene-d10	105
Chrysene-d12	109
Perylene-d12	103

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	91

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11	**Job Number:**	W12_4560
LIMS ID Number:	EX1136562	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.044	94
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.62	0.010	85
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.016	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	104
Phenanthrene-d10	113
Chrysene-d12	121
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	94

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-17	**Job Number:**	W12_4560
LIMS ID Number:	EX1136563	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	104
Phenanthrene-d10	114
Chrysene-d12	128
Perylene-d12	123

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	87

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124560 Blank	**Job Number:**	W12_4560
LIMS ID Number:	EX1136564	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	76
Phenanthrene-d10	82
Chrysene-d12	91
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124560 Blank Spike	**Job Number:**	W12_4560
LIMS ID Number:	EX1136565	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	94	97
Acenaphthylene	208-96-8	4.49	81	99
Acenaphthene	83-32-9	4.62	85	97
Fluorene	86-73-7	5.02	94	98
Phenanthrene	85-01-8	5.89	94	99
Anthracene	120-12-7	5.95	88	98
Fluoranthene	206-44-0	7.27	84	96
Pyrene	129-00-0	7.56	80	77
Benzo[a]anthracene	56-55-3	9.27	109	98
Chrysene	218-01-9	9.32	95	99
Benzo[b]fluoranthene	205-99-2	10.80	101	97
Benzo[k]fluoranthene	207-08-9	10.84	92	94
Benzo[a]pyrene	50-32-8	11.23	89	92
Indeno[1,2,3-cd]pyrene	193-39-5	12.62	80	80
Dibenzo[a,h]anthracene	53-70-3	12.66	67	65
Benzo[g,h,i]perylene	191-24-2	12.95	83	73
Total (USEPA16) PAHs	-	-	1414	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	100
Phenanthrene-d10	108
Chrysene-d12	117
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	89
Terphenyl-d14	109

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4560
QC Batch Number: 110789
Directory: D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\072B2801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

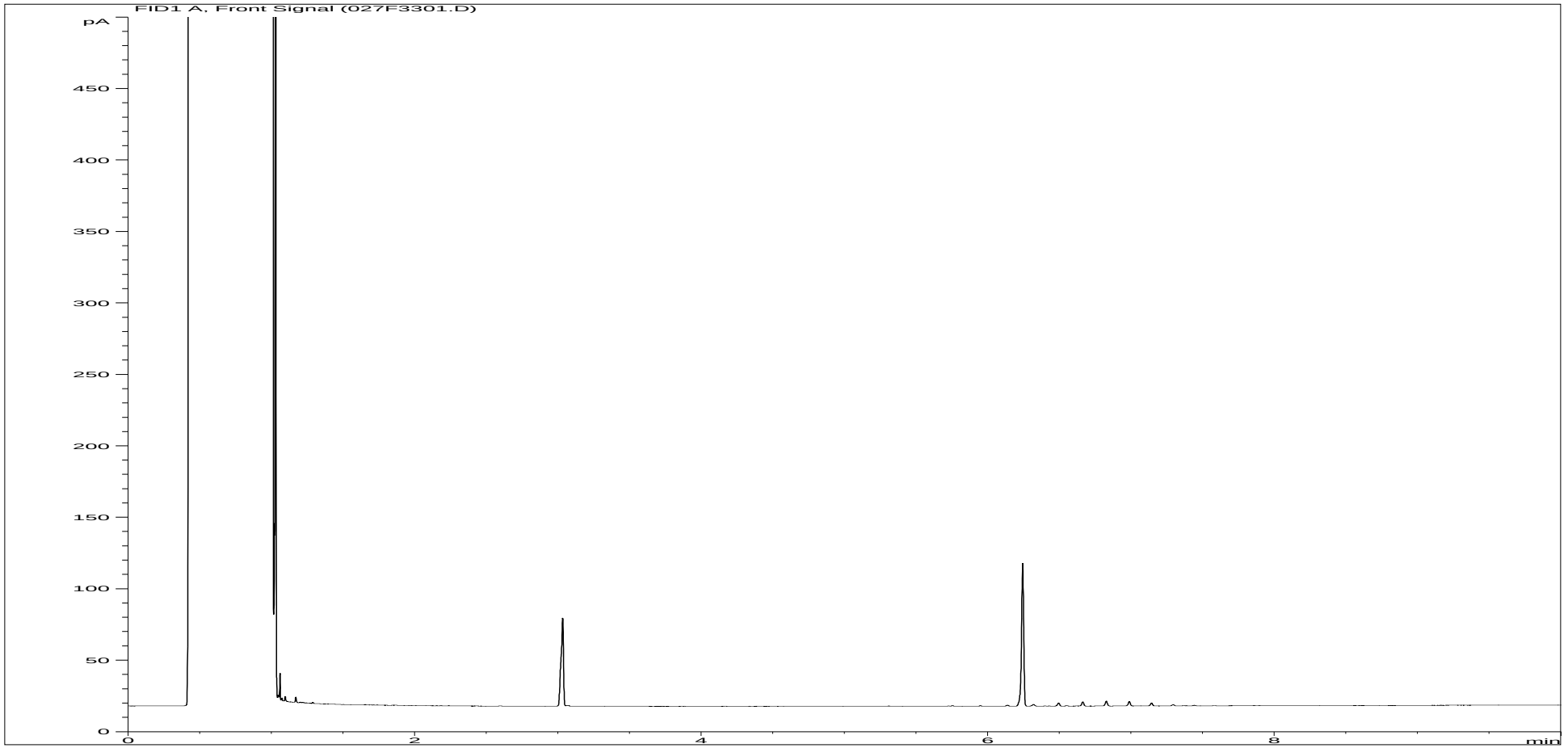
Matrix: Water
Date Booked ir 25-Aug-11
Date Extracted 05-Sep-11
Date Analysed: 06-Sep-11, 16:04:03

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1136560	MW11-10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013
EX1136561	MW3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136562	MW11-11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136563	MW11-17	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136564	Report 124560 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136565	Report 124560 Blank Spike	0.565	0.179	0.91	0.298	1.63	0.535	0.96	0.269	2.56	0.644	6.68	1.94

Where individual results are flagged see report notes for status.

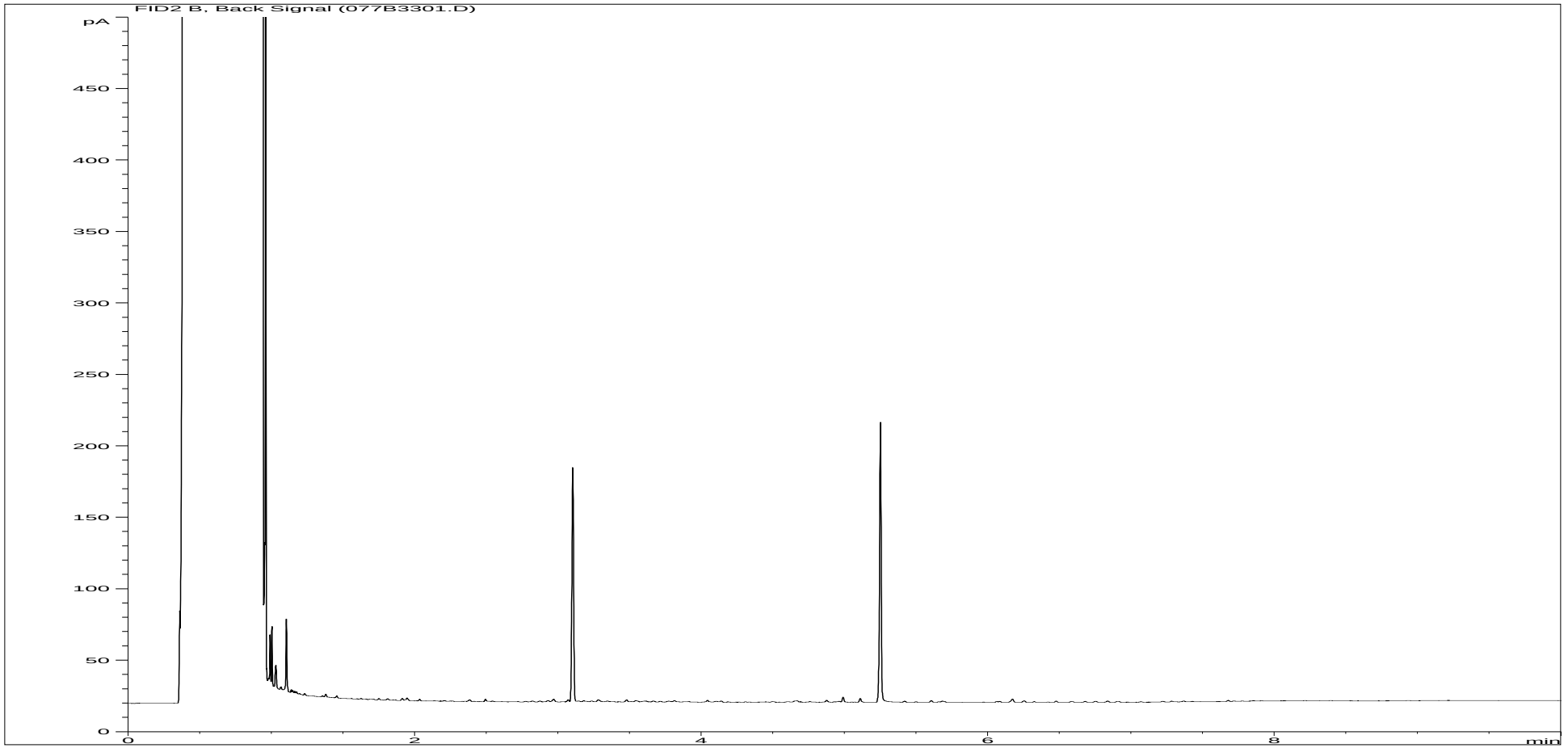
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136560ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	06-Sep-11, 17:30:38		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\027F3301.D		

Where individual results are flagged see report notes for status.

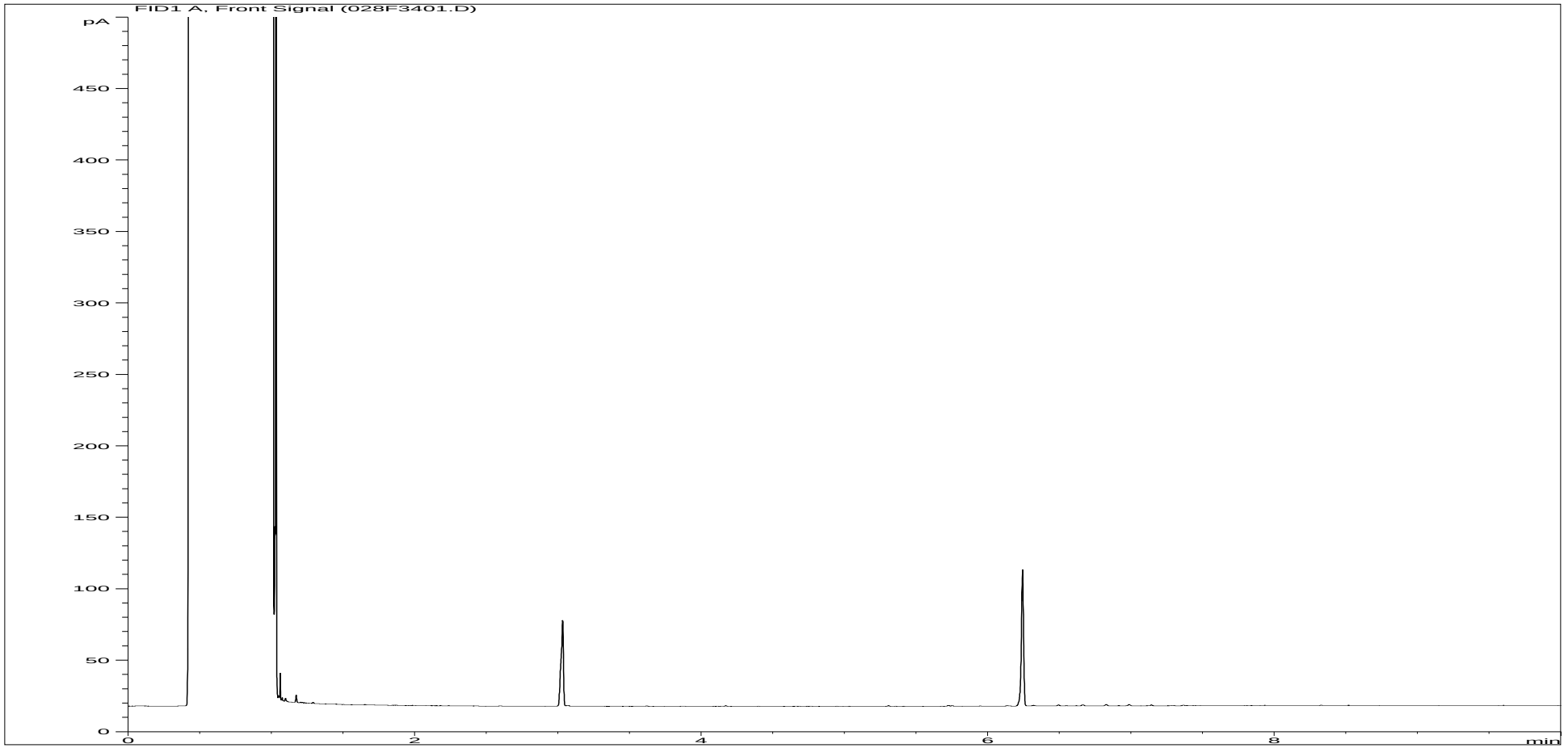
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136560ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	06-Sep-11, 17:30:38		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\077B3301.D		

Where individual results are flagged see report notes for status.

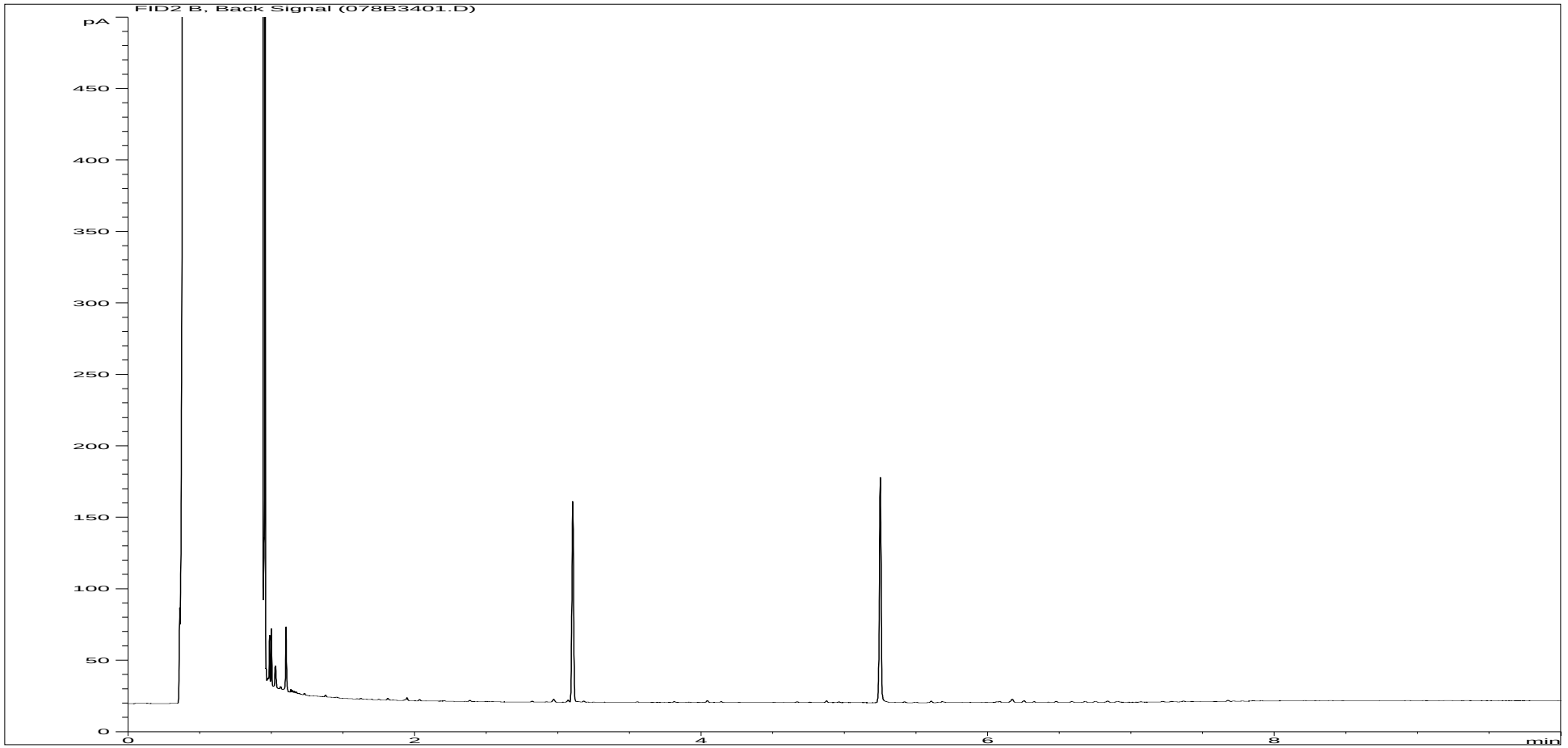
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136561ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	06-Sep-11, 17:47:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\028F3401.D		

Where individual results are flagged see report notes for status.

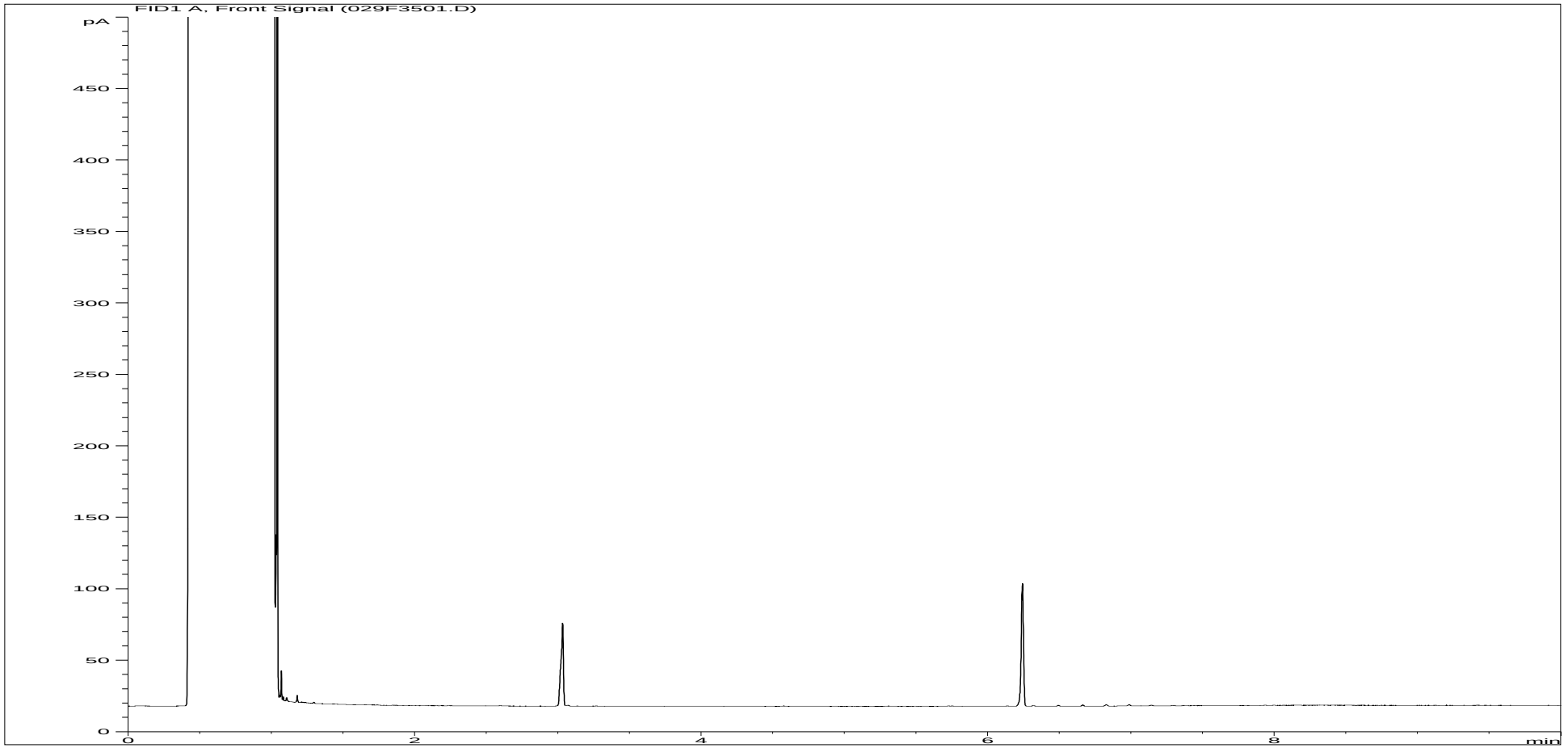
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136561ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	06-Sep-11, 17:47:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\078B3401.D		

Where individual results are flagged see report notes for status.

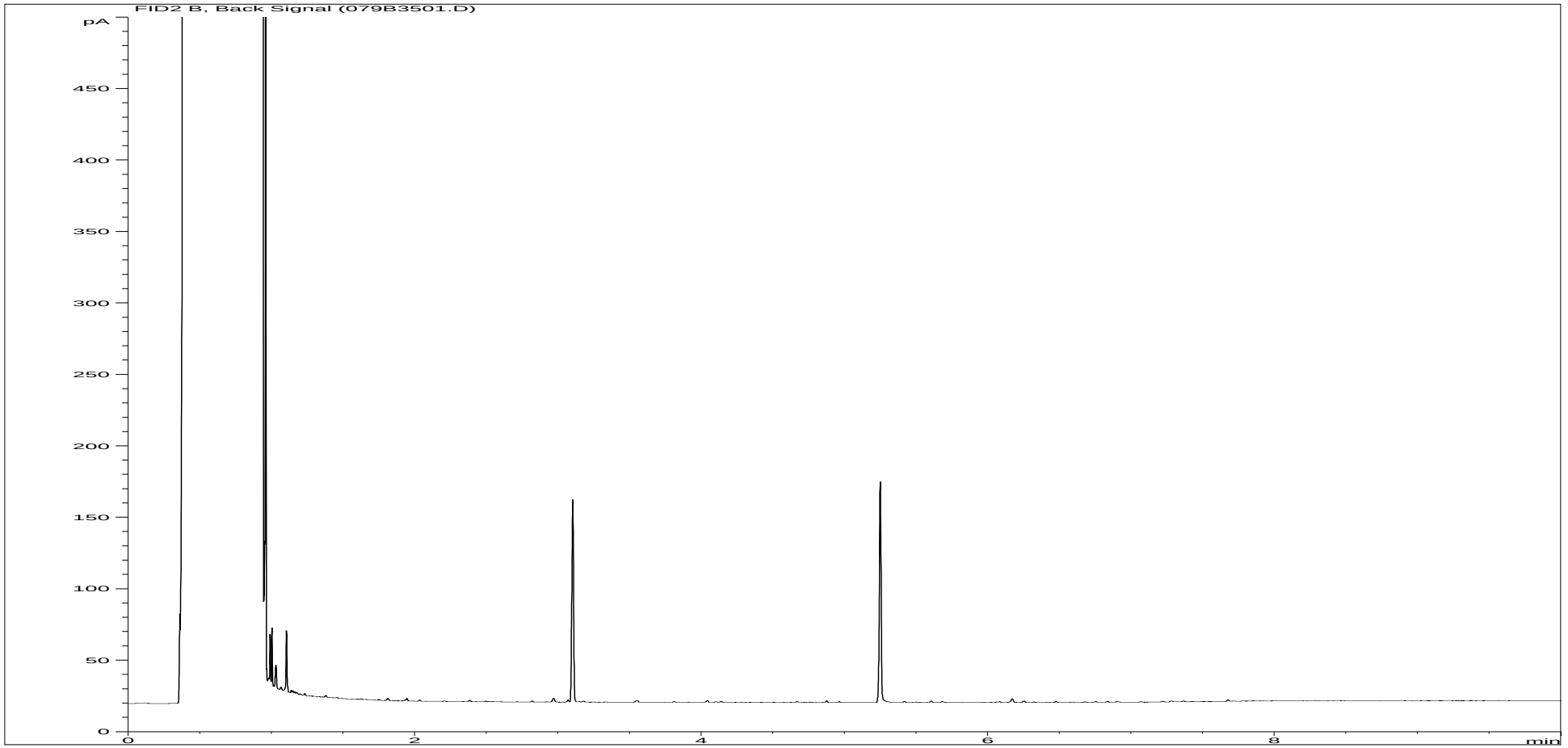
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136562ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	06-Sep-11, 18:05:04		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\029F3501.D		

Where individual results are flagged see report notes for status.

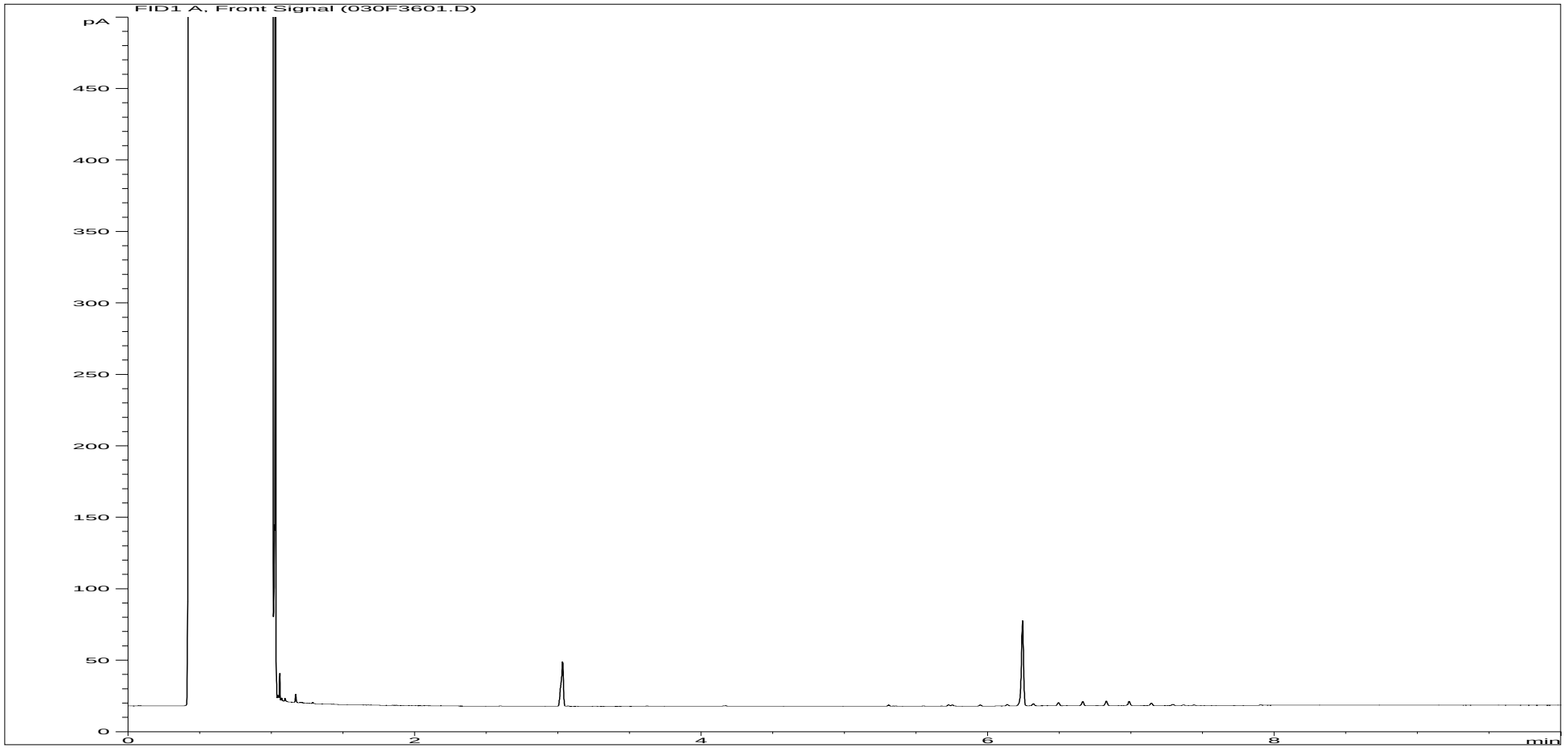
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136562ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	06-Sep-11, 18:05:04		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\079B3501.D		

Where individual results are flagged see report notes for status.

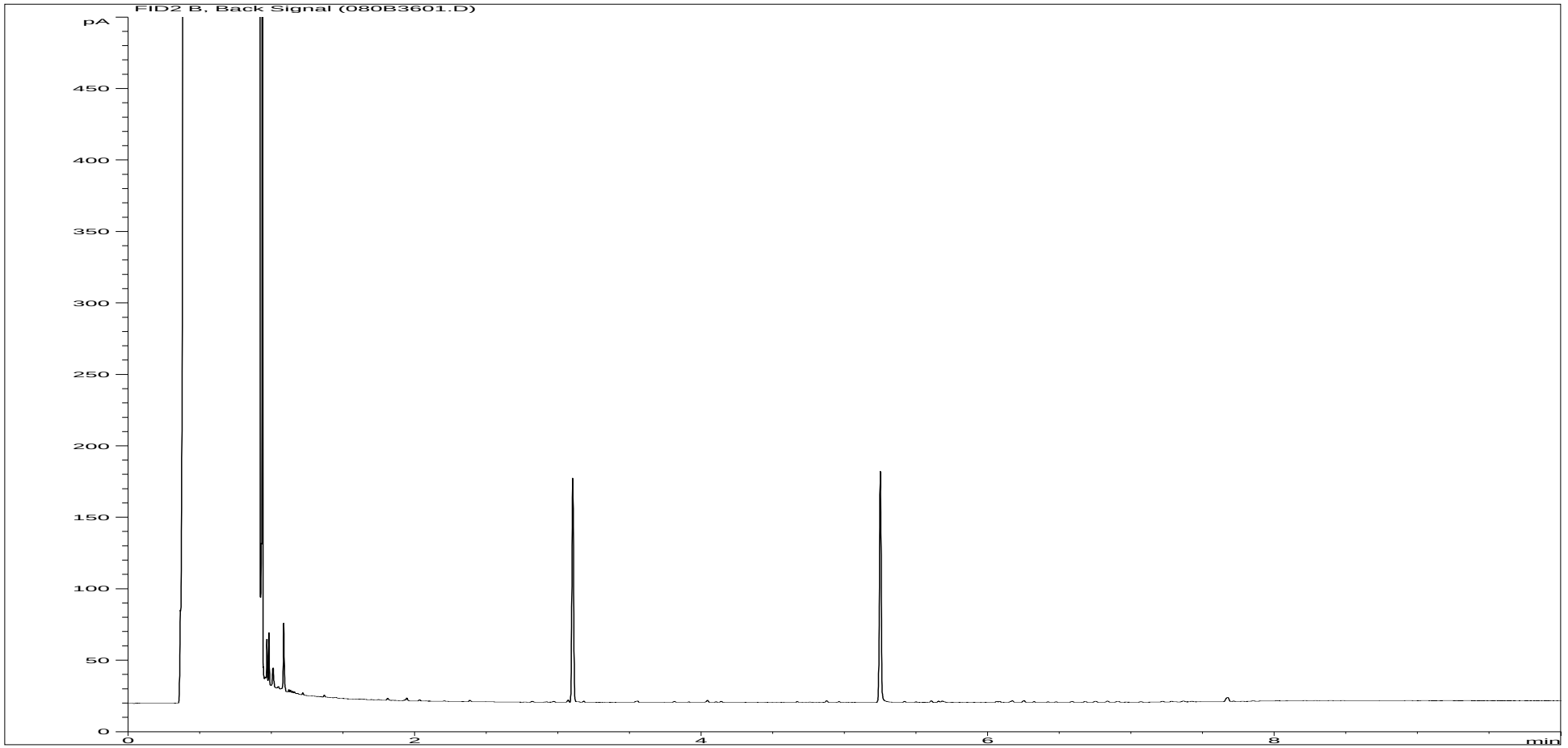
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136563ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	06-Sep-11, 18:22:22		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\030F3601.D		

Where individual results are flagged see report notes for status.

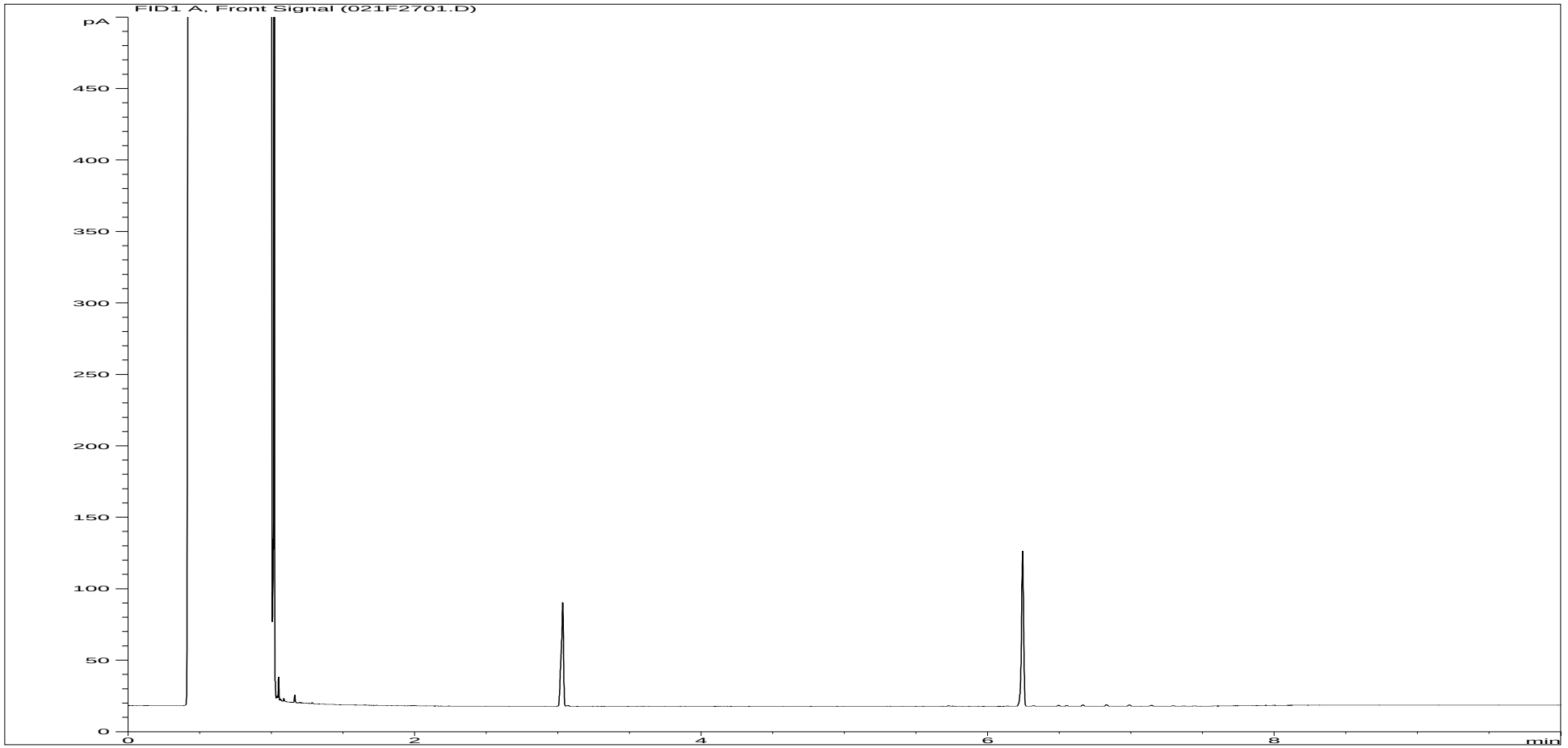
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136563ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	06-Sep-11, 18:22:22		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\080B3601.D		

Where individual results are flagged see report notes for status.

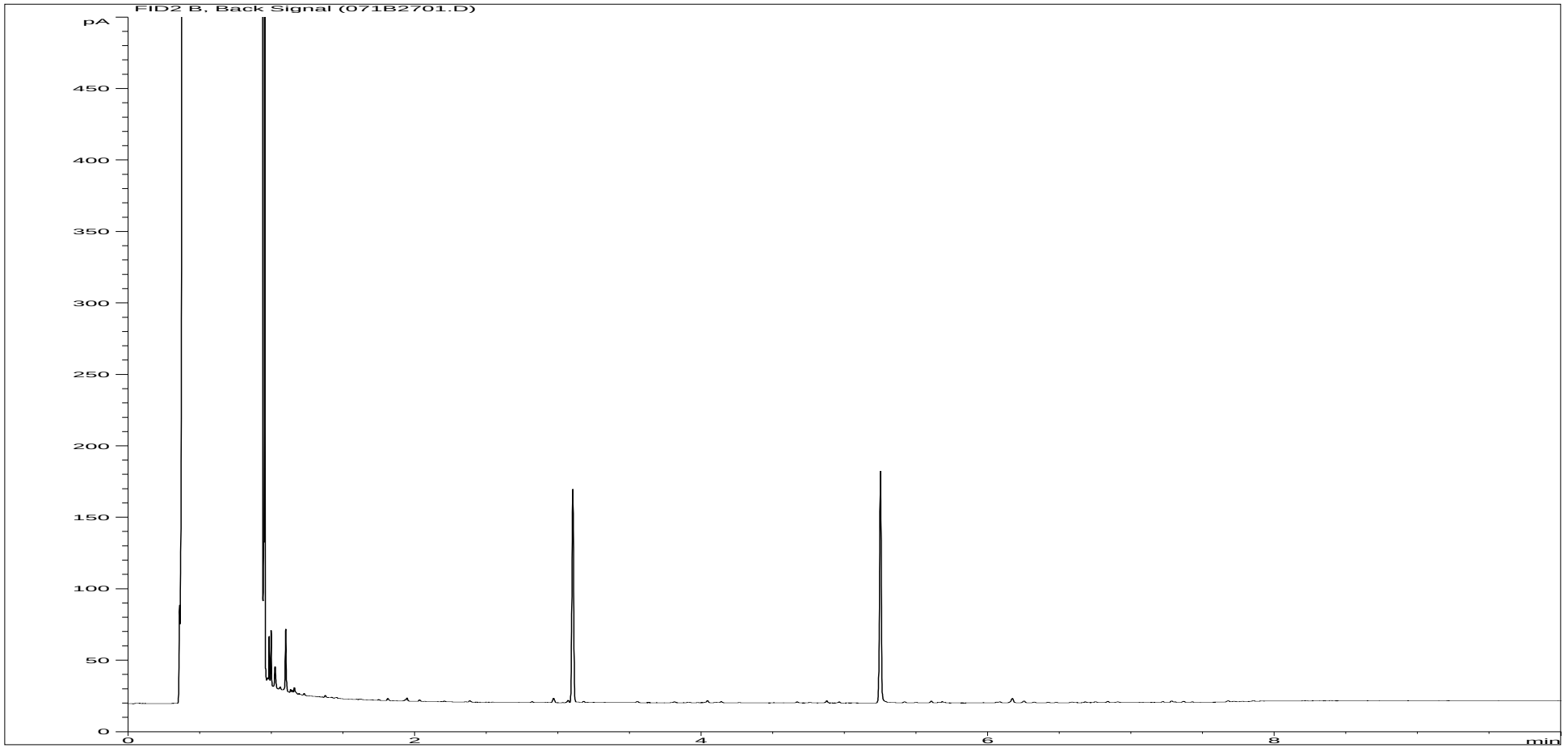
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136564ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank
Acquisition Date/Time:	06-Sep-11, 15:46:48		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\021F2701.D		

Where individual results are flagged see report notes for status.

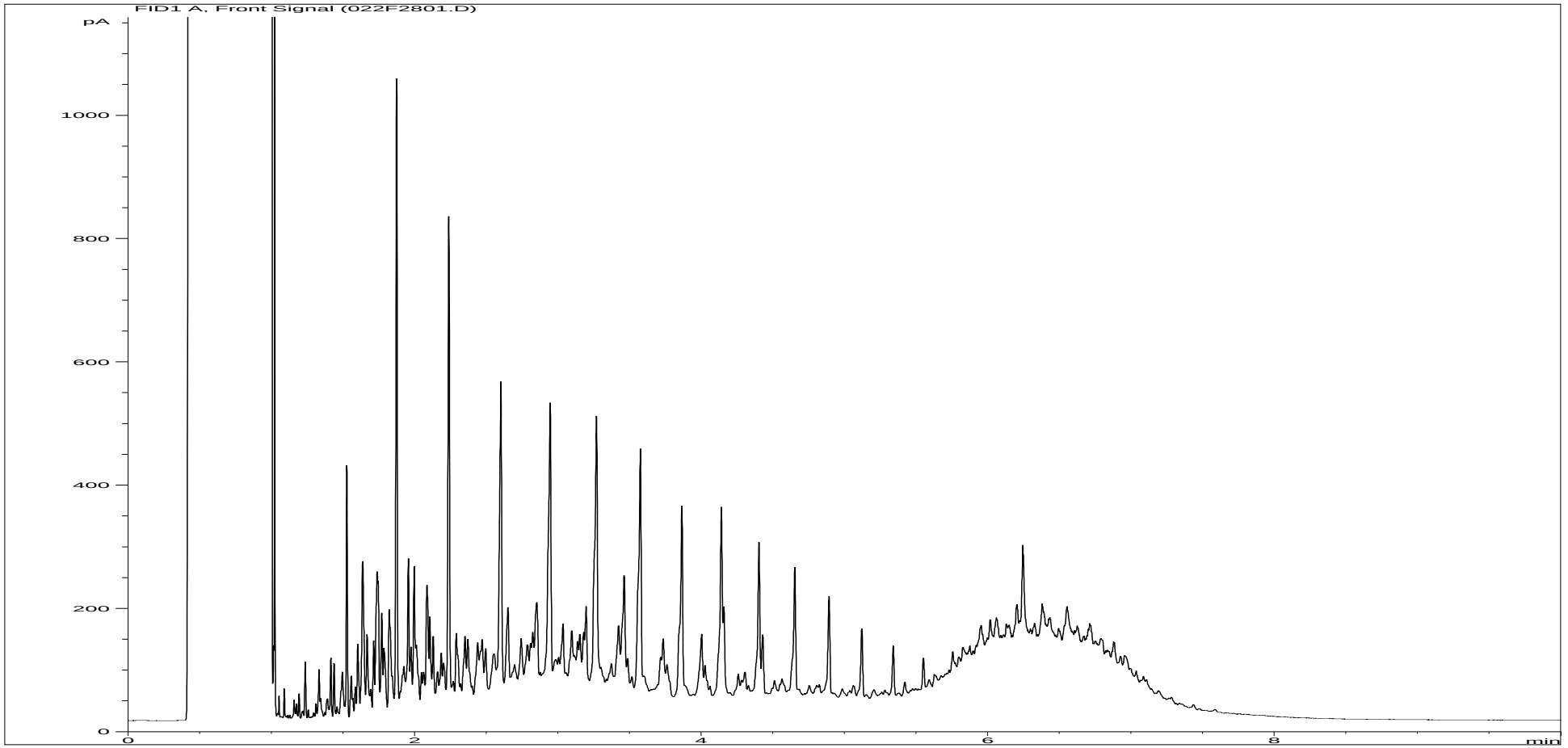
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136564ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank
Acquisition Date/Time:	06-Sep-11, 15:46:48		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\071B2701.D		

Where individual results are flagged see report notes for status.

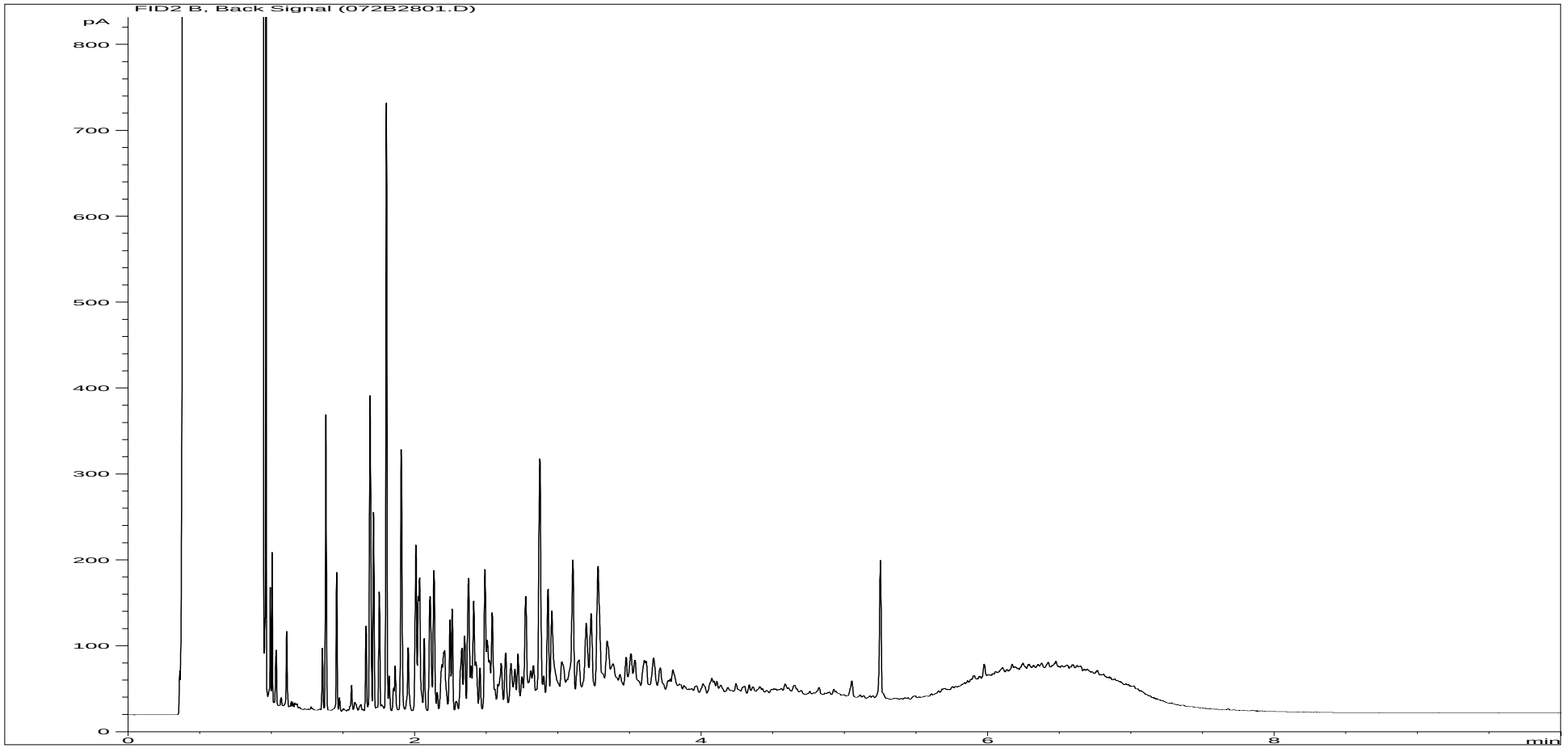
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136565ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank Spike
Acquisition Date/Time:	06-Sep-11, 16:04:03		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\022F2801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136565ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank Spike
Acquisition Date/Time:	06-Sep-11, 16:04:03		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\072B2801.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W124560

Consignment No 28785
Date Logged 25-Aug-2011

Report Due 08-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1136560	MW11-10	23/08/11																										
EX/1136561	MW3	23/08/11																										
EX/1136562	MW11-11	24/08/11																										
EX/1136563	MW11-17	24/08/11																										
EX/1136564	Report 124560 Blank																											
EX/1136565	Report 124560 Blank Spike																											

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124560

Customer Worley Parsons Komex
Site Maelor Works
Report No W124560

Consignment No 28785
Date Logged 25-Aug-2011

Report Due 08-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1136560	MW11-10	23/08/11															
EX/1136561	MW3	23/08/11															
EX/1136562	MW11-11	24/08/11															
EX/1136563	MW11-17	24/08/11															
EX/1136564	Report 124560 Blank																
EX/1136565	Report 124560 Blank Spike																

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124580 (Ver. 1)
Your Ref: 305001-50065-29

September 9, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124580 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 7 samples described in this report were logged for analysis by Scientifics on 26-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
Table of TPH (Si) banding (0.01) (Page 12)
GC-FID Chromatograms (Pages 13 to 26)
Analytical and Deviating Sample Overview (Pages 27 to 28)
Table of Method Descriptions (Page 29)
Table of Report Notes (Page 30)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 09-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1136675	MW11-13	24-Aug-11	7.0	678	1661	255	20	31	89	8	40	7	0.002	0.002	0.0001	Req	<0.001	<0.001
1136676	MW99-107	25-Aug-11	7.0	741	50	352	18	4	111	18	12	2	<0.001	0.002	<0.0001	Req	<0.001	<0.001
1136677	MW11-4	25-Aug-11	6.9	1030	517	323	78	12	111	11	28	4	0.001	0.003	<0.0001	Req	<0.001	<0.001
1136678	MW11-15	25-Aug-11	6.9	5080	1184	2361	1450	117	615	200	132	3	0.007	0.002	0.0004	Req	0.002	<0.001
1136679	MW11-15A	25-Aug-11	6.9	5340	940	2368	1440	118	616	201	132	3	0.007	0.002	0.0004	Req	0.001	<0.001
1136680	QC Blank		7.04	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136681	Blank Spike (% Recovery)				100		102	99	97	98	99	101	102	97	97	Req	102	101

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1136675	MW11-13	24-Aug-11	<0.002	2.62	3.58	6.20	<0.01	0.002	<0.0001	<0.001	0.4	<0.2	<0.2	<0.02	0.11	<0.05	3.5	<0.1
1136676	MW99-107	25-Aug-11	<0.002	0.30	13.2	13.5	<0.01	0.002	<0.0001	<0.001	3.9	<0.2	<0.2	<0.02	<0.02	0.22	13	<0.1
1136677	MW11-4	25-Aug-11	<0.002	<0.01	46.0	45.2	3.81	0.002	<0.0001	<0.001	32.0	<0.2	<0.2	<0.02	0.04	0.14	19	2.72
1136678	MW11-15	25-Aug-11	0.006	2.15	1.78	3.93	<0.01	0.001	<0.0001	0.001	0.08	<0.2	<0.2	<0.02	<0.02	<0.05	3.2	<0.1
1136679	MW11-15A	25-Aug-11	0.004	<0.01	1.36	<0.01	<0.01	0.001	<0.0001	0.001	0.07	<0.2	<0.2	<0.02	0.1	<0.05	3.0	<0.1
1136680	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1
1136681	Blank Spike (% Recovery)		99	100	99	100	96	98	100	97	101		100	102	99	107	94	104

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1136675	MW11-13	24-Aug-11	Req	0.97	0.11	5.4	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136676	MW99-107	25-Aug-11	Req	4.31	<0.02	1.6	5	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136677	MW11-4	25-Aug-11	Req	5.73	0.04	1.5	16	2981	2	120	472	0.115	0.0523	0.128	<0.1	0.0370		
1136678	MW11-15	25-Aug-11	Req	0.30	<0.02	5.6	1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136679	MW11-15A	25-Aug-11	Req	0.30	0.10	6.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136680	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136681	Blank Spike (% Recovery)		Req	98			96	105	101	102	313	93	101	99	94	109		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13	**Job Number:**	W12_4580
LIMS ID Number:	EX1136675	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	111
Phenanthrene-d10	104
Chrysene-d12	108
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	86

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-107	**Job Number:**	W12_4580
LIMS ID Number:	EX1136676	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	36.500	100
Acenaphthylene	208-96-8	4.38	0.074	M
Acenaphthene	83-32-9	4.51	0.479	95
Fluorene	86-73-7	4.89	0.182	97
Phenanthrene	85-01-8	5.75	0.102	93
Anthracene	120-12-7	5.80	0.016	93
Fluoranthene	206-44-0	7.11	0.011	98
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 37.454	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	111
Acenaphthene-d10	116
Phenanthrene-d10	112
Chrysene-d12	112
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	88

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-4	**Job Number:**	W12_4580
LIMS ID Number:	EX1136677	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	06-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	234.000	100
Acenaphthylene	208-96-8	4.38	0.116	87
Acenaphthene	83-32-9	4.51	0.336	97
Fluorene	86-73-7	4.89	0.069	90
Phenanthrene	85-01-8	5.75	0.121	92
Anthracene	120-12-7	5.80	0.022	92
Fluoranthene	206-44-0	7.11	0.043	98
Pyrene	129-00-0	7.40	0.035	98
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 234.822	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	118
Phenanthrene-d10	113
Chrysene-d12	113
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	83

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15	**Job Number:**	W12_4580
LIMS ID Number:	EX1136678	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	0.046	97
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.196	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	109
Phenanthrene-d10	103
Chrysene-d12	106
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	94
Terphenyl-d14	92

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-15A	**Job Number:**	W12_4580
LIMS ID Number:	EX1136679	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	0.016	89
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.166	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	113
Phenanthrene-d10	108
Chrysene-d12	108
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	95
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124580 Blank	**Job Number:**	W12_4580
LIMS ID Number:	EX1136680	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	107
Phenanthrene-d10	99
Chrysene-d12	97
Perylene-d12	86

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124580 Blank Spike	**Job Number:**	W12_4580
LIMS ID Number:	EX1136681	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.33	89	100
Acenaphthylene	208-96-8	4.39	79	100
Acenaphthene	83-32-9	4.51	79	98
Fluorene	86-73-7	4.90	82	100
Phenanthrene	85-01-8	5.76	96	100
Anthracene	120-12-7	5.81	83	99
Fluoranthene	206-44-0	7.12	79	98
Pyrene	129-00-0	7.41	72	98
Benzo[a]anthracene	56-55-3	9.10	94	97
Chrysene	218-01-9	9.15	90	99
Benzo[b]fluoranthene	205-99-2	10.62	92	99
Benzo[k]fluoranthene	207-08-9	10.66	84	99
Benzo[a]pyrene	50-32-8	11.05	82	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.42	80	100
Dibenzo[a,h]anthracene	53-70-3	12.46	78	100
Benzo[g,h,i]perylene	191-24-2	12.73	90	78
Total (USEPA16) PAHs	-	-	1351	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	119
Phenanthrene-d10	115
Chrysene-d12	109
Perylene-d12	95

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	88

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ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4580
QC Batch Number: 110790
Directory: D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\094B5301.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

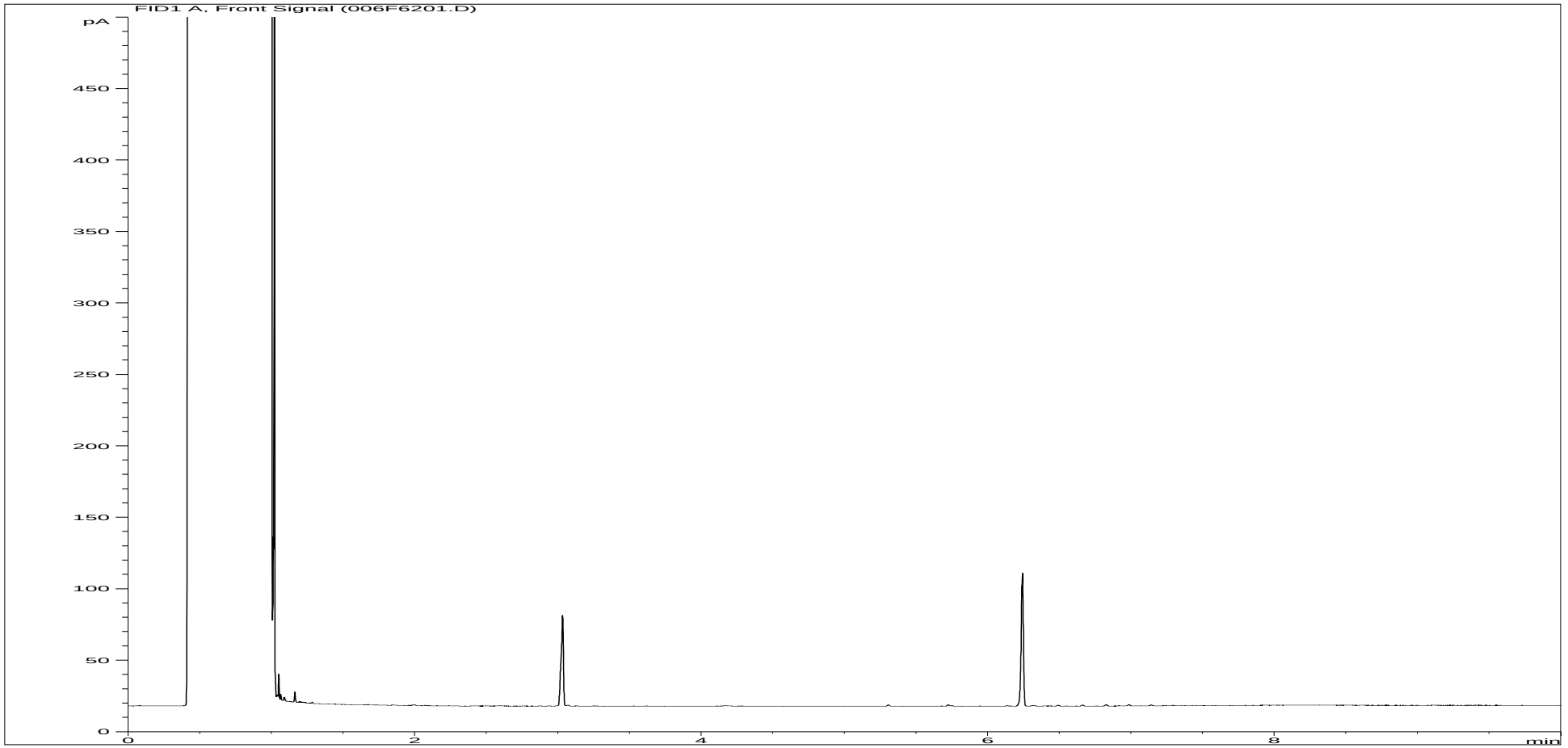
Matrix: Water
Date Booked ir 26-Aug-11
Date Extracted 05-Sep-11
Date Analysed 06-Sep-11, 23:14:54

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1136675	MW11-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136676	MW99-107	<0.01	0.024	<0.01	0.12	<0.01	0.028	<0.01	<0.01	<0.01	<0.01	<0.01	0.182
EX1136677	MW11-4	<0.01	0.413	<0.01	0.558	<0.01	0.027	<0.01	<0.01	<0.01	<0.01	0.014	1.01
EX1136678	MW11-15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
EX1136679	MW11-15A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136680	Report 124580 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136681	Report 124580 Blank Spik	0.598	0.207	0.93	0.328	1.64	0.575	0.96	0.299	2.55	0.712	6.73	2.14

Where individual results are flagged see report notes for status.

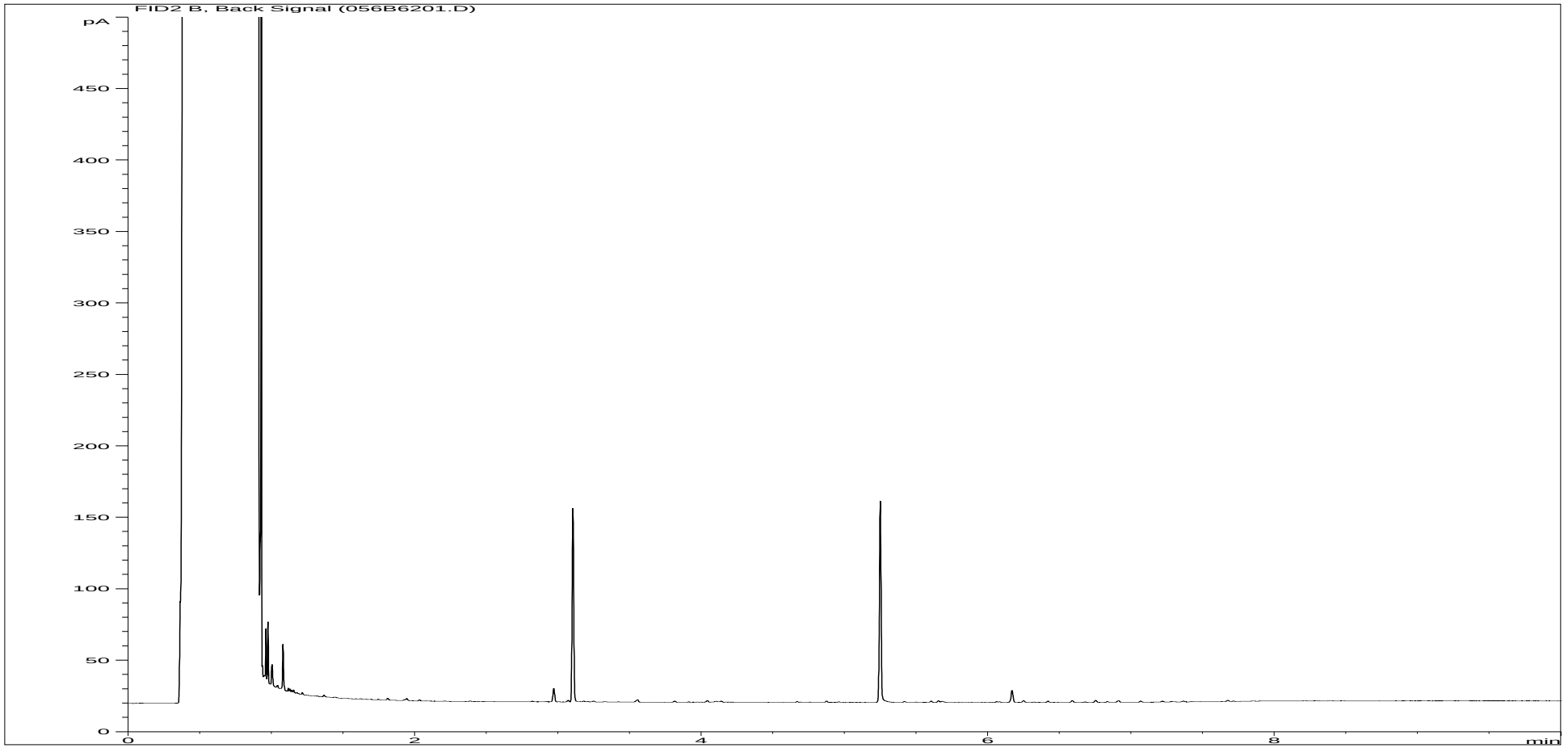
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136675ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	07-Sep-11, 01:49:52		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\006F6201.D		

Where individual results are flagged see report notes for status.

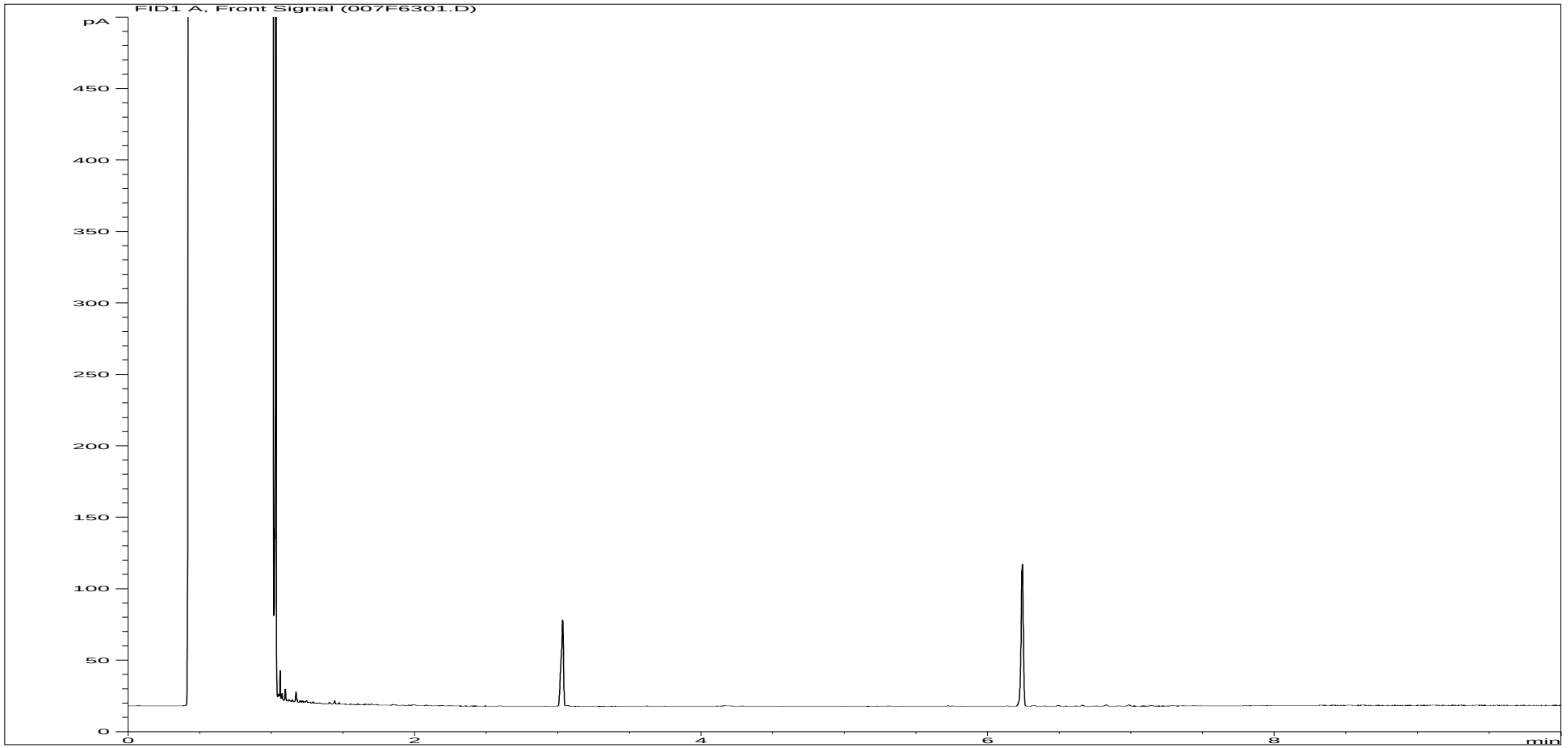
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136675ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	07-Sep-11, 01:49:52		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\056B6201.D		

Where individual results are flagged see report notes for status.

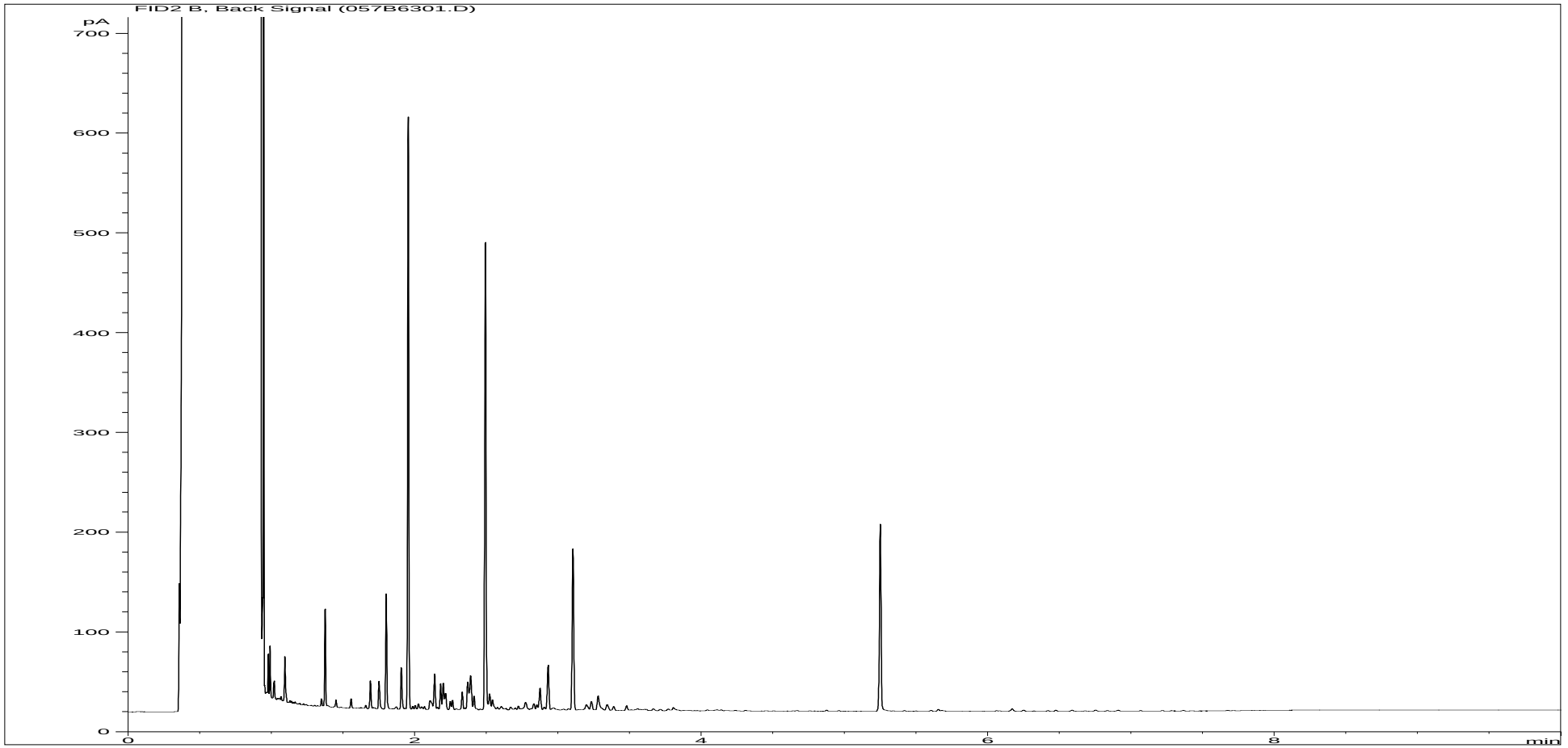
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136676ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	07-Sep-11, 02:06:59		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\007F6301.D		

Where individual results are flagged see report notes for status.

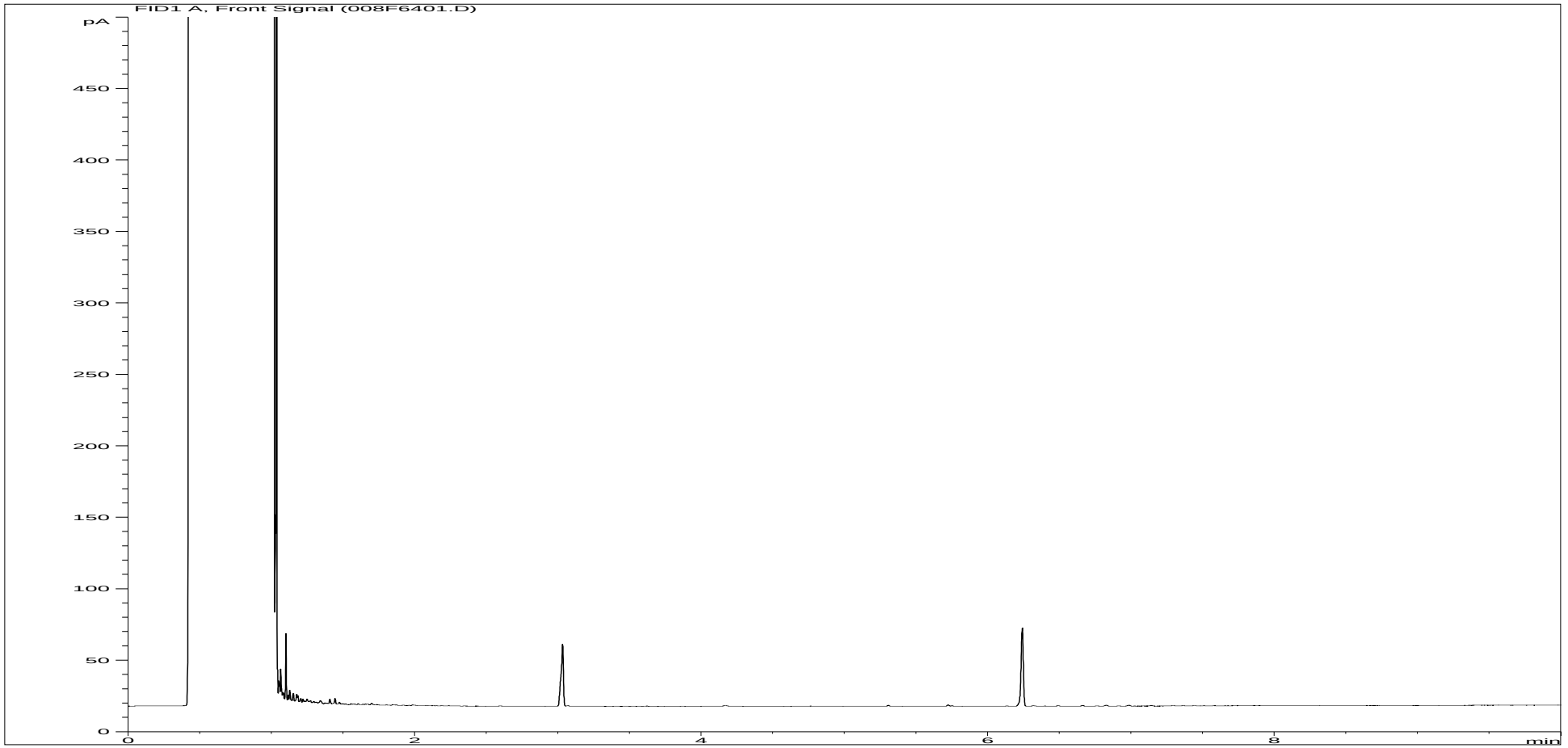
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136676ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	07-Sep-11, 02:06:59		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\057B6301.D		

Where individual results are flagged see report notes for status.

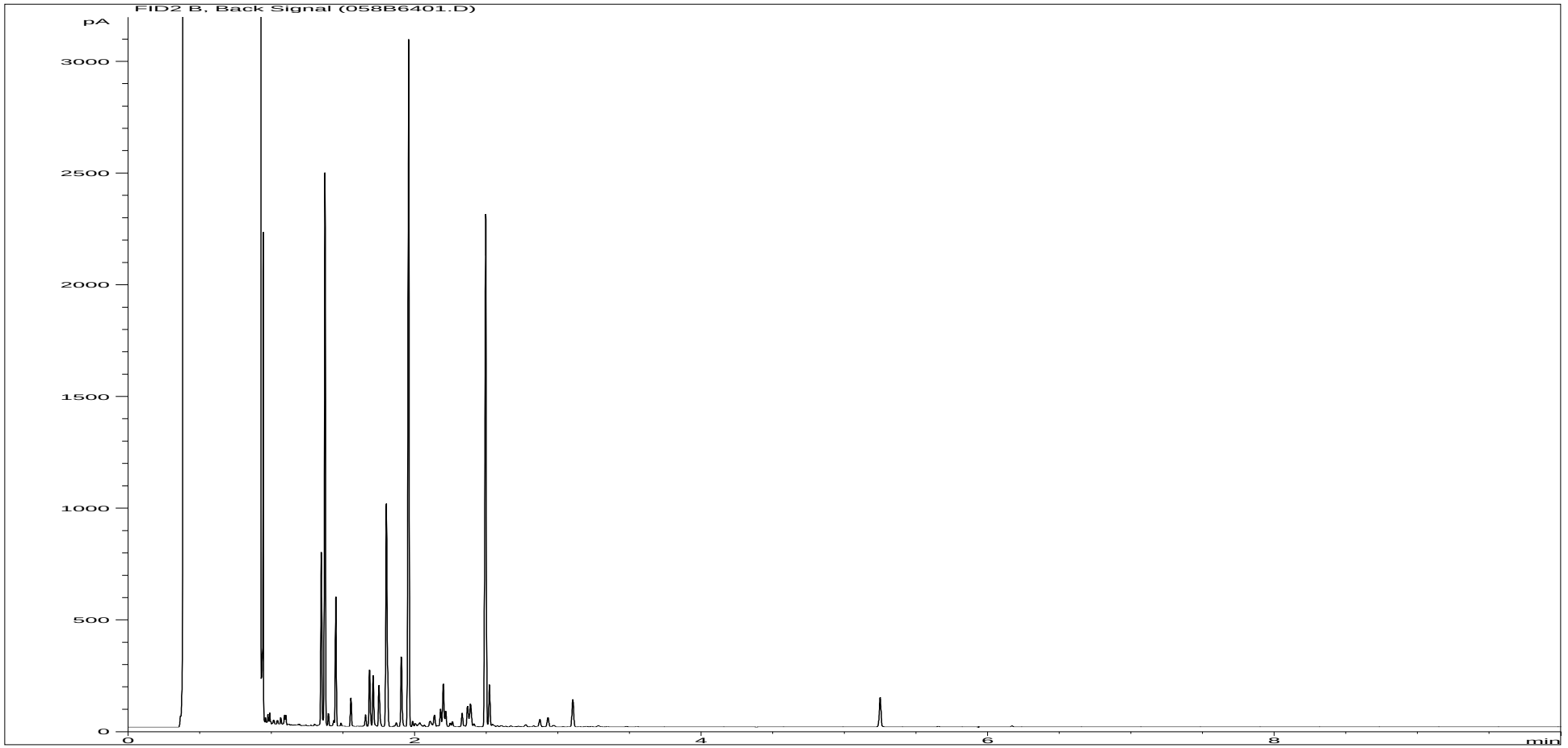
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136677ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	07-Sep-11, 02:24:09		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\008F6401.D		

Where individual results are flagged see report notes for status.

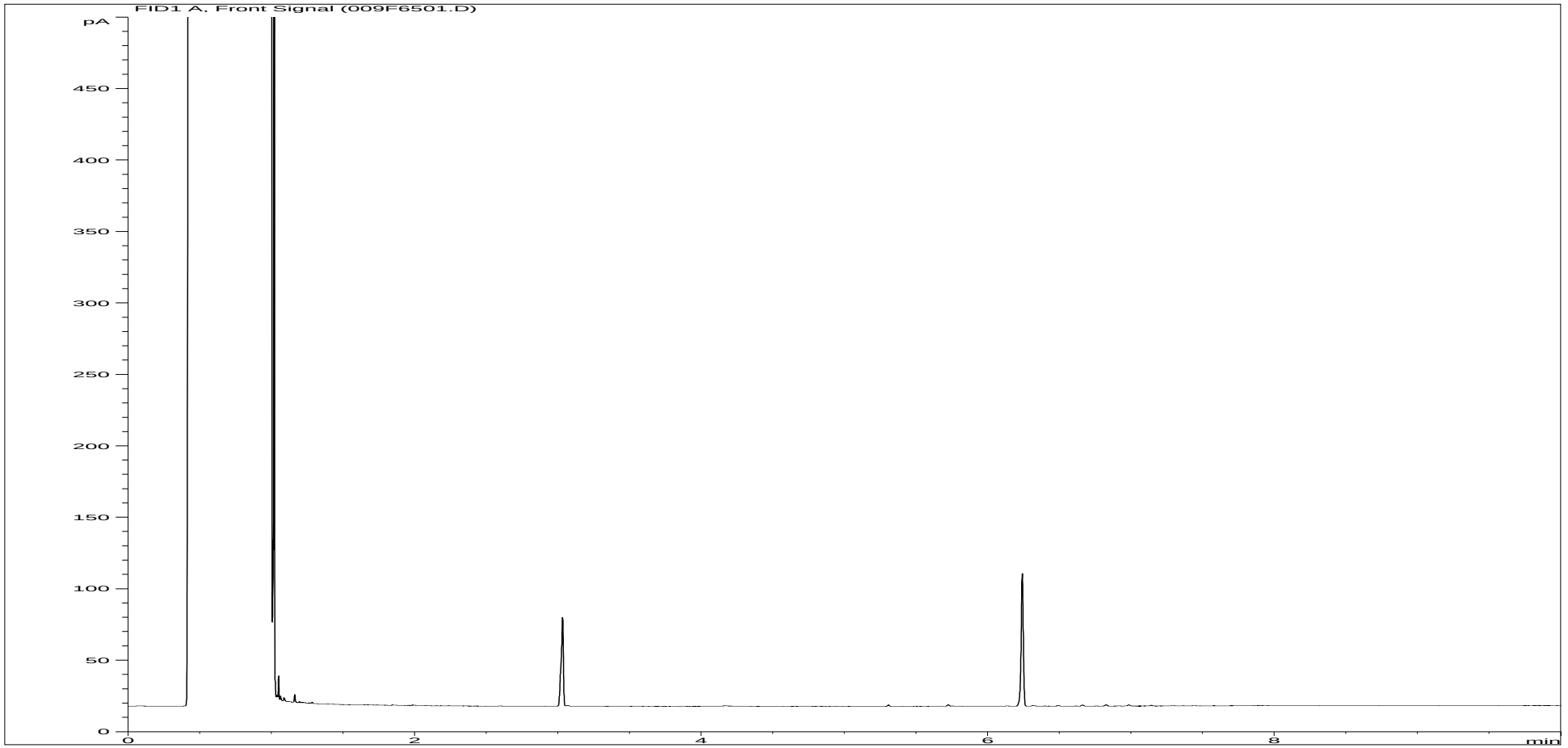
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136677ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	07-Sep-11, 02:24:09		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\058B6401.D		

Where individual results are flagged see report notes for status.

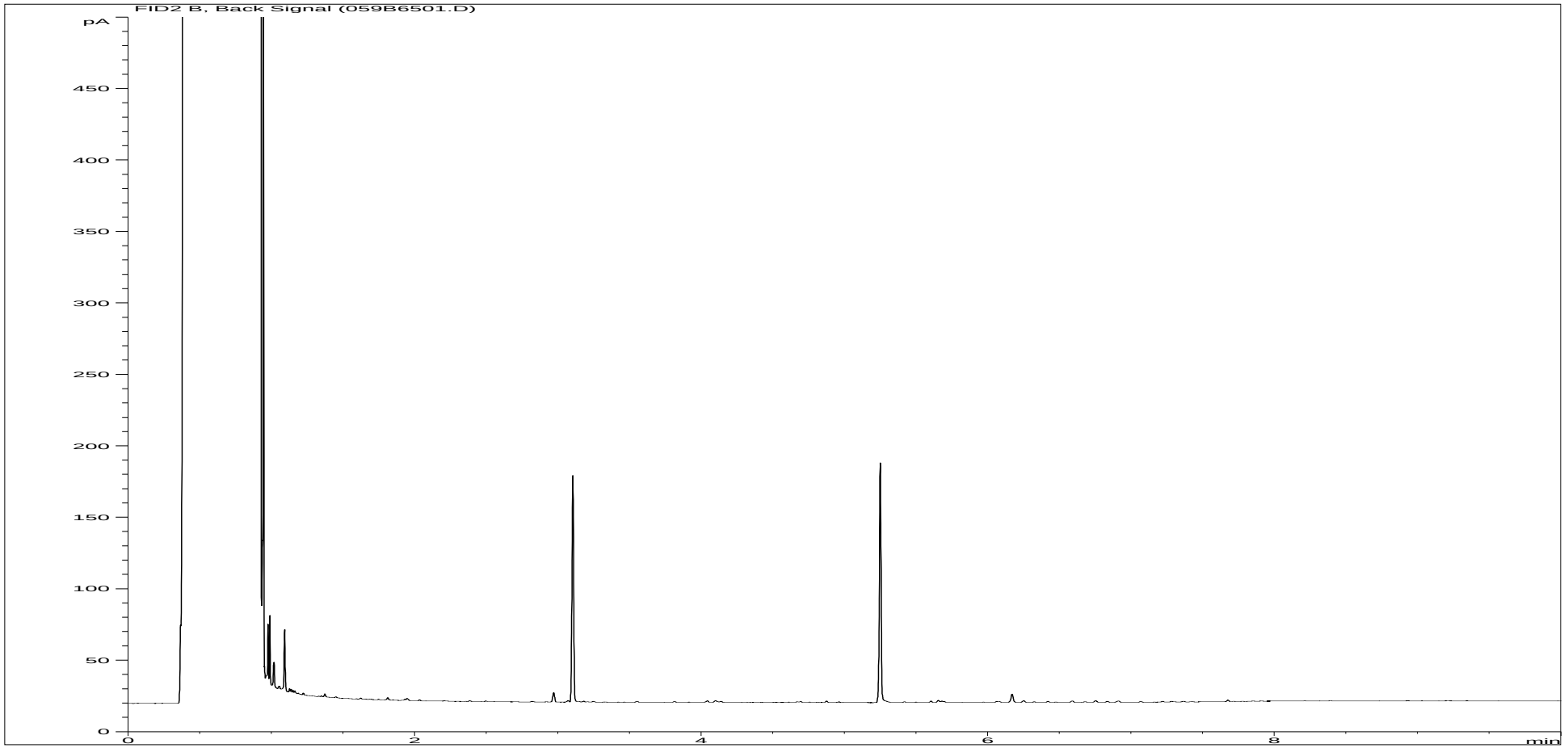
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136678ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15
Acquisition Date/Time:	07-Sep-11, 02:41:27		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\009F6501.D		

Where individual results are flagged see report notes for status.

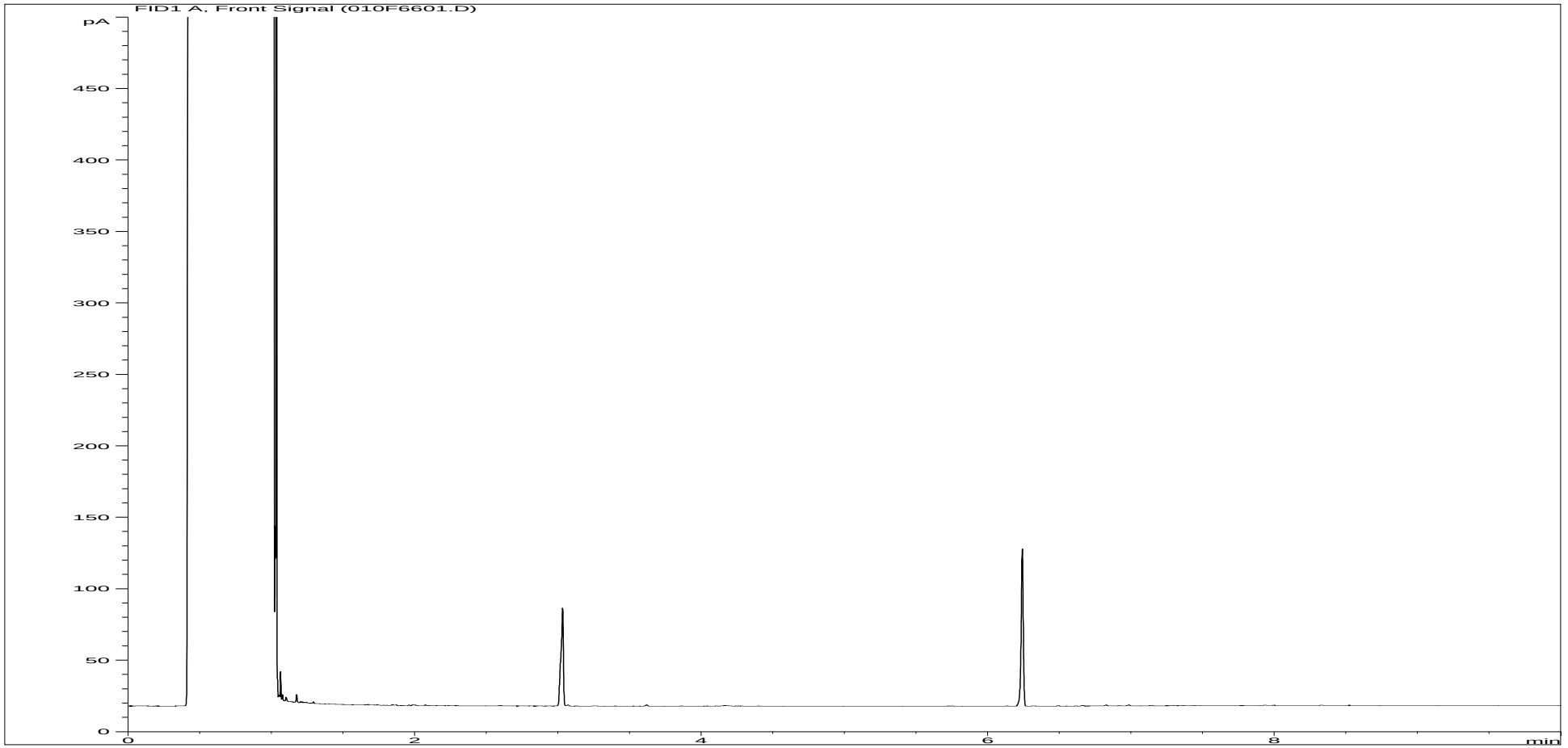
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136678ARO	**Job Number:**	W12_4580
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15
Acquisition Date/Time:	07-Sep-11, 02:41:27		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\059B6501.D		

Where individual results are flagged see report notes for status.

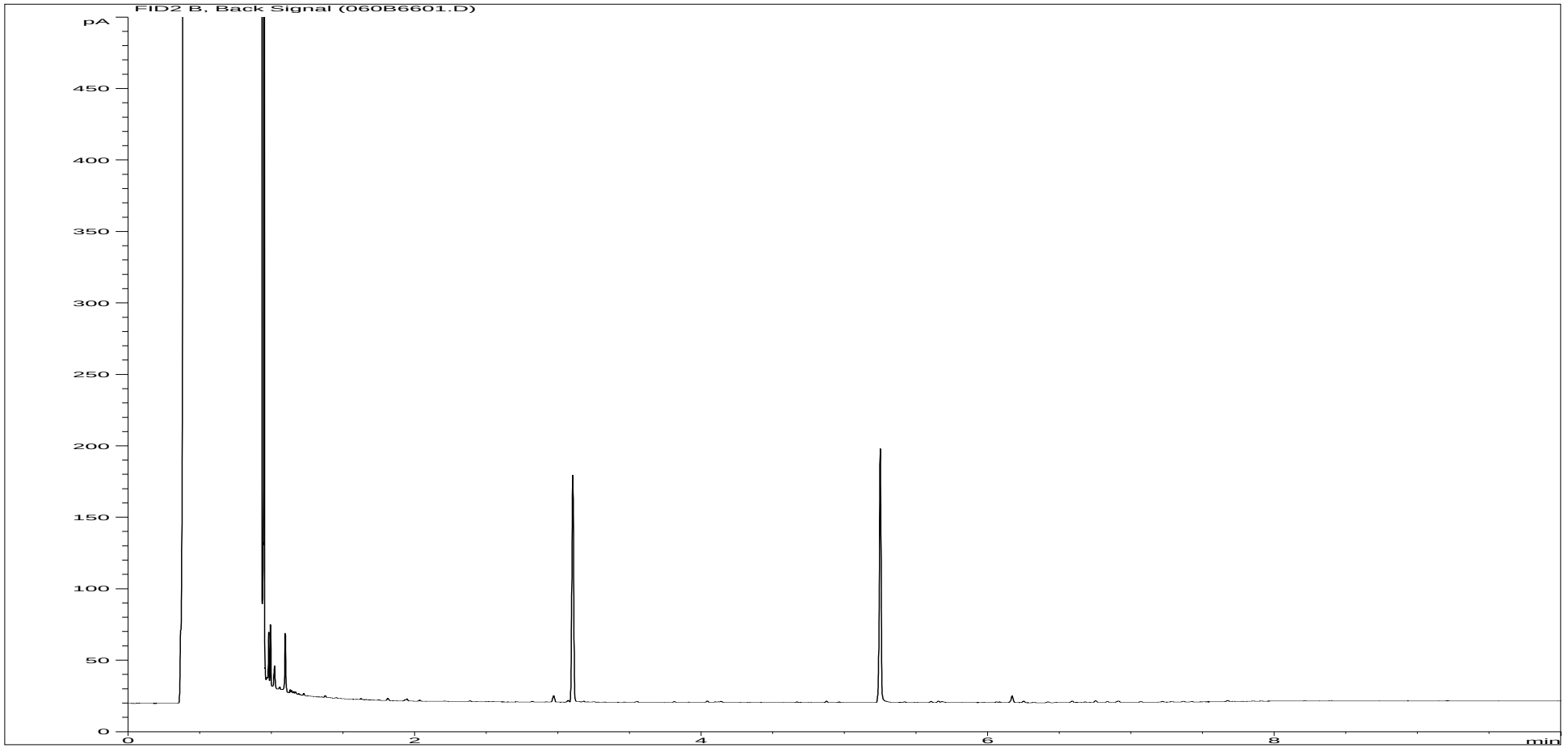
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136679ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15A
Acquisition Date/Time:	07-Sep-11, 02:58:33		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\010F6601.D		

Where individual results are flagged see report notes for status.

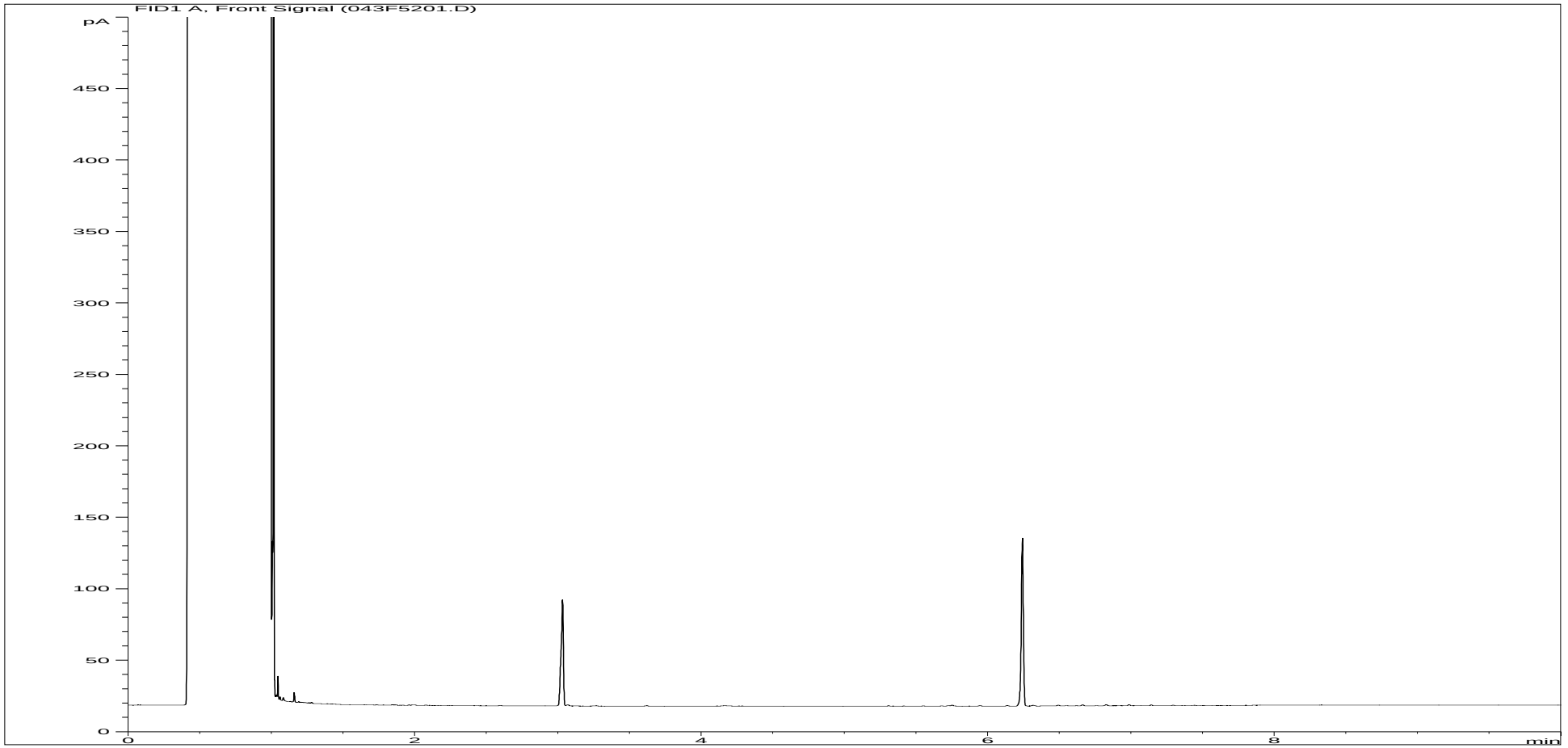
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136679ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15A
Acquisition Date/Time:	07-Sep-11, 02:58:33		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\060B6601.D		

Where individual results are flagged see report notes for status.

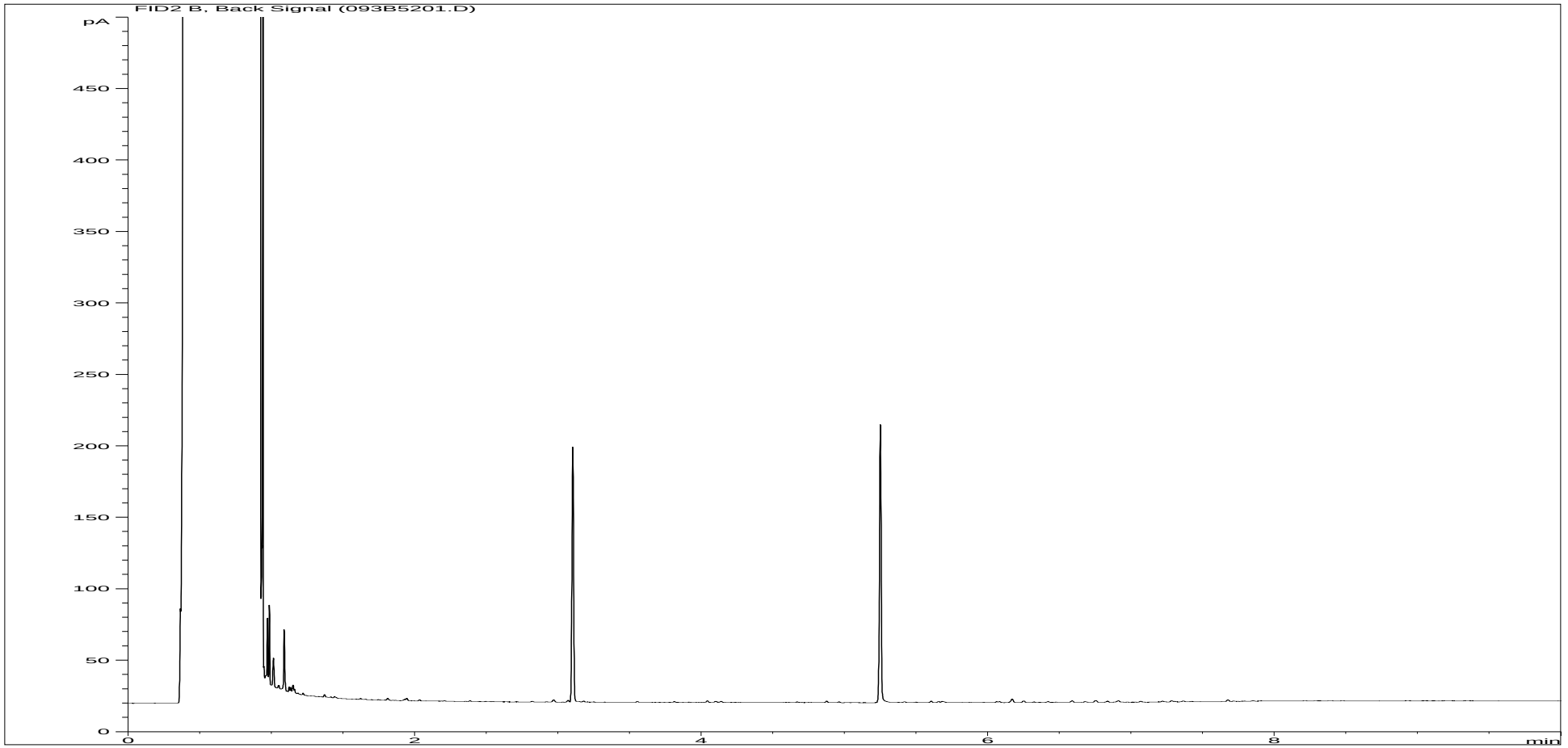
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136680ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank
Acquisition Date/Time:	06-Sep-11, 22:57:31		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\043F5201.D		

Where individual results are flagged see report notes for status.

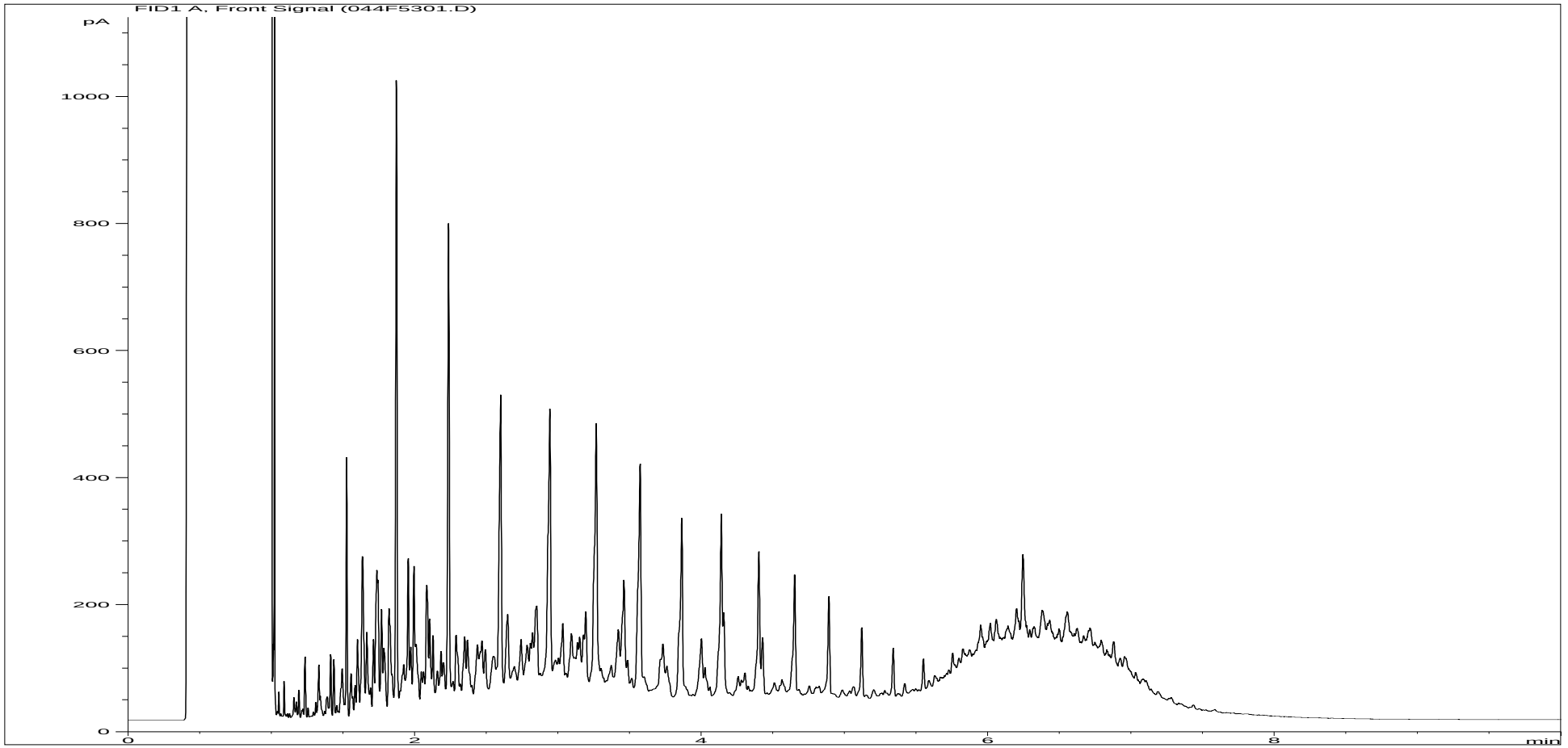
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136680ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank
Acquisition Date/Time:	06-Sep-11, 22:57:31		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\093B5201.D		

Where individual results are flagged see report notes for status.

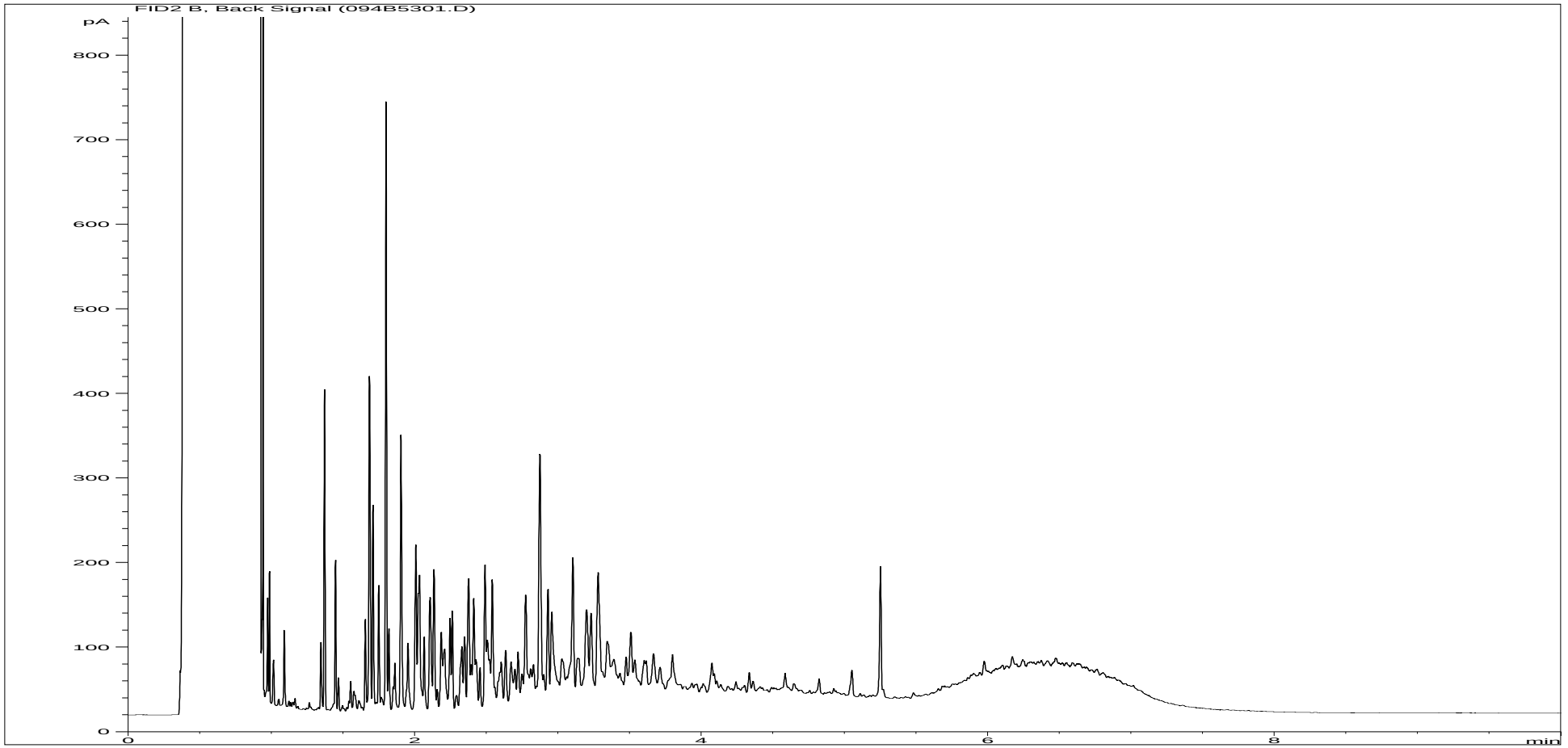
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136681ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank Spike
Acquisition Date/Time:	06-Sep-11, 23:14:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\044F5301.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136681ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank Spike
Acquisition Date/Time:	06-Sep-11, 23:14:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\094B5301.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124580

Customer Worley Parsons Komex
Site Maelor Works
Report No W124580

Consignment No 28810
Date Logged 26-Aug-2011

Report Due 09-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1136675	MW11-13	24/08/11																										
EX/1136676	MW99-107	25/08/11																										
EX/1136677	MW11-4	25/08/11																										
EX/1136678	MW11-15	25/08/11																										
EX/1136679	MW11-15A	25/08/11																										
EX/1136680	Report 124580 Blank	24/08/11																										
EX/1136681	Report 124580 Blank Spike	24/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124580

Customer Worley Parsons Komex
Site Maelor Works
Report No W124580

Consignment No 28810
Date Logged 26-Aug-2011

Report Due 09-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1136675	MW11-13	24/08/11															
EX/1136676	MW99-107	25/08/11															
EX/1136677	MW11-4	25/08/11															
EX/1136678	MW11-15	25/08/11															
EX/1136679	MW11-15A	25/08/11															
EX/1136680	Report 124580 Blank	24/08/11															
EX/1136681	Report 124580 Blank Spike	24/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124670 (Ver. 1)
Your Ref: 305001-50065-29

September 13, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124670 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 7 samples described in this report were logged for analysis by Scientifics on 31-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 13-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
Table of TPH (Si) banding (0.01) (Page 12)
GC-FID Chromatograms (Pages 13 to 26)
Analytical and Deviating Sample Overview (Pages 27 to 28)
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On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 13-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

		Units :	pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
		Method Codes :	WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
		Method Reporting Limits :		100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
		UKAS Accredited :	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137072	MW99-202	28-Aug-11	2.9	4740	753	19	3210	468	195	28	<1	0.158	0.187	0.0029	Req	0.329	<0.001	4.052
1137073	MW11-16	28-Aug-11	6.7	1810	56	20	229	323	32	26	4	0.009	0.004	<0.0001	Req	0.002	<0.001	0.009
1137074	MW99-104	28-Aug-11	6.9	1660	305	21	313	181	24	23	7	0.003	0.003	<0.0001	Req	<0.001	<0.001	0.006
1137075	MW11-2	28-Aug-11	7.4	3670	382	124	1630	509	56	315	35	0.007	0.002	<0.0001	Req	0.007	<0.001	0.006
1137076	MW99-106	28-Aug-11	7.4	2360	56	39	242	147	24	13	5	0.002	0.004	<0.0001	Req	<0.001	<0.001	0.004
1137123	QC Blank		7.07	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137124	Blank Spike (% Recovery)				101	103	99	97	98	100	100	100	100	100	Req	99	97	99

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137072	MW99-202	28-Aug-11	117	215	332	108	<0.001	<0.0001	<0.001	13.0	<0.2	<0.2	<0.02	<0.02	<0.05	11	<0.1	Req
1137073	MW11-16	28-Aug-11	0.21	3.50	3.71	0.22	0.002	<0.0001	0.001	2.0	<0.2	<0.2	0.02	0.26	<0.05	25	<0.1	Req
1137074	MW99-104	28-Aug-11	9.0	35.2	44.2	0.18	0.002	<0.0001	0.001	63.9	<0.2	8.1	0.05	0.59	<0.05	16	<0.1	Req
1137075	MW11-2	28-Aug-11	4.15	3.21	7.36	2.05	0.012	<0.0001	0.002	9.9	<0.2	1.5	0.63	5.63	<0.05	54	<0.1	Req
1137076	MW99-106	28-Aug-11	0.44	4.63	5.07	0.08	0.005	<0.0001	0.002	161	<0.2	<0.2	0.05	0.31	0.37	23	0.31	Req
1137123	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	Req
1137124	Blank Spike (% Recovery)		99	99	99	96	100	102	100	98	98	99	101	104	109	98	103	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137072	MW99-202	28-Aug-11	1973	17.9	<0.02	8.6	15	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137073	MW11-16	28-Aug-11	939	37.2	0.24	6.2	4	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137074	MW99-104	28-Aug-11	551	6.43	0.54	3.7	67	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137075	MW11-2	28-Aug-11	1503	2.83	5.00	5.2	16	<1	<1	<1	<2	0.0091	<0.0005	<0.0005	<0.1	<0.0005		
1137076	MW99-106	28-Aug-11	466	8.50	0.26	1.7	156	<1	<1	<1	4	0.1809	0.1578	0.0308	<0.1	0.0366		
1137123	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137124	Blank Spike (% Recovery)			98			96	84	81	82	249	85	98	104	109	105		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-202	**Job Number:**	W12_4670
LIMS ID Number:	EX1137072	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.56	0.059	96
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.79	0.012	73
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.211	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	102
Phenanthrene-d10	115
Chrysene-d12	114
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-16	**Job Number:**	W12_4670
LIMS ID Number:	EX1137073	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	101
Phenanthrene-d10	112
Chrysene-d12	108
Perylene-d12	106

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	86
Terphenyl-d14	102

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-104	**Job Number:**	W12_4670
LIMS ID Number:	EX1137074	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.031	90
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	5.01	0.014	93
Phenanthrene	85-01-8	5.88	0.018	84
Anthracene	120-12-7	5.94	0.014	M
Fluoranthene	206-44-0	7.26	0.050	78
Pyrene	129-00-0	7.55	0.038	69
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.265	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	104
Phenanthrene-d10	117
Chrysene-d12	114
Perylene-d12	112

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	102

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-2	**Job Number:**	W12_4670
LIMS ID Number:	EX1137075	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.49	0.021	82
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.048	97
Anthracene	120-12-7	5.94	0.048	98
Fluoranthene	206-44-0	7.26	0.117	98
Pyrene	129-00-0	7.55	0.100	74
Benzo[a]anthracene	56-55-3	9.25	0.081	88
Chrysene	218-01-9	9.30	0.076	69
Benzo[b]fluoranthene	205-99-2	10.79	0.158	99
Benzo[k]fluoranthene	207-08-9	10.83	0.050	99
Benzo[a]pyrene	50-32-8	11.22	0.128	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	0.074	73
Dibenzo[a,h]anthracene	53-70-3	12.64	0.014	55
Benzo[g,h,i]perylene	191-24-2	12.93	0.065	73
Total (USEPA16) PAHs	-	-	< 1.010	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	107
Phenanthrene-d10	124
Chrysene-d12	134
Perylene-d12	144

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	98

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-106	**Job Number:**	W12_4670
LIMS ID Number:	EX1137076	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	1.920	91
Acenaphthylene	208-96-8	4.49	4.930	99
Acenaphthene	83-32-9	4.61	8.830	99
Fluorene	86-73-7	5.01	0.143	36
Phenanthrene	85-01-8	5.88	0.059	93
Anthracene	120-12-7	5.94	0.012	94
Fluoranthene	206-44-0	7.26	0.019	65
Pyrene	129-00-0	7.55	0.015	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 16.008	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	116
Phenanthrene-d10	133
Chrysene-d12	134
Perylene-d12	136

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	97

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124670 Blank	**Job Number:**	W12_4670
LIMS ID Number:	EX1137123	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	121
Chrysene-d12	122
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	84
Terphenyl-d14	104

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124670 Blank Spike	**Job Number:**	W12_4670
LIMS ID Number:	EX1137124	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	100	94
Acenaphthylene	208-96-8	4.49	96	98
Acenaphthene	83-32-9	4.61	96	98
Fluorene	86-73-7	5.01	102	97
Phenanthrene	85-01-8	5.89	100	99
Anthracene	120-12-7	5.94	94	98
Fluoranthene	206-44-0	7.26	91	79
Pyrene	129-00-0	7.56	87	79
Benzo[a]anthracene	56-55-3	9.26	115	96
Chrysene	218-01-9	9.31	108	99
Benzo[b]fluoranthene	205-99-2	10.79	108	98
Benzo[k]fluoranthene	207-08-9	10.83	101	99
Benzo[a]pyrene	50-32-8	11.22	99	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	81	88
Dibenzo[a,h]anthracene	53-70-3	12.65	79	86
Benzo[g,h,i]perylene	191-24-2	12.93	90	92
Total (USEPA16) PAHs	-	-	1546	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	100
Phenanthrene-d10	112
Chrysene-d12	107
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4670
QC Batch Number: 110801
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\091B5501.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

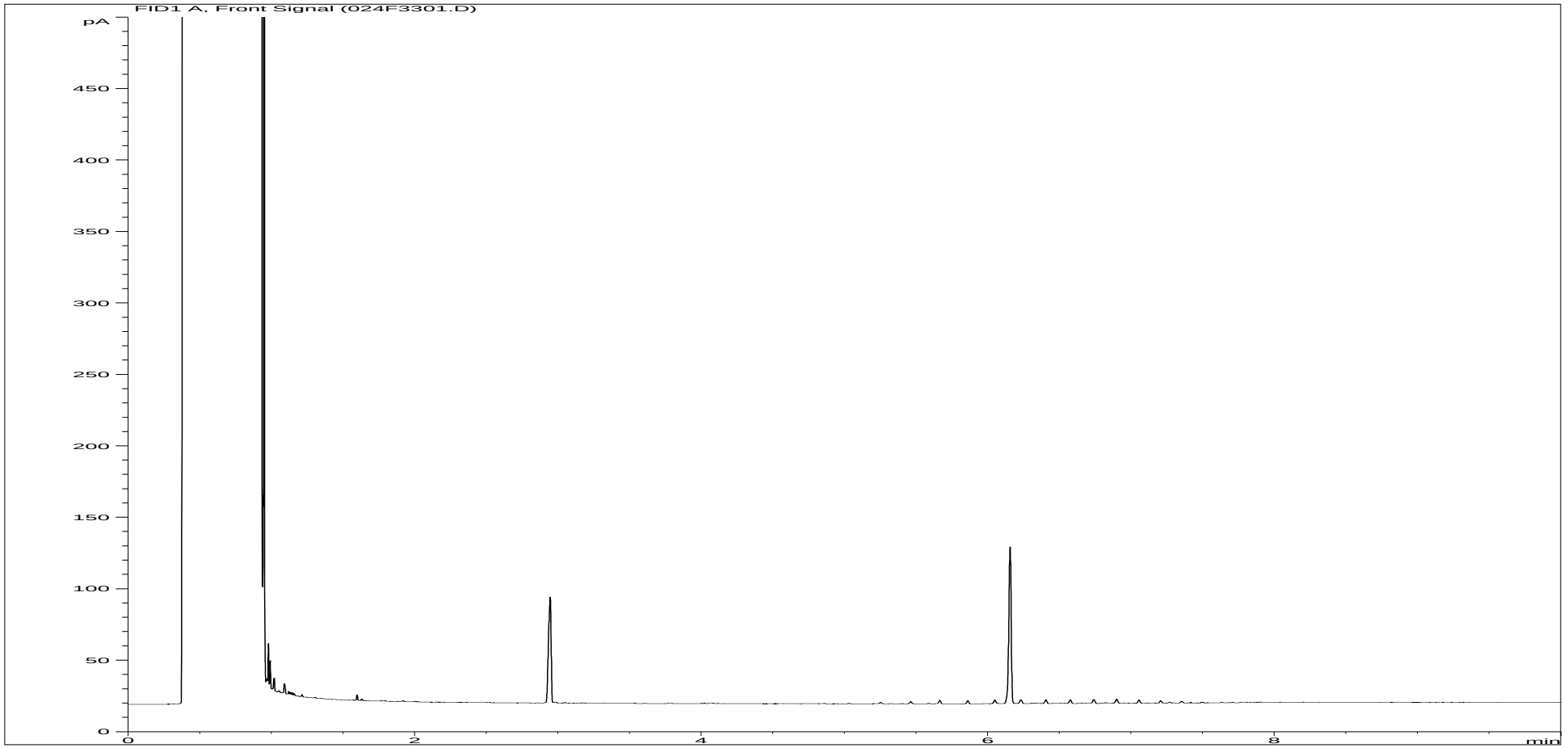
Matrix: Water
Date Booked ir 31-Aug-11
Date Extracted 07-Sep-11
Date Analysed:09-Sep-11, 01:51:49

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137072	MW99-202	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.014	<0.01	0.019	0.028
EX1137073	MW11-16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137074	MW99-104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137075	MW11-2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01
EX1137076	MW99-106	<0.01	0.037	<0.01	0.202	<0.01	0.073	<0.01	0.013	<0.01	0.012	<0.01	0.339
EX1137123	Report 124670 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137124	Report 124670 Blank Spike	0.601	0.194	0.96	0.324	1.67	0.573	0.96	0.293	2.56	0.688	6.8	2.1

Where individual results are flagged see report notes for status.

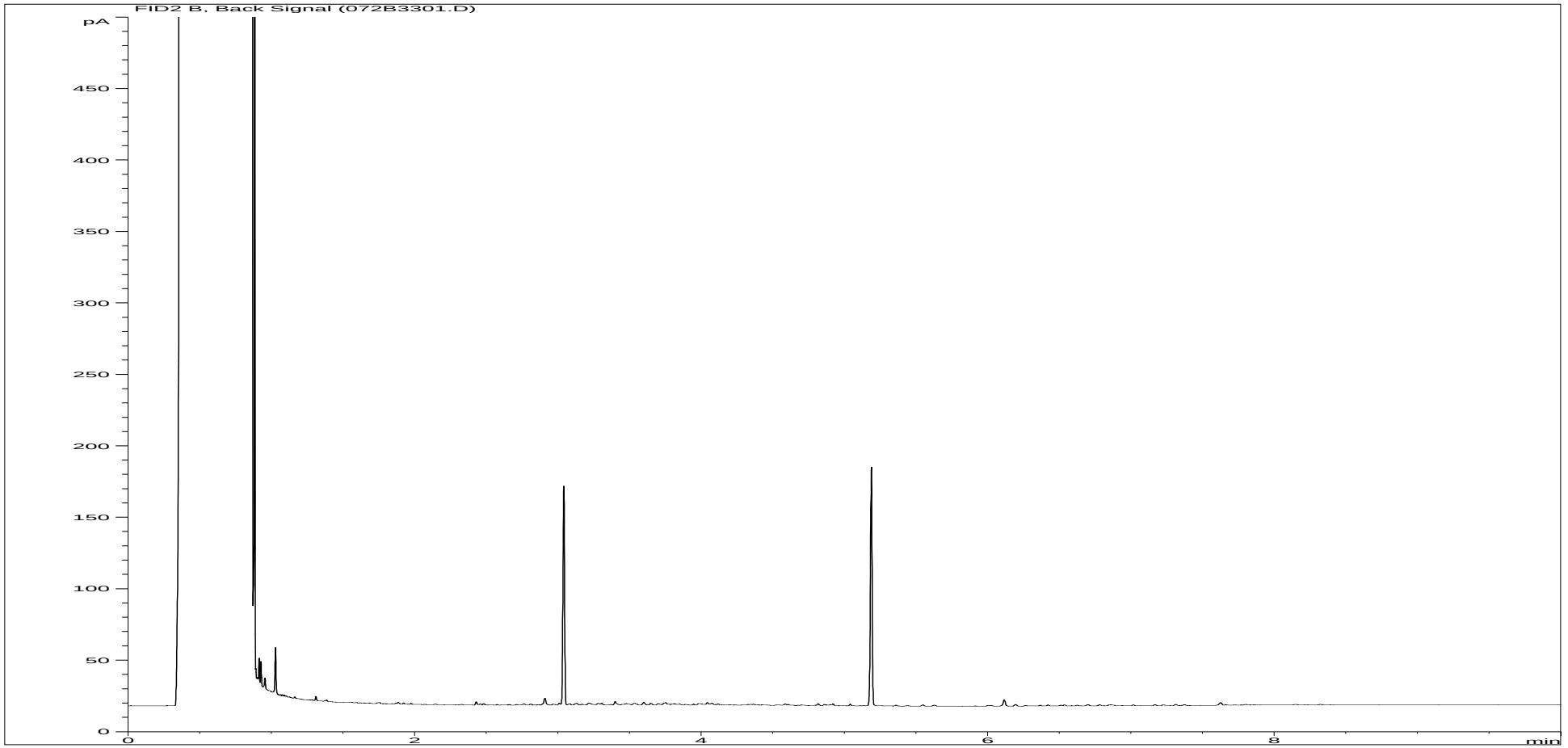
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137072ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	06-Sep-11, 22:44:14		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\024F3301.D		

Where individual results are flagged see report notes for status.

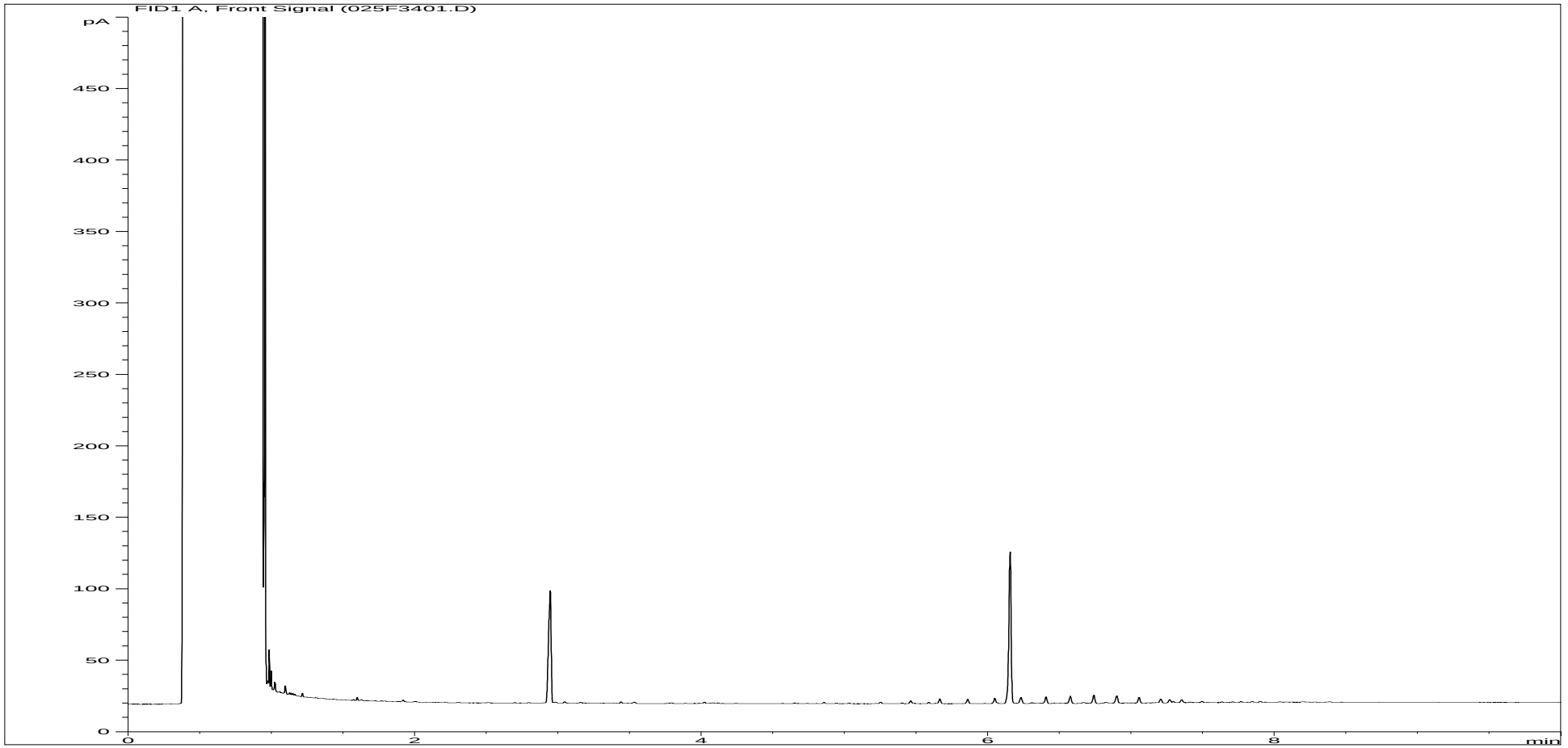
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137072ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	06-Sep-11, 22:44:14		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\072B3301.D		

Where individual results are flagged see report notes for status.

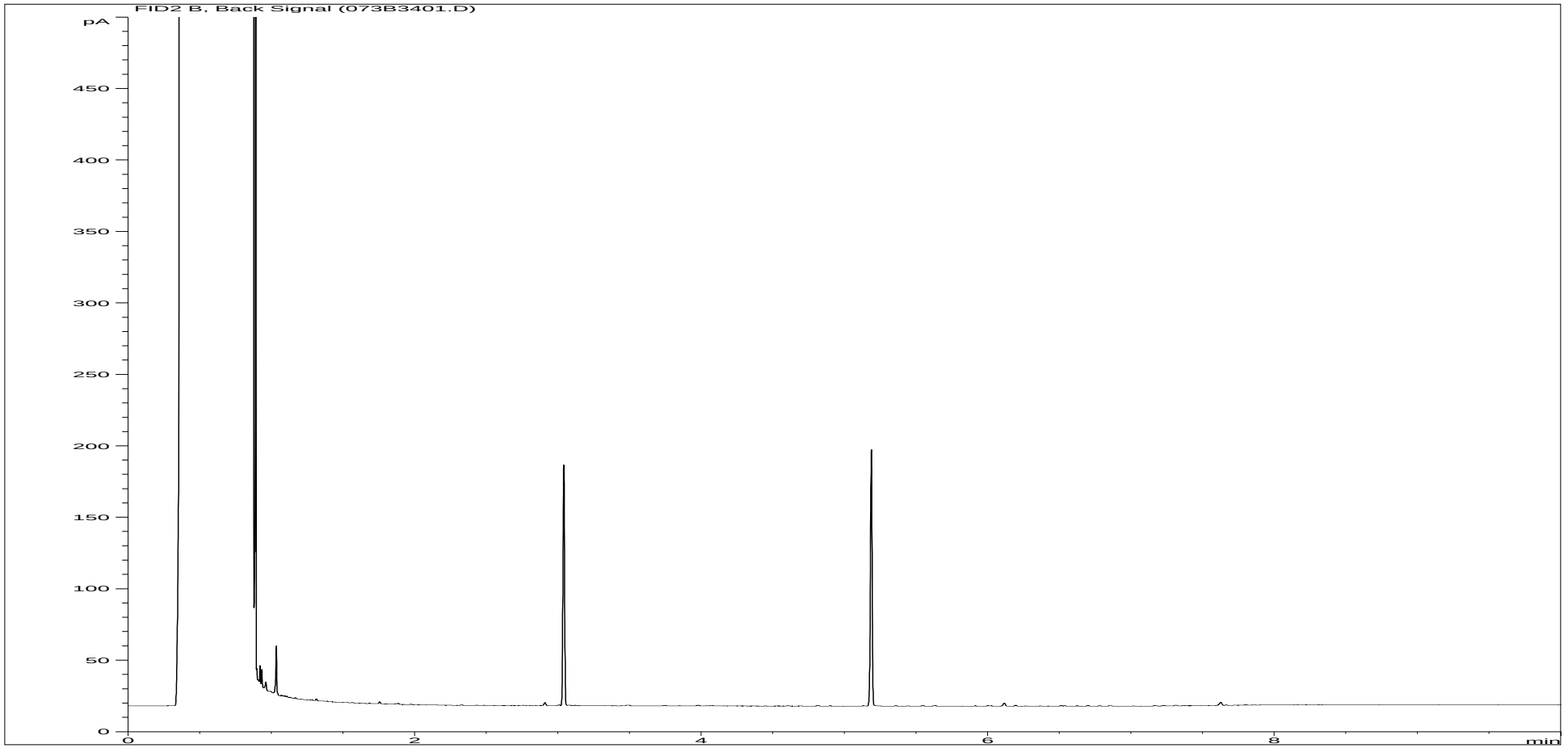
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137073ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	06-Sep-11, 23:01:25		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\025F3401.D		

Where individual results are flagged see report notes for status.

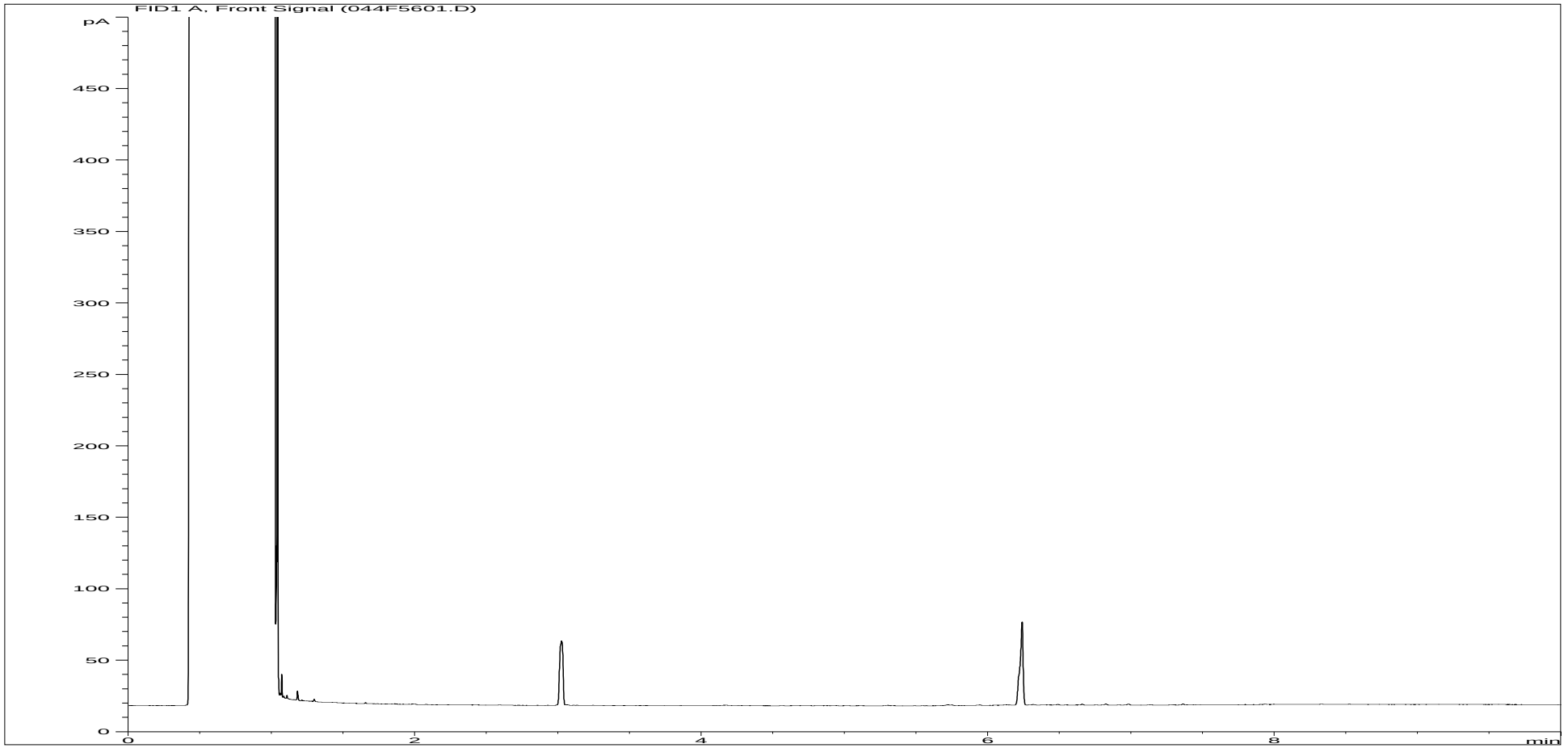
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137073ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	06-Sep-11, 23:01:25		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\073B3401.D		

Where individual results are flagged see report notes for status.

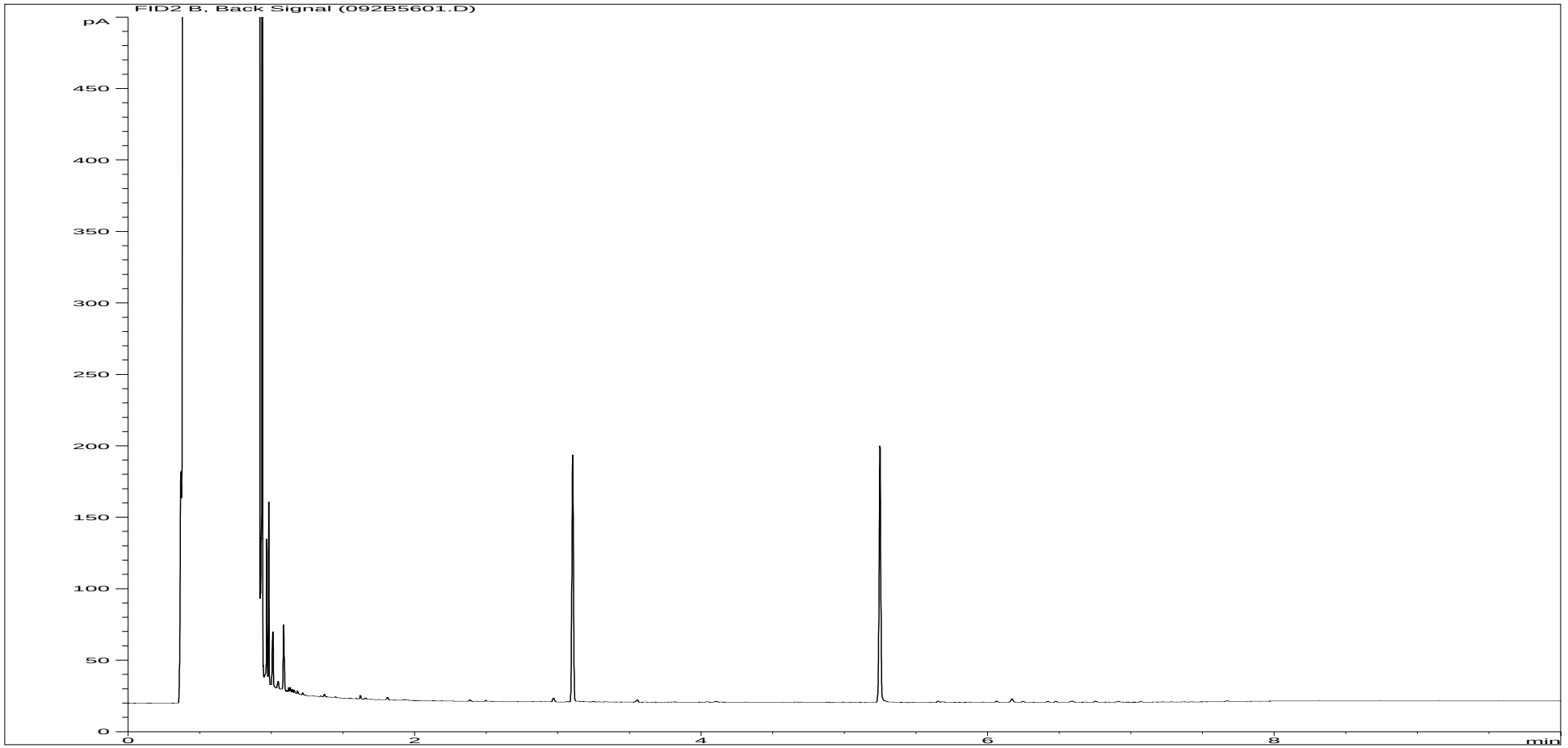
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137074ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	09-Sep-11, 02:09:12		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\044F5601.D		

Where individual results are flagged see report notes for status.

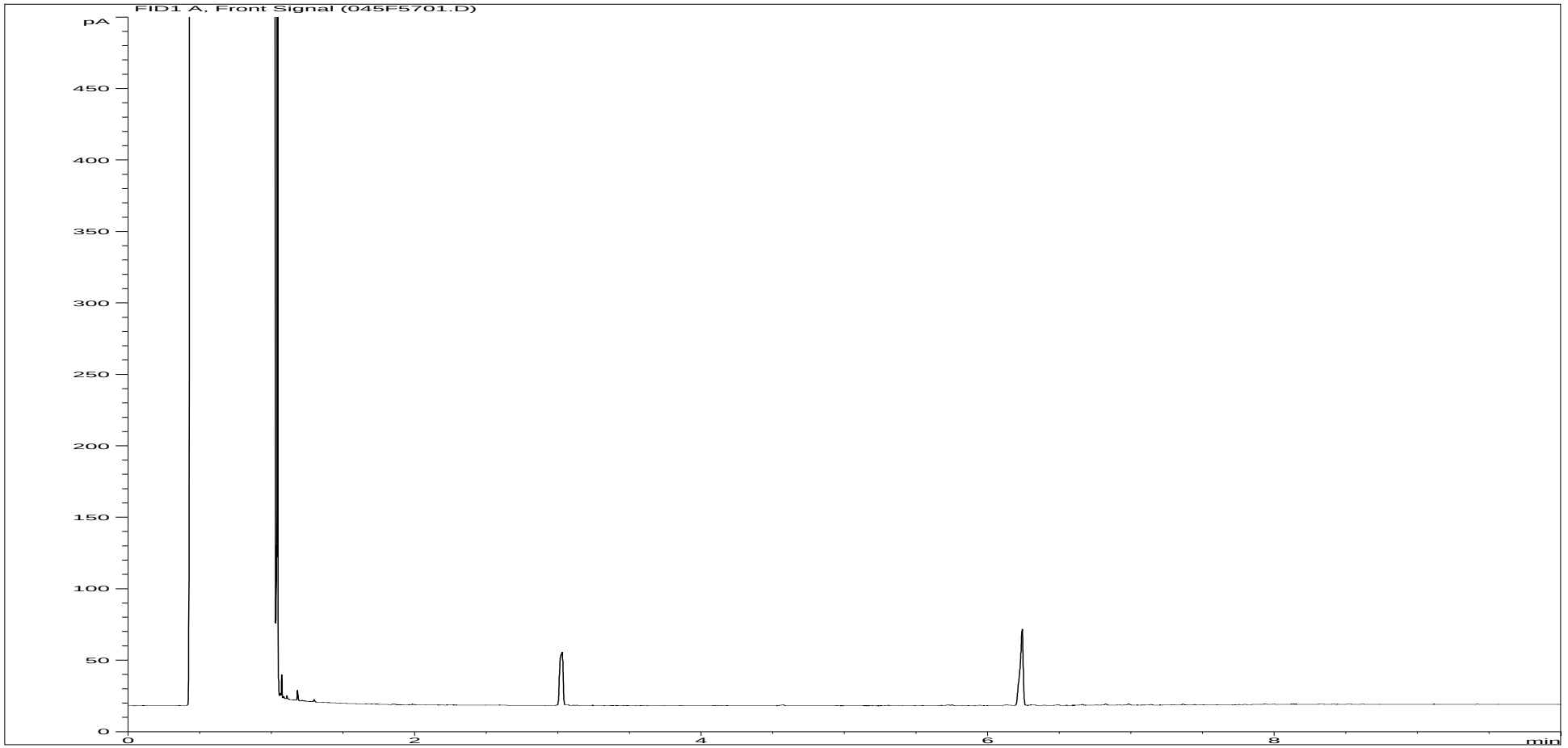
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137074ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	09-Sep-11, 02:09:12		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\092B5601.D		

Where individual results are flagged see report notes for status.

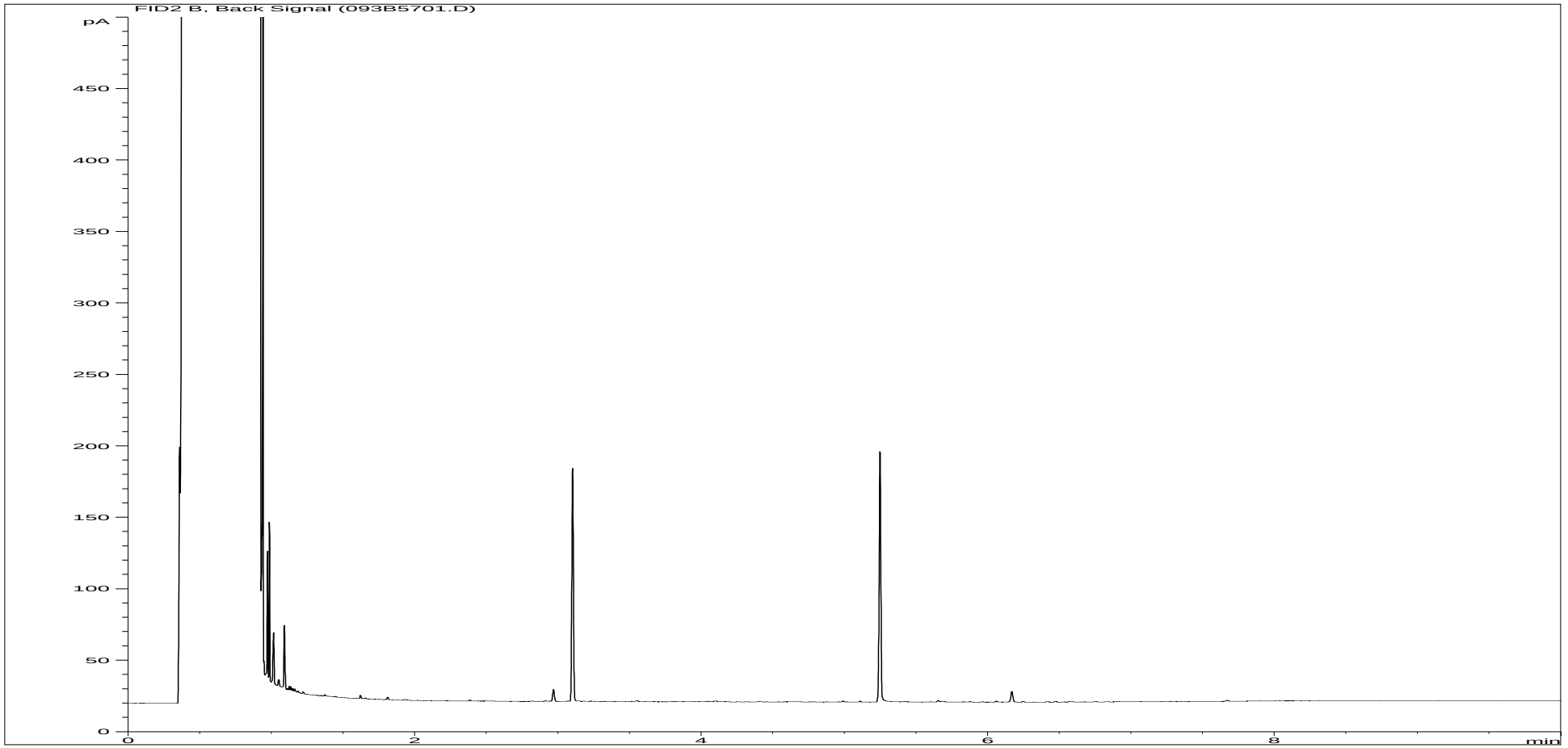
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137075ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Sep-11, 02:26:24		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\045F5701.D		

Where individual results are flagged see report notes for status.

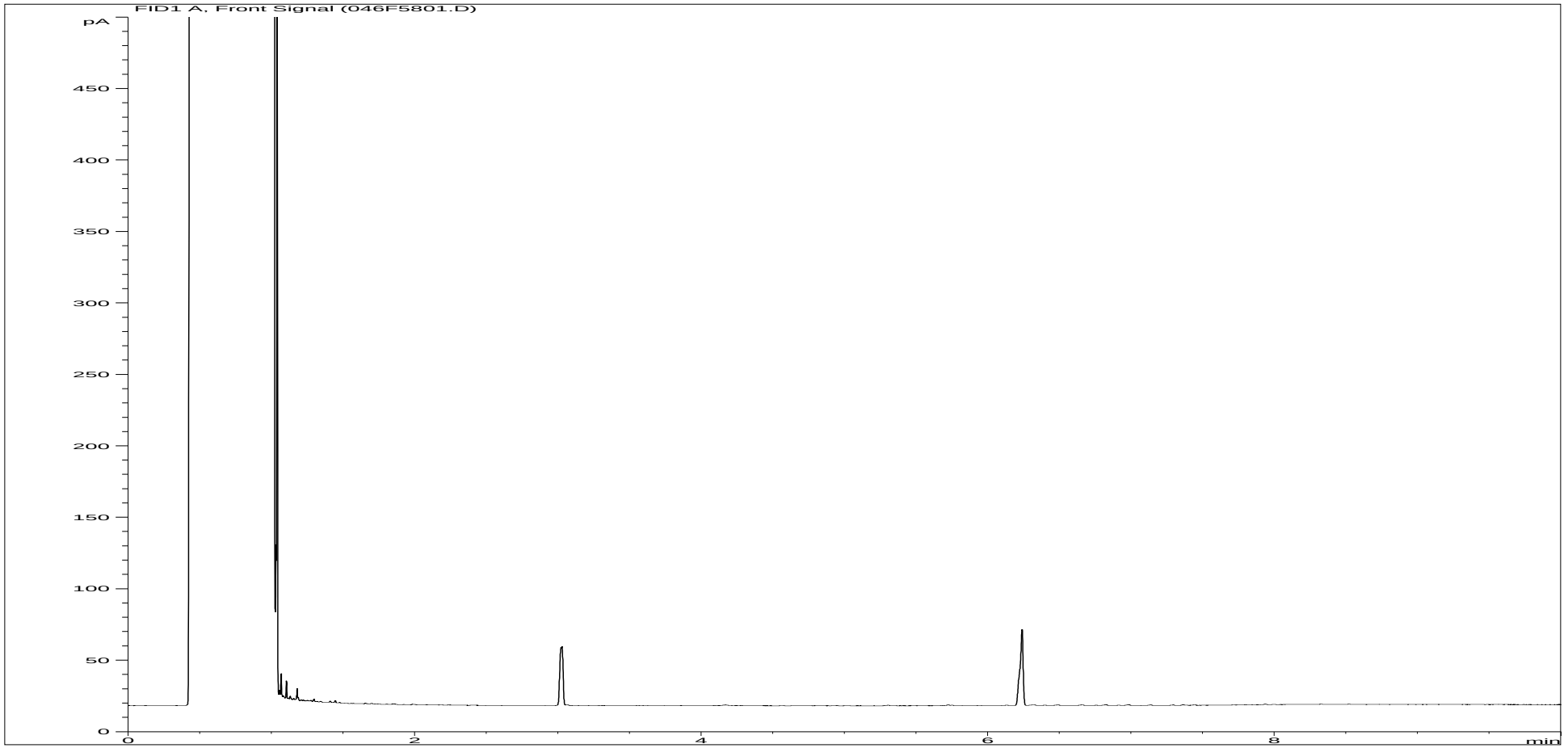
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137075ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Sep-11, 02:26:24		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\093B5701.D		

Where individual results are flagged see report notes for status.

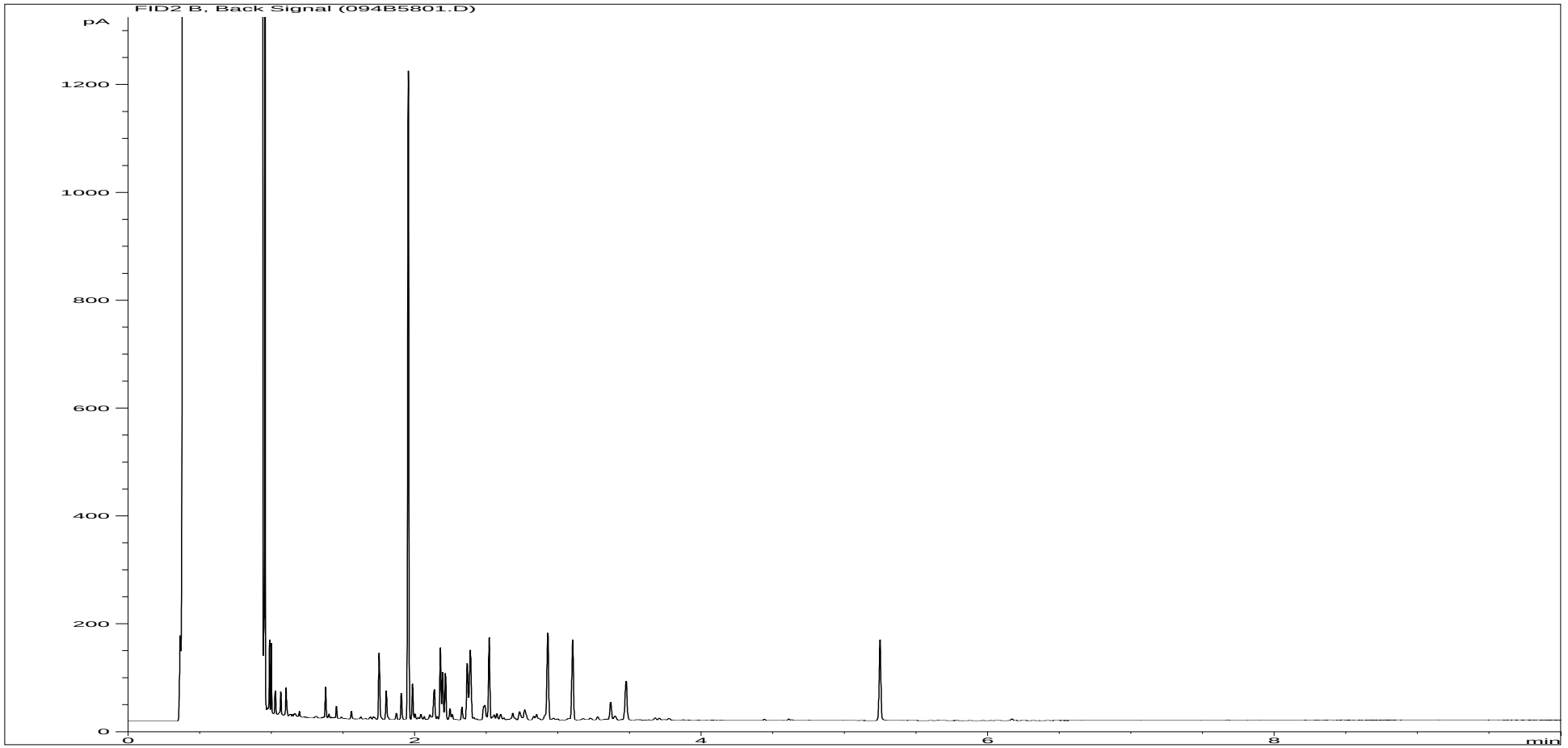
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137076ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	09-Sep-11, 02:43:34		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\046F5801.D		

Where individual results are flagged see report notes for status.

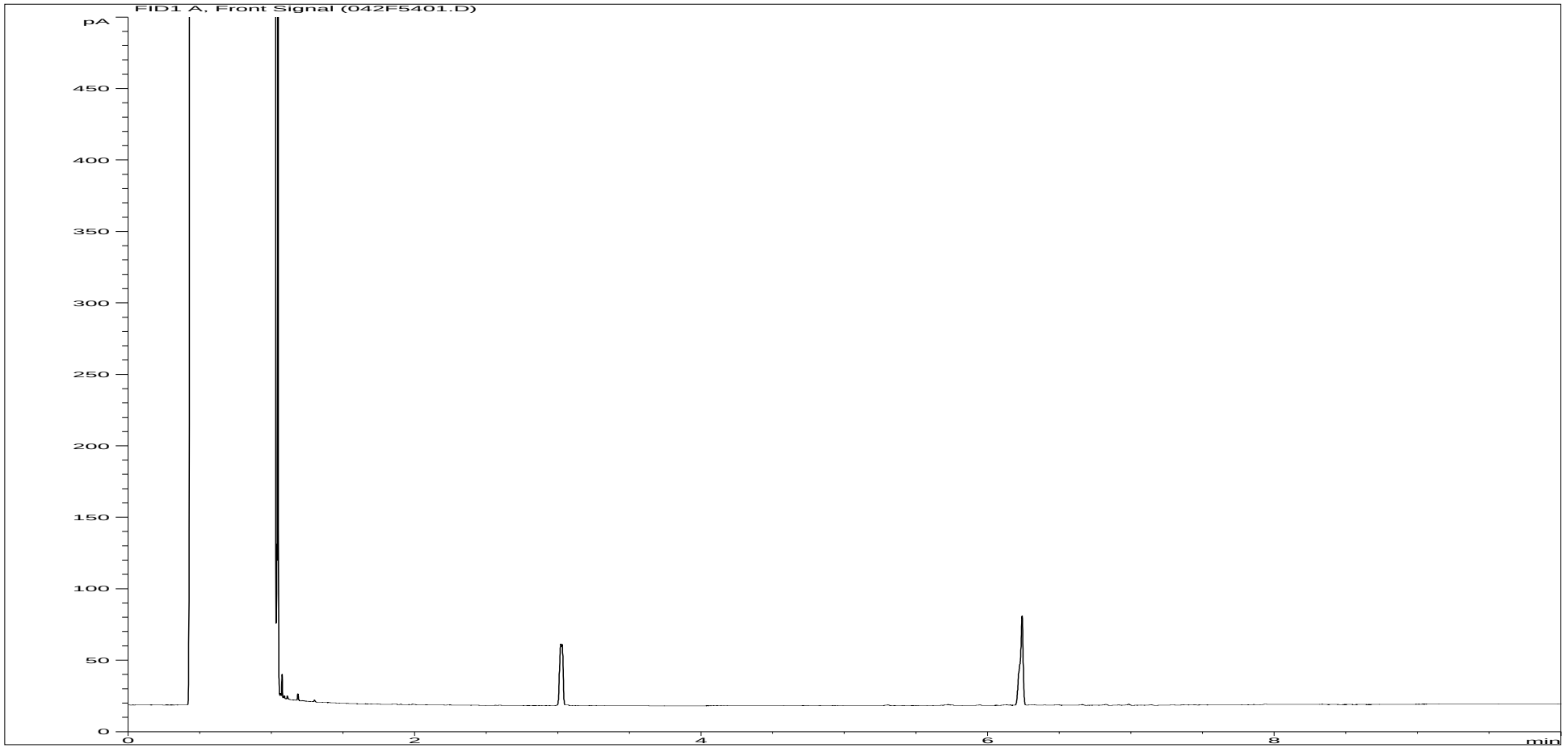
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137076ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	09-Sep-11, 02:43:34		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\094B5801.D		

Where individual results are flagged see report notes for status.

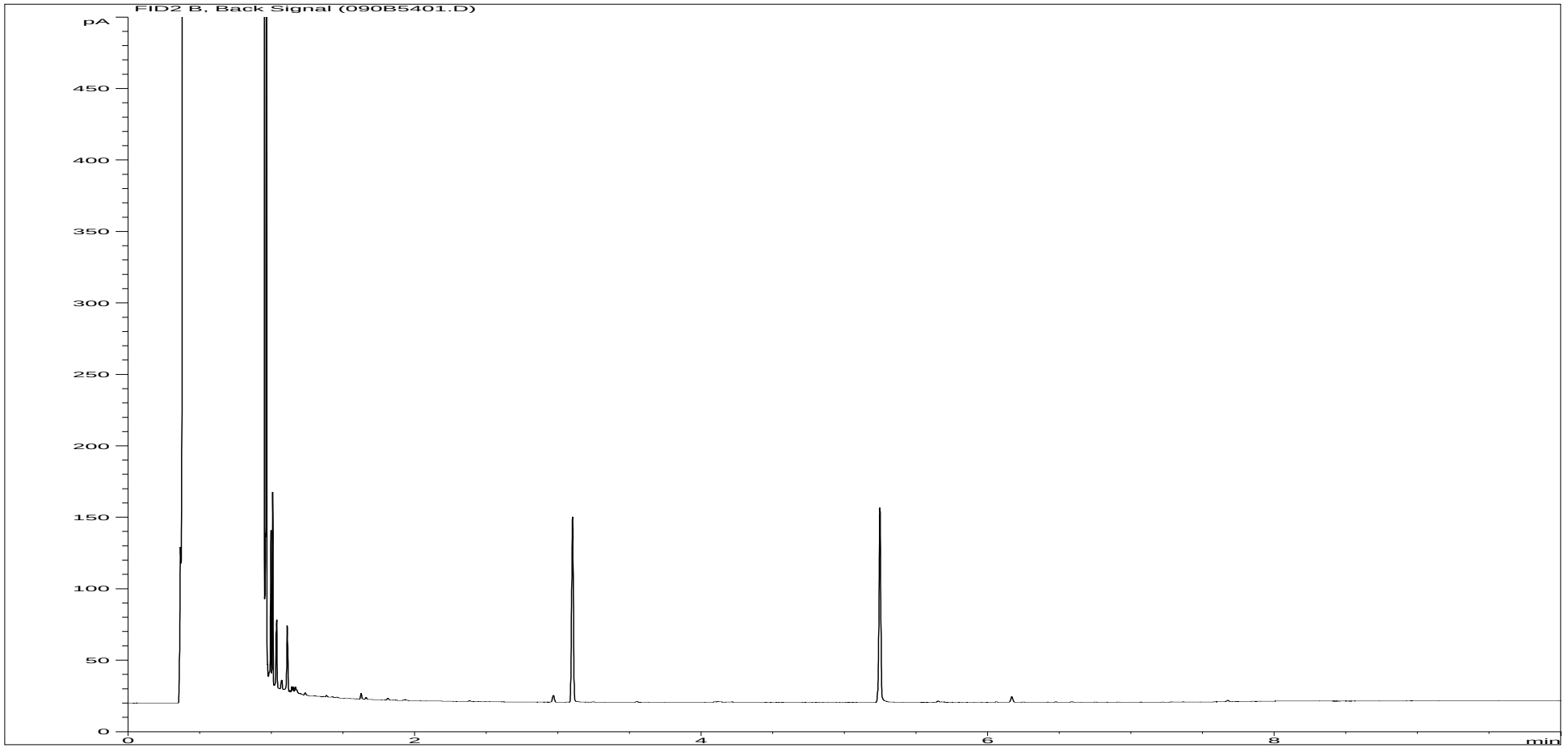
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137123ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank
Acquisition Date/Time:	09-Sep-11, 01:34:36		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\042F5401.D		

Where individual results are flagged see report notes for status.

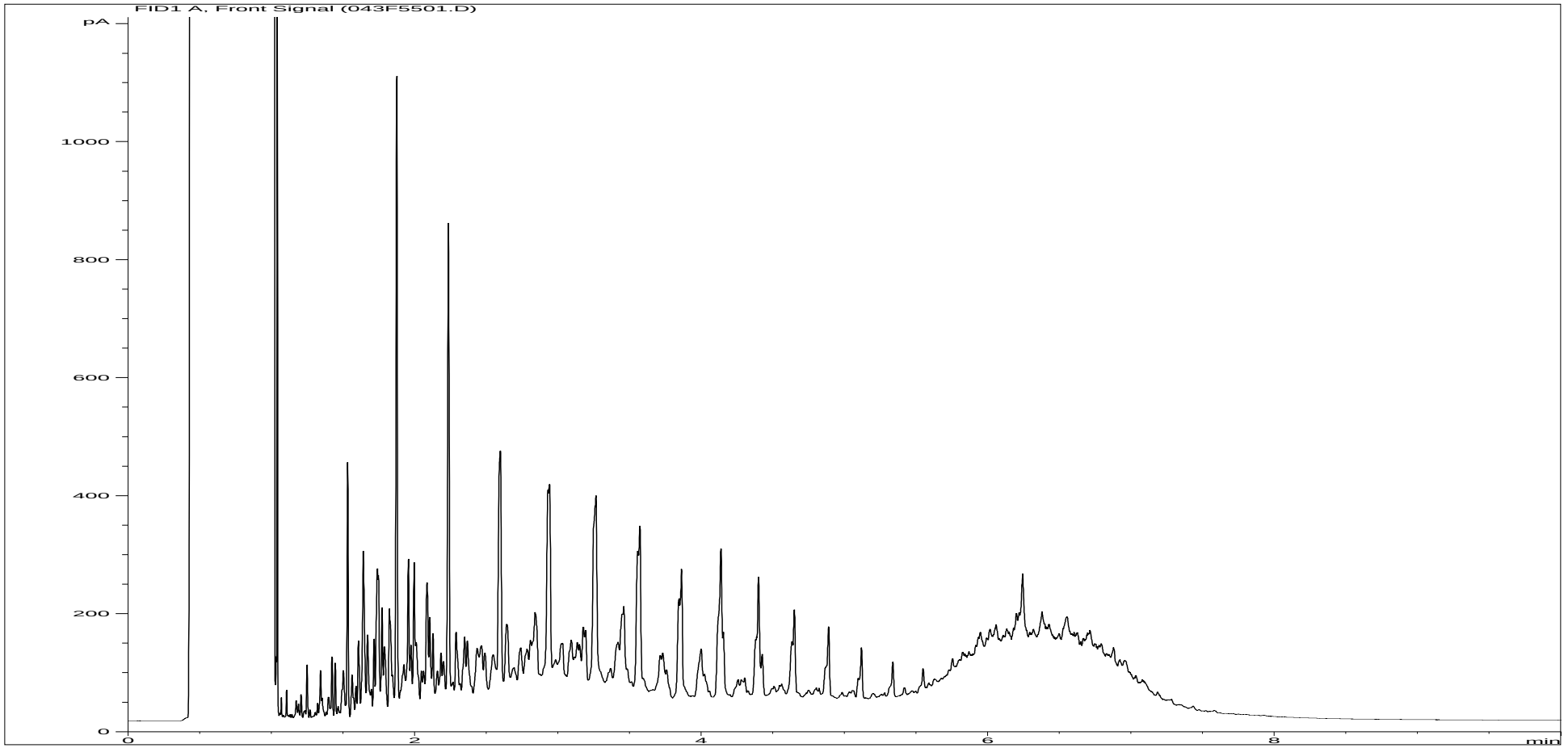
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137123ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank
Acquisition Date/Time:	09-Sep-11, 01:34:36		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\090B5401.D		

Where individual results are flagged see report notes for status.

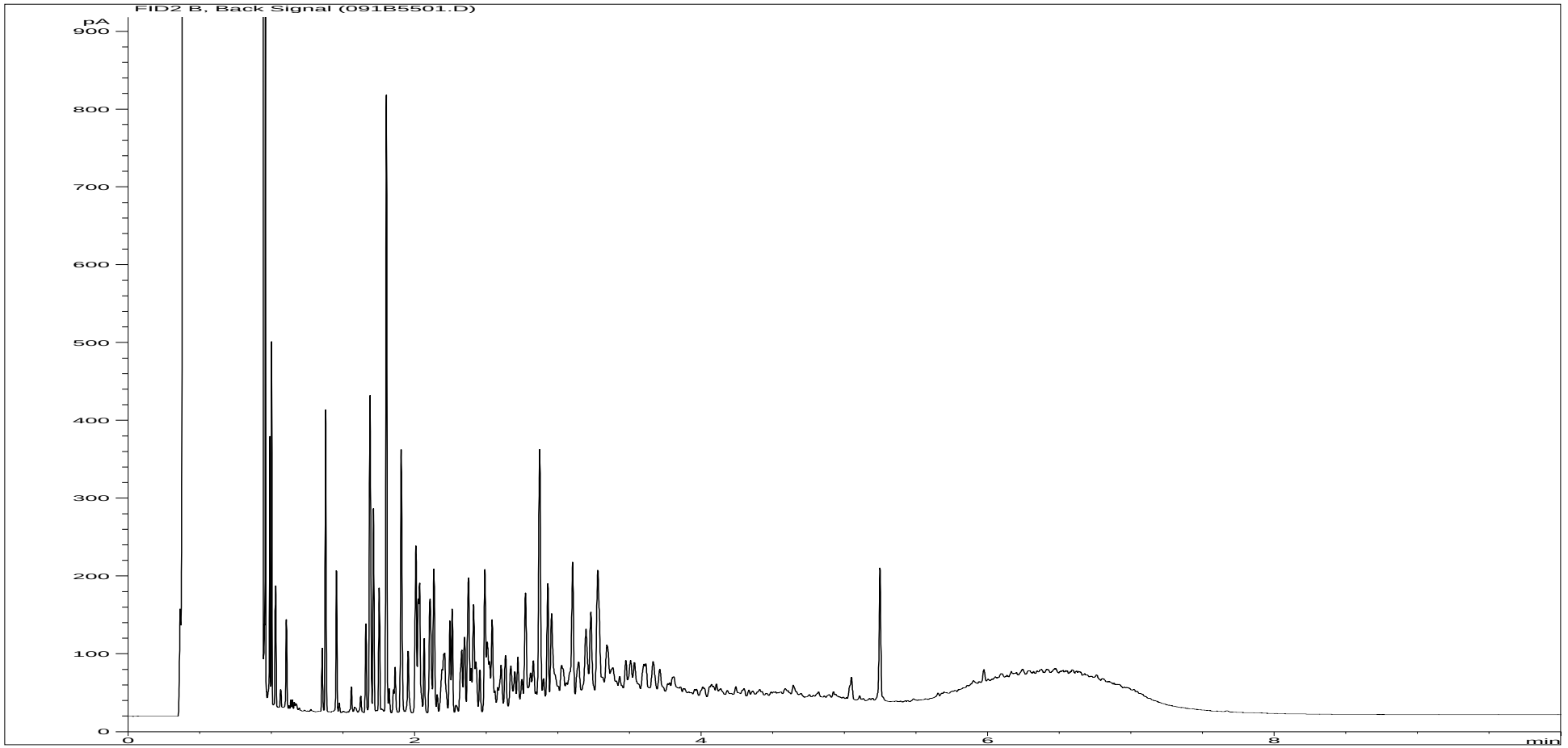
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137124ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank Spike
Acquisition Date/Time:	09-Sep-11, 01:51:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\043F5501.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137124ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank Spike
Acquisition Date/Time:	09-Sep-11, 01:51:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\091B5501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124670

Customer Worley Parsons Komex
Site Maelor Works
Report No W124670

Consignment No 28837
Date Logged 31-Aug-2011

Report Due 12-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137072	MW99-202	28/08/11																										
EX/1137073	MW11-16	28/08/11																										
EX/1137074	MW99-104	28/08/11																										
EX/1137075	MW11-2	28/08/11																										
EX/1137076	MW99-106	28/08/11																										
EX/1137123	Report 124670 Blank	28/08/11																										
EX/1137124	Report 124670 Blank Spike	28/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124670

Customer Worley Parsons Komex
Site Maelor Works
Report No W124670

Consignment No 28837
Date Logged 31-Aug-2011

Report Due 12-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137072	MW99-202	28/08/11															
EX/1137073	MW11-16	28/08/11															
EX/1137074	MW99-104	28/08/11															
EX/1137075	MW11-2	28/08/11															
EX/1137076	MW99-106	28/08/11															
EX/1137123	Report 124670 Blank	28/08/11															
EX/1137124	Report 124670 Blank Spike	28/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
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C	Headspace present in the sample container
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Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis
Unless stated otherwise results are expressed as mg/l
Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124728 (Ver. 1)
Your Ref: 305001-50065-29

September 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124728 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 01-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137320	MW99-102	30-Aug-11	6.9	831	22	364	62	132	16	19	3	0.001	0.007	<0.0001	Req	<0.001	<0.001	0.003
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	7.4	876	98	59	137	94	37	48	2	0.001	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137323	MW11-1A	30-Aug-11	7.4	831	52	57	138	91	34	47	2	0.002	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137334	QC Blank		7.02	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137335	Blank Spike (% Recovery)				102	101	98	96	98	99	101	100	95	94	Req	100	97	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137320	MW99-102	30-Aug-11	0.81	5.90	6.71	<0.01	<0.001	<0.0001	<0.001	17.3	<0.2	<0.2	<0.02	<0.02	<0.05	5.9	<0.1	Req
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	1.14	0.98	2.12	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.9	<0.1	Req
1137323	MW11-1A	30-Aug-11	1.15	0.98	2.13	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	3.0	<0.1	Req
1137334	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137335	Blank Spike (% Recovery)			99	96	96	96	102	94	101		99	100	97	107	109	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137320	MW99-102	**30-Aug-11**	395	5.19	<0.02	4.8	21	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1137322	MW11-1	**30-Aug-11**	387	0.09	<0.02	8.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137323	MW11-1A	**30-Aug-11**	367	0.10	<0.02	7.5	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137334	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137335	Blank Spike (% Recovery)			96			86	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_4728
LIMS ID Number:	EX1137320	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.042	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.018	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	109
Phenanthrene-d10	116
Chrysene-d12	125
Perylene-d12	128

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-1	**Job Number:**	W12_4728
LIMS ID Number:	EX1137322	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	108
Phenanthrene-d10	113
Chrysene-d12	116
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-1A	**Job Number:**	W12_4728
LIMS ID Number:	EX1137323	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	126
Perylene-d12	134

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank	**Job Number:**	W12_4728
LIMS ID Number:	EX1137334	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	107
Phenanthrene-d10	110
Chrysene-d12	110
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank Spike	**Job Number:**	W12_4728
LIMS ID Number:	EX1137335	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	90	96
Acenaphthylene	208-96-8	4.49	80	97
Acenaphthene	83-32-9	4.61	83	100
Fluorene	86-73-7	5.01	84	99
Phenanthrene	85-01-8	5.89	87	100
Anthracene	120-12-7	5.94	80	100
Fluoranthene	206-44-0	7.26	80	94
Pyrene	129-00-0	7.56	76	95
Benzo[a]anthracene	56-55-3	9.26	102	96
Chrysene	218-01-9	9.31	87	99
Benzo[b]fluoranthene	205-99-2	10.80	87	97
Benzo[k]fluoranthene	207-08-9	10.83	84	97
Benzo[a]pyrene	50-32-8	11.23	82	95
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	72	76
Dibenzo[a,h]anthracene	53-70-3	12.65	68	80
Benzo[g,h,i]perylene	191-24-2	12.94	76	82
Total (USEPA16) PAHs	-	-	1316	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	124
Perylene-d12	130

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4728
QC Batch Number: 110800
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

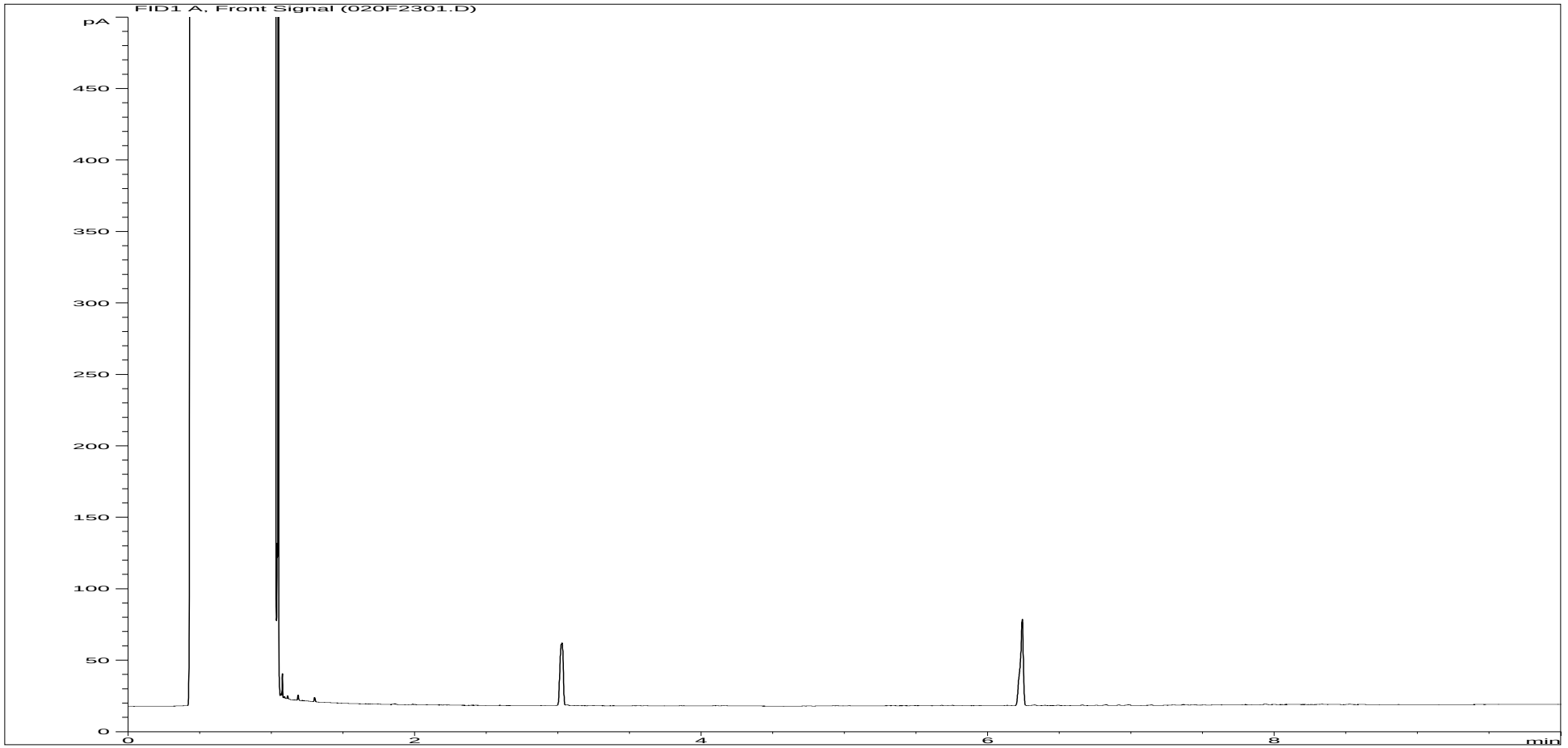
Matrix: Water
Date Booked in 01-Sep-11
Date Extracted 07-Sep-11
Date Analysed 08-Sep-11, 11:30:51

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137320	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1137322	MW99-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137323	MW99-1A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01
EX1137334	Report 124728 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137335	Report 124728 Blank Spike	0.634	0.21	1	0.347	1.75	0.616	1	0.302	2.65	0.716	7.09	2.21

Where individual results are flagged see report notes for status.

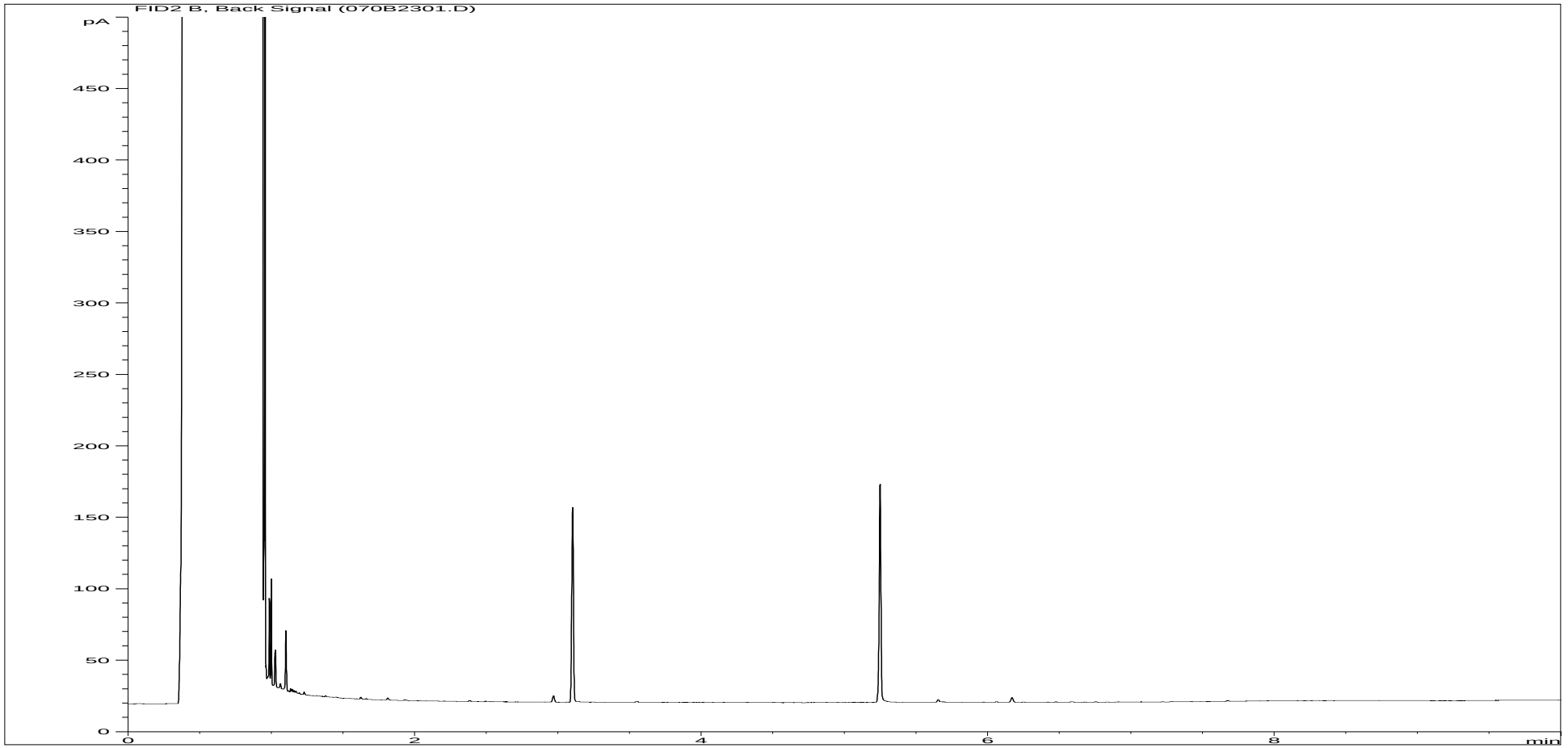
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137320ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\020F2301.D		

Where individual results are flagged see report notes for status.

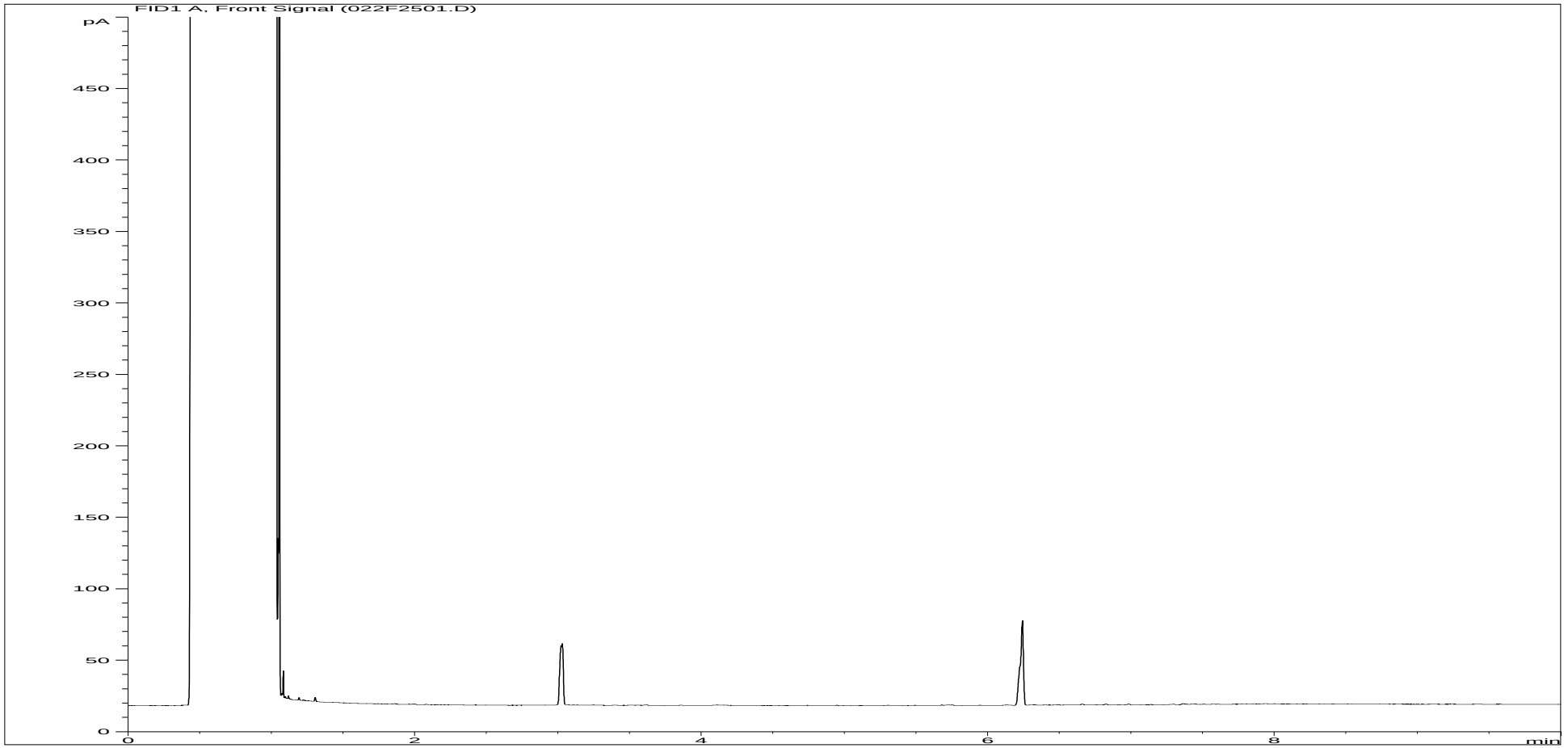
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137320ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\070B2301.D		

Where individual results are flagged see report notes for status.

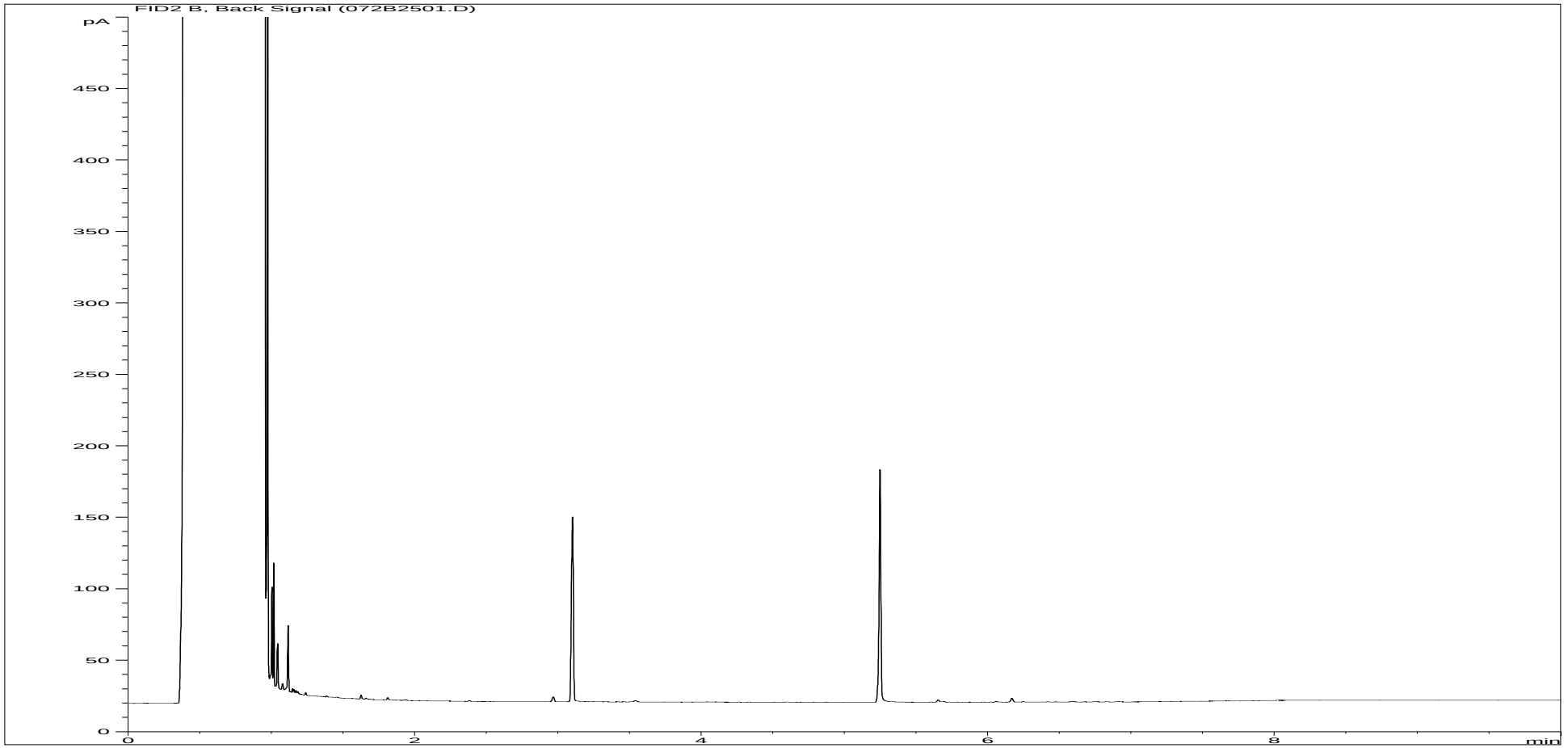
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137322ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\022F2501.D		

Where individual results are flagged see report notes for status.

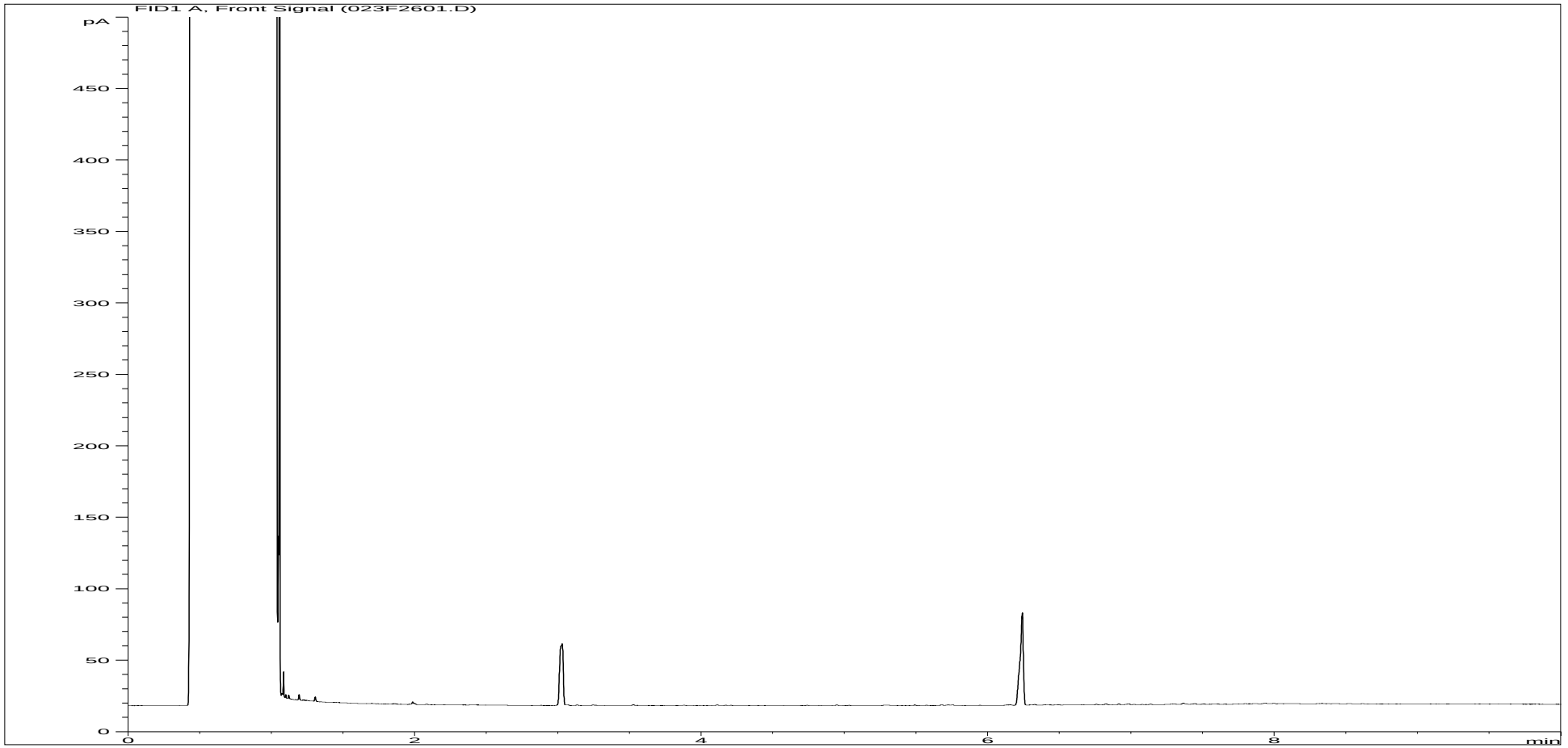
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137322ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\072B2501.D		

Where individual results are flagged see report notes for status.

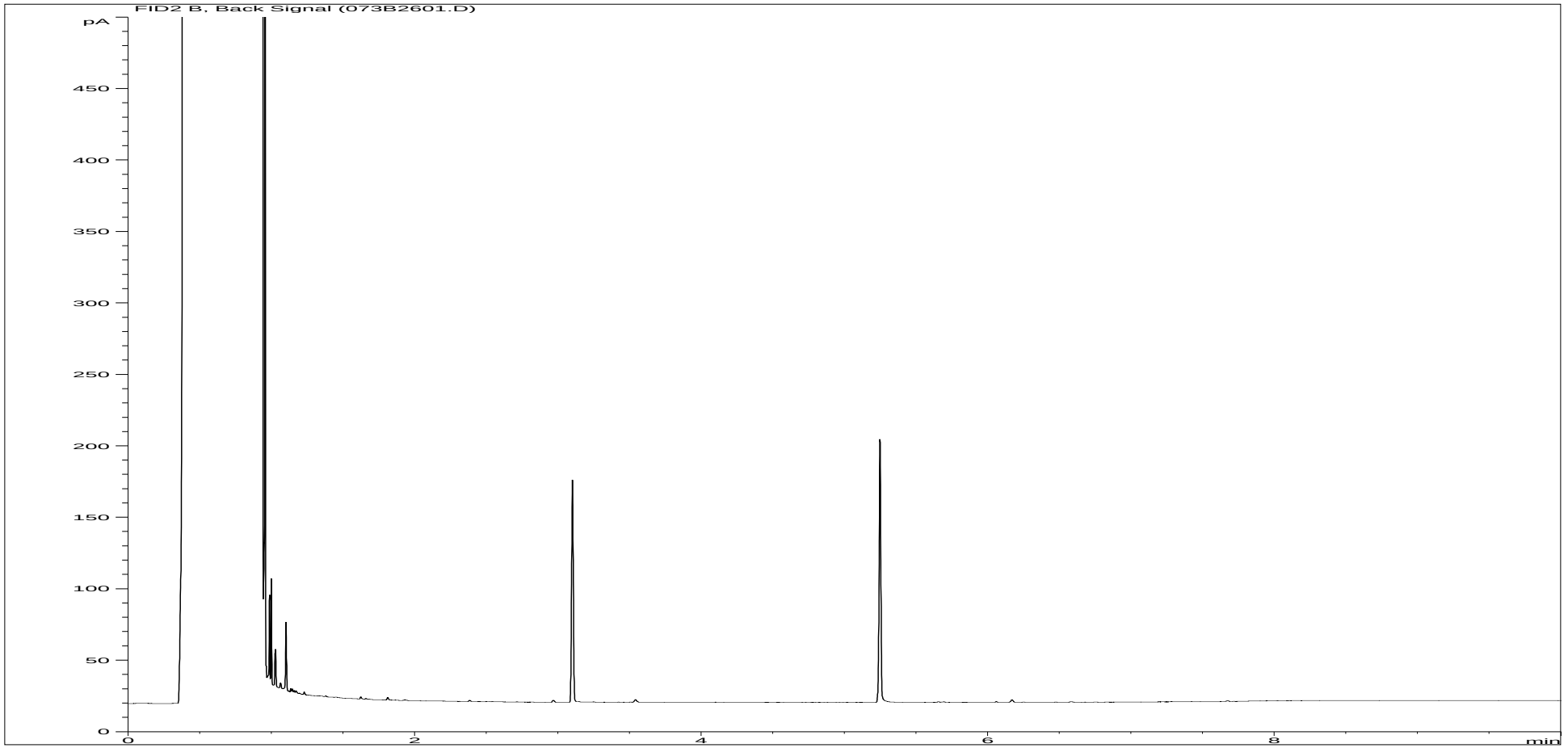
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137323ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\023F2601.D		

Where individual results are flagged see report notes for status.

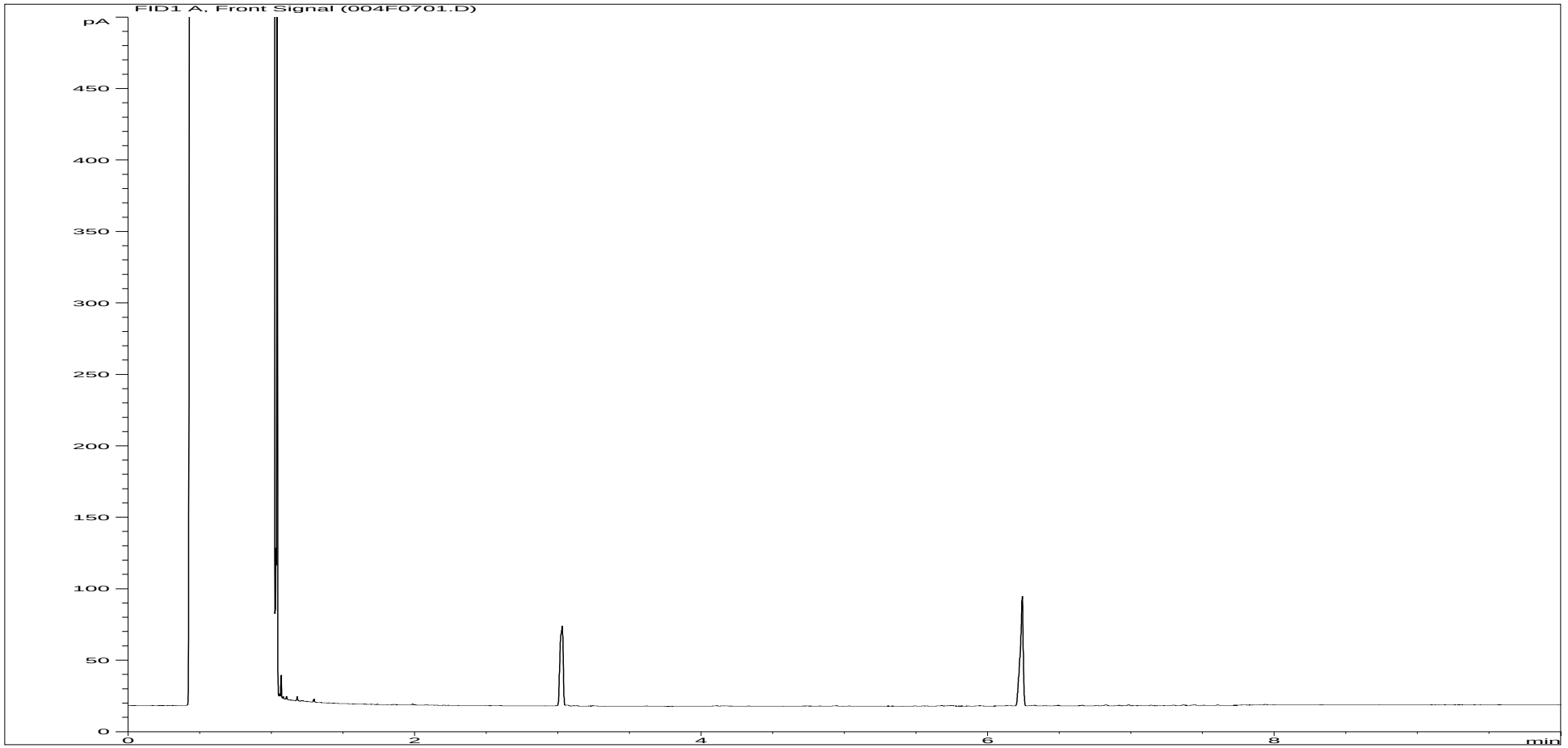
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137323ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\073B2601.D		

Where individual results are flagged see report notes for status.

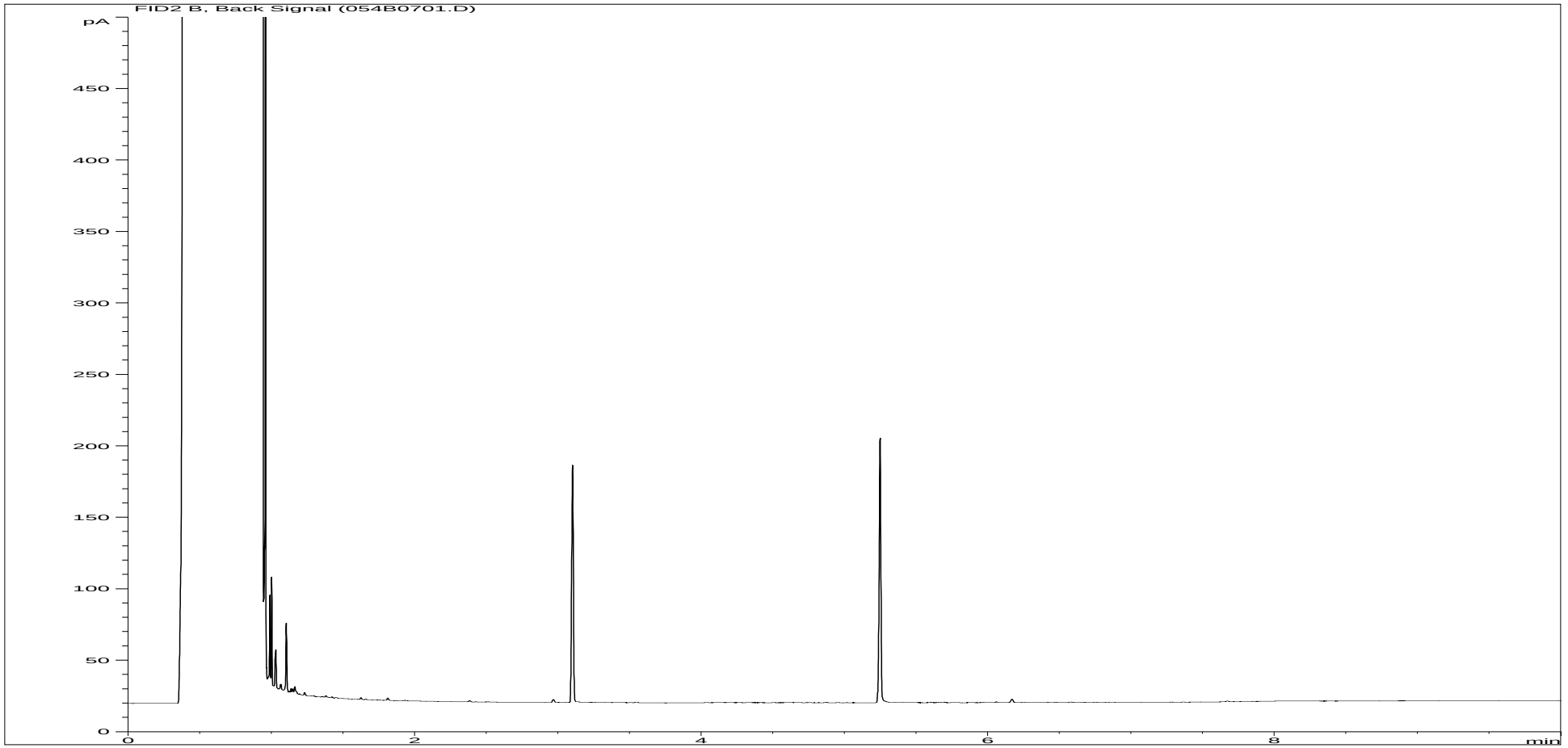
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137334ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\004F0701.D		

Where individual results are flagged see report notes for status.

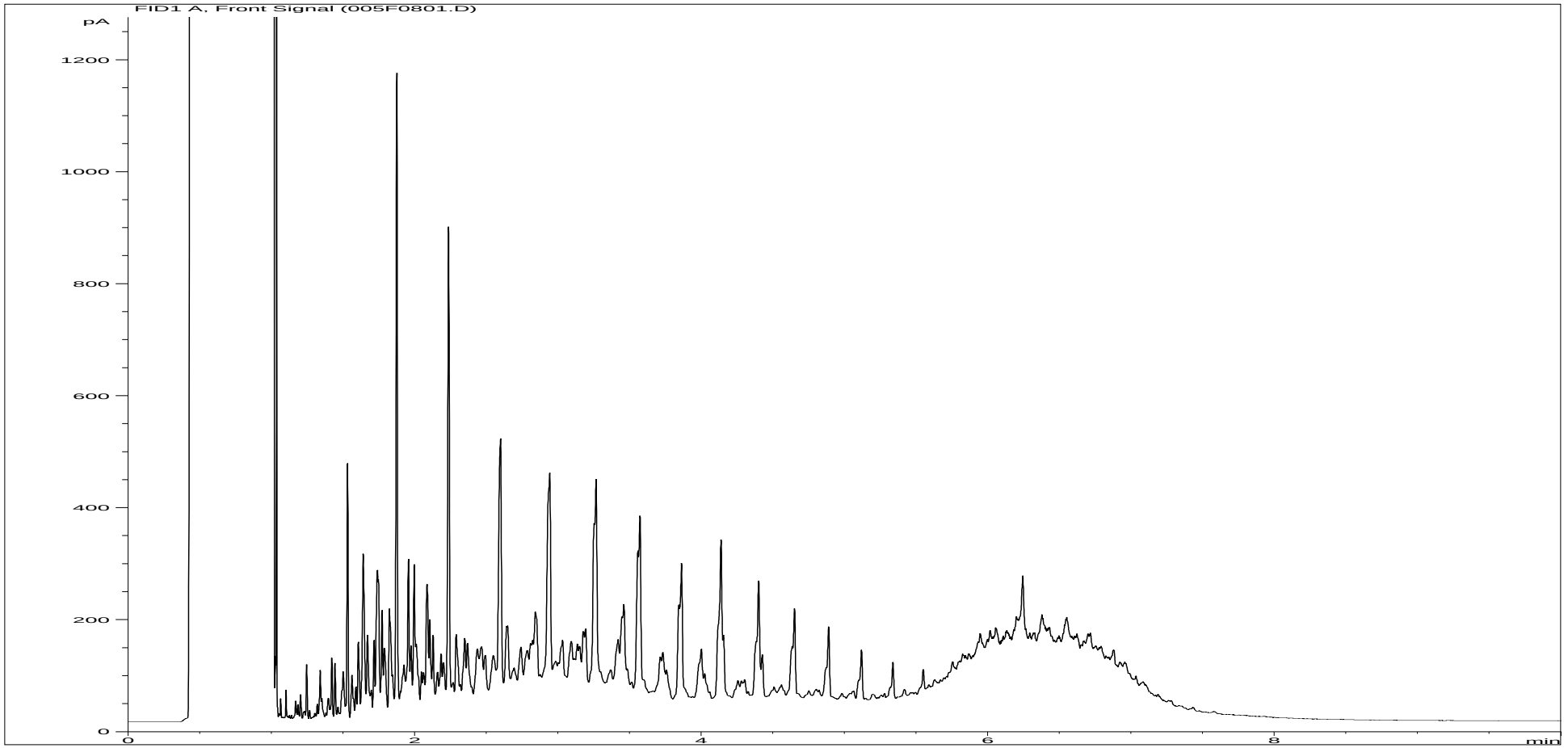
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137334ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\054B0701.D		

Where individual results are flagged see report notes for status.

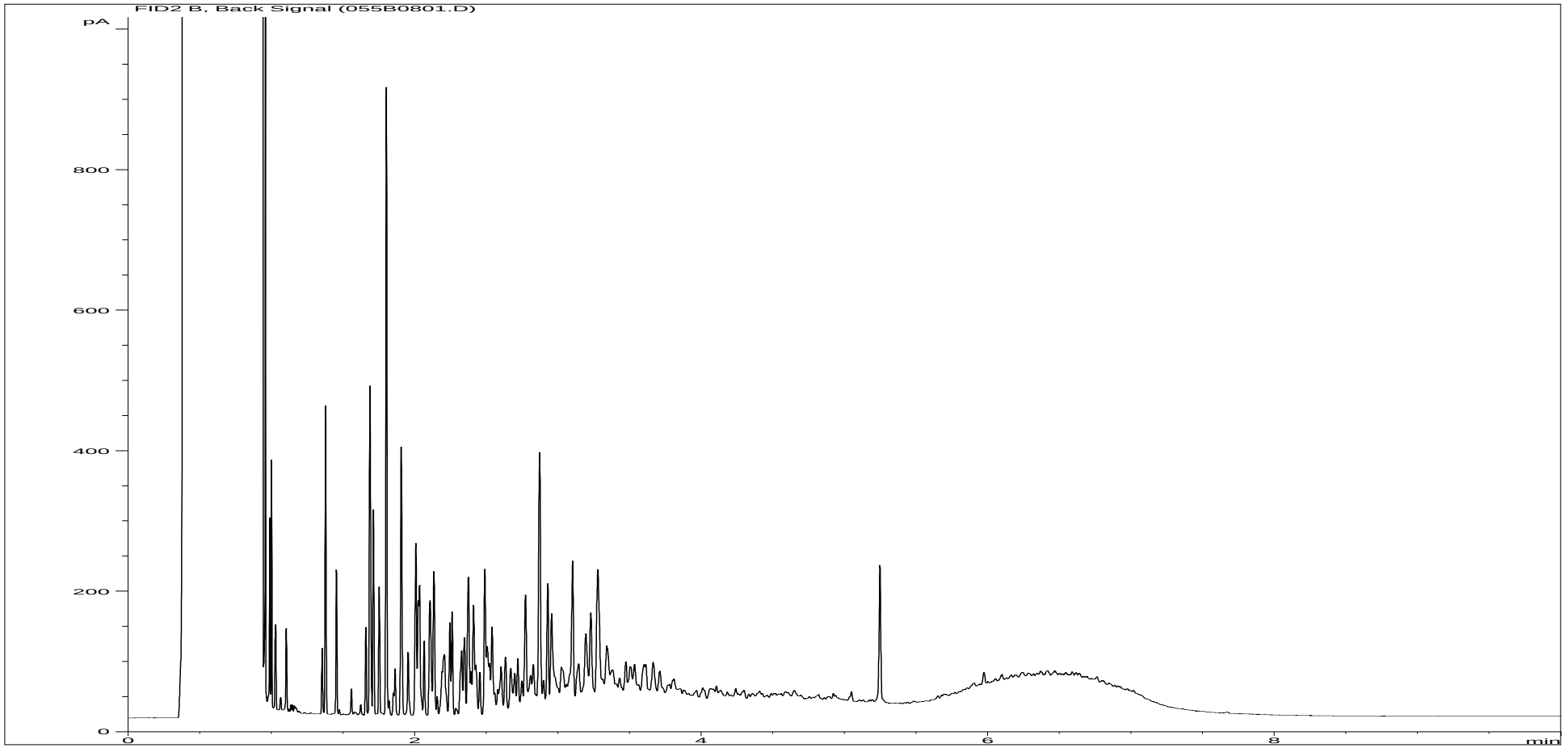
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137335ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\005F0801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137335ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR							KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137320	MW99-102	30/08/11																										
[redacted]	[redacted]	[redacted]																										
EX/1137322	MW99-1	30/08/11																										
EX/1137323	MW99-1A	30/08/11																										
EX/1137334	Report 124728 Blank	30/08/11																										
EX/1137335	Report 124728 Blank Spike	30/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137320	MW99-102	30/08/11															
[redacted]	[redacted]	[redacted]															
EX/1137322	MW99-1	30/08/11															
EX/1137323	MW99-1A	30/08/11															
EX/1137334	Report 124728 Blank	30/08/11															
EX/1137335	Report 124728 Blank Spike	30/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124728 (Ver. 2)
Your Ref: 305001-50065-29

September 16, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124728 (Ver. 2)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 01-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 16-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 16-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137320	MW99-102	30-Aug-11	6.9	831	22	364	62	132	16	19	3	0.001	0.007	<0.0001	Req	<0.001	<0.001	0.003
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	7.4	876	98	59	137	94	37	48	2	0.001	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137323	MW11-1A	30-Aug-11	7.4	831	52	57	138	91	34	47	2	0.002	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137334	QC Blank		7.02	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137335	Blank Spike (% Recovery)				102	101	98	96	98	99	101	100	95	94	Req	100	97	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137320	MW99-102	30-Aug-11	0.81	5.90	6.71	<0.01	<0.001	<0.0001	<0.001	17.3	<0.2	<0.2	<0.02	<0.02	<0.05	5.9	<0.1	Req
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	1.14	0.98	2.12	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.9	<0.1	Req
1137323	MW11-1A	30-Aug-11	1.15	0.98	2.13	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	3.0	<0.1	Req
1137334	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137335	Blank Spike (% Recovery)			99	96	96	96	102	94	101		99	100	97	107	109	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137320	MW99-102	**30-Aug-11**	395	5.19	<0.02	4.8	21	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1137322	MW11-1	**30-Aug-11**	387	0.09	<0.02	8.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137323	MW11-1A	**30-Aug-11**	367	0.10	<0.02	7.5	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137334	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137335	Blank Spike (% Recovery)			96			86	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_4728
LIMS ID Number:	EX1137320	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.042	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.018	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	109
Phenanthrene-d10	116
Chrysene-d12	125
Perylene-d12	128

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1	**Job Number:**	W12_4728
LIMS ID Number:	EX1137322	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	108
Phenanthrene-d10	113
Chrysene-d12	116
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1A	**Job Number:**	W12_4728
LIMS ID Number:	EX1137323	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	126
Perylene-d12	134

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank	**Job Number:**	W12_4728
LIMS ID Number:	EX1137334	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	107
Phenanthrene-d10	110
Chrysene-d12	110
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank Spike	**Job Number:**	W12_4728
LIMS ID Number:	EX1137335	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	90	96
Acenaphthylene	208-96-8	4.49	80	97
Acenaphthene	83-32-9	4.61	83	100
Fluorene	86-73-7	5.01	84	99
Phenanthrene	85-01-8	5.89	87	100
Anthracene	120-12-7	5.94	80	100
Fluoranthene	206-44-0	7.26	80	94
Pyrene	129-00-0	7.56	76	95
Benzo[a]anthracene	56-55-3	9.26	102	96
Chrysene	218-01-9	9.31	87	99
Benzo[b]fluoranthene	205-99-2	10.80	87	97
Benzo[k]fluoranthene	207-08-9	10.83	84	97
Benzo[a]pyrene	50-32-8	11.23	82	95
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	72	76
Dibenzo[a,h]anthracene	53-70-3	12.65	68	80
Benzo[g,h,i]perylene	191-24-2	12.94	76	82
Total (USEPA16) PAHs	-	-	1316	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	124
Perylene-d12	130

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4728
QC Batch Number: 110800
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

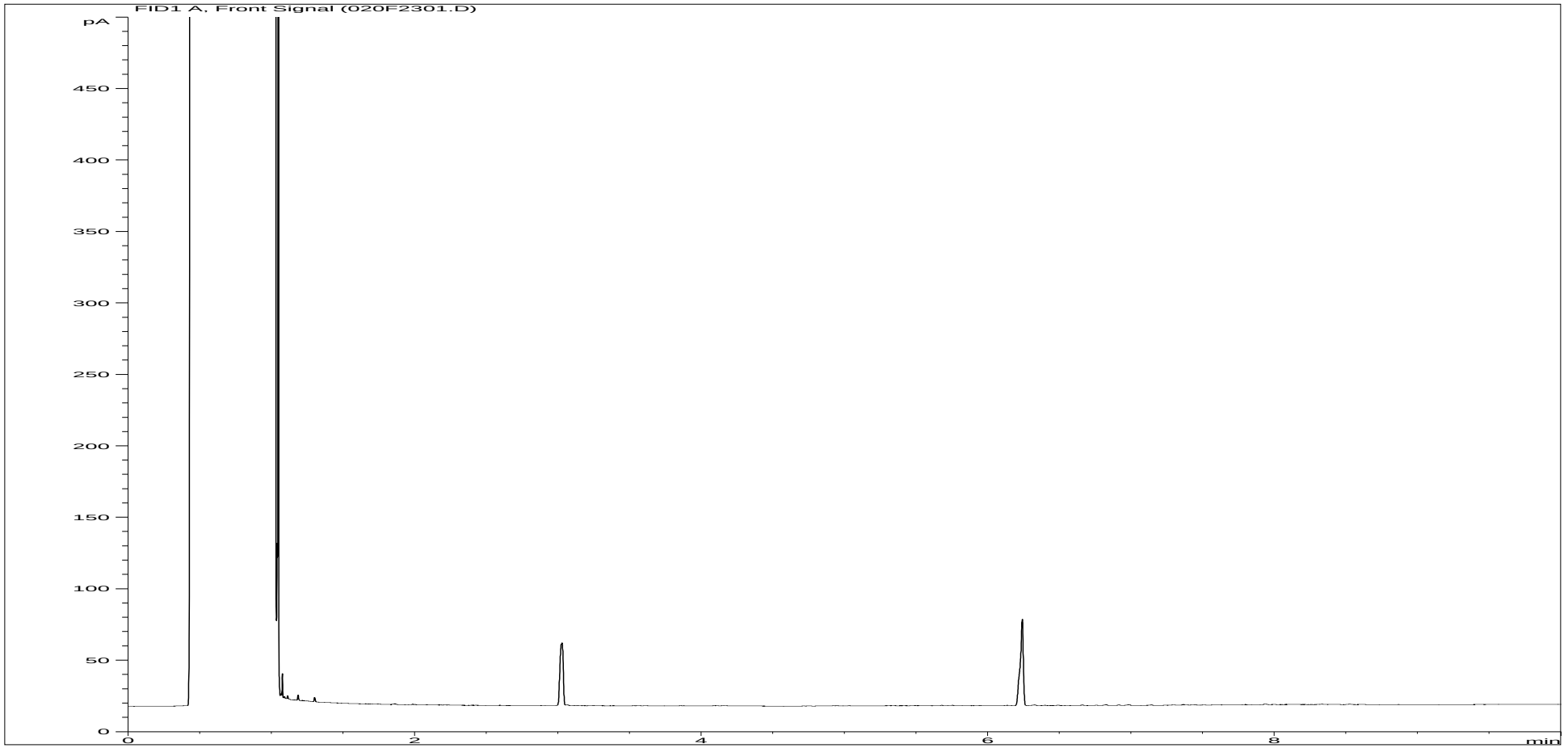
Matrix: Water
Date Booked ir 01-Sep-11
Date Extracted 07-Sep-11
Date Analysed 08-Sep-11, 11:30:51

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137320	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1137322	MW11-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137323	MW11-1A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01
EX1137334	Report 124728 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137335	Report 124728 Blank Spik	0.634	0.21	1	0.347	1.75	0.616	1	0.302	2.65	0.716	7.09	2.21

Where individual results are flagged see report notes for status.

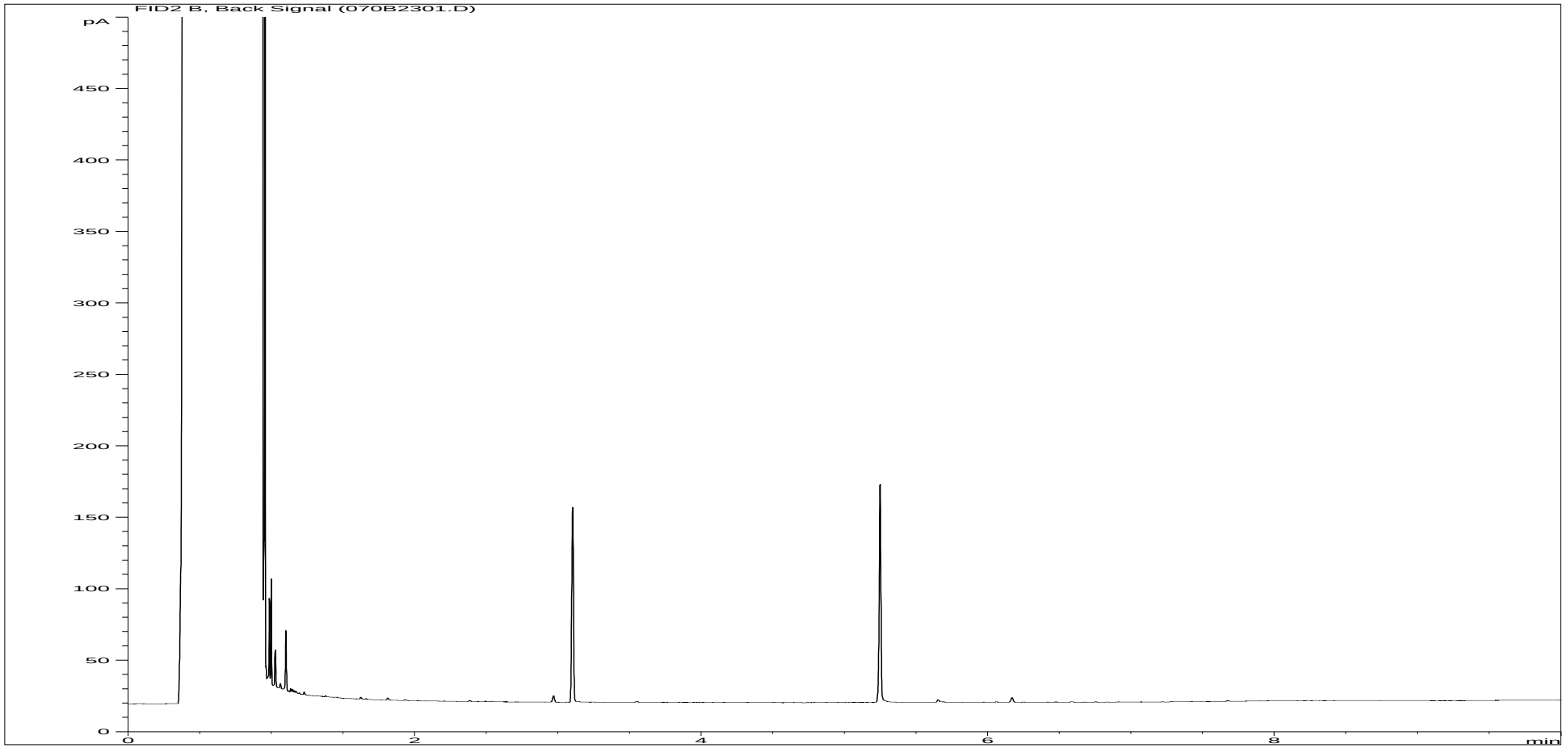
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137320ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\020F2301.D		

Where individual results are flagged see report notes for status.

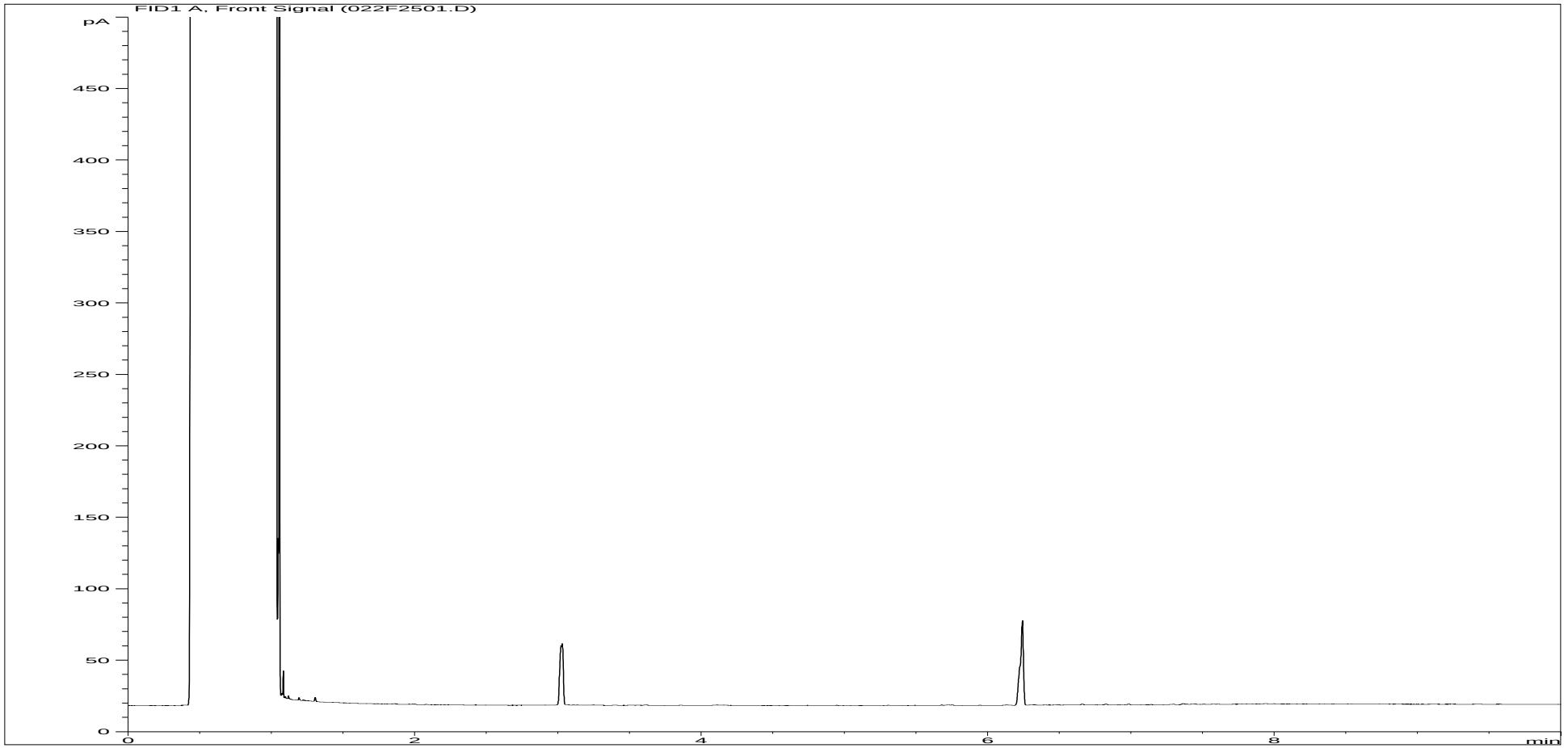
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137320ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\070B2301.D		

Where individual results are flagged see report notes for status.

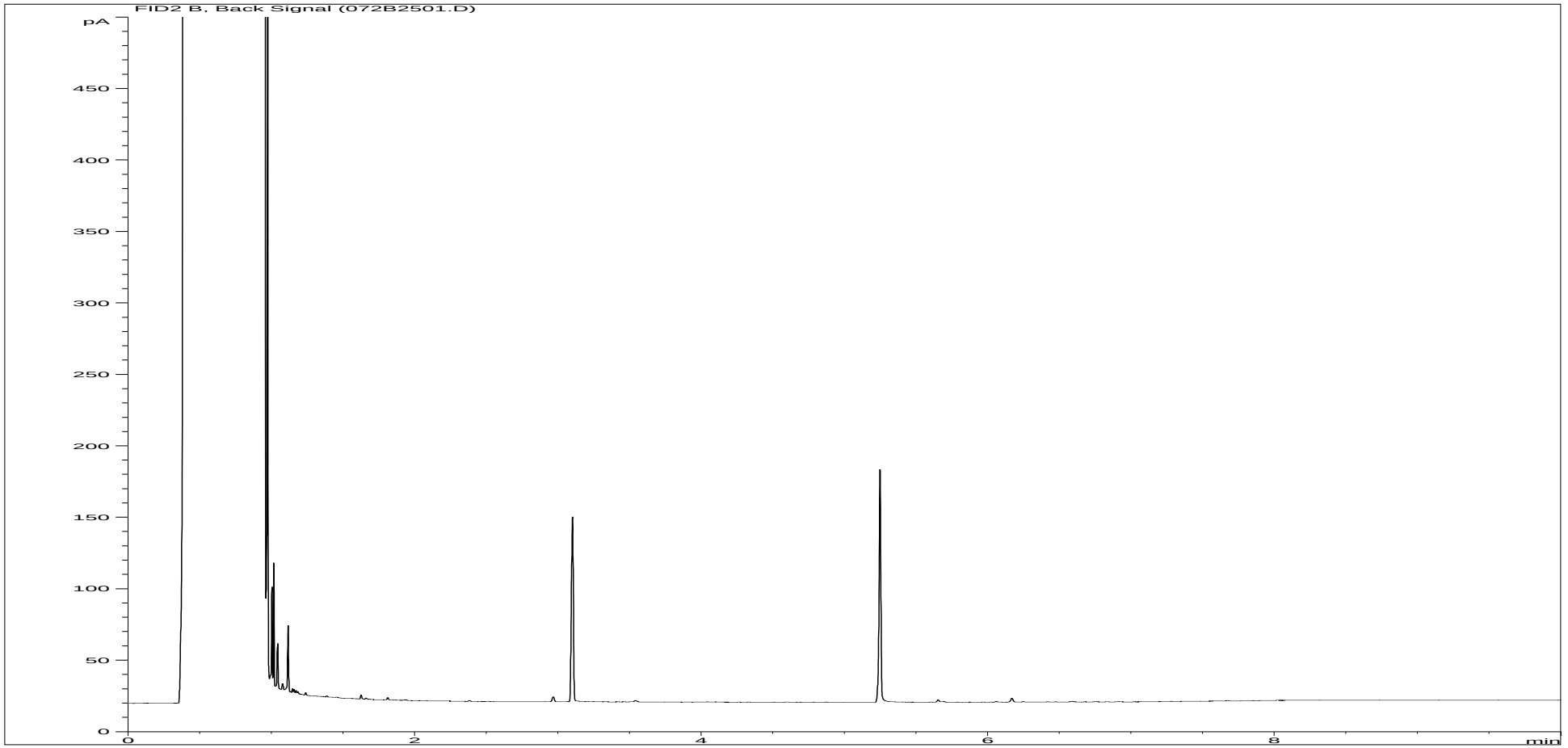
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137322ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\022F2501.D		

Where individual results are flagged see report notes for status.

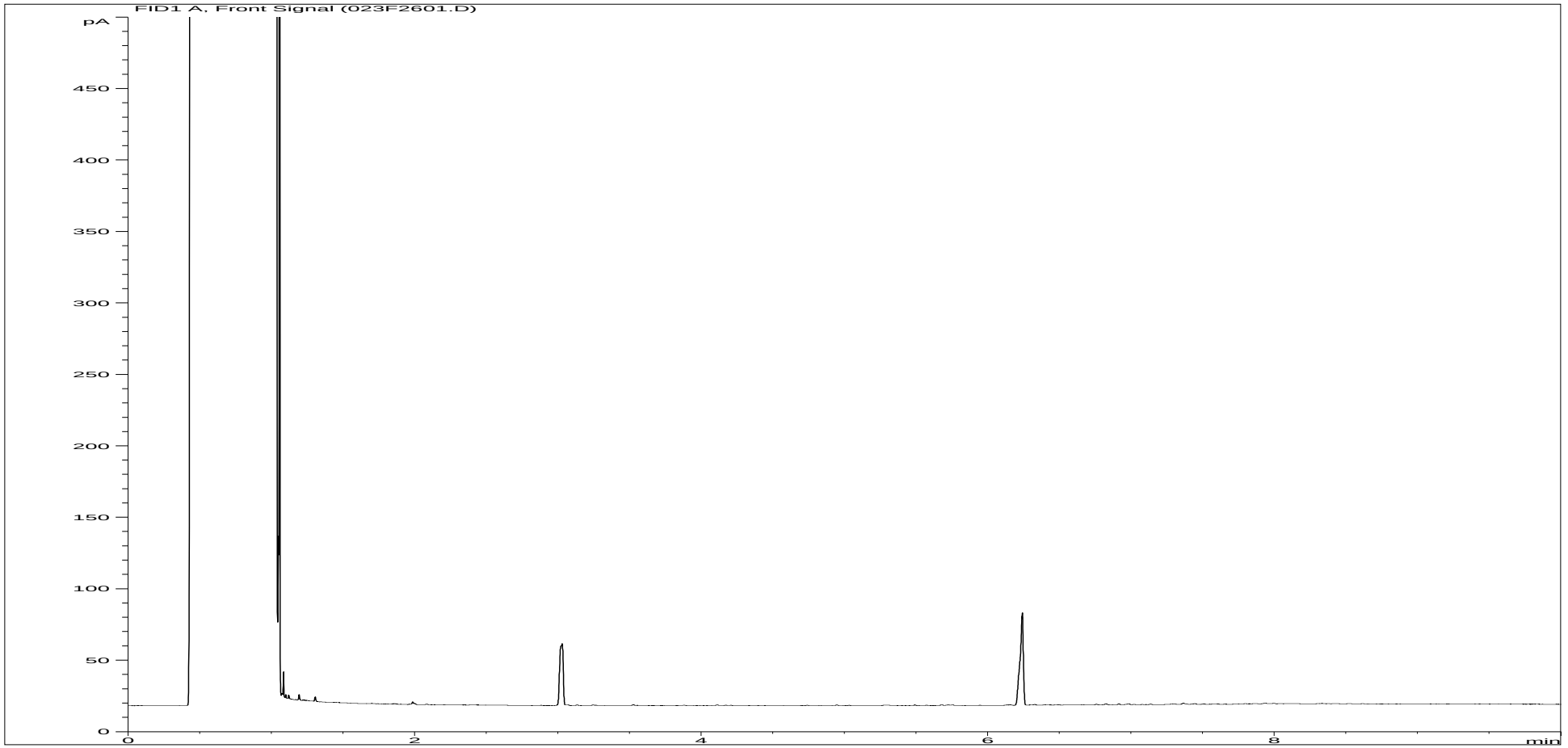
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137322ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\072B2501.D		

Where individual results are flagged see report notes for status.

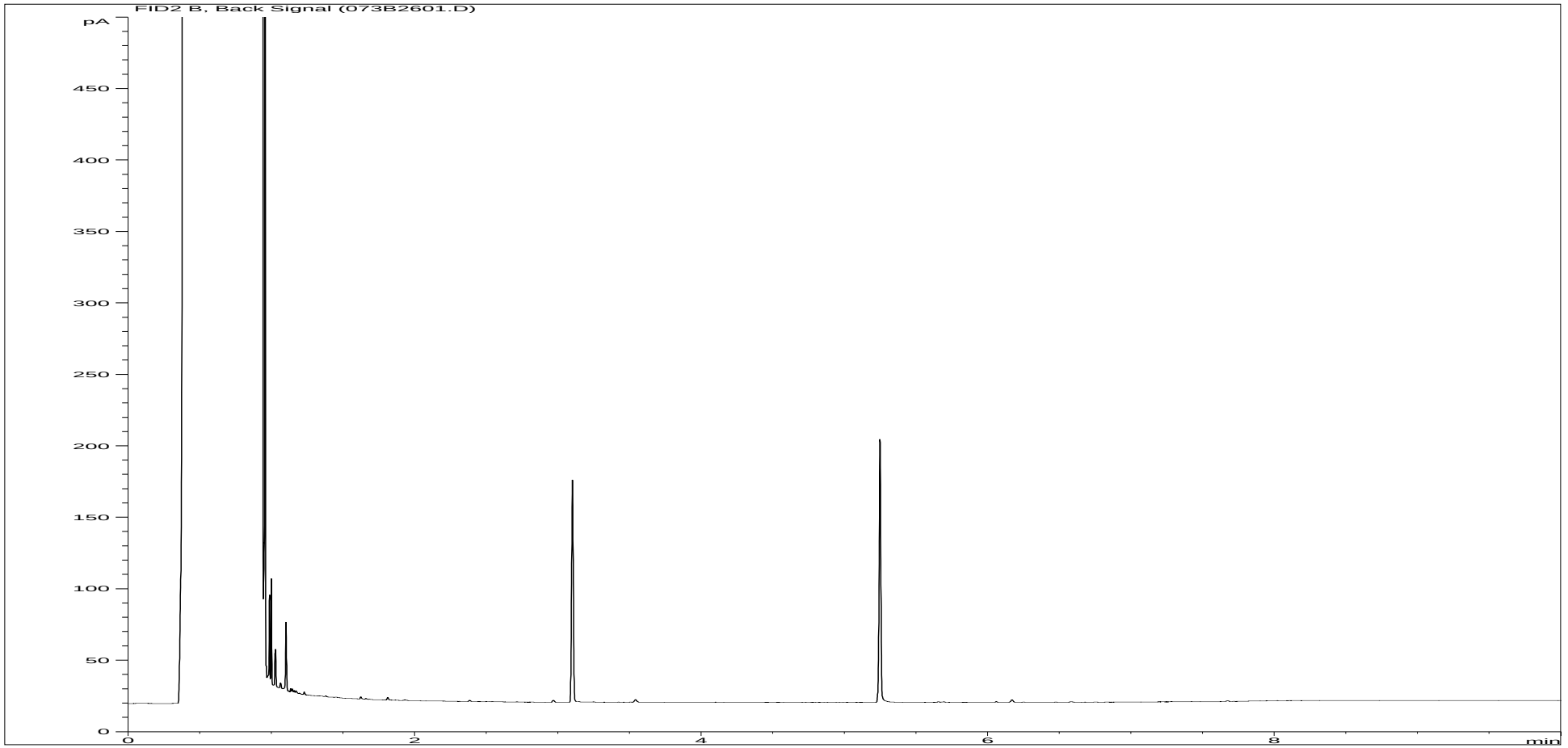
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137323ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\023F2601.D		

Where individual results are flagged see report notes for status.

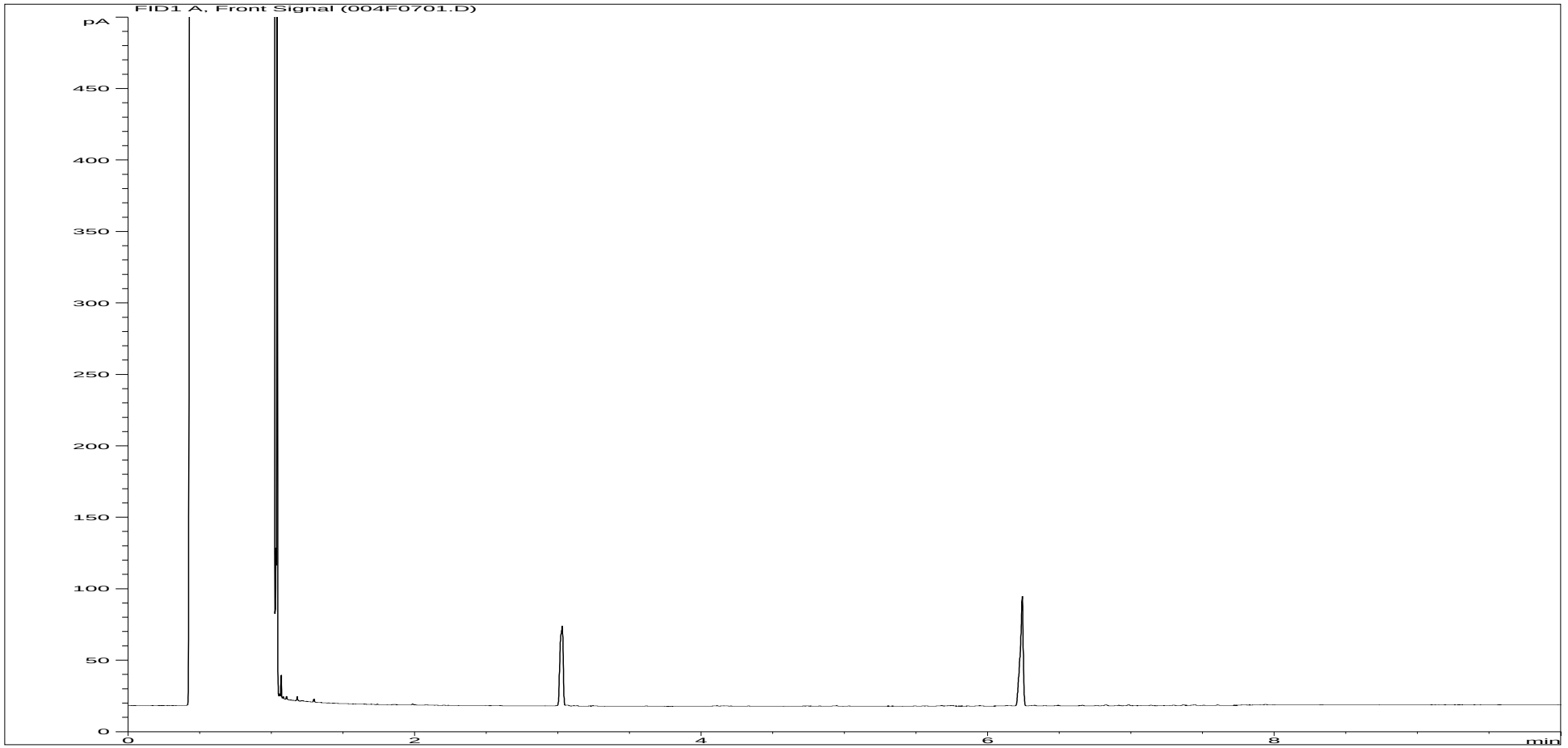
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137323ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\073B2601.D		

Where individual results are flagged see report notes for status.

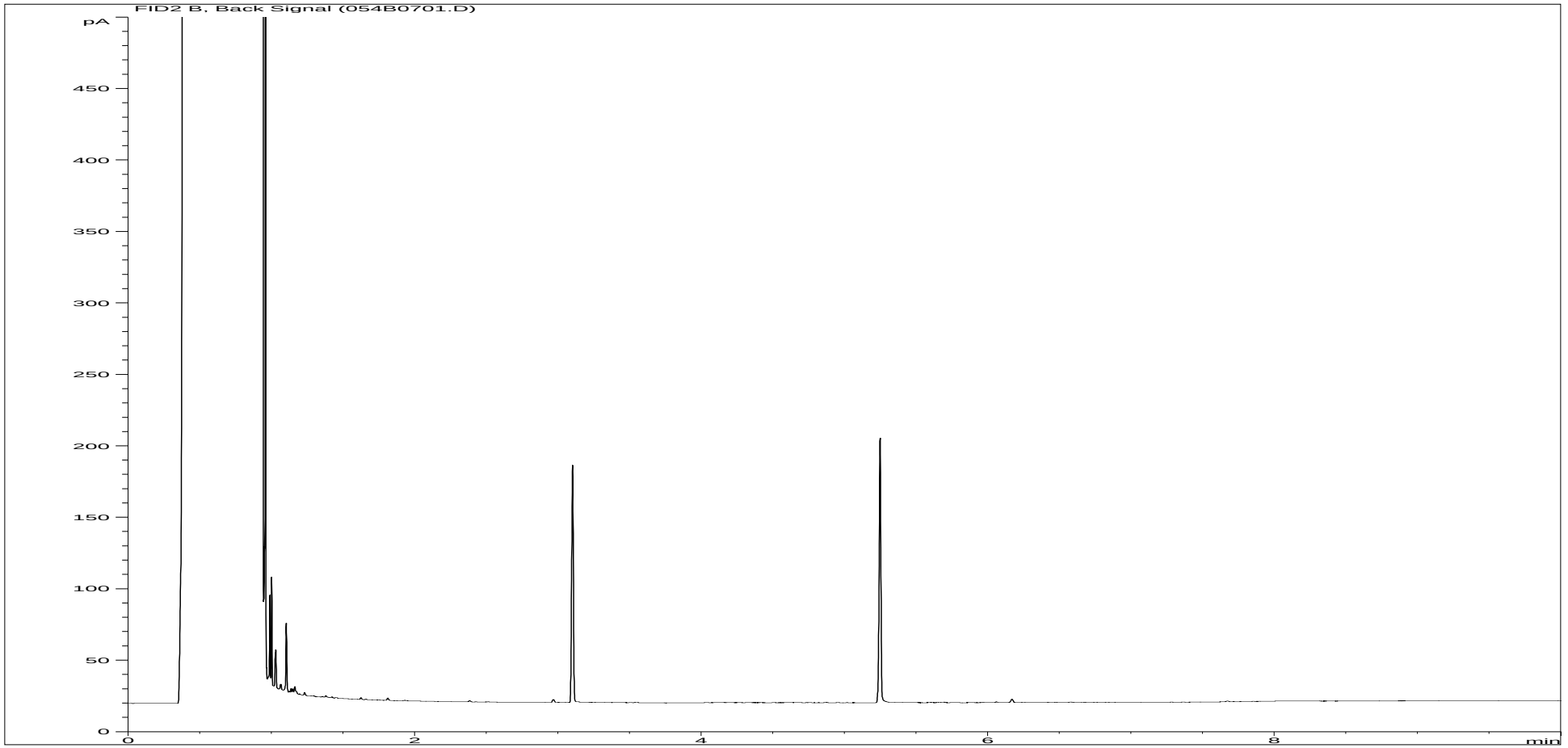
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137334ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\004F0701.D		

Where individual results are flagged see report notes for status.

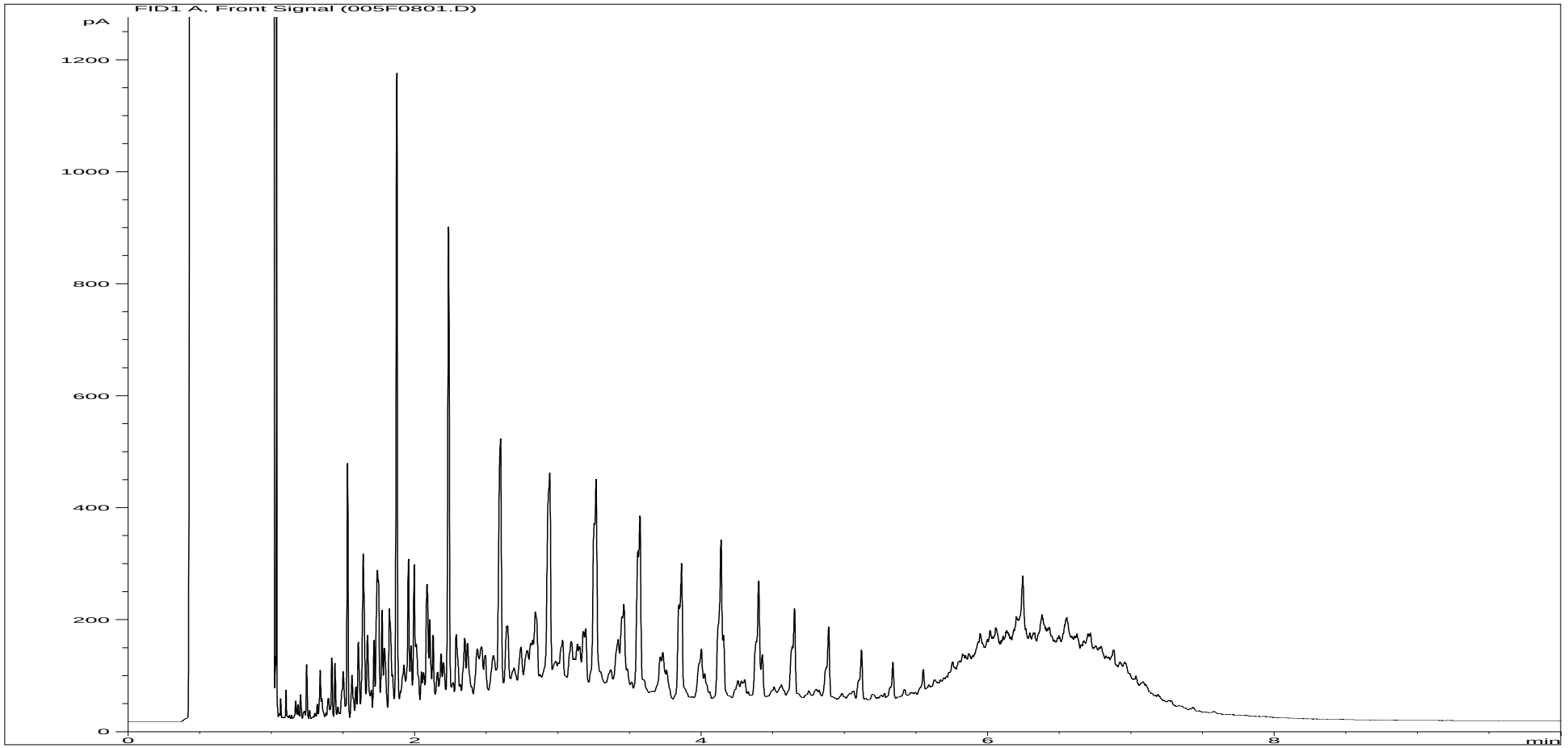
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137334ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\054B0701.D		

Where individual results are flagged see report notes for status.

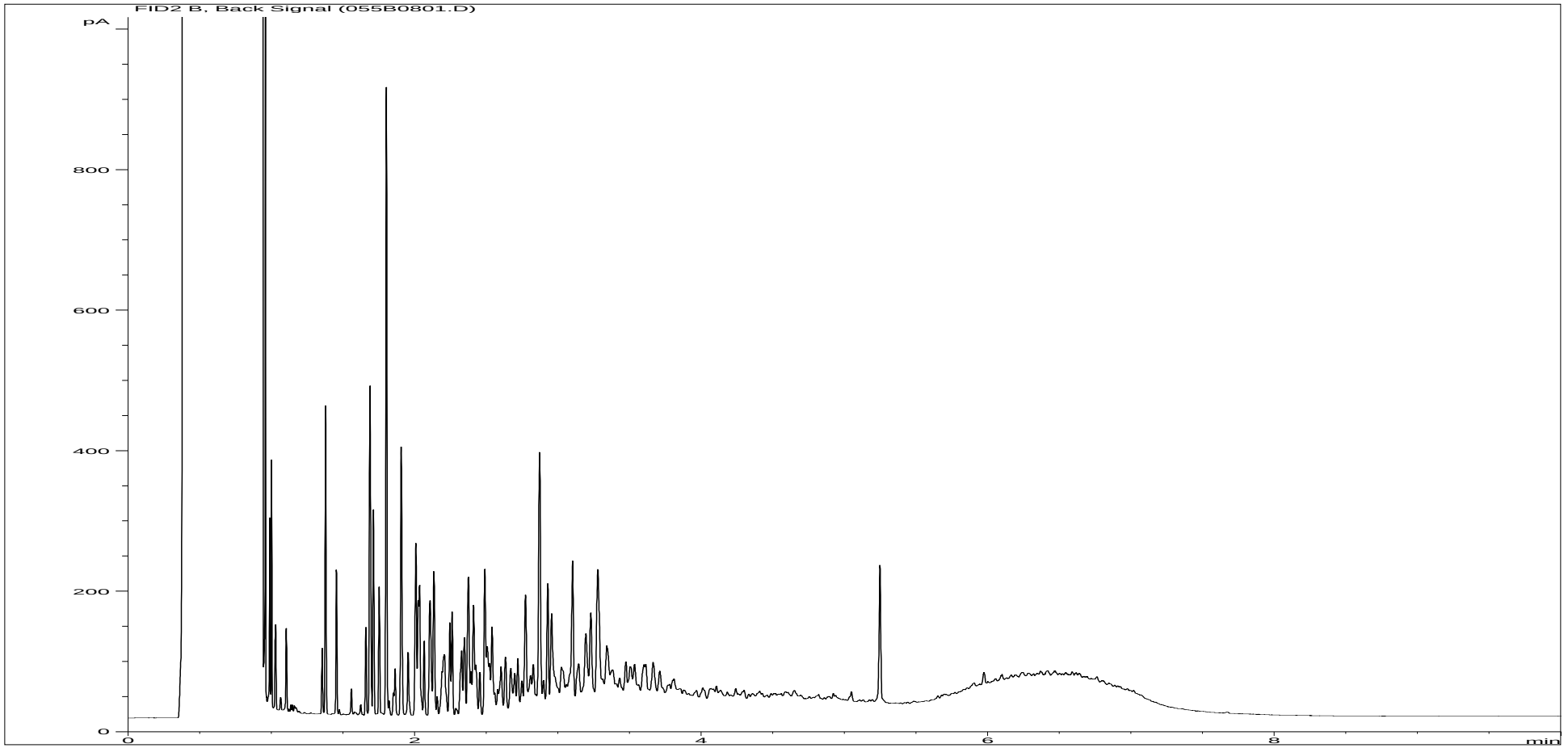
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137335ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\005F0801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137335ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137320	MW99-102	30/08/11																									
[redacted]	[redacted]	[redacted]																									
EX/1137322	MW11-1	30/08/11																									
EX/1137323	MW11-1A	30/08/11																									
EX/1137334	Report 124728 Blank	30/08/11																									
EX/1137335	Report 124728 Blank Spike	30/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137320	MW99-102	30/08/11															
[redacted]	[redacted]	[redacted]															
EX/1137322	MW11-1	30/08/11															
EX/1137323	MW11-1A	30/08/11															
EX/1137334	Report 124728 Blank	30/08/11															
EX/1137335	Report 124728 Blank Spike	30/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

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E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Phenols by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124742 (Ver. 1)
Your Ref: 305001-50065-29

September 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124742 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 8 samples described in this report were logged for analysis by Scientifics on 02-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 12)
Table of TPH (Si) banding (0.01) (Page 13)
GC-FID Chromatograms (Pages 14 to 29)
Analytical and Deviating Sample Overview (Pages 30 to 31)
Table of Method Descriptions (Page 32)
Table of Report Notes (Page 33)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137377	MW11-12	30-Aug-11	7.5	1000	378	103	99	93	7	62	61	0.001	0.003	<0.0001	Req	0.002	<0.001	<0.002
1137378	MW99-204	30-Aug-11	7.2	309	14	14	45	47	3	9	8	<0.001	0.001	<0.0001	Req	0.001	<0.001	<0.002
1137379	MW11-5	31-Aug-11	6.6	394	17	42	16	54	3	26	3	0.003	0.002	0.0001	Req	0.001	<0.001	<0.002
1137380	MW11-6	31-Aug-11	11.7	1400	150	63	180	143	<1	35	57	0.012	<0.001	<0.0001	Req	0.004	0.004	<0.002
1137381	MW5	31-Aug-11	8.9	2610	524	206	1220	602	24	60	31	0.003	<0.001	<0.0001	Req	0.004	<0.001	<0.002
1137382	MW5A	31-Aug-11	6.7	396	18	43	16	52	3	25	3	0.003	0.002	0.0001	Req	0.001	<0.001	<0.002
1137417	QC Blank		7.05	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137418	Blank Spike (% Recovery)				100	100	99	98	99	101	101	101	96	94	Req	100	99	95

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137377	MW11-12	30-Aug-11	7.1	2.10	9.20	<0.01	0.003	<0.0001	0.003	0.09	2.0	<0.2	<0.02	<0.02	0.10	5.0	<0.1	Req
1137378	MW99-204	30-Aug-11	2.44	0.43	2.87	<0.01	<0.001	<0.0001	0.003	0.08	0.2	<0.2	<0.02	<0.02	0.26	2.5	<0.1	Req
1137379	MW11-5	31-Aug-11	7.89	2.61	10.5	<0.01	0.002	<0.0001	<0.001	0.13	<0.2	<0.2	<0.02	<0.02	<0.05	3.6	<0.1	Req
1137380	MW11-6	31-Aug-11	0.16	1.69	1.85	<0.01	0.007	<0.0001	0.005	22.2	<0.2	0.4	<0.02	0.04	0.92	23	0.14	Req
1137381	MW5	31-Aug-11	0.85	0.76	1.61	<0.01	0.004	<0.0001	0.005	11.5	<0.2	0.6	0.03	0.19	<0.05	5.9	<0.1	Req
1137382	MW5A	31-Aug-11	8.04	2.16	10.2	<0.01	0.001	<0.0001	<0.001	0.14	<0.2	<0.2	<0.02	<0.02	<0.05	3.6	<0.1	Req
1137417	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	Req
1137418	Blank Spike (% Recovery)			98	98	98	95	103	92	102		99	101	99	109	98	99	Req

scientifics

Bretby Business Park, Ashby Road

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137377	MW11-12	30-Aug-11	261	0.846	<0.02	5.4	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137378	MW99-204	30-Aug-11	130	0.232	<0.02	6.8	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137379	MW11-5	31-Aug-11	147	0.856	<0.02	5.3	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137380	MW11-6	31-Aug-11	361	0.077	<0.04	0.6	28	60	12	3	18	1.5	1.3	0.5	<0.1	0.0623		
1137381	MW5	31-Aug-11	1602	0.180	0.16	4.2	12	2	3	<1	7	0.5	0.5	0.2	<0.1	0.0020		
1137382	MW5A	31-Aug-11	142	0.860	<0.02	4.9	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137417	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137418	Blank Spike (% Recovery)			99			86	108	94	99	298	100	103	96	104	113		

scientifics

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-12	**Job Number:**	W12_4742
LIMS ID Number:	EX1137377	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.023	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.37	0.068	M
Fluorene	86-73-7	4.74	0.038	M
Phenanthrene	85-01-8	5.57	0.045	M
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.90	0.012	M
Pyrene	129-00-0	7.18	0.011	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.297	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	99
Phenanthrene-d10	103
Chrysene-d12	109
Perylene-d12	121

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	96

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-204	**Job Number:**	W12_4742
LIMS ID Number:	EX1137378	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.011	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.011	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.162	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	100
Phenanthrene-d10	103
Chrysene-d12	102
Perylene-d12	109

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	96

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5	**Job Number:**	W12_4742
LIMS ID Number:	EX1137379	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.018	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.168	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	99
Phenanthrene-d10	101
Chrysene-d12	96
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6	**Job Number:**	W12_4742
LIMS ID Number:	EX1137380	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	395.000	100
Acenaphthylene	208-96-8	4.25	803.000	100
Acenaphthene	83-32-9	4.37	3.740	95
Fluorene	86-73-7	4.74	13.100	99
Phenanthrene	85-01-8	5.57	14.100	100
Anthracene	120-12-7	5.62	3.270	100
Fluoranthene	206-44-0	6.89	3.440	100
Pyrene	129-00-0	7.18	2.330	100
Benzo[a]anthracene	56-55-3	8.85	0.368	100
Chrysene	218-01-9	8.90	0.245	100
Benzo[b]fluoranthene	205-99-2	10.38	0.141	M
Benzo[k]fluoranthene	207-08-9	10.41	0.056	M
Benzo[a]pyrene	50-32-8	10.80	0.109	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.040	M
Dibenzo[a,h]anthracene	53-70-3	12.22	0.010	M
Benzo[g,h,i]perylene	191-24-2	12.47	0.028	M
Total (USEPA16) PAHs	-	-	< 1238.977	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	110
Phenanthrene-d10	119
Chrysene-d12	133
Perylene-d12	147

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	87

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5	**Job Number:**	W12_4742
LIMS ID Number:	EX1137381	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.211	100
Acenaphthylene	208-96-8	4.25	2.670	100
Acenaphthene	83-32-9	4.36	0.309	70
Fluorene	86-73-7	4.74	1.090	97
Phenanthrene	85-01-8	5.57	0.863	100
Anthracene	120-12-7	5.62	0.318	100
Fluoranthene	206-44-0	6.89	0.348	100
Pyrene	129-00-0	7.17	0.242	M
Benzo[a]anthracene	56-55-3	8.85	0.057	M
Chrysene	218-01-9	8.90	0.041	M
Benzo[b]fluoranthene	205-99-2	10.38	0.019	M
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	10.80	0.016	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 6.224	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	103
Phenanthrene-d10	109
Chrysene-d12	112
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	66
Terphenyl-d14	87

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5A	**Job Number:**	W12_4742
LIMS ID Number:	EX1137382	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.027	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.017	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.184	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	100
Phenanthrene-d10	108
Chrysene-d12	115
Perylene-d12	122

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	99

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124742 Blank	**Job Number:**	W12_4742
LIMS ID Number:	EX1137417	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	102
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124742 Blank Spike	**Job Number:**	W12_4742
LIMS ID Number:	EX1137418	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.20	83	M
Acenaphthylene	208-96-8	4.25	79	M
Acenaphthene	83-32-9	4.37	81	M
Fluorene	86-73-7	4.74	82	M
Phenanthrene	85-01-8	5.57	88	M
Anthracene	120-12-7	5.62	84	M
Fluoranthene	206-44-0	6.89	90	M
Pyrene	129-00-0	7.18	88	M
Benzo[a]anthracene	56-55-3	8.85	103	M
Chrysene	218-01-9	8.90	87	M
Benzo[b]fluoranthene	205-99-2	10.38	90	M
Benzo[k]fluoranthene	207-08-9	10.42	89	M
Benzo[a]pyrene	50-32-8	10.80	81	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.19	83	M
Dibenzo[a,h]anthracene	53-70-3	12.22	80	M
Benzo[g,h,i]perylene	191-24-2	12.47	84	M
Total (USEPA16) PAHs	-	-	1371	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	105
Chrysene-d12	110
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4742
QC Batch Number: 110805
Directory: D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

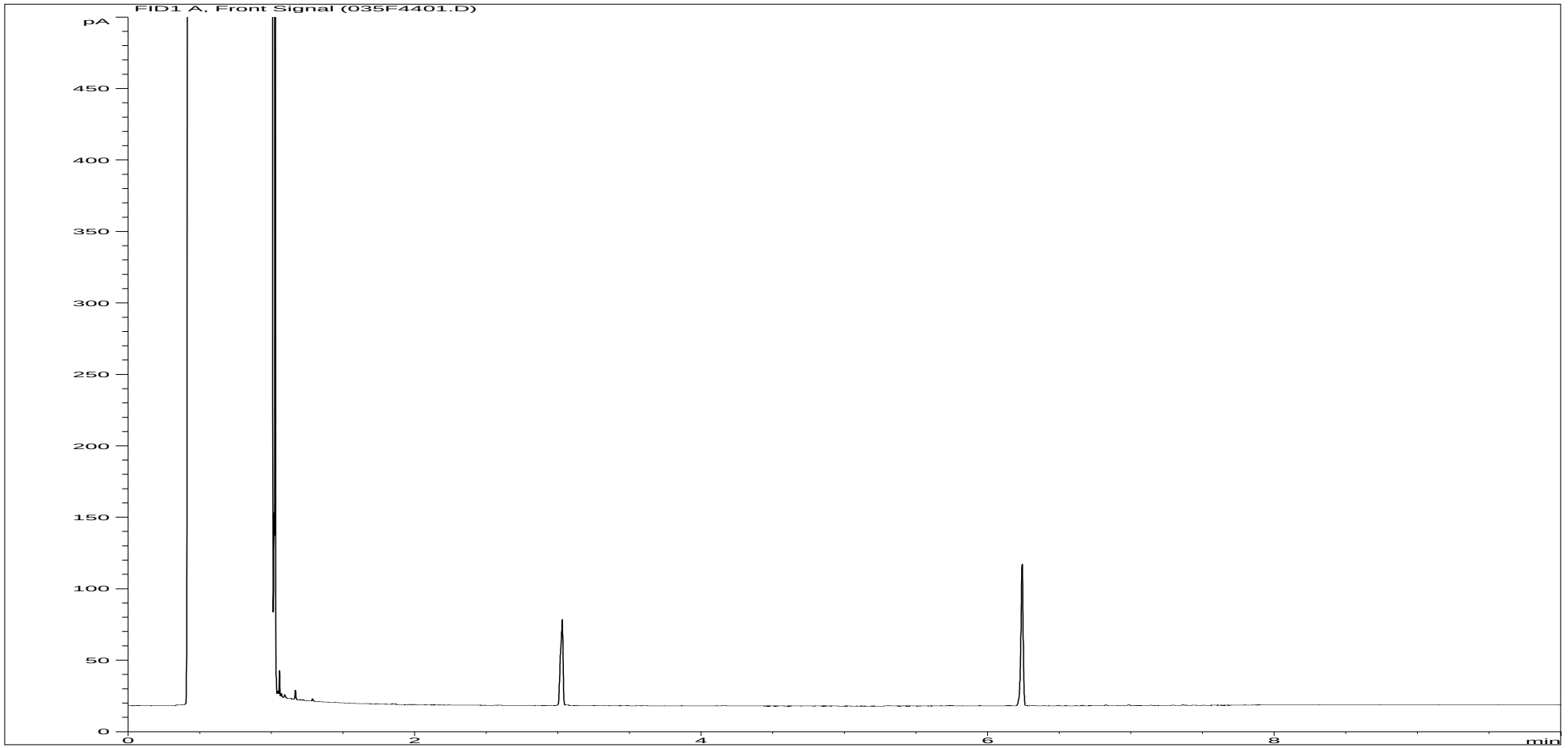
Matrix: Water
Date Booked in 02-Sep-11
Date Extracted 08-Sep-11
Date Analysed 09-Sep-11, 19:03:52

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137377	MW11-12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137378	MW99-204	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137379	MW11-5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137380	MW11-6	<0.01	0.062	<0.01	0.532	<0.01	0.229	<0.01	0.072	0.038	0.016	0.048	0.91
EX1137381	MW5	<0.01	0.015	<0.01	0.011	<0.01	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	0.056
EX1137382	MW5A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137417	Report 124742 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137418	Report 124742 Blank Spike	0.594	0.207	0.91	0.328	1.83	0.615	1.13	0.32	2.95	0.746	7.46	2.23

Where individual results are flagged see report notes for status.

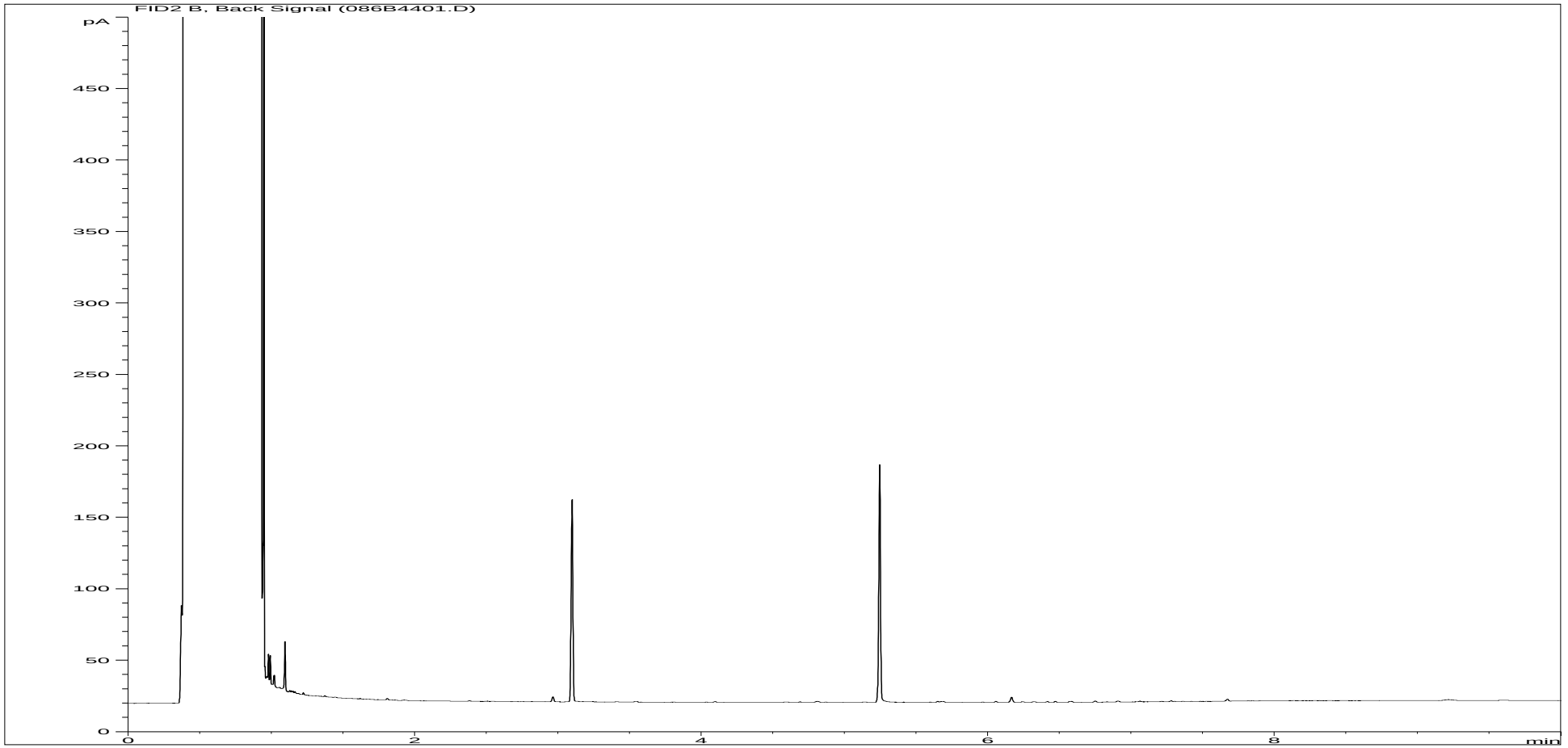
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137377ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	09-Sep-11, 21:04:29		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\035F4401.D		

Where individual results are flagged see report notes for status.

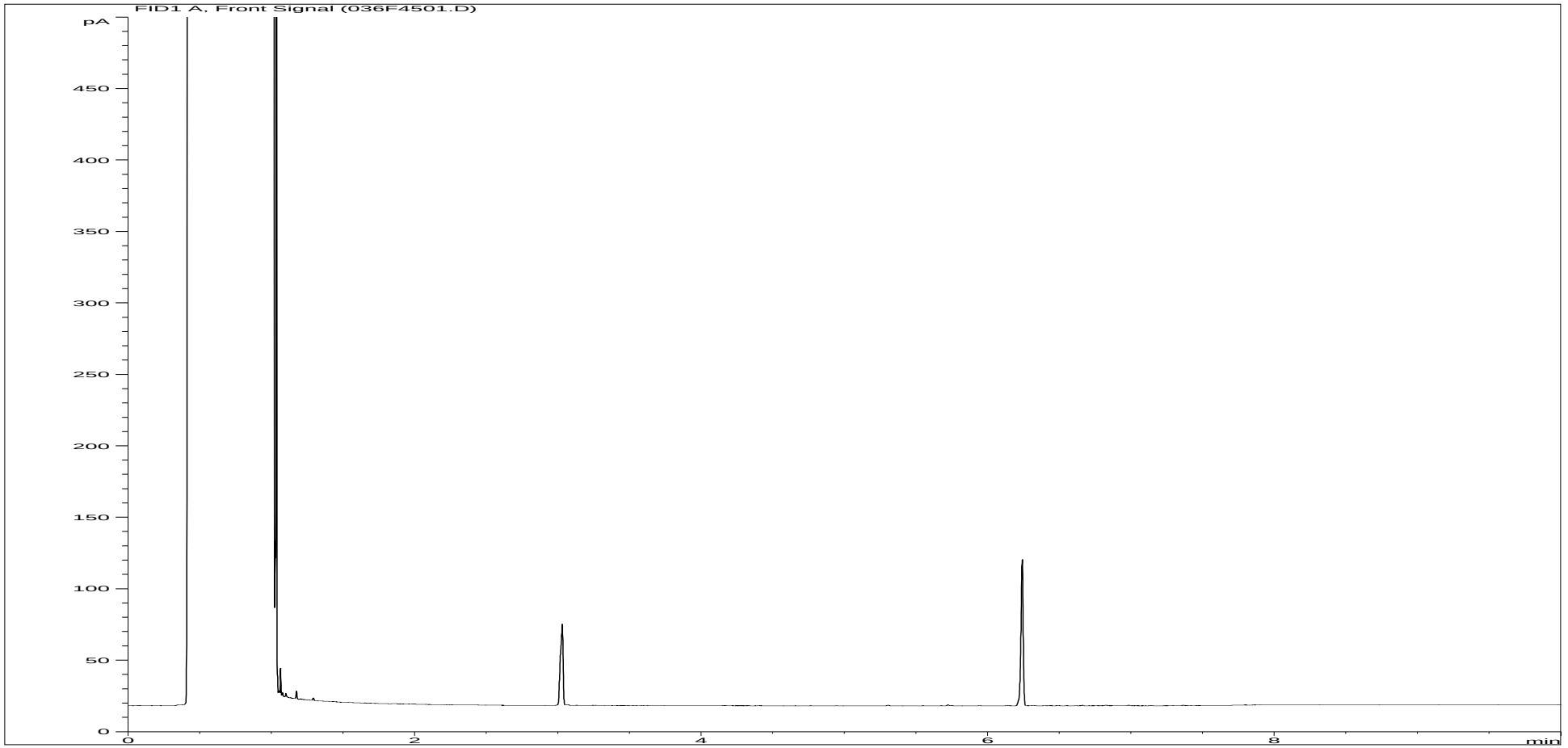
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137377ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	09-Sep-11, 21:04:29		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\086B4401.D		

Where individual results are flagged see report notes for status.

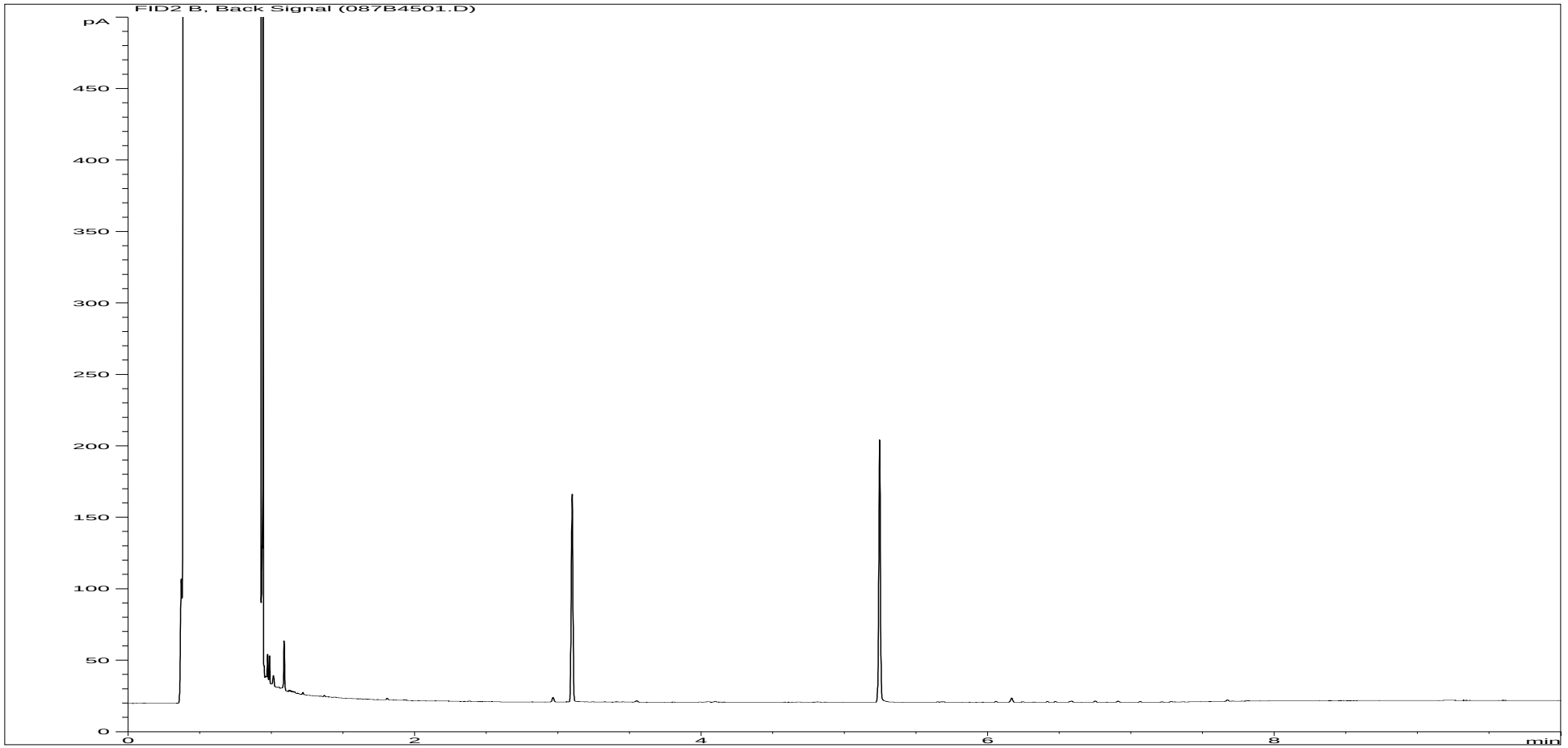
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137378ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	09-Sep-11, 21:21:50		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\036F4501.D		

Where individual results are flagged see report notes for status.

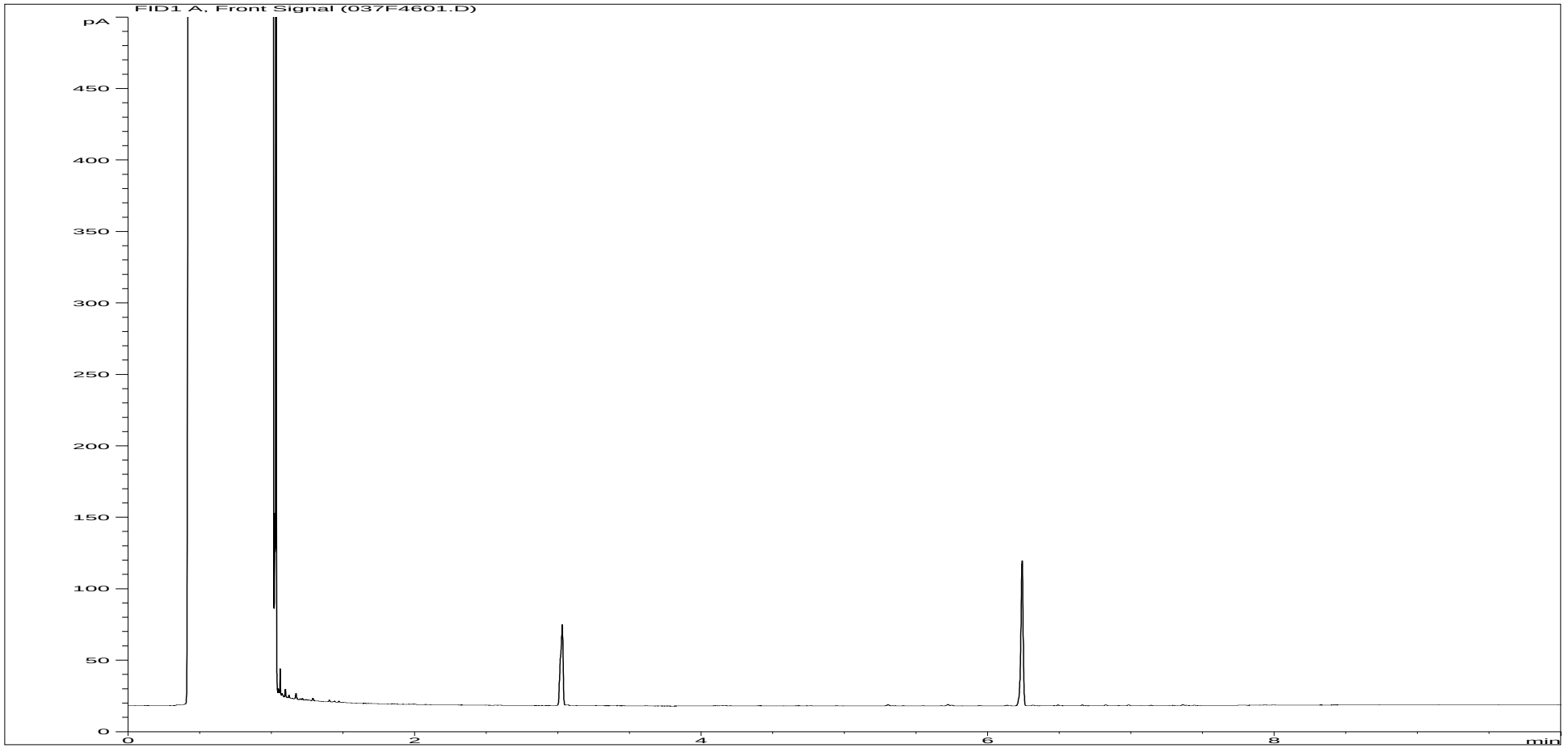
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137378ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	09-Sep-11, 21:21:50		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\087B4501.D		

Where individual results are flagged see report notes for status.

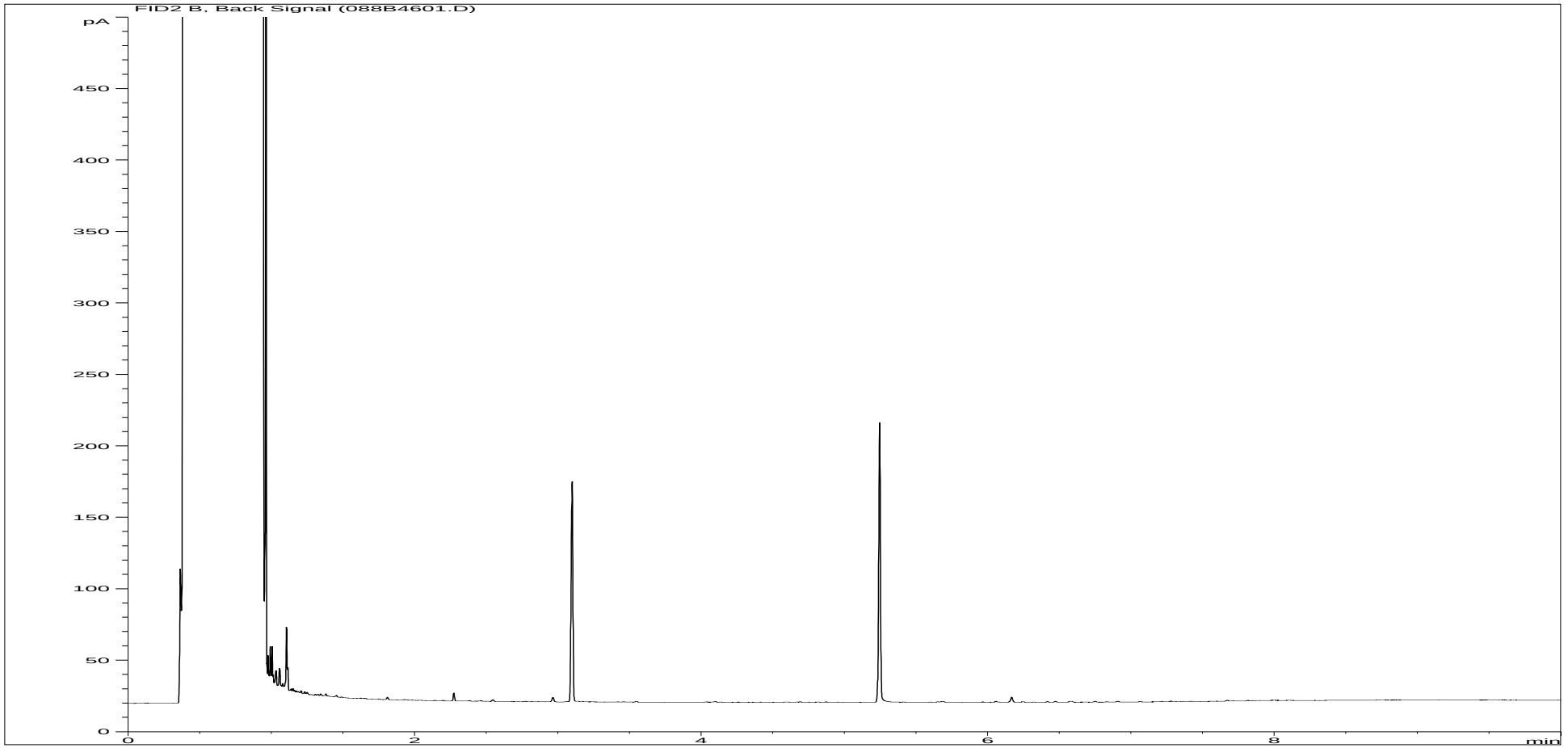
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137379ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	09-Sep-11, 21:38:59		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\037F4601.D		

Where individual results are flagged see report notes for status.

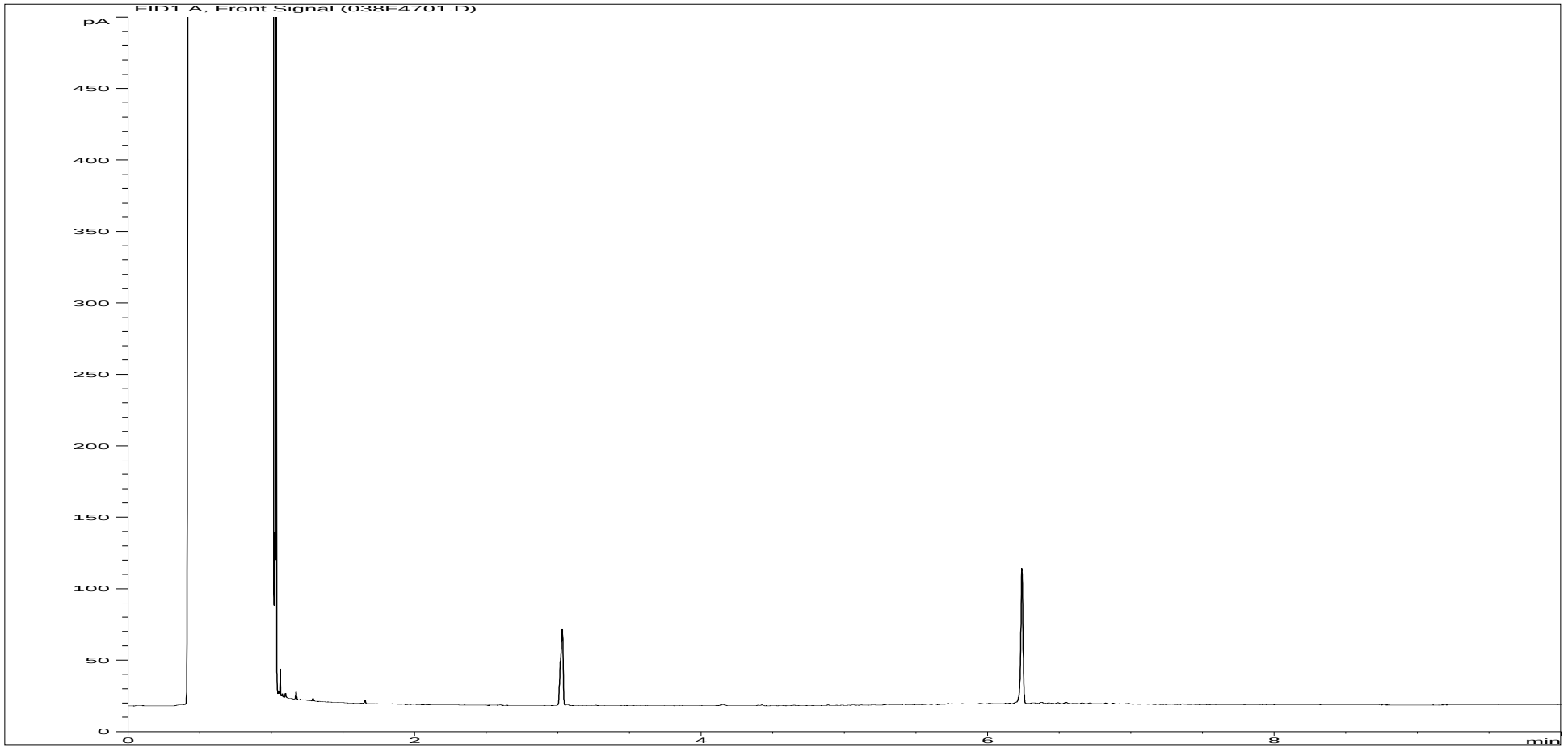
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137379ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	09-Sep-11, 21:38:59		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\088B4601.D		

Where individual results are flagged see report notes for status.

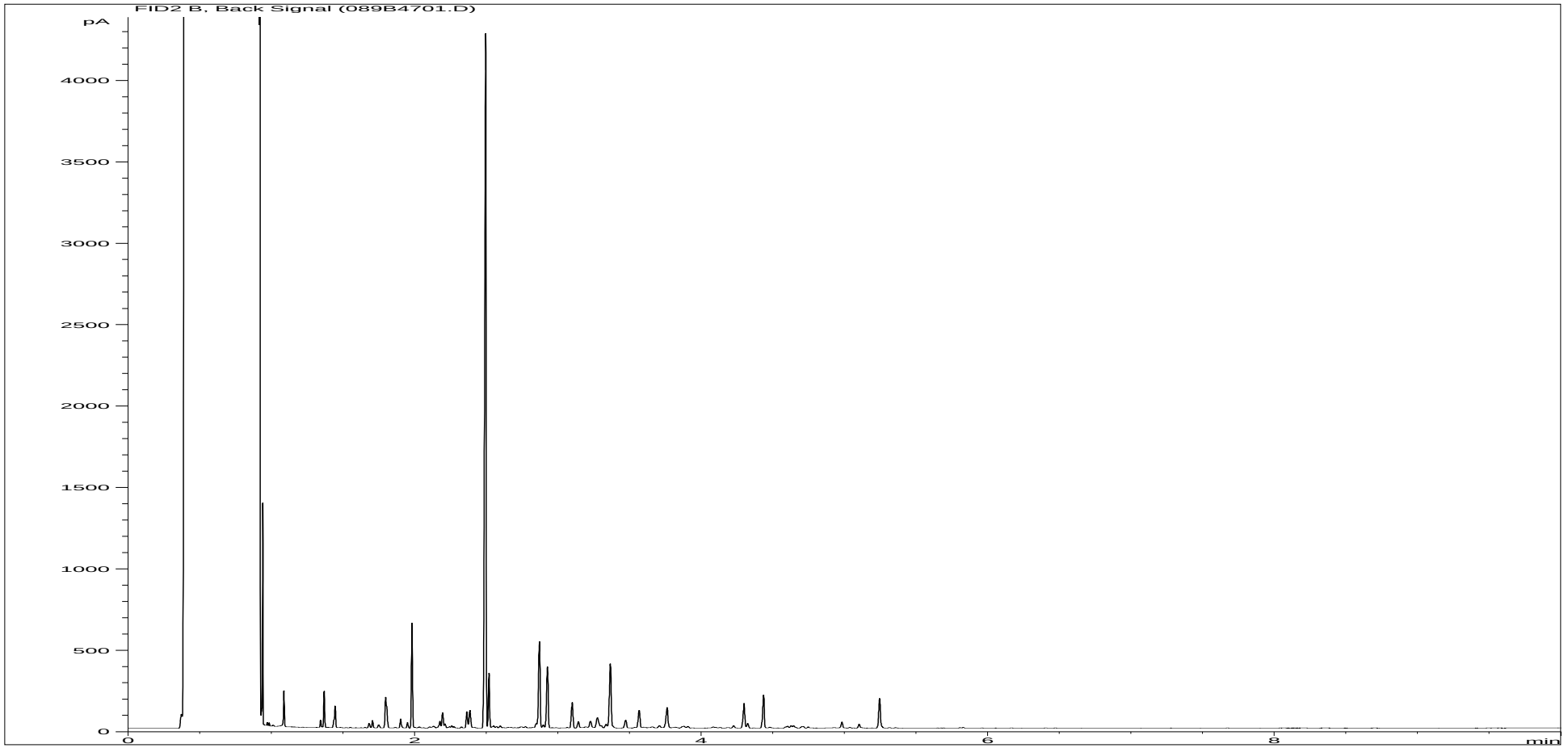
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137380ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	09-Sep-11, 21:56:05		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\038F4701.D		

Where individual results are flagged see report notes for status.

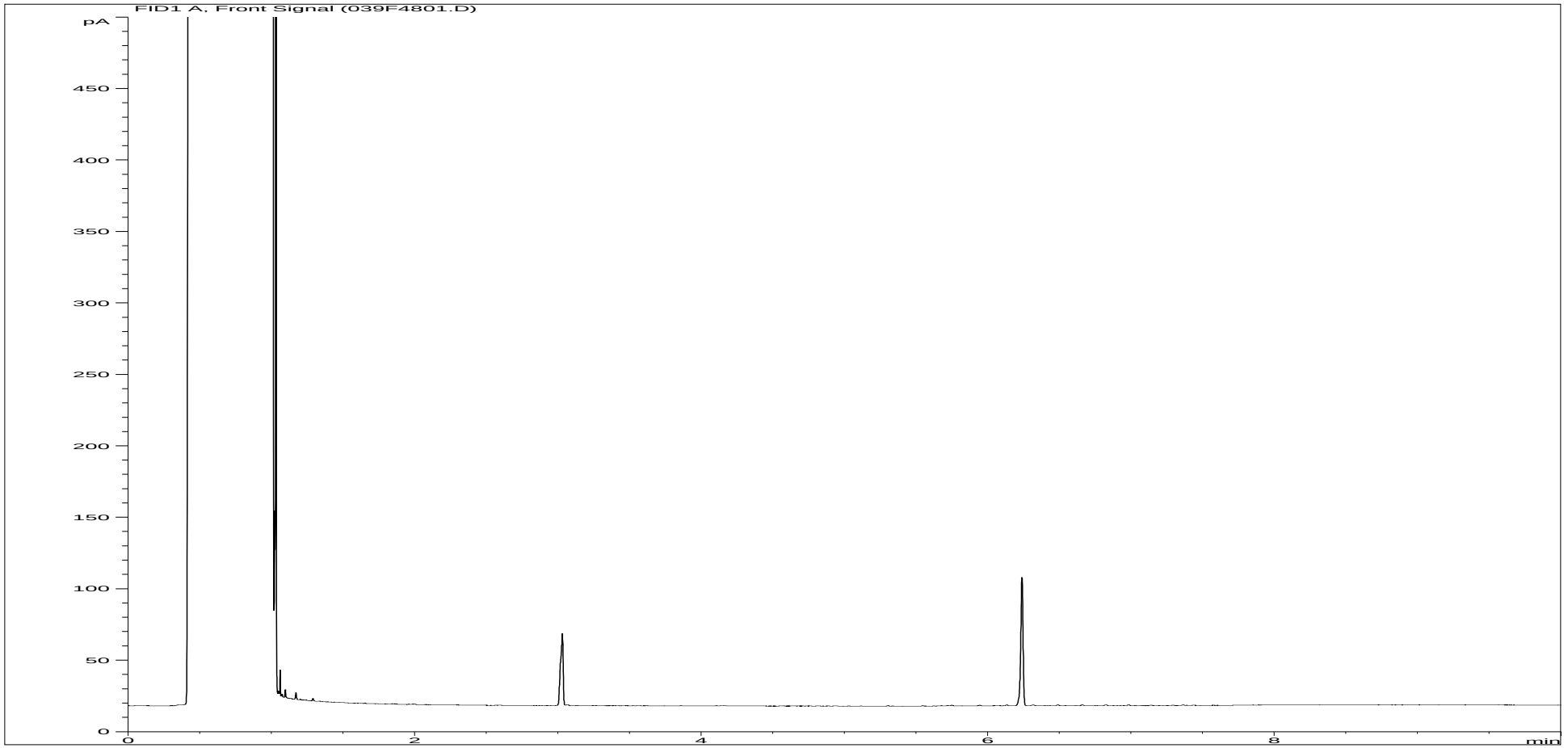
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137380ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	09-Sep-11, 21:56:05		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\089B4701.D		

Where individual results are flagged see report notes for status.

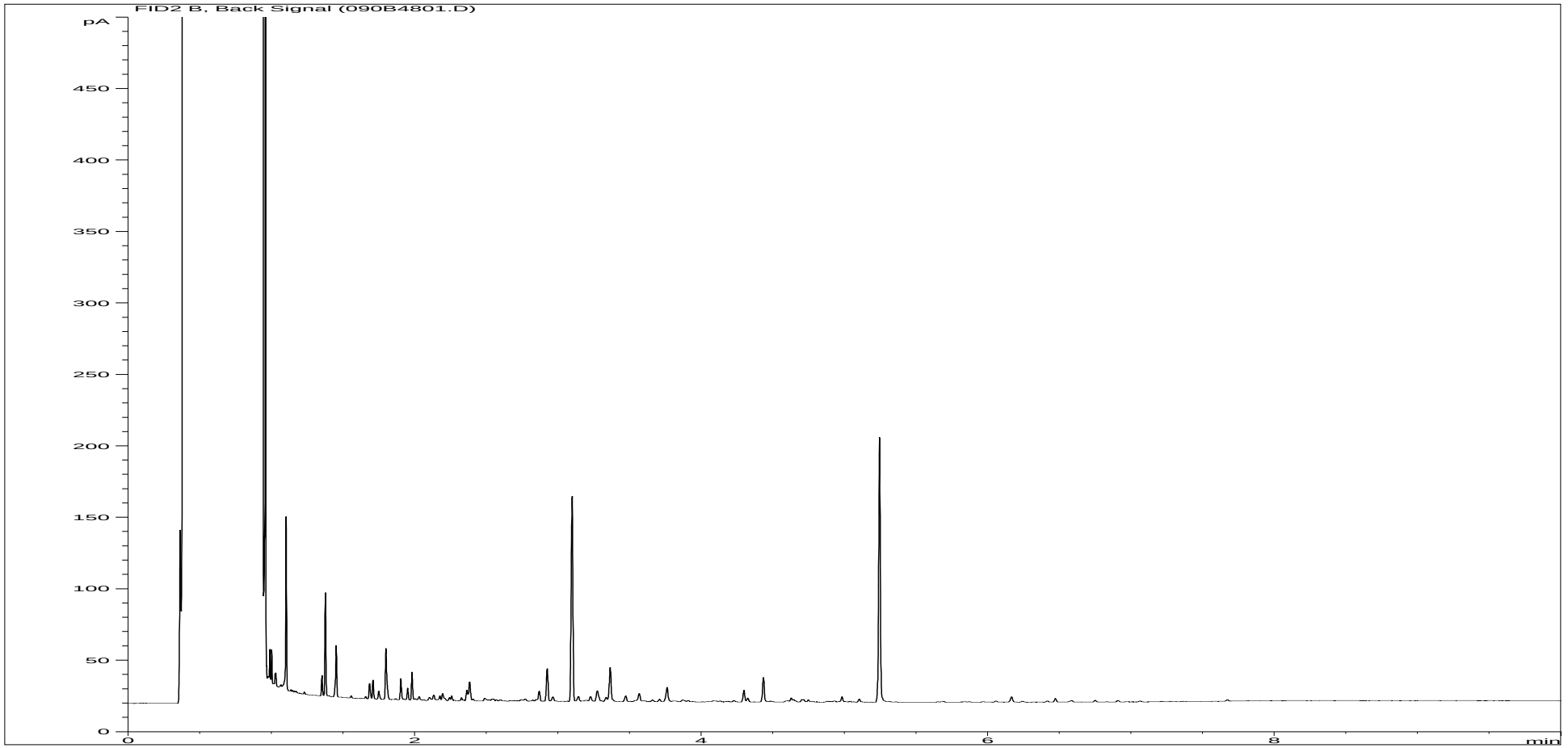
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137381ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	09-Sep-11, 22:13:11		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\039F4801.D		

Where individual results are flagged see report notes for status.

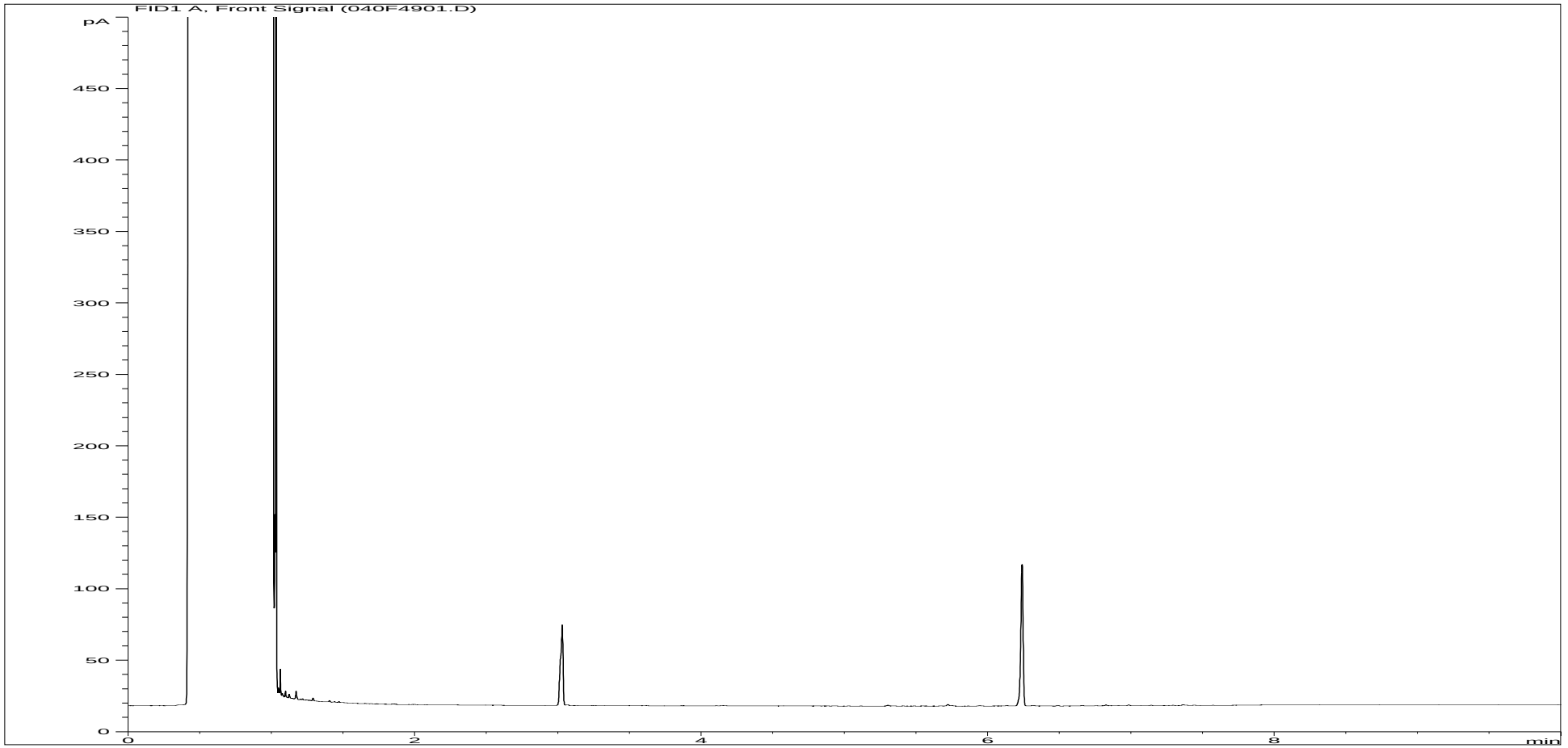
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137381ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	09-Sep-11, 22:13:11		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\090B4801.D		

Where individual results are flagged see report notes for status.

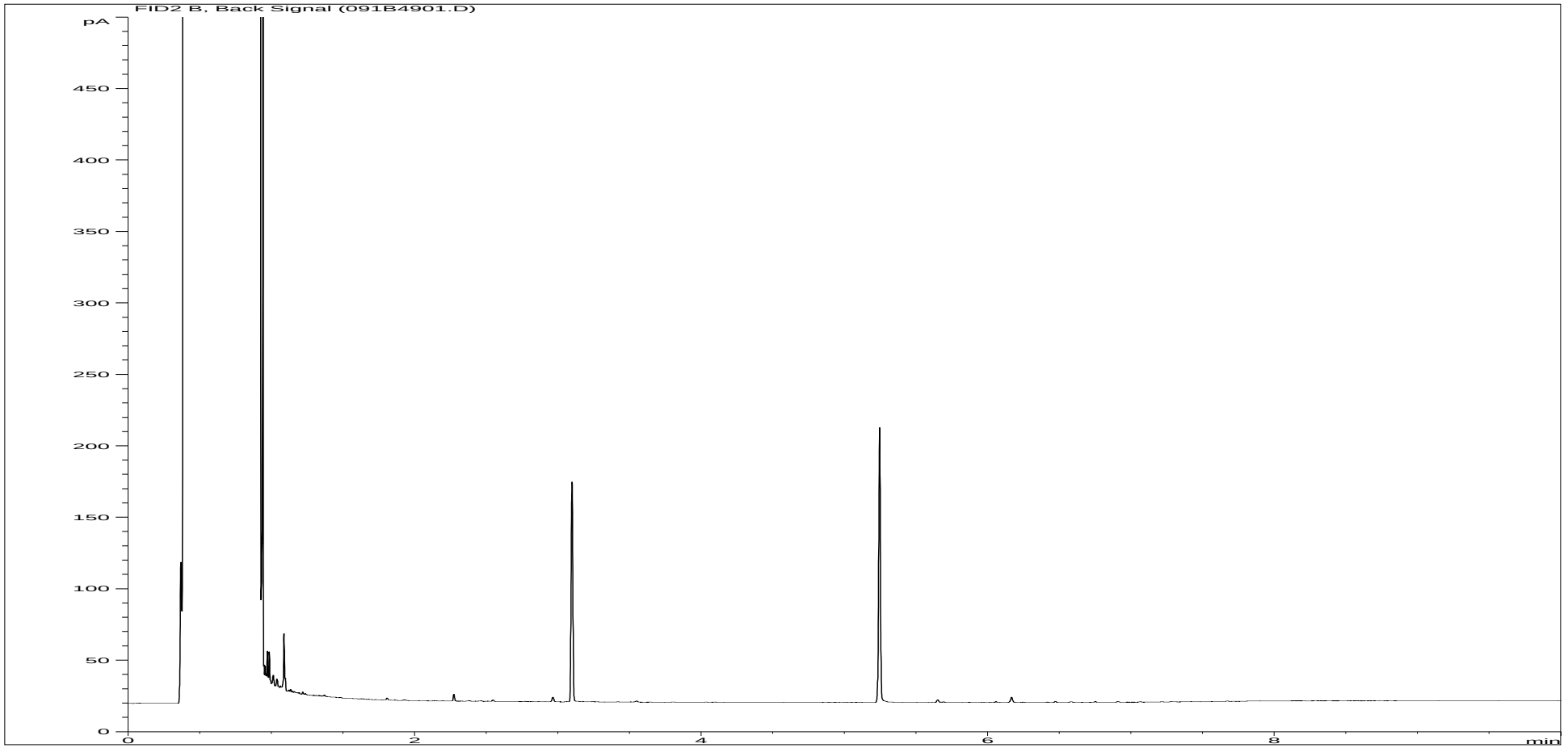
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137382ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5A
Acquisition Date/Time:	09-Sep-11, 22:30:31		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\040F4901.D		

Where individual results are flagged see report notes for status.

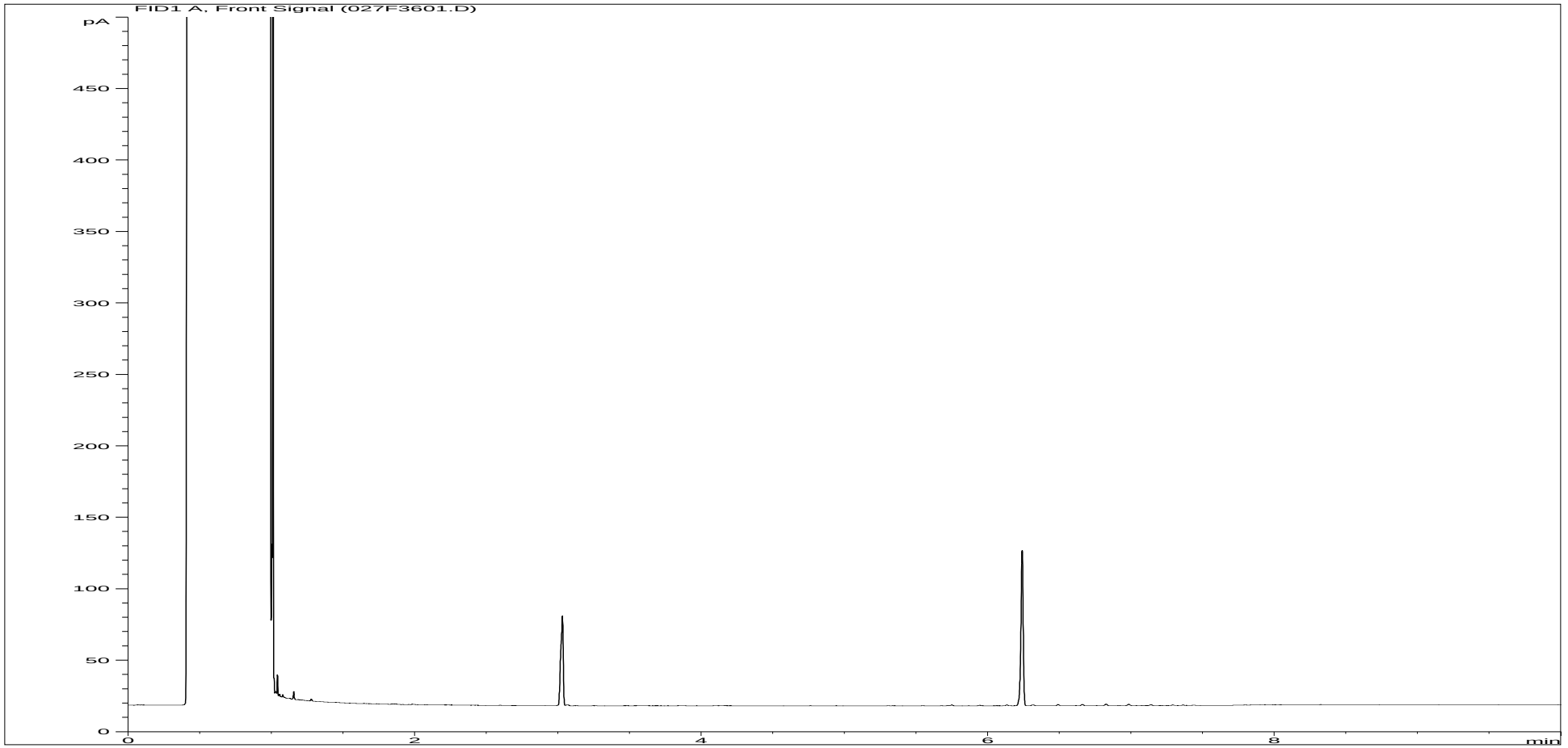
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137382ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5A
Acquisition Date/Time:	09-Sep-11, 22:30:31		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\091B4901.D		

Where individual results are flagged see report notes for status.

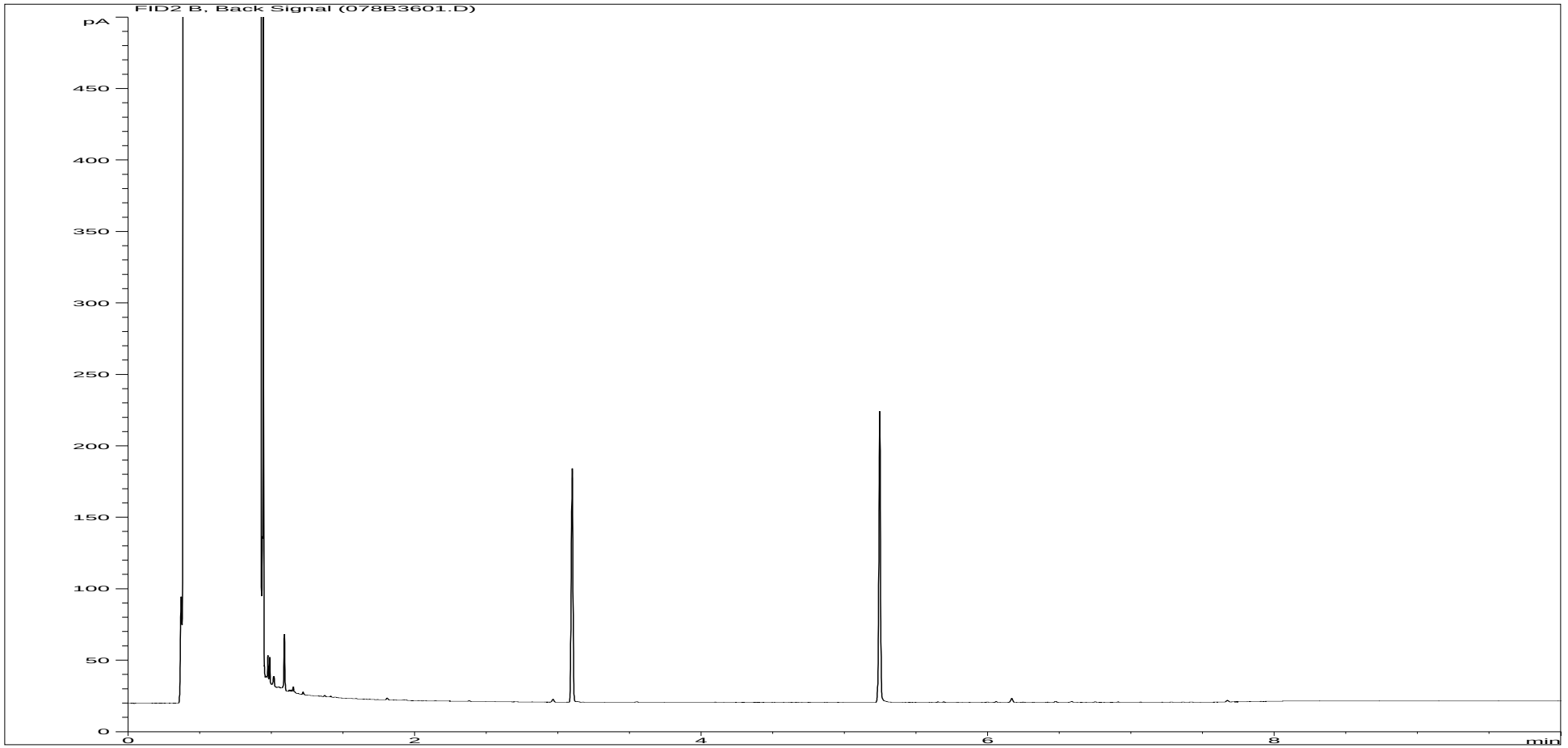
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137417ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\027F3601.D		

Where individual results are flagged see report notes for status.

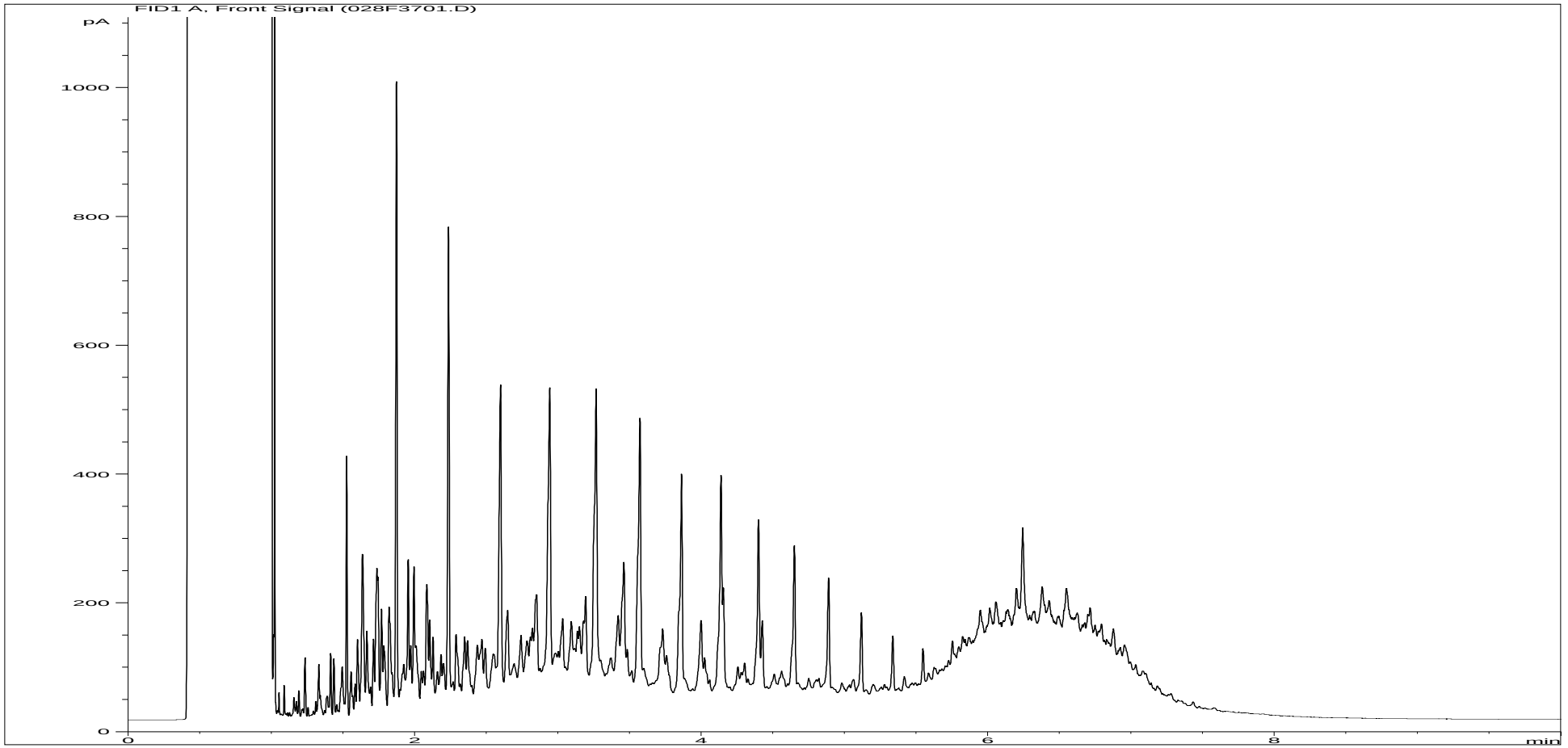
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137417ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\078B3601.D		

Where individual results are flagged see report notes for status.

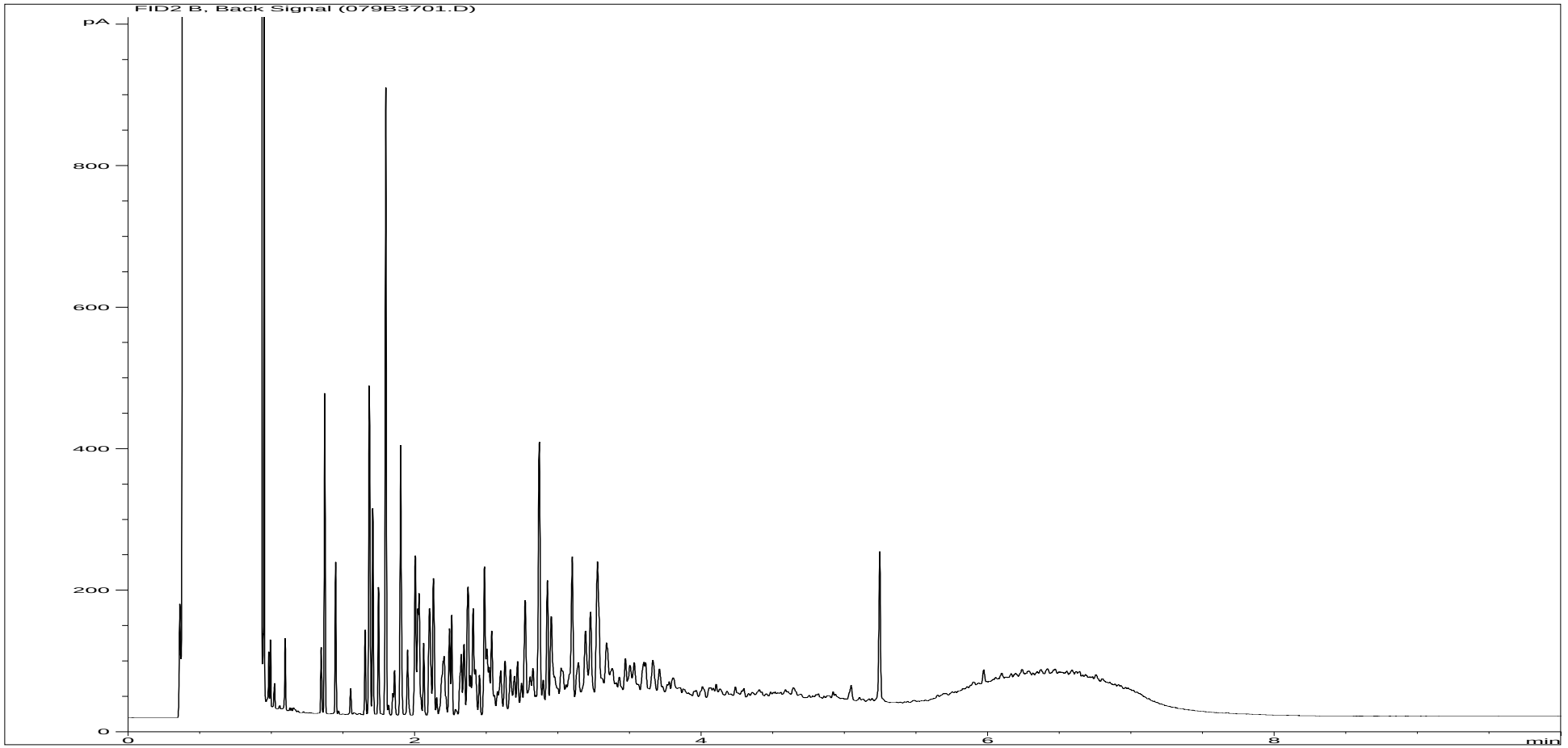
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137418ALI	**Job Number:**	W12_4742
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\028F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137418ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

Consignment No 28913
Date Logged 02-Sep-2011

Report Due 14-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137377	MW11-12	30/08/11																									
EX/1137378	MW99-204	30/08/11																									
EX/1137379	MW11-5	31/08/11																									
EX/1137380	MW11-6	31/08/11																									
EX/1137381	MW5	31/08/11																									
EX/1137382	MW5A	31/08/11																									
EX/1137417	Report 124742 Blank	31/08/11																									
EX/1137418	Report 124742 Blank Spike	31/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

Consignment No 28913
Date Logged 02-Sep-2011

Report Due 14-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137377	MW11-12	30/08/11															
EX/1137378	MW99-204	30/08/11															
EX/1137379	MW11-5	31/08/11															
EX/1137380	MW11-6	31/08/11															
EX/1137381	MW5	31/08/11															
EX/1137382	MW5A	31/08/11															
EX/1137417	Report 124742 Blank	31/08/11															
EX/1137418	Report 124742 Blank Spike	31/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124763 (Ver. 1)
Your Ref: 305001-50065-29

September 15, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

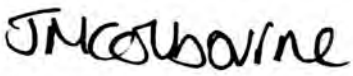
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics



J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124763 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 02-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 15-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137461	MW99-110	31-Aug-11	6.9	983	51	177	68	84	8	94	6	0.003	0.003	<0.0001	Req	<0.001	<0.001	0.007
1137462	MW11-8	01-Sep-11	7.0	1090	120	96	11	127	11	47	26	0.003	0.007	<0.0001	Req	<0.001	<0.001	<0.002
1137463	MW11-7	01-Sep-11	7.1	1110	62	93	88	157	8	58	13	0.003	0.006	<0.0001	Req	<0.001	<0.001	<0.002
1137490	QC Blank		7.05	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137491	Blank Spike (% Recovery)				102	102	99	98	99	101	101	101	96	94	Req	100	99	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137461	MW99-110	31-Aug-11	0.12	0.72	0.84	<0.01	<0.001	<0.0001	<0.001	1.6	0.4	<0.2	<0.02	<0.02	<0.05	2.3	<0.1	Req
1137462	MW11-8	01-Sep-11	<0.01	11.8	14.6	3.36	0.019	<0.0001	<0.001	19.9	<0.2	<0.2	<0.02	<0.02	<0.05	25	2.20	Req
1137463	MW11-7	01-Sep-11	1.81	5.08	6.89	0.02	0.008	<0.0001	0.001	10.1	<0.2	<0.2	<0.02	<0.02	0.11	17	0.29	Req
1137490	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137491	Blank Spike (% Recovery)			95	99	98	95	103	92	101	101	99	101	99	109	108	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137461	MW99-110	31-Aug-11	243	4.13	<0.02	6.9	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137462	MW11-8	01-Sep-11	362	4.12	<0.02	0.1	19	105	4	49	98	0.0211	<0.0005	0.0102	<0.1	0.0029		
1137463	MW11-7	01-Sep-11	425	1.63	<0.02	0.9	10	<1	<1	<1	<2	0.0707	0.0195	0.5	<0.1	0.3		
1137490	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137491	Blank Spike (% Recovery)			99			98	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-110	**Job Number:**	W12_4763
LIMS ID Number:	EX1137461	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.030	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.180	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	98
Phenanthrene-d10	103
Chrysene-d12	99
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	100

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-8	**Job Number:**	W12_4763
LIMS ID Number:	EX1137462	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	525.000	100
Acenaphthylene	208-96-8	4.25	1.660	100
Acenaphthene	83-32-9	4.37	52.100	94
Fluorene	86-73-7	4.74	28.000	100
Phenanthrene	85-01-8	5.57	26.200	100
Anthracene	120-12-7	5.62	8.300	100
Fluoranthene	206-44-0	6.89	4.670	100
Pyrene	129-00-0	7.18	3.880	100
Benzo[a]anthracene	56-55-3	8.85	0.808	100
Chrysene	218-01-9	8.90	0.596	100
Benzo[b]fluoranthene	205-99-2	10.38	0.341	100
Benzo[k]fluoranthene	207-08-9	10.41	0.128	100
Benzo[a]pyrene	50-32-8	10.80	0.340	100
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.106	0
Dibenzo[a,h]anthracene	53-70-3	12.21	0.030	0
Benzo[g,h,i]perylene	191-24-2	12.47	0.098	0
Total (USEPA16) PAHs	-	-	< 652.257	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	130
Acenaphthene-d10	115
Phenanthrene-d10	117
Chrysene-d12	132
Perylene-d12	145

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-7	**Job Number:**	W12_4763
LIMS ID Number:	EX1137463	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	5.340	100
Acenaphthylene	208-96-8	4.25	25.700	100
Acenaphthene	83-32-9	4.37	57.300	90
Fluorene	86-73-7	4.74	30.100	97
Phenanthrene	85-01-8	5.57	11.800	100
Anthracene	120-12-7	5.62	8.860	100
Fluoranthene	206-44-0	6.89	4.600	100
Pyrene	129-00-0	7.17	3.570	100
Benzo[a]anthracene	56-55-3	8.85	0.284	100
Chrysene	218-01-9	8.90	0.217	100
Benzo[b]fluoranthene	205-99-2	10.38	0.063	M
Benzo[k]fluoranthene	207-08-9	10.41	0.028	M
Benzo[a]pyrene	50-32-8	10.80	0.056	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.015	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.47	0.016	M
Total (USEPA16) PAHs	-	-	< 147.959	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	81
Acenaphthene-d10	121
Phenanthrene-d10	122
Chrysene-d12	132
Perylene-d12	141

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	64
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124763 Blank	**Job Number:**	W12_4763
LIMS ID Number:	EX1137490	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	102
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124763 Blank Spike	**Job Number:**	W12_4763
LIMS ID Number:	EX1137491	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.20	83	M
Acenaphthylene	208-96-8	4.25	79	M
Acenaphthene	83-32-9	4.37	81	M
Fluorene	86-73-7	4.74	82	M
Phenanthrene	85-01-8	5.57	88	M
Anthracene	120-12-7	5.62	84	M
Fluoranthene	206-44-0	6.89	90	M
Pyrene	129-00-0	7.18	88	M
Benzo[a]anthracene	56-55-3	8.85	103	M
Chrysene	218-01-9	8.90	87	M
Benzo[b]fluoranthene	205-99-2	10.38	90	M
Benzo[k]fluoranthene	207-08-9	10.42	89	M
Benzo[a]pyrene	50-32-8	10.80	81	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.19	83	M
Dibenzo[a,h]anthracene	53-70-3	12.22	80	M
Benzo[g,h,i]perylene	191-24-2	12.47	84	M
Total (USEPA16) PAHs	-	-	1371	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	105
Chrysene-d12	110
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4763
QC Batch Number: 110805
Directory: D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

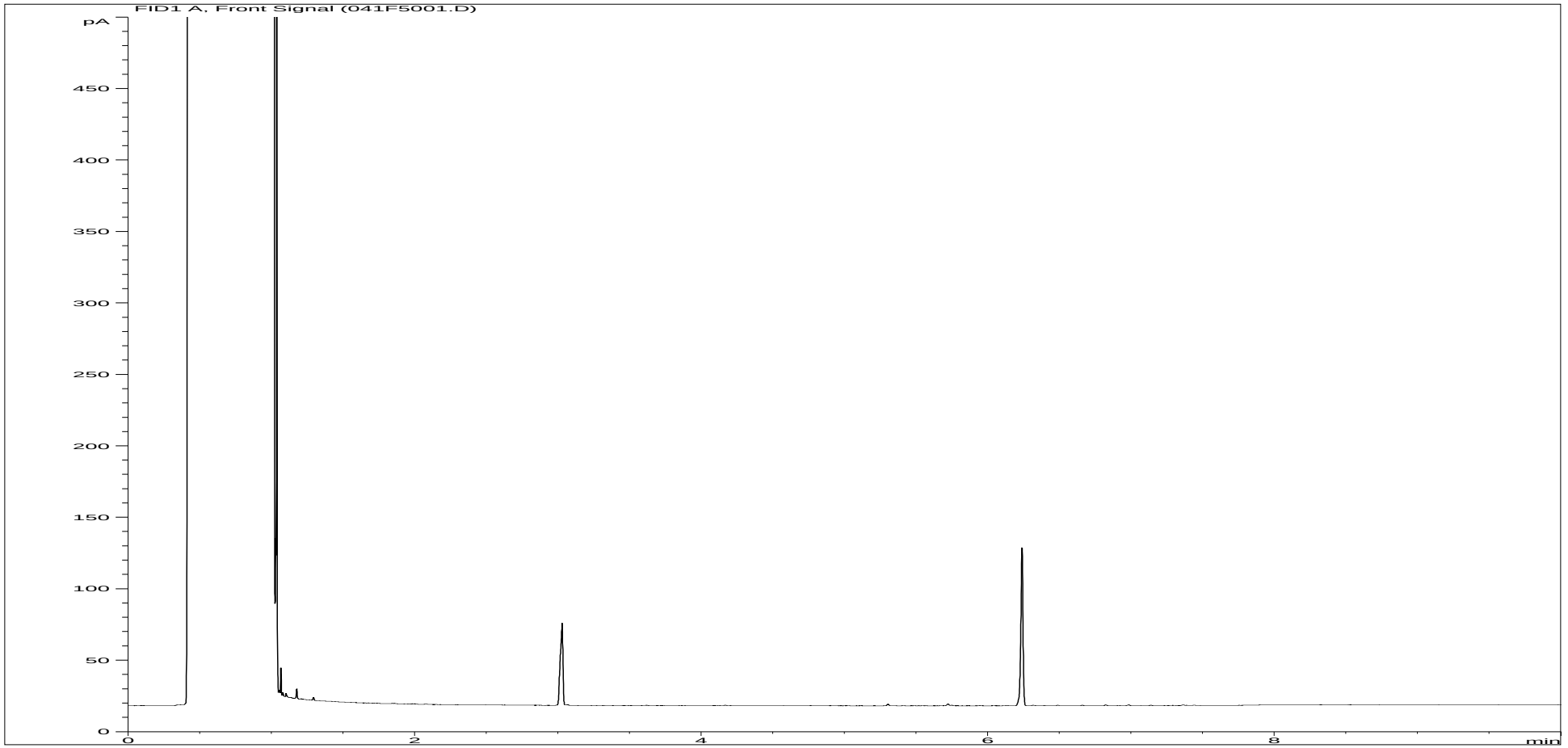
Matrix: Water
Date Booked ir 02-Sep-11
Date Extracted 08-Sep-11
Date Analysed 09-Sep-11, 19:03:52

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137461	MW99-110	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137462	MW11-8	0.014	0.357	0.019	1.13	0.064	0.683	0.084	0.225	0.115	0.09	0.307	2.49
EX1137463	MW11-7	<0.01	0.297	<0.01	0.572	<0.01	0.869	<0.01	0.182	<0.01	0.034	0.01	1.96
EX1137490	Report 124763 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137491	Report 124763 Blank Spike	0.594	0.207	0.91	0.328	1.83	0.615	1.13	0.32	2.95	0.746	7.46	2.23

Where individual results are flagged see report notes for status.

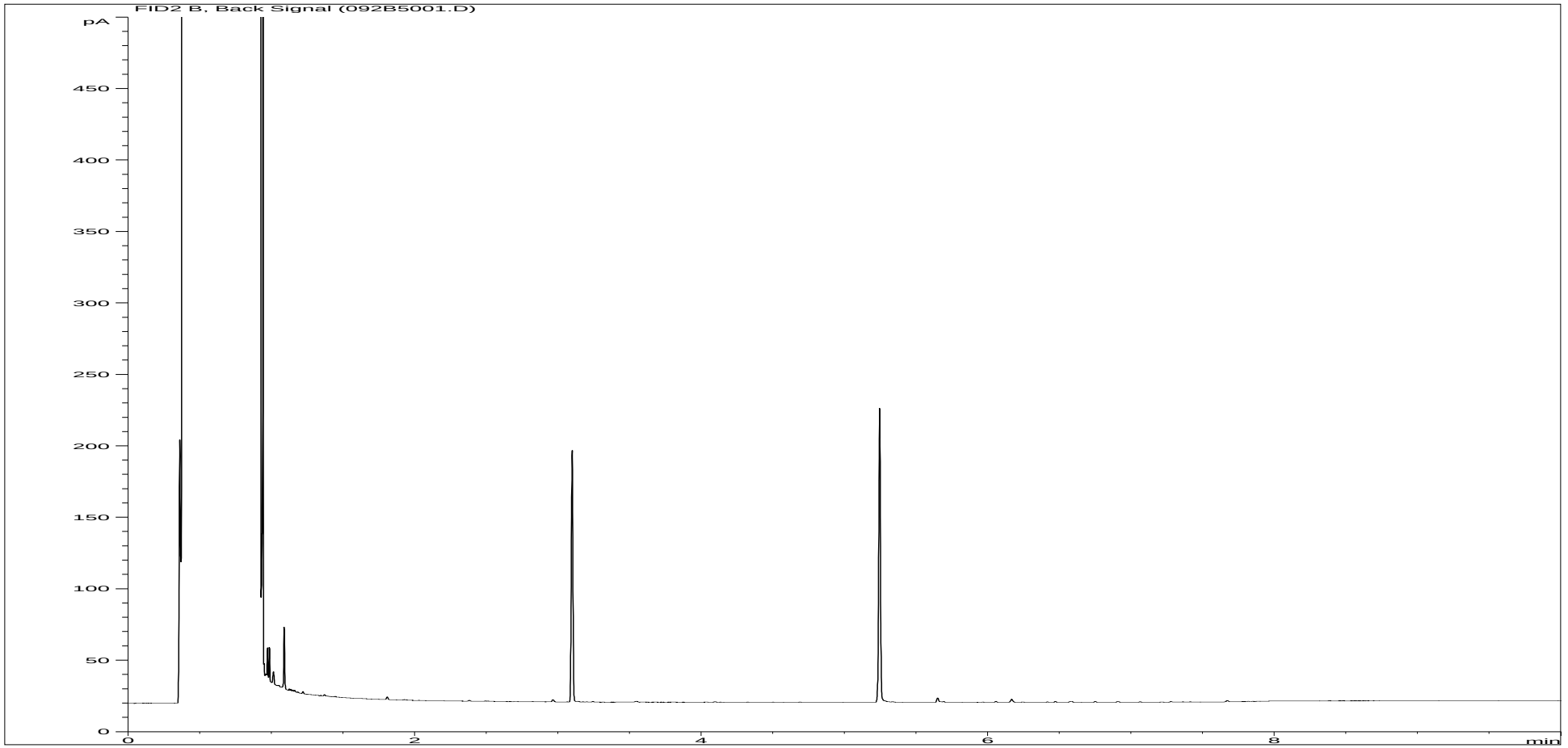
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137461ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	09-Sep-11, 22:47:35		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\041F5001.D		

Where individual results are flagged see report notes for status.

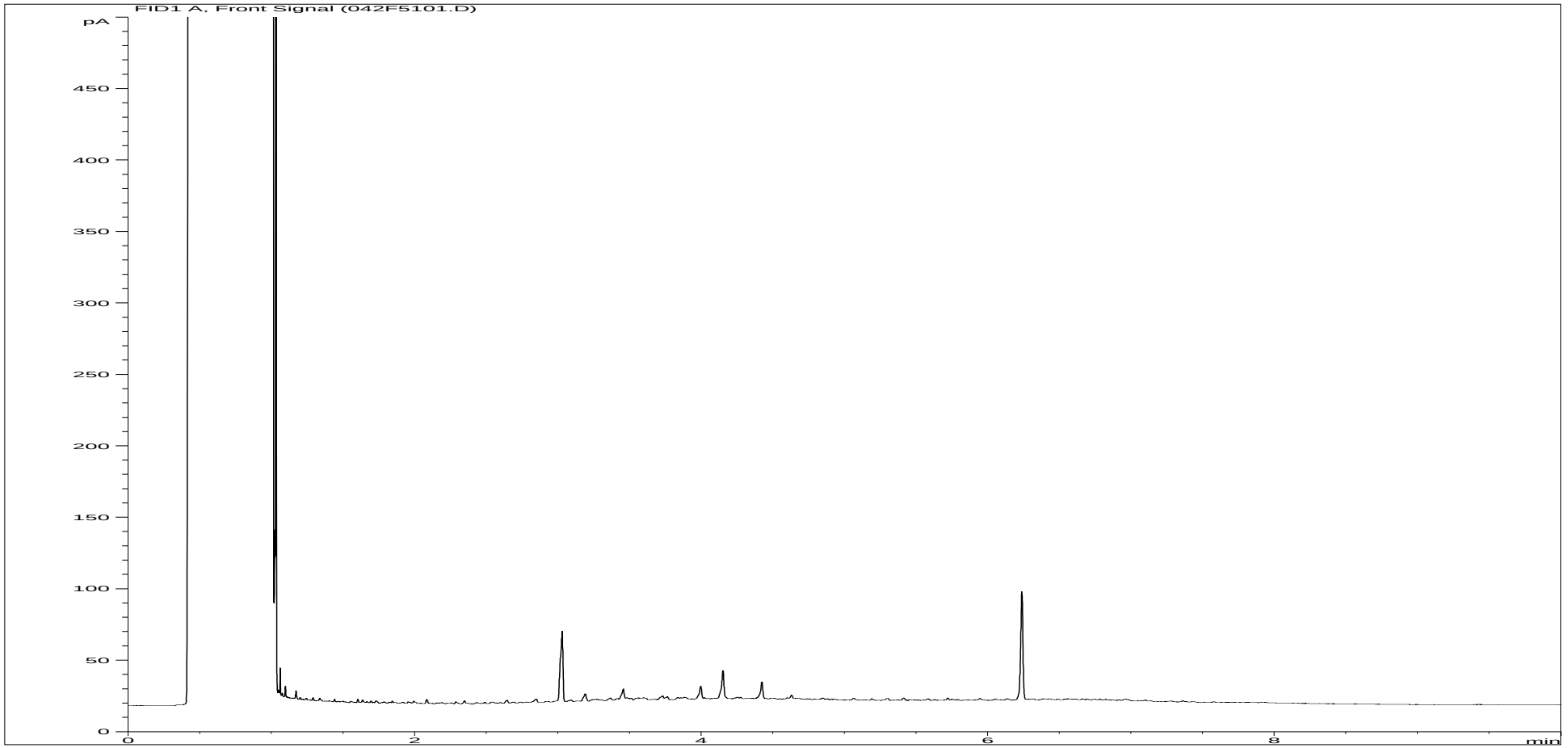
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137461ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	09-Sep-11, 22:47:35		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\092B5001.D		

Where individual results are flagged see report notes for status.

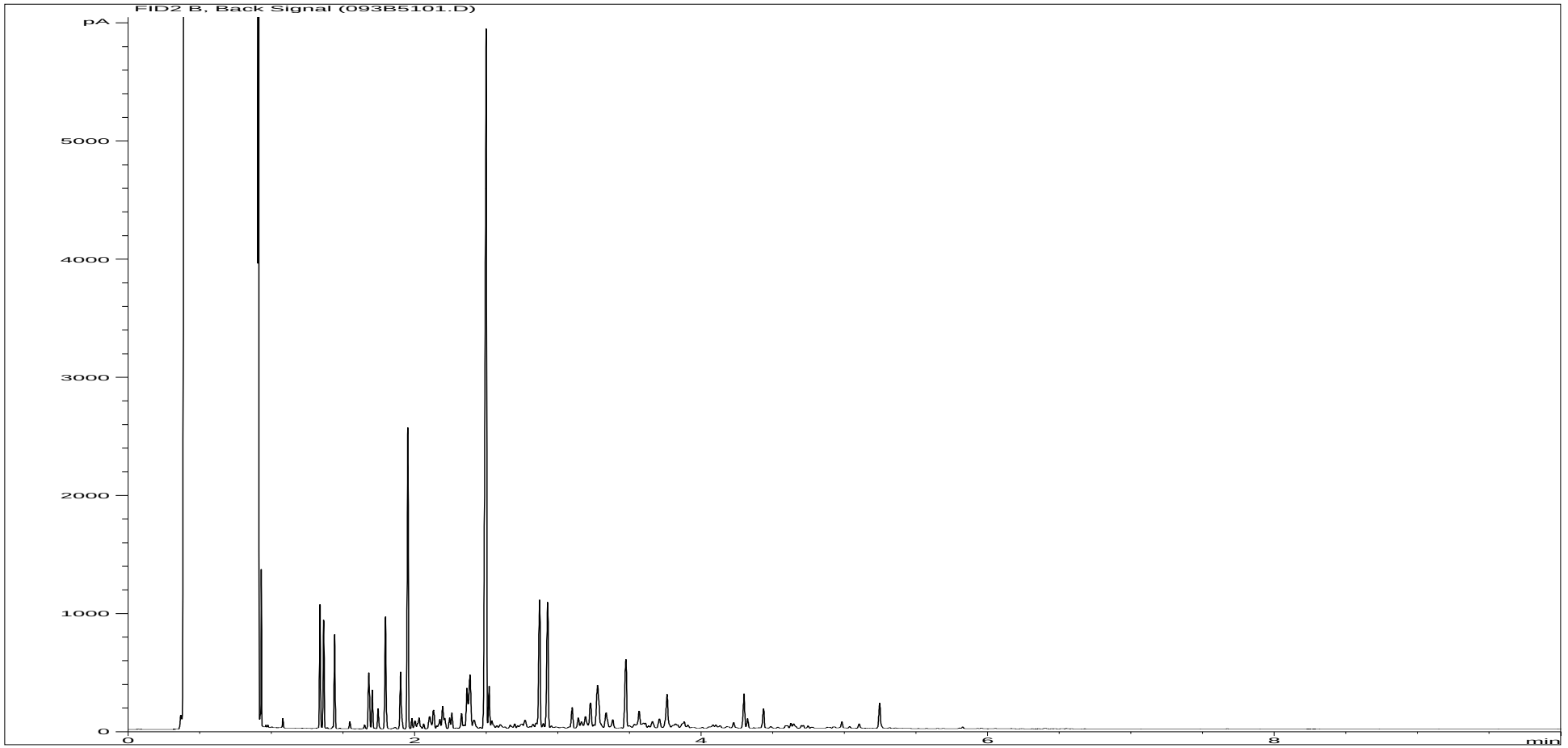
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137462ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	09-Sep-11, 23:04:45		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\042F5101.D		

Where individual results are flagged see report notes for status.

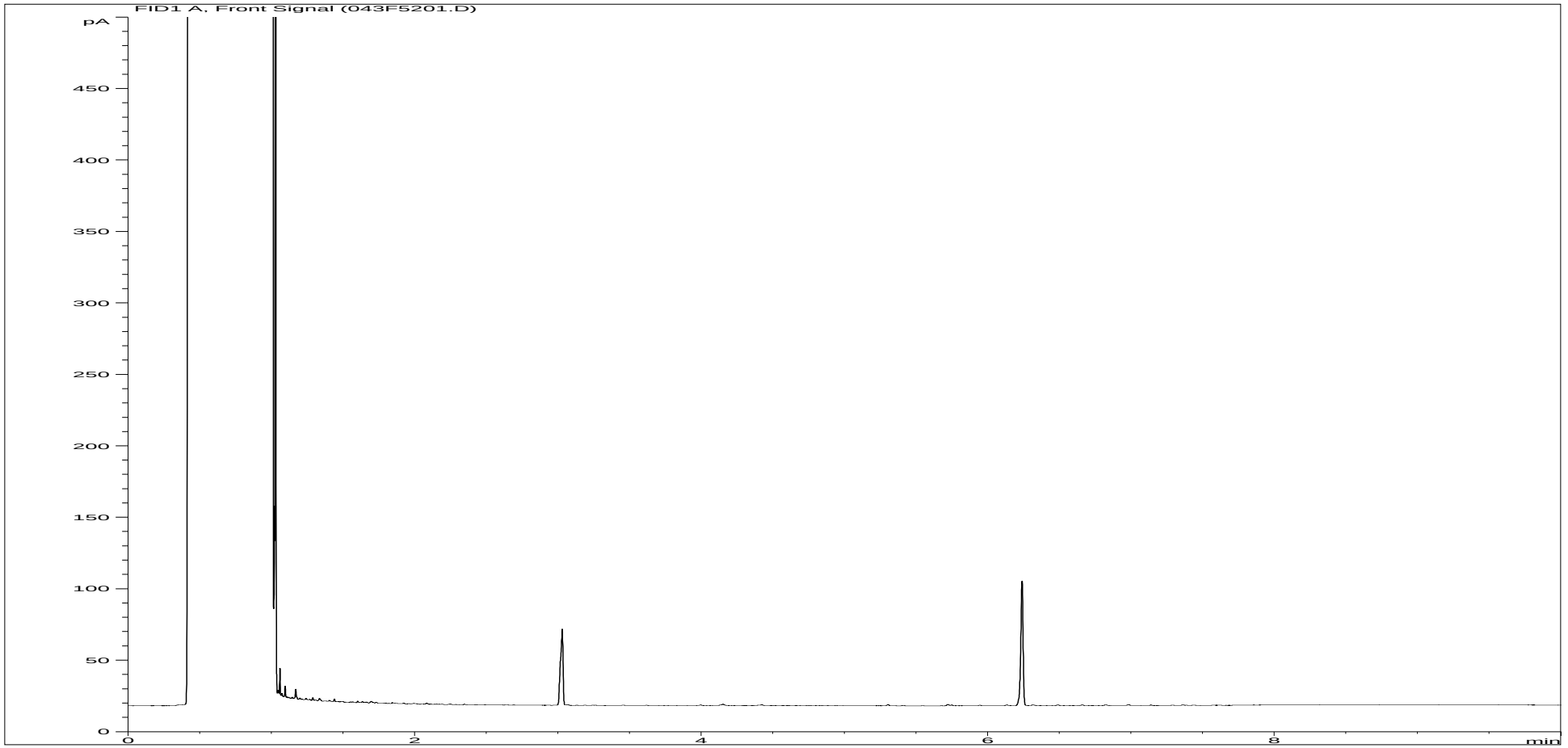
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137462ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	09-Sep-11, 23:04:45		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\093B5101.D		

Where individual results are flagged see report notes for status.

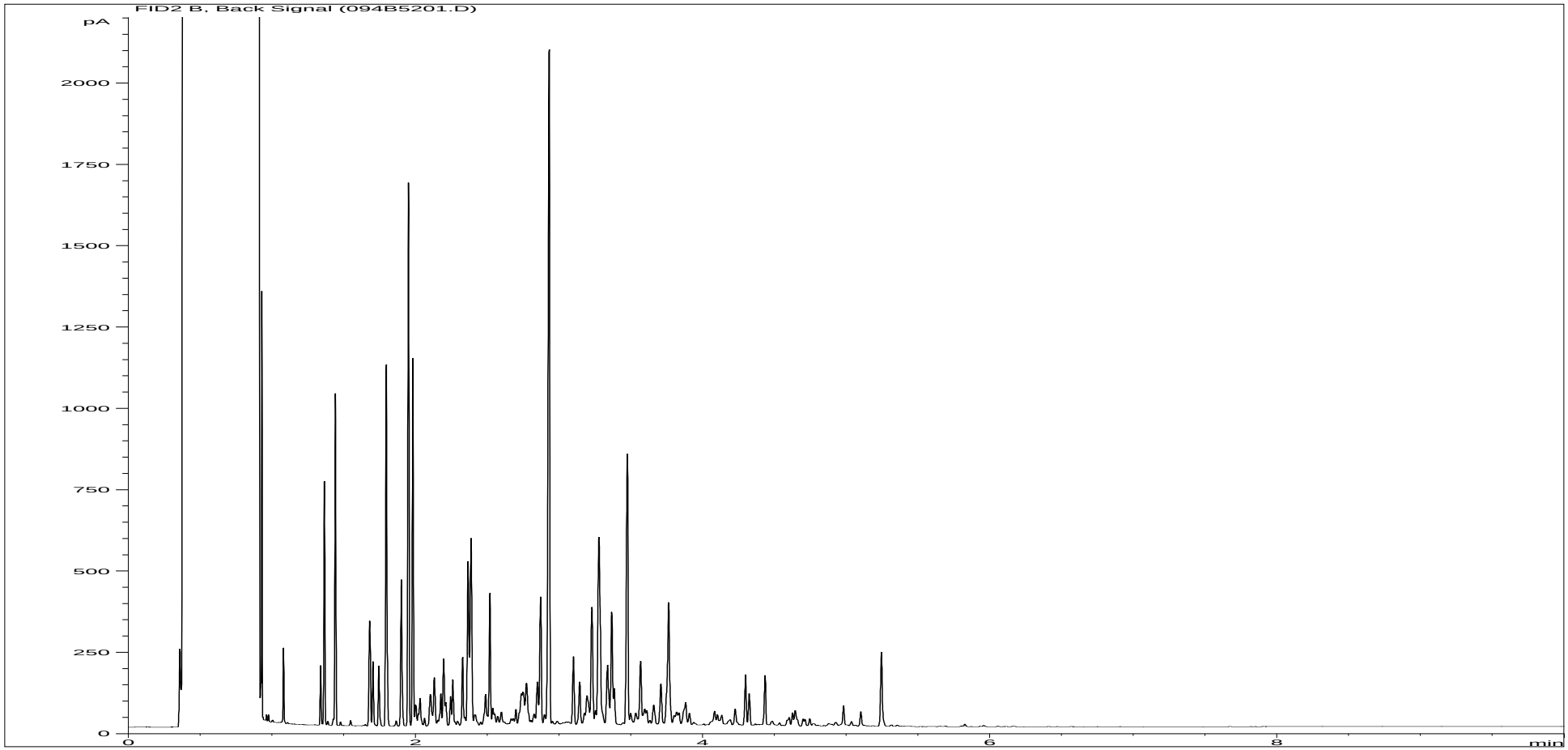
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137463ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	09-Sep-11, 23:21:48		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\043F5201.D		

Where individual results are flagged see report notes for status.

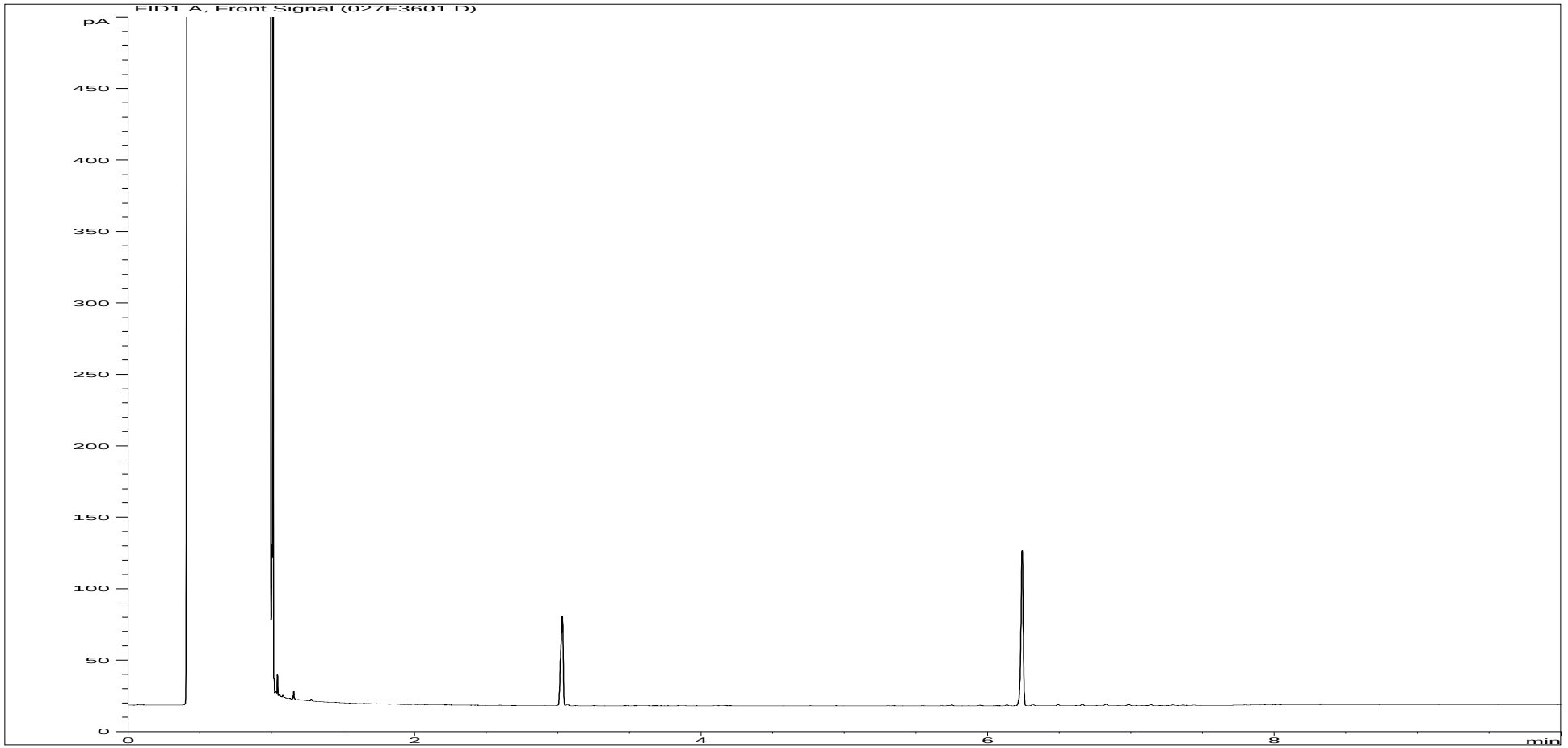
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137463ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	09-Sep-11, 23:21:48		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\094B5201.D		

Where individual results are flagged see report notes for status.

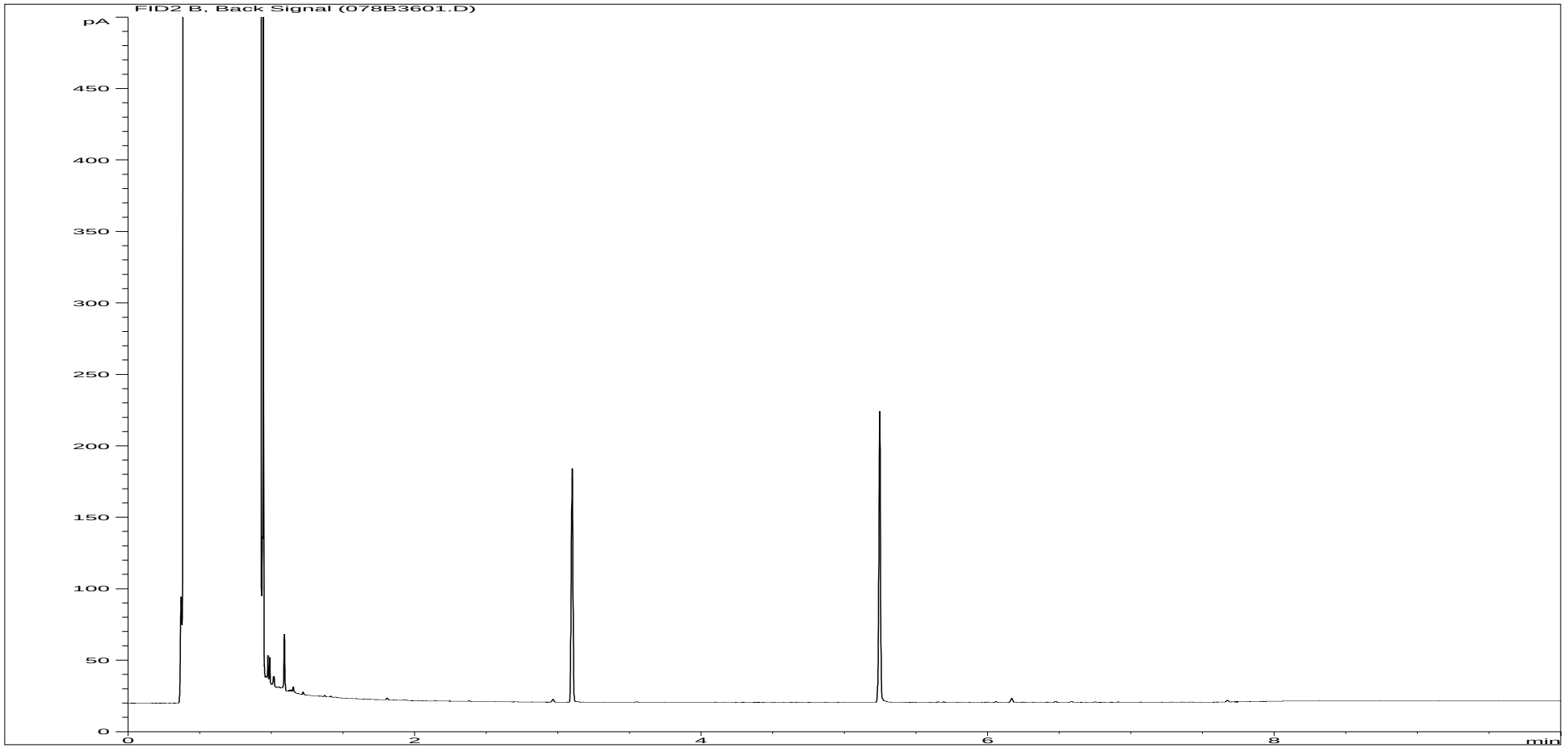
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137490ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\027F3601.D		

Where individual results are flagged see report notes for status.

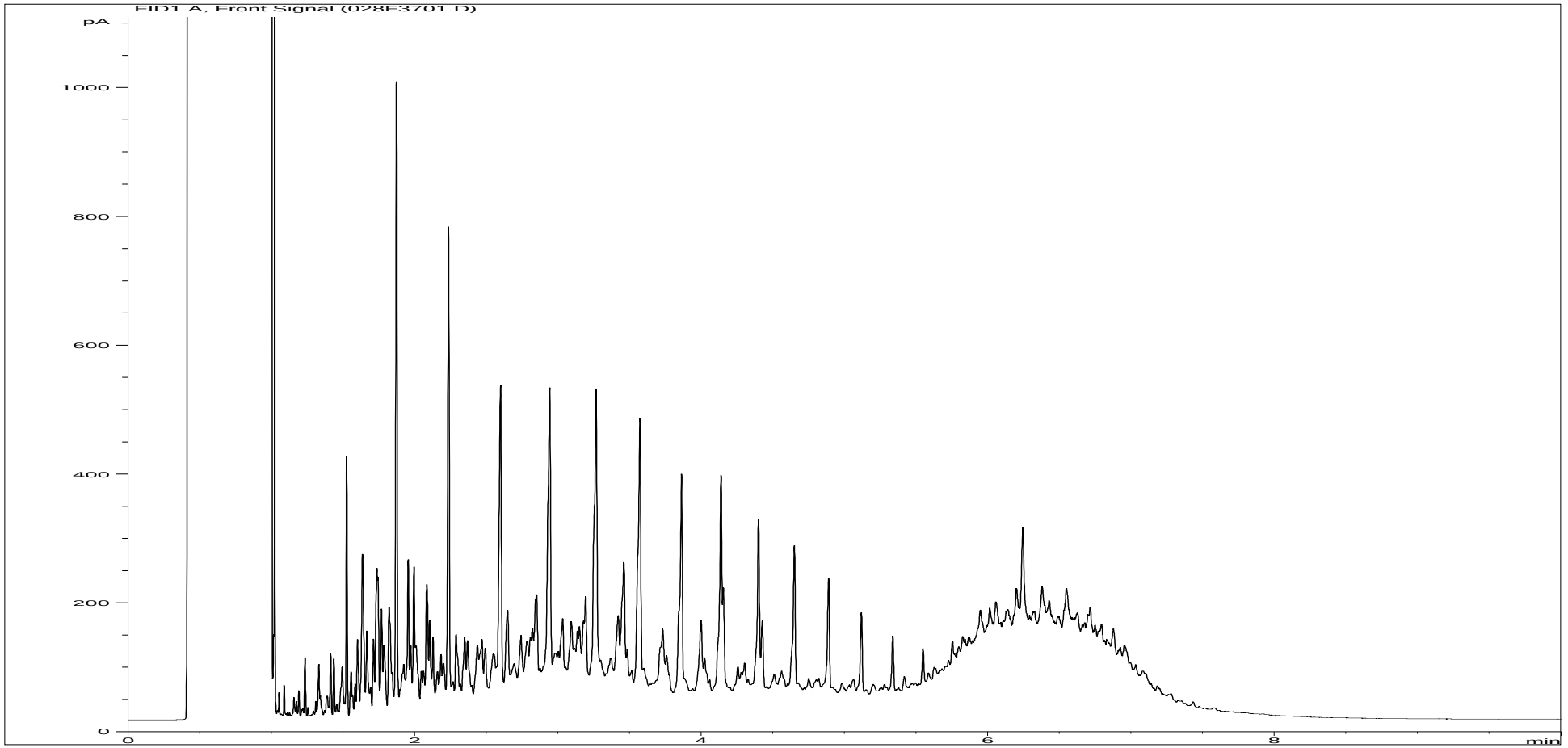
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137490ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\078B3601.D		

Where individual results are flagged see report notes for status.

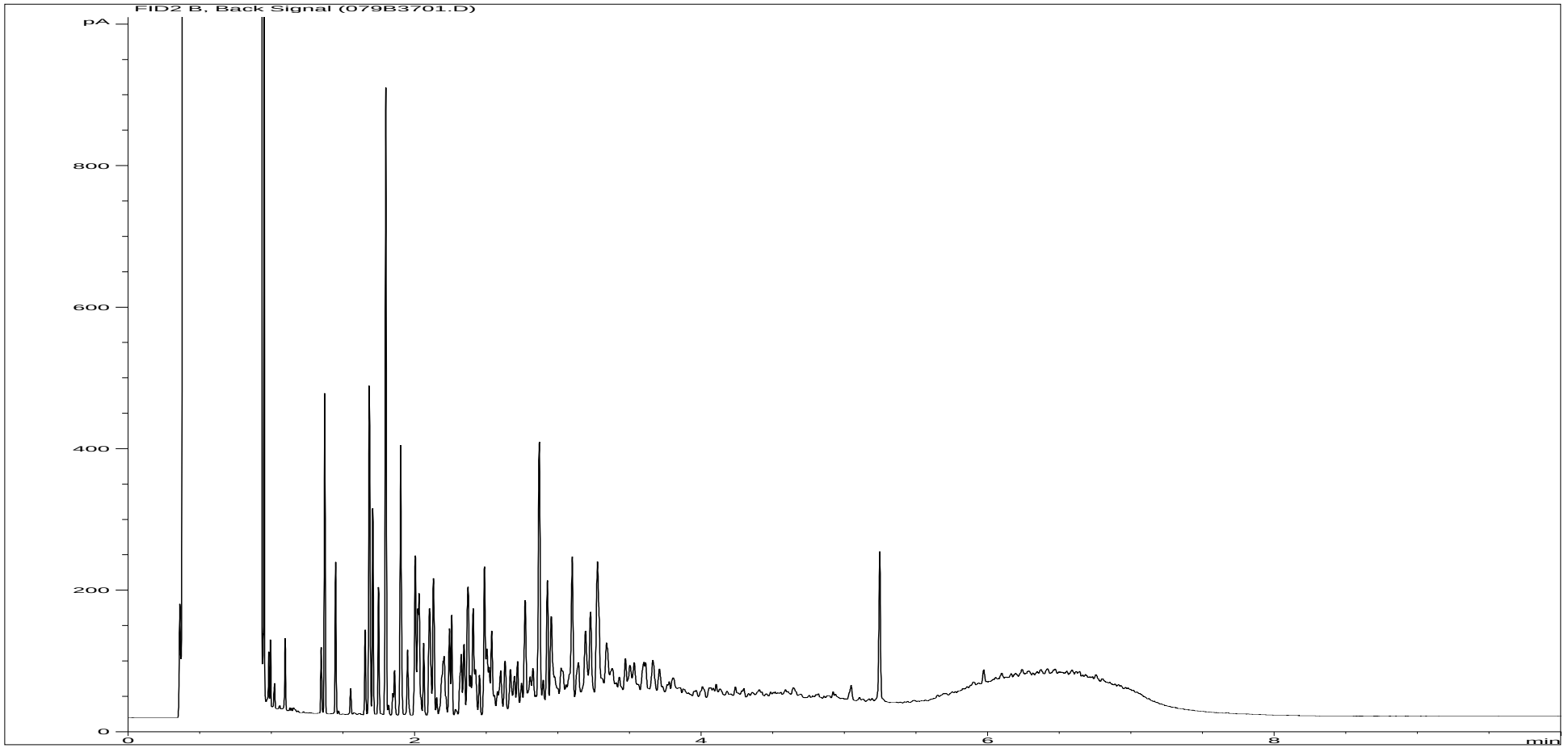
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137491ALI	**Job Number:**	W12_4763
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\028F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137491ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124763

Customer Worley Parsons Komex
Site Maelor Works
Report No W124763

Consignment No 28928
Date Logged 02-Sep-2011

Report Due 15-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137461	MW99-110	31/08/11																										
EX/1137462	MW11-8	01/09/11																										
EX/1137463	MW11-7	01/09/11																										
EX/1137490	Report 124763 Blank	31/08/11																										
EX/1137491	Report 124763 Blank Spike	31/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124763

Customer Worley Parsons Komex
Site Maelor Works
Report No W124763

Consignment No 28928
Date Logged 02-Sep-2011

Report Due 15-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137461	MW99-110	31/08/11															
EX/1137462	MW11-8	01/09/11															
EX/1137463	MW11-7	01/09/11															
EX/1137490	Report 124763 Blank	31/08/11															
EX/1137491	Report 124763 Blank Spike	31/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/118085 (Ver. 1)
Your Ref:

April 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - 50065-29 Maelor

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/118085 (Ver. 1)

Worley Parsons
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: 50065-29 Maelor

The 7 samples described in this report were logged for analysis by Scientifics on 31-Mar-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Apr-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
GC-FID Chromatograms (Pages 12 to 18)
Table of Method Descriptions (Page 19)
Table of Report Notes (Page 20)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Apr-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**
1112720	SS11-04-1	29-Mar-11	8.0	971	27	119	45	<0.001	0.003	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	0.001
1112721	SS11-05-1	29-Mar-11	7.6	566	23	53	55	<0.001	0.001	<0.0001	Req	<0.001	<0.001	0.007	<0.01	<0.001	<0.0001	<0.001
1112722	SS11-06-1	29-Mar-11	7.5	542	25	41	74	<0.001	0.001	<0.0001	Req	<0.001	<0.001	0.005	<0.01	0.002	<0.0001	<0.001
1112723	SS11-07-1	29-Mar-11	7.0	1500	404	25	480	0.005	0.003	0.0001	Req	0.004	<0.001	0.009	0.14	<0.001	<0.0001	<0.001
1112724	SS11-08-1	30-Mar-11	7.7	631	6	39	48	0.001	0.002	<0.0001	Req	0.002	<0.001	0.002	<0.01	<0.001	<0.0001	<0.001
1112725	QC Blank		7.04	<100		<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001
1112726	Blank Spike (% Recovery)				91	99	100	103	97	96	Req	102	102	98	101	97	101	91

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Glynn

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118085**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l			
		Method Codes :	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW			
		Method Reporting Limits :	0.01	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2			
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes			
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Ammoniacal Nitrogen as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**			
1112720	SS11-04-1	29-Mar-11	<0.01	<0.2	<0.02	<0.02	<0.05	2.7	<0.1	0.05	<0.02	<1	<1	<1	<2			
1112721	SS11-05-1	29-Mar-11	<0.01	<0.2	<0.02	<0.02	<0.05	2.6	<0.1	0.30	<0.02	<1	<1	<1	<2			
1112722	SS11-06-1	29-Mar-11	0.05	<0.2	<0.02	<0.02	<0.05	3.0	<0.1	0.05	<0.02	<1	<1	<1	<2			
1112723	SS11-07-1	29-Mar-11	21.1	<0.2	0.05	0.82	<0.05	12	<0.1	0.02	0.77	<1	<1	<1	<2			
1112724	SS11-08-1	30-Mar-11	<0.01	<0.2	<0.02	<0.02	<0.05	7.4	<0.1	0.03	<0.02	<1	<1	<1	<2			
1112725	QC Blank		<0.01	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	<0.01	<0.02	<1	<1	<1	<2			
1112726	Blank Spike (% Recovery)		102	96	103	103	105	105	96	98		108	102	113	327			

scientifics

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Client Name **Worley Parsons**

Contact Ms N Glynn

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118085**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1112720	SS11-04-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112721	SS11-05-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112722	SS11-06-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112723	SS11-07-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112724	SS11-08-1	**30-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112725	QC Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112726	Blank Spike (% Recovery)		108	104	107	107	113											

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Client Name **Worley Parsons**

Contact Ms N Glynn

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118085**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-04-1	**Job Number:**	W11_8085
LIMS ID Number:	EX1112720	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.22	0.011	92
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.58	0.011	71
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.162	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	87
Acenaphthene-d10	88
Phenanthrene-d10	91
Chrysene-d12	92
Perylene-d12	95

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	65
Terphenyl-d14	78

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-05-1	**Job Number:**	W11_8085
LIMS ID Number:	EX1112721	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.015	99
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.37	0.010	67
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.165	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	89
Acenaphthene-d10	90
Phenanthrene-d10	95
Chrysene-d12	101
Perylene-d12	102

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	86

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-06-1	**Job Number:**	W11_8085
LIMS ID Number:	EX1112722	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	88
Acenaphthene-d10	89
Phenanthrene-d10	92
Chrysene-d12	94
Perylene-d12	89

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-07-1	**Job Number:**	W11_8085
LIMS ID Number:	EX1112723	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	83
Acenaphthene-d10	83
Phenanthrene-d10	83
Chrysene-d12	84
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-08-1	**Job Number:**	W11_8085
LIMS ID Number:	EX1112724	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.014	81
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.37	0.030	75
Benzo[k]fluoranthene	207-08-9	10.40	0.014	65
Benzo[a]pyrene	50-32-8	10.80	0.018	88
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.196	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	81
Acenaphthene-d10	83
Phenanthrene-d10	86
Chrysene-d12	86
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	88

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	Report 118085 Blank	**Job Number:**	W11_8085
LIMS ID Number:	EX1112725	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	91
Phenanthrene-d10	91
Chrysene-d12	90
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	Report 118085 Blank Spike	**Job Number:**	W11_8085
LIMS ID Number:	EX1112726	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.21	93	98
Acenaphthylene	208-96-8	4.26	79	95
Acenaphthene	83-32-9	4.38	82	98
Fluorene	86-73-7	4.76	83	99
Phenanthrene	85-01-8	5.58	91	98
Anthracene	120-12-7	5.63	83	98
Fluoranthene	206-44-0	6.90	86	70
Pyrene	129-00-0	7.18	86	78
Benzo[a]anthracene	56-55-3	8.85	92	96
Chrysene	218-01-9	8.90	99	93
Benzo[b]fluoranthene	205-99-2	10.37	94	86
Benzo[k]fluoranthene	207-08-9	10.41	89	72
Benzo[a]pyrene	50-32-8	10.79	67	68
Indeno[1,2,3-cd]pyrene	193-39-5	12.17	71	83
Dibenzo[a,h]anthracene	53-70-3	12.20	66	70
Benzo[g,h,i]perylene	191-24-2	12.46	87	75
Total (USEPA16) PAHs	-	-	1348	-

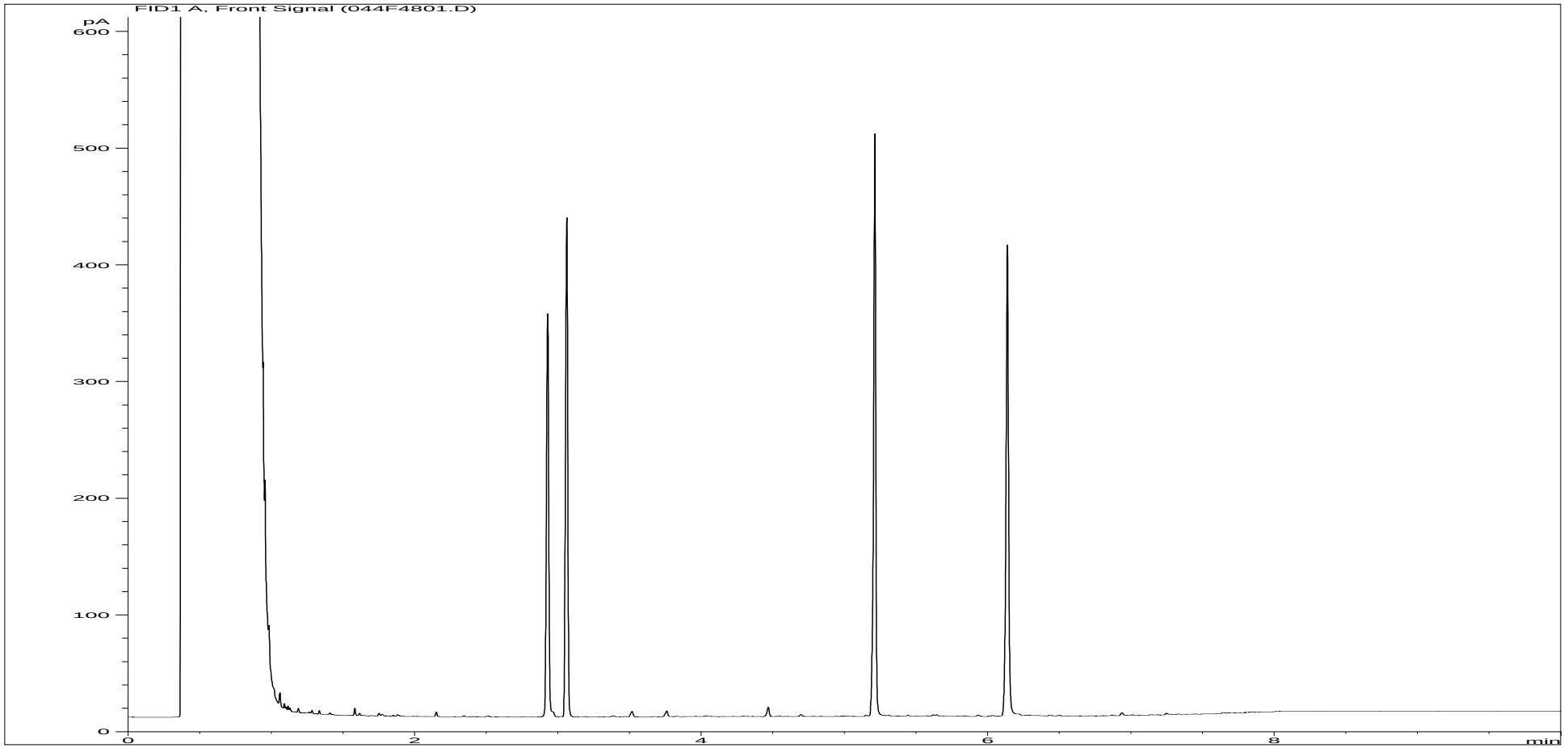
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	82
Acenaphthene-d10	86
Phenanthrene-d10	85
Chrysene-d12	85
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

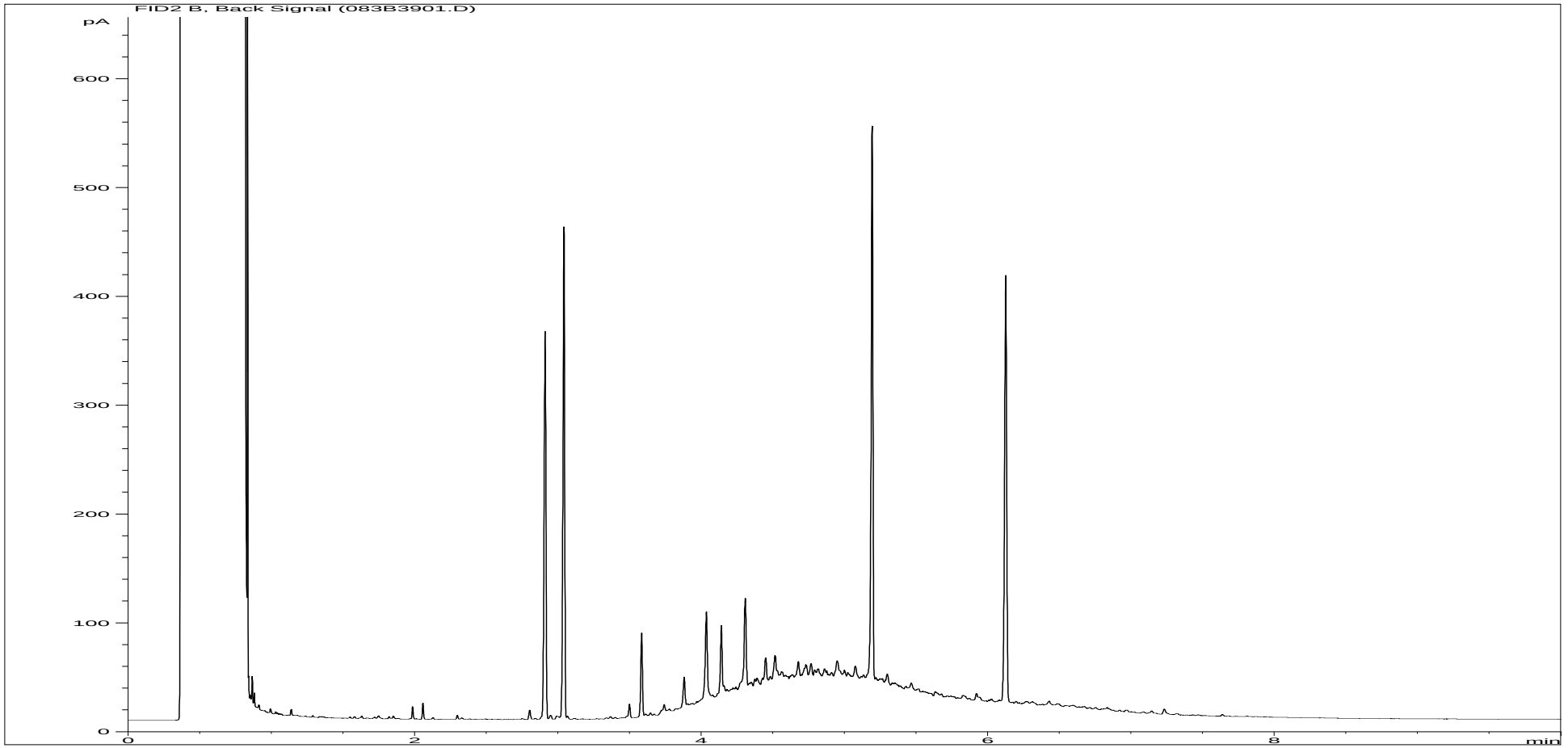
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112720	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-04-1
Acquisition Date/Time:	12-Apr-11, 21:52:11		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\044F4801.D		

Where individual results are flagged see report notes for status.

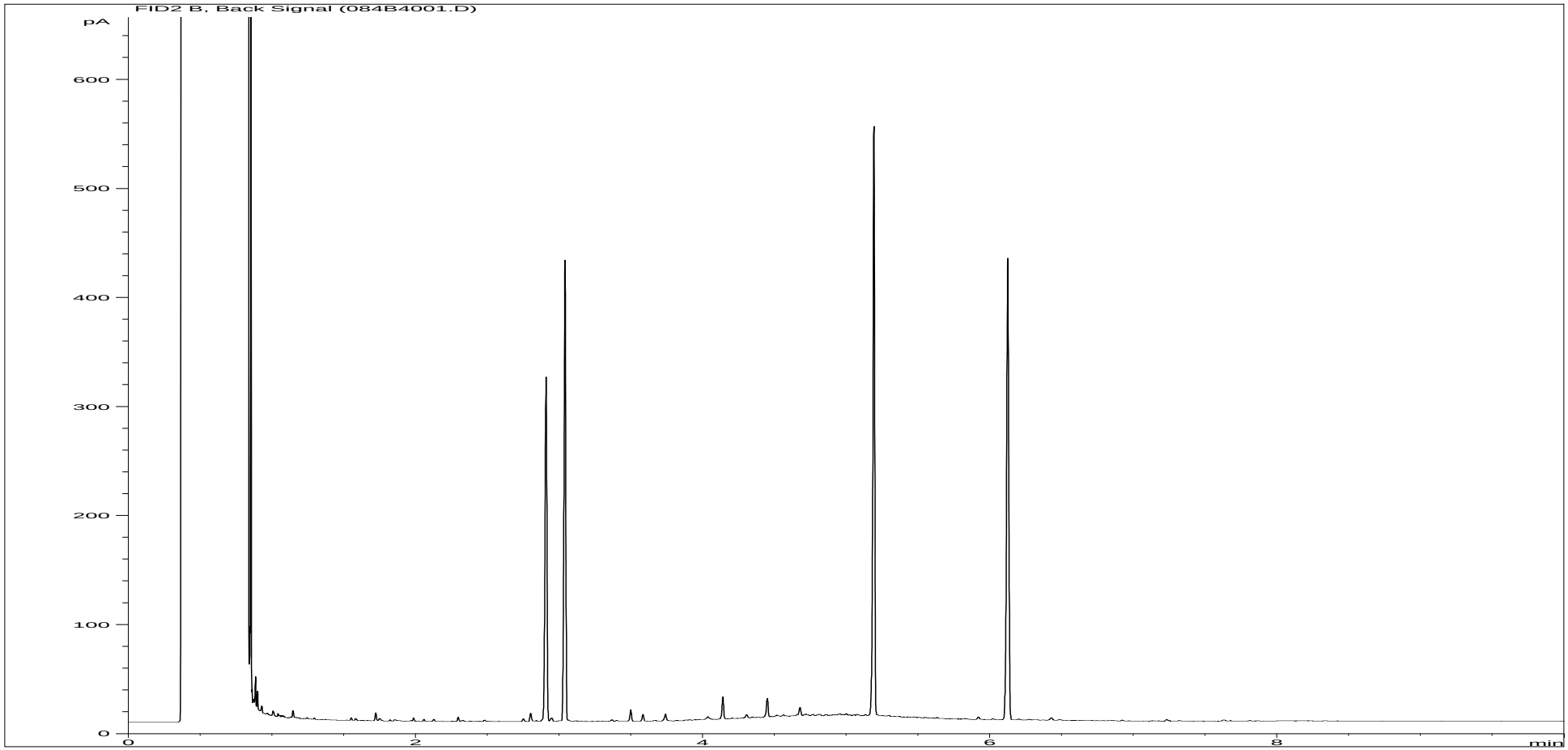
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112721	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-05-1
Acquisition Date/Time:	12-Apr-11, 19:16:44		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\083B3901.D		

Where individual results are flagged see report notes for status.

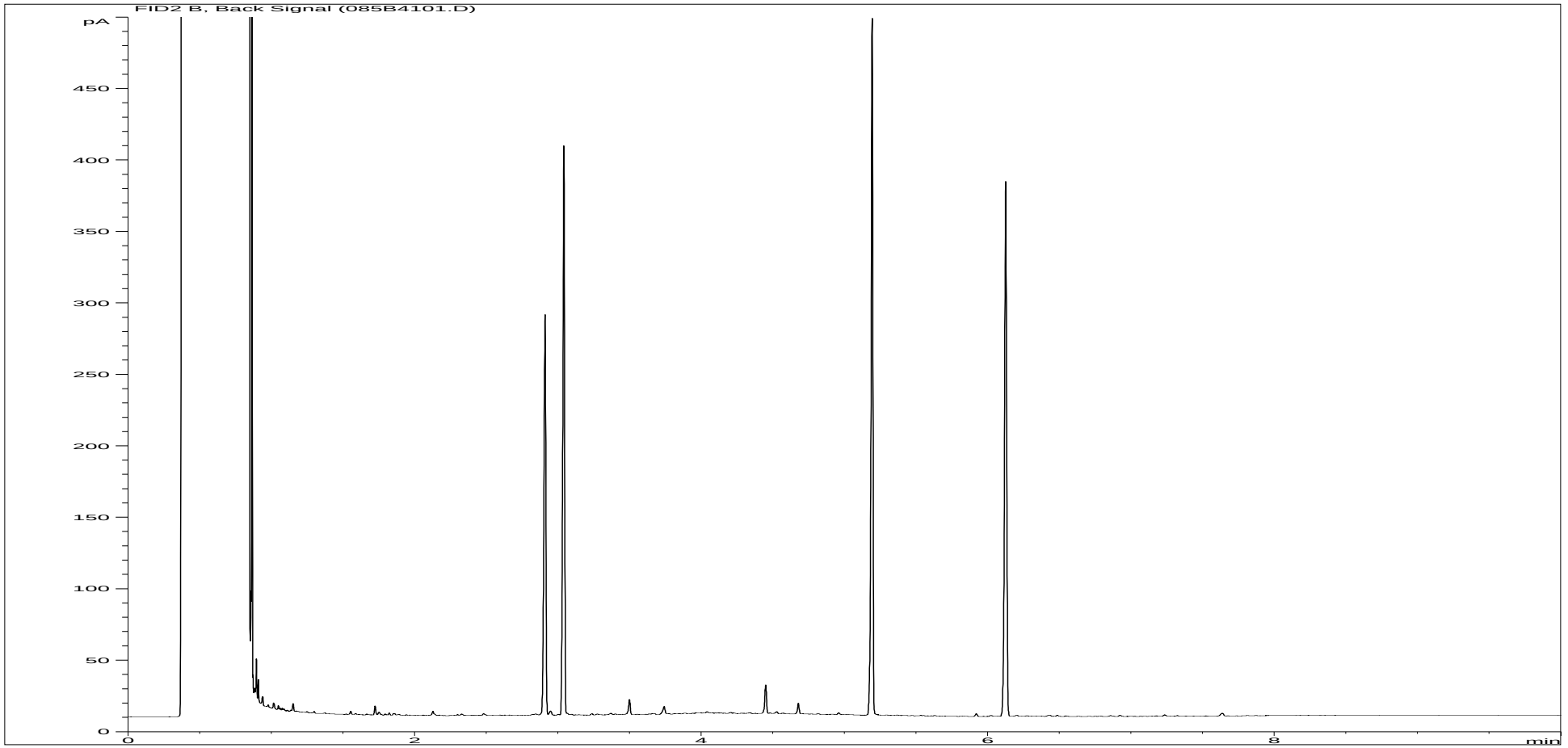
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112722	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-06-1
Acquisition Date/Time:	12-Apr-11, 19:33:58		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\084B4001.D		

Where individual results are flagged see report notes for status.

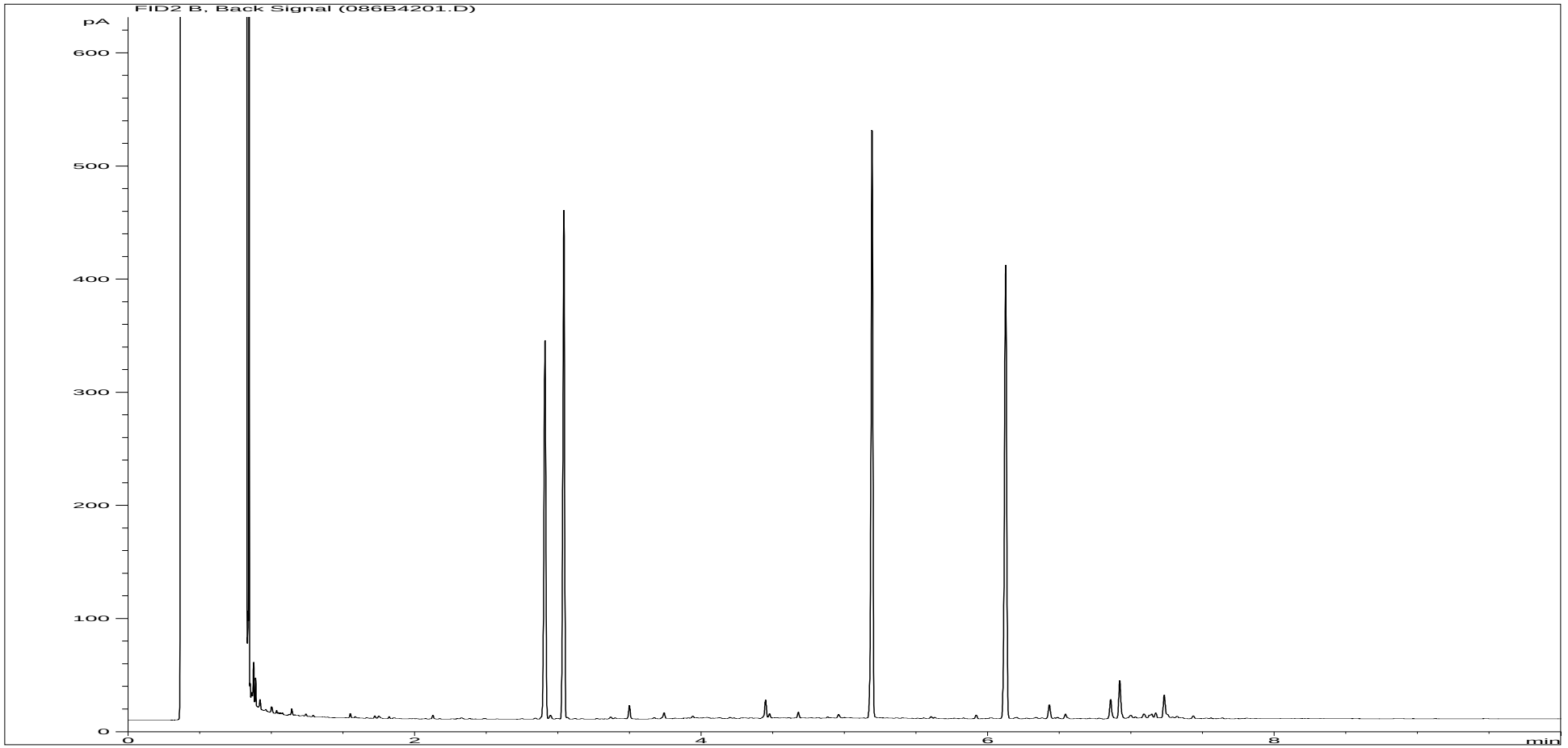
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112723	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-07-1
Acquisition Date/Time:	12-Apr-11, 19:51:11		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\085B4101.D		

Where individual results are flagged see report notes for status.

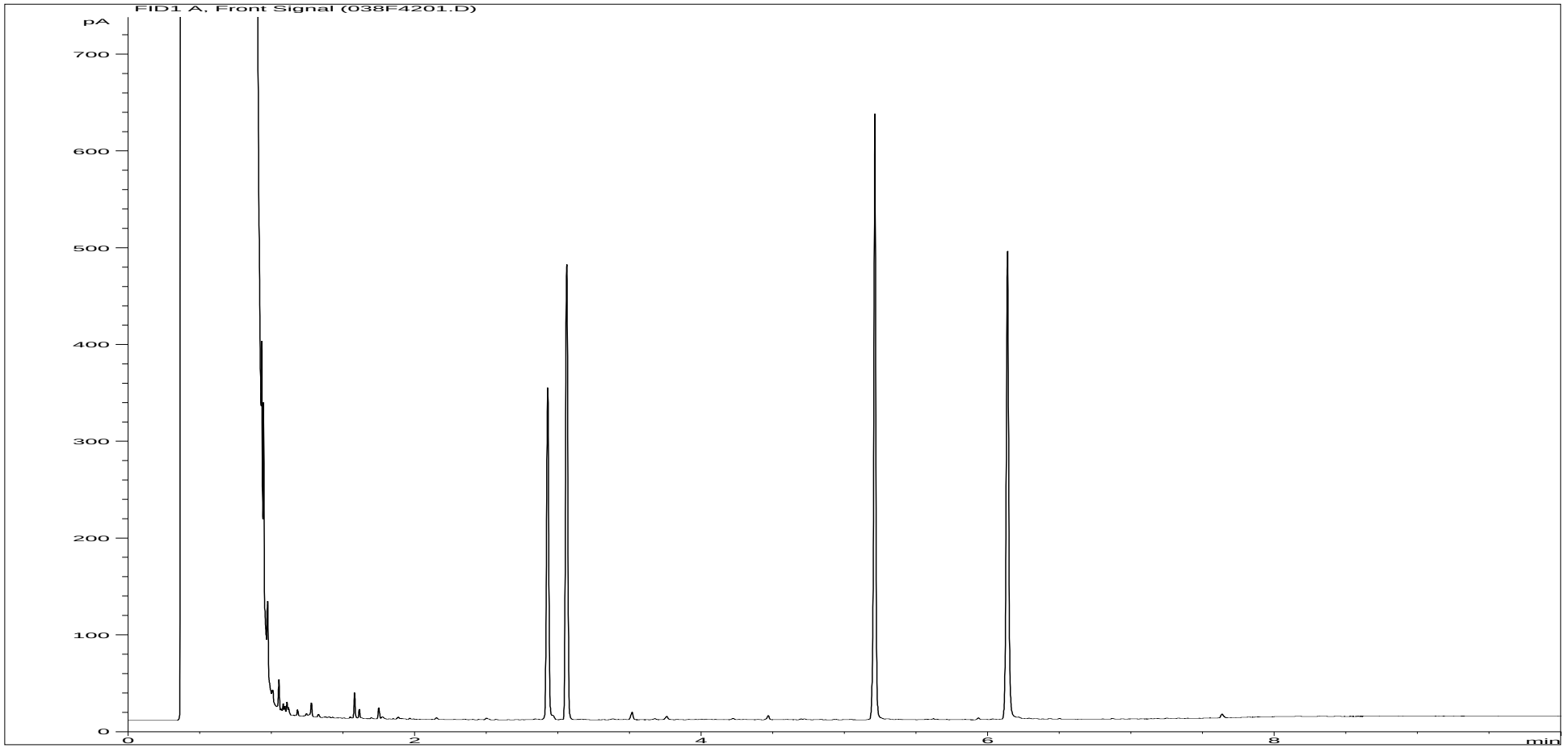
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112724	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-08-1
Acquisition Date/Time:	12-Apr-11, 20:08:38		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\086B4201.D		

Where individual results are flagged see report notes for status.

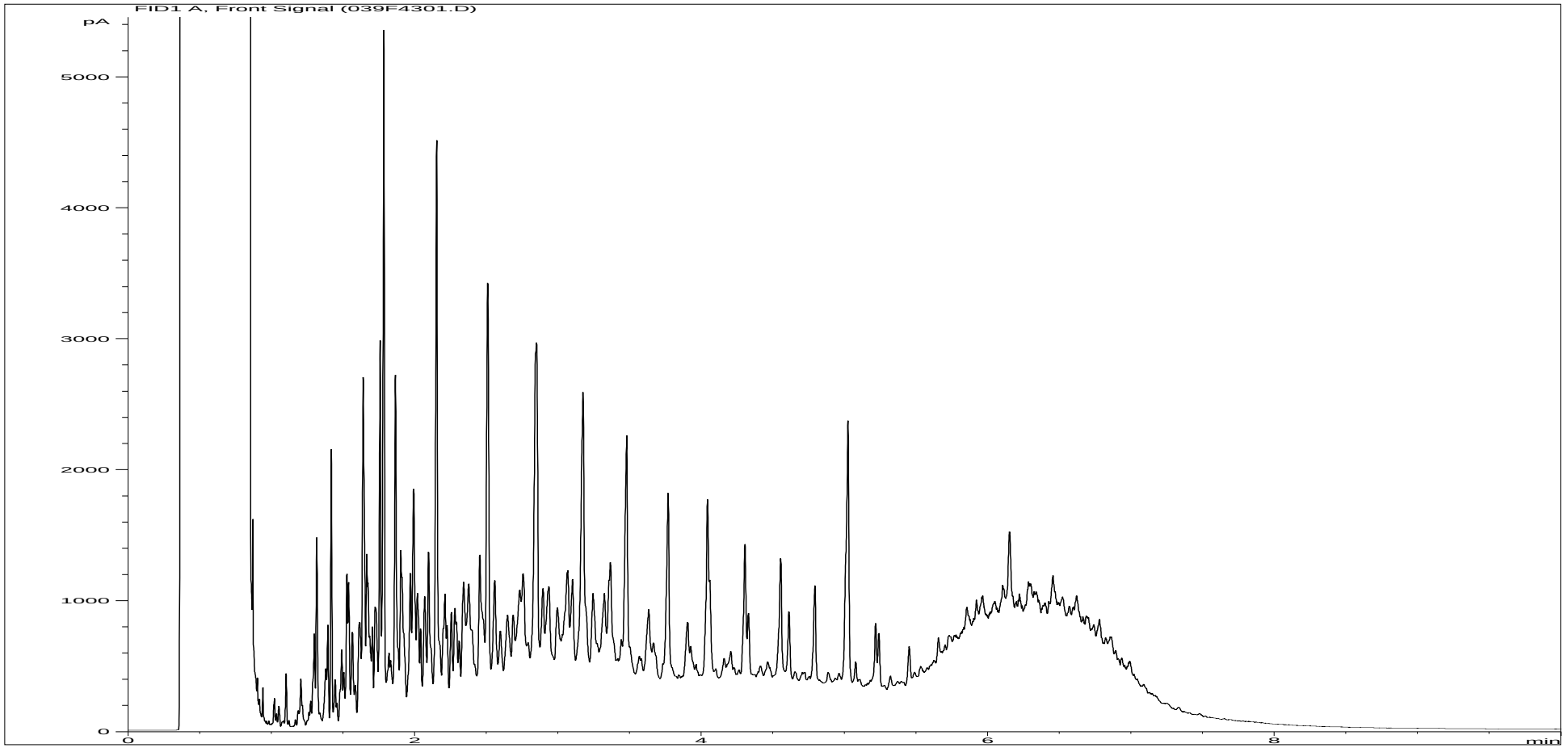
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112725	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 118085 Blank
Acquisition Date/Time:	12-Apr-11, 20:08:38		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\038F4201.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112726	**Job Number:**	W11_8085
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 118085 Blank Spike
Acquisition Date/Time:	12-Apr-11, 20:26:07		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\039F4301.D		

Where individual results are flagged see report notes for status.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TPHFID	As Received	Determination of pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/118084 (Ver. 1)
Your Ref:

April 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Dixon
Worley Parsons
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Dixon

Dear Ms Dixon

WATER SAMPLE ANALYSIS - 50065-29 Maelor

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/118084 (Ver. 1)

Worley Parsons
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: 50065-29 Maelor

The 6 samples described in this report were logged for analysis by Scientifics on 31-Mar-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Apr-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
GC-FID Chromatograms (Pages 11 to 16)
Table of Method Descriptions (Page 17)
Table of Report Notes (Page 18)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Apr-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**
1112714	SS11-01-1	**29-Mar-11**	7.7	621	6	39	30	0.002	0.003	<0.0001	Req	0.003	<0.001	0.003	0.01	0.001	<0.0001	<0.001
1112715	SS11-01-2	**29-Mar-11**	7.8	619	7	39	28	0.002	0.003	<0.0001	Req	0.004	<0.001	0.004	<0.01	0.001	<0.0001	<0.001
1112716	SS11-02-1	**29-Mar-11**	7.8	619	22	36	30	0.002	0.003	<0.0001	Req	0.003	<0.001	0.004	<0.01	0.001	<0.0001	<0.001
1112717	SS11-03-1	**29-Mar-11**	7.0	649	4720	25	<3	0.001	0.004	<0.0001	Req	<0.001	<0.001	<0.002	18.5	0.012	<0.0001	<0.001
1112718	QC Blank		7.06	<100		<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001
1112719	Blank Spike (% Recovery)				91	100	101	103	98	99	Req	103	103	89	103	97	102	95

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Dixon

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118084**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l			
Method Codes :			KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW			
Method Reporting Limits :			0.01	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2			
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes			
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Ammoniacal Nitrogen as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**			
1112714	SS11-01-1	**29-Mar-11**	<0.01	<0.2	<0.02	<0.02	<0.05	7.4	<0.1	0.03	<0.02	<1	<1	<1	<2			
1112715	SS11-01-2	**29-Mar-11**	<0.01	<0.2	<0.02	<0.02	<0.05	7.1	<0.1	0.02	<0.02	<1	<1	<1	<2			
1112716	SS11-02-1	**29-Mar-11**	<0.01	<0.2	<0.02	<0.02	<0.05	7.6	<0.1	0.03	<0.02	<1	<1	<1	<2			
1112717	SS11-03-1	**29-Mar-11**	2.6	<0.2	<0.02	<0.02	0.99	24	<0.1	63.41	<0.02	<1	<1	<1	<2			
1112718	QC Blank		<0.01	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	<0.01	<0.02	<1	<1	<1	<2			
1112719	Blank Spike (% Recovery)		101	99	101	101	104	107	96	98		108	102	113	327			

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Client Name **Worley Parsons**

Contact Ms N Dixon

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118084**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1112714	SS11-01-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112715	SS11-01-2	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112716	SS11-02-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112717	SS11-03-1	**29-Mar-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112718	QC Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1112719	Blank Spike (% Recovery)		108	104	107	107	113											

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Client Name **Worley Parsons**

Contact Ms N Dixon

50065-29 Maelor

Water Sample Analysis

Date Printed	14-Apr-11
Report Number	**EXR/118084**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-01-1	**Job Number:**	W11_8084
LIMS ID Number:	EX1112714	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.38	0.026	73
Benzo[k]fluoranthene	207-08-9	10.41	0.010	65
Benzo[a]pyrene	50-32-8	10.79	0.014	75
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.180	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	86
Acenaphthene-d10	86
Phenanthrene-d10	84
Chrysene-d12	80
Perylene-d12	73

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-01-2	**Job Number:**	W11_8084
LIMS ID Number:	EX1112715	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.011	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.38	0.022	67
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	10.79	0.012	62
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.175	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	94
Phenanthrene-d10	94
Chrysene-d12	99
Perylene-d12	95

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	69
Terphenyl-d14	85

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-02-1	**Job Number:**	W11_8084
LIMS ID Number:	EX1112716	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	86
Acenaphthene-d10	90
Phenanthrene-d10	90
Chrysene-d12	95
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	SS11-03-1	**Job Number:**	W11_8084
LIMS ID Number:	EX1112717	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.27	0.086	61
Acenaphthene	83-32-9	4.39	0.129	M
Fluorene	86-73-7	4.76	0.751	M
Phenanthrene	85-01-8	5.60	10.700	87
Anthracene	120-12-7	5.64	2.460	M
Fluoranthene	206-44-0	6.93	1.950	65
Pyrene	129-00-0	7.21	3.550	61
Benzo[a]anthracene	56-55-3	8.87	0.138	87
Chrysene	218-01-9	8.91	0.756	90
Benzo[b]fluoranthene	205-99-2	10.38	0.299	56
Benzo[k]fluoranthene	207-08-9	10.42	0.076	55
Benzo[a]pyrene	50-32-8	10.81	0.104	70
Indeno[1,2,3-cd]pyrene	193-39-5	12.17	0.138	72
Dibenzo[a,h]anthracene	53-70-3	12.20	0.026	58
Benzo[g,h,i]perylene	191-24-2	12.46	0.077	63
Total (USEPA16) PAHs	-	-	< 21.250	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	79
Acenaphthene-d10	90
Phenanthrene-d10	87
Chrysene-d12	106
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	57
Terphenyl-d14	77

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	Report 118084 Blank	**Job Number:**	W11_8084
LIMS ID Number:	EX1112718	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	91
Phenanthrene-d10	91
Chrysene-d12	90
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: 50065-29 Maelor		
Sample Details:	Report 118084 Blank Spike	**Job Number:**	W11_8084
LIMS ID Number:	EX1112719	**Date Booked in:**	31-Mar-11
QC Batch Number:	110324	**Date Extracted:**	12-Apr-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Apr-11
Directory:	412PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.21	93	98
Acenaphthylene	208-96-8	4.26	79	95
Acenaphthene	83-32-9	4.38	82	98
Fluorene	86-73-7	4.76	83	99
Phenanthrene	85-01-8	5.58	91	98
Anthracene	120-12-7	5.63	83	98
Fluoranthene	206-44-0	6.90	86	70
Pyrene	129-00-0	7.18	86	78
Benzo[a]anthracene	56-55-3	8.85	92	96
Chrysene	218-01-9	8.90	99	93
Benzo[b]fluoranthene	205-99-2	10.37	94	86
Benzo[k]fluoranthene	207-08-9	10.41	89	72
Benzo[a]pyrene	50-32-8	10.79	67	68
Indeno[1,2,3-cd]pyrene	193-39-5	12.17	71	83
Dibenzo[a,h]anthracene	53-70-3	12.20	66	70
Benzo[g,h,i]perylene	191-24-2	12.46	87	75
Total (USEPA16) PAHs	-	-	1348	-

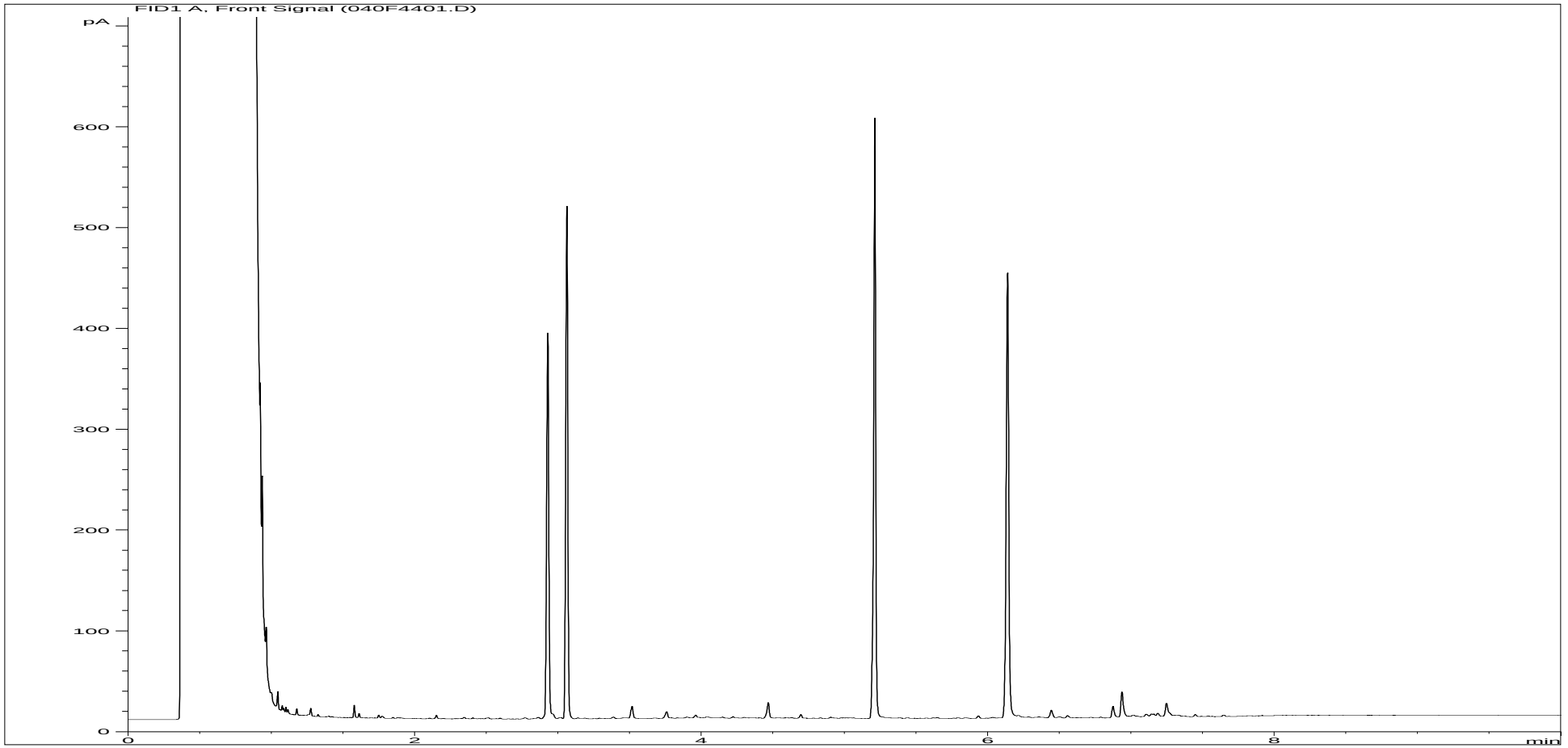
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	82
Acenaphthene-d10	86
Phenanthrene-d10	85
Chrysene-d12	85
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

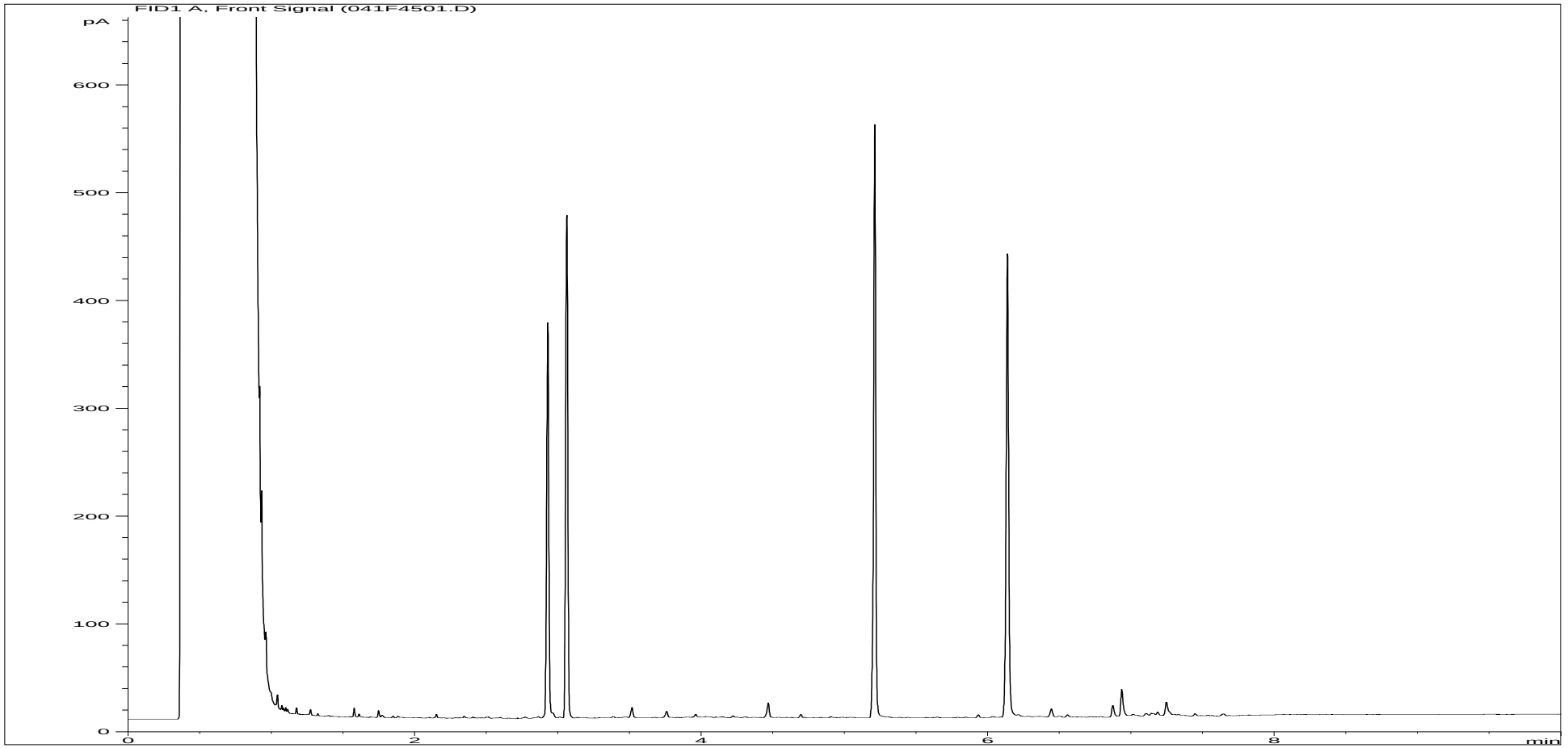
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112714	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-01-1
Acquisition Date/Time:	12-Apr-11, 20:43:27		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\040F4401.D		

Where individual results are flagged see report notes for status.

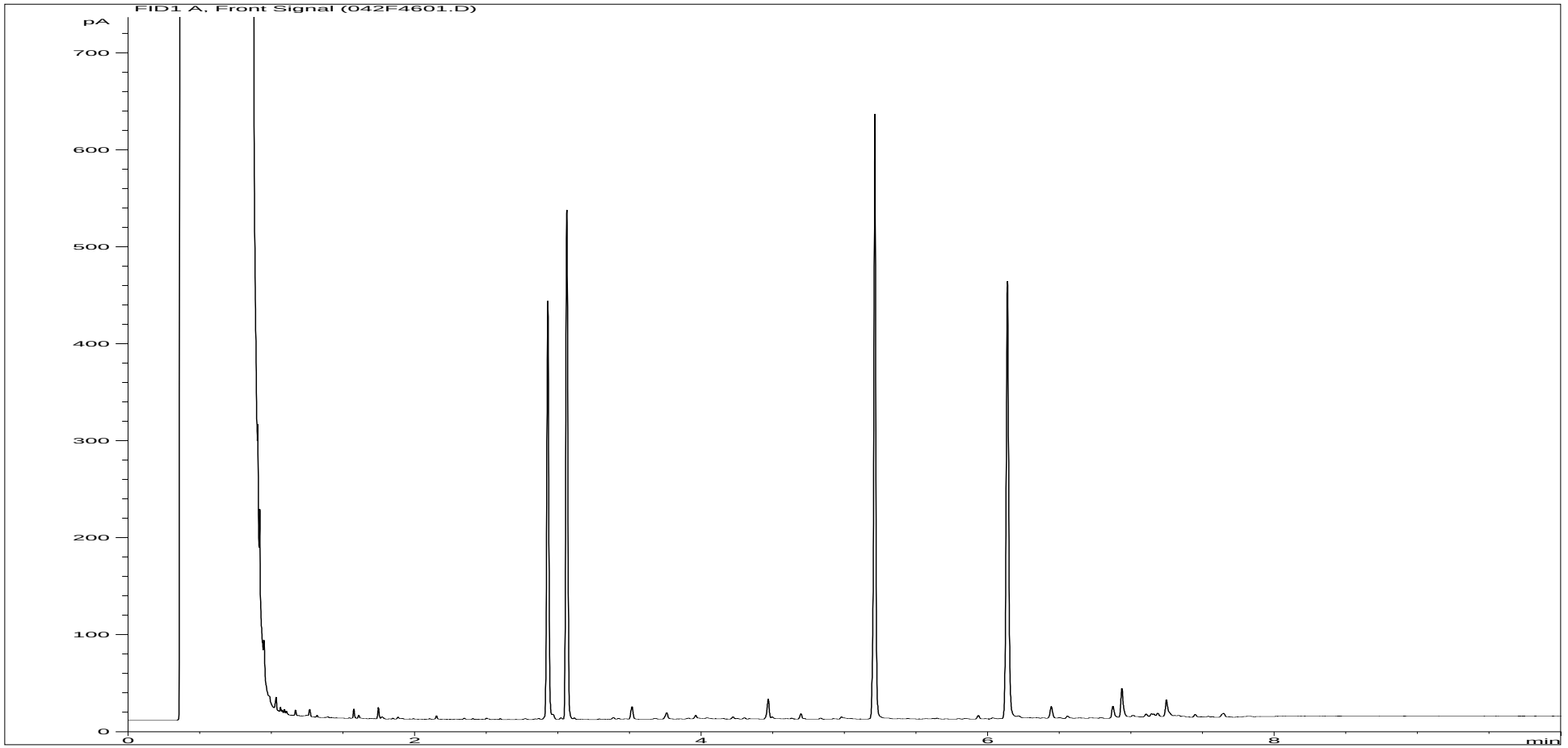
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112715	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-01-2
Acquisition Date/Time:	12-Apr-11, 21:00:38		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\041F4501.D		

Where individual results are flagged see report notes for status.

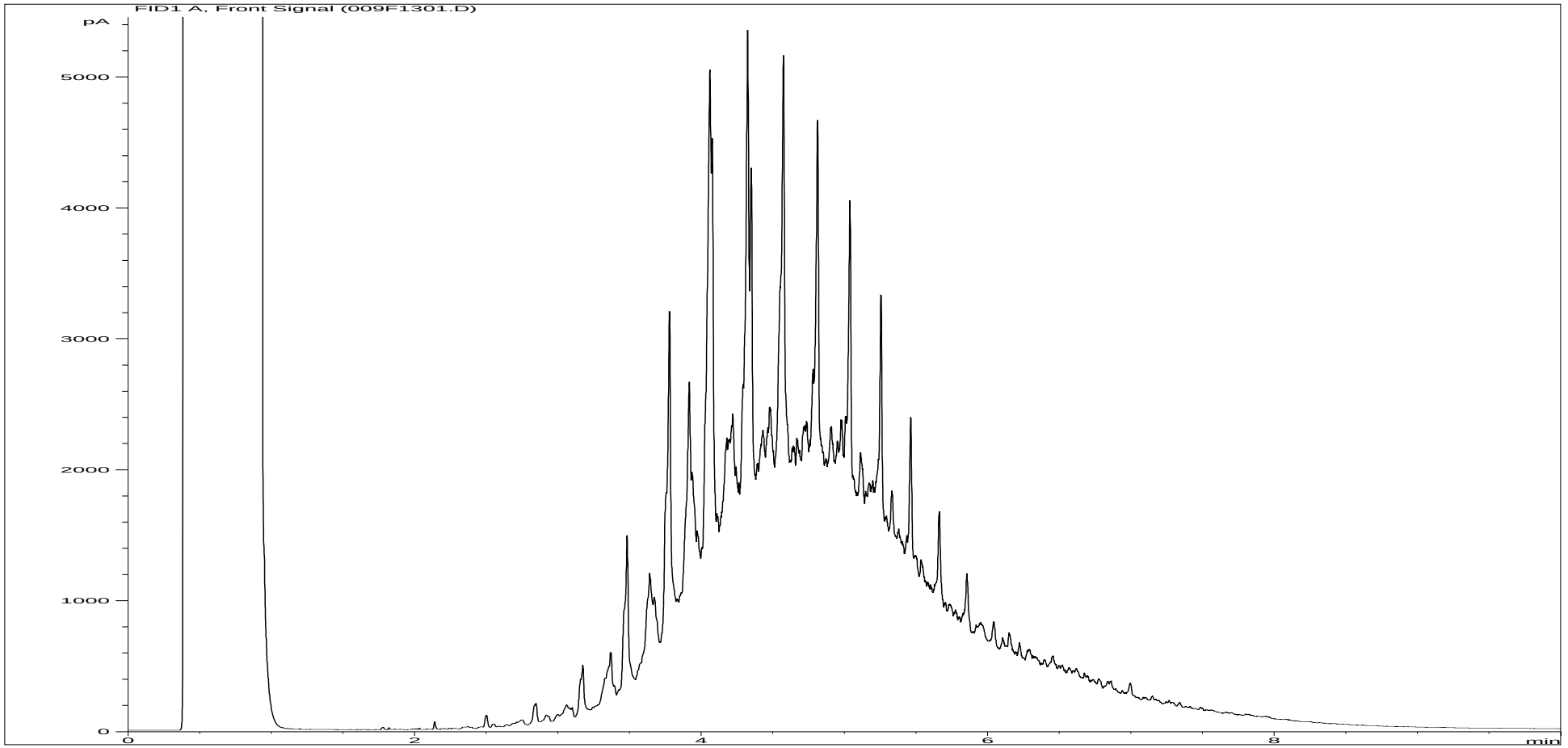
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112716	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-02-1
Acquisition Date/Time:	12-Apr-11, 21:17:47		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\042F4601.D		

Where individual results are flagged see report notes for status.

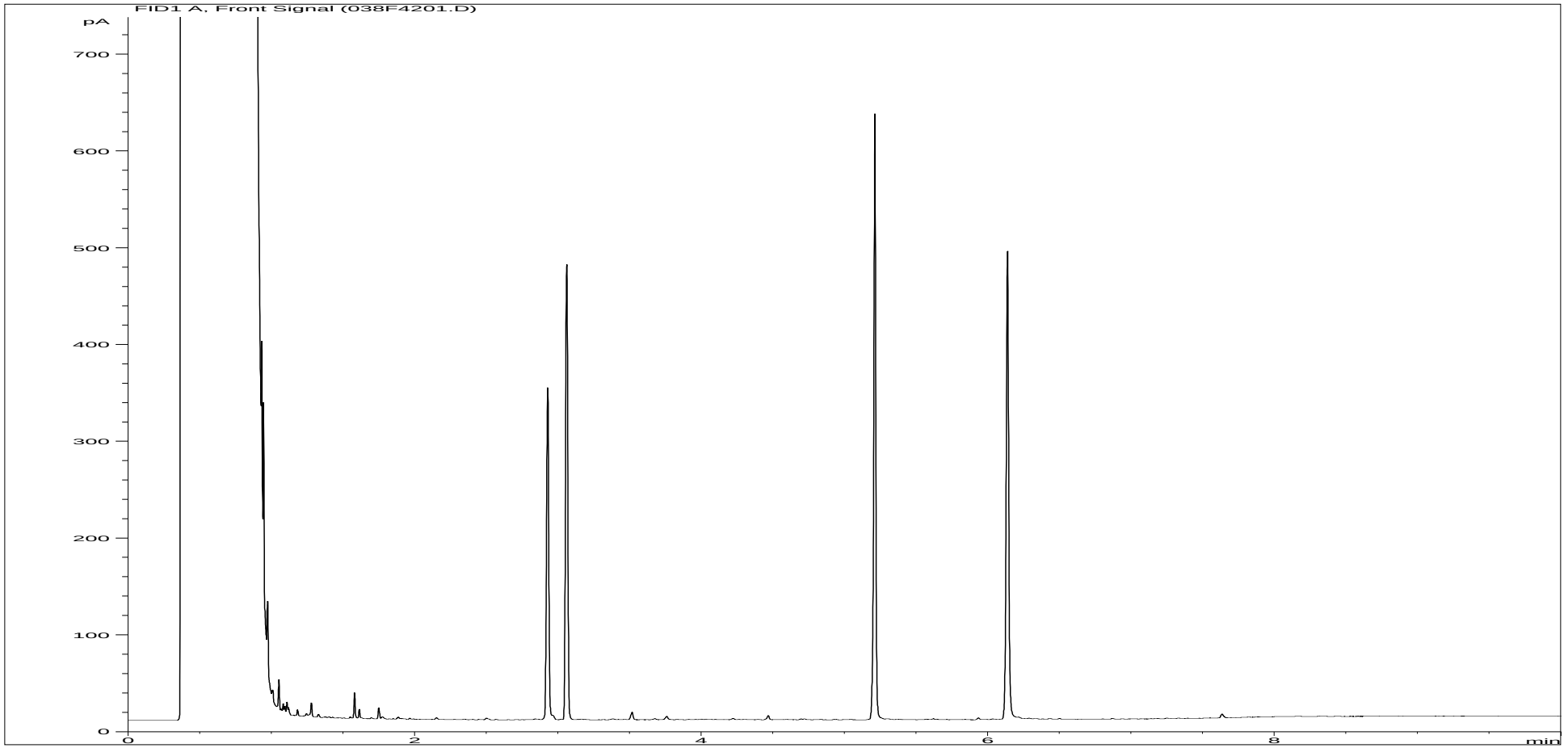
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112717	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	5	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	SS11-03-1
Acquisition Date/Time:	13-Apr-11, 15:00:51		
Datafile:	D:\TES\DATA\Y2011\0413TPH_GC16\041311 2011-04-13 08-23-35\009F1301.D		

Where individual results are flagged see report notes for status.

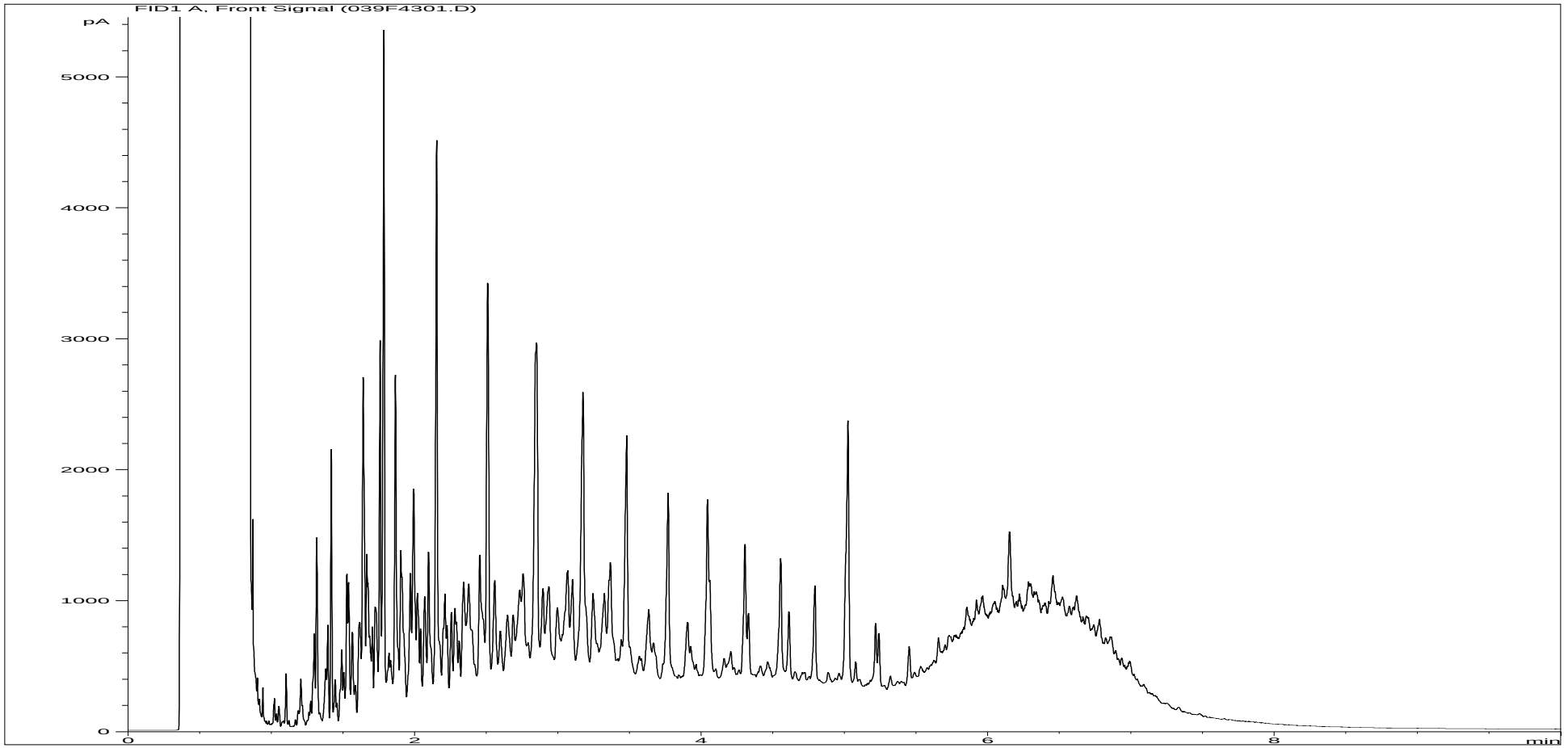
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112718	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 118084 Blank
Acquisition Date/Time:	12-Apr-11, 20:08:38		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\038F4201.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1112719	**Job Number:**	W11_8084
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	50065-29 Maelor
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 118084 Blank Spike
Acquisition Date/Time:	12-Apr-11, 20:26:07		
Datafile:	D:\TES\DATA\Y2011\041211TPH_GC16\041211 2011-04-12 08-17-58\039F4301.D		

Where individual results are flagged see report notes for status.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TPHFID	As Received	Determination of pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/122035 (Ver. 1)
Your Ref: 50065-29

July 13, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

LEACHATE SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
LEACHATE SAMPLE ANALYSIS

1252

Report No. EXR/122035 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 4 samples described in this report were logged for analysis by Scientifics on 30-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 13-Jul-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 8)
GC-FID Chromatograms (Pages 9 to 12)
Analytical and Deviating Sample Overview (Pages 13 to 14)
Table of Report Notes (Page 15)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 13-Jul-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS
Method Reporting Limits :				100	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001	0.01
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**
1127070	MW11-12-2 2.3-3.3	13-Jun-11	9.8	109	2	10	0.002	0.004	<0.0001	Req	0.005	0.002	0.047	1.32	0.01	<0.0001	<0.001	<0.01
1127071	MW11-7-2 1.1-1.4	14-Jun-11	9.5	239	10	90	0.004	0.004	<0.0001	Req	0.007	0.001	0.033	0.39	0.018	0.0001	0.002	0.9
1127072	QC Blank		7.08	<100	<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001	<0.01
1127073	Blank Spike(% recovery)				97	97	96	97	94	Req	97	100	95	97	94	101	92	100

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	13-Jul-11
Report Number	**EXR/122035**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l				
		Method Codes :	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW				
		Method Reporting Limits :	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2				
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes				
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**				
1127070	MW11-12-2 2.3-3.3	**13-Jun-11**	<0.2	<0.02	<0.02	<0.05	8.3	<0.1	0.01	<0.02	<1	<1	<1	<2				
1127071	MW11-7-2 1.1-1.4	**14-Jun-11**	<0.2	<0.02	<0.02	<0.05	13	8.94	1.00	<0.02	<1	6	19	157				
1127072	QC Blank		<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	<0.01	<0.02	<1	<1	<1	<2				
1127073	Blank Spike(% recovery)		100	78	84	107	92	101	83		104	103	103	312				

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	13-Jul-11
Report Number	**EXR/122035**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1127070	MW11-12-2 2.3-3.3	**13-Jun-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1127071	MW11-7-2 1.1-1.4	**14-Jun-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1127072	QC Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1127073	Blank Spike(% recovery)		90	108	102	115	97											

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Bretby Business Park, Ashby Road

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Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	13-Jul-11
Report Number	**EXR/122035**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-12-2 2.3-3.3	**Job Number:**	W12_2035
LIMS ID Number:	EX1127070	**Date Booked in:**	30-Jun-11
QC Batch Number:	110607	**Date Extracted:**	11-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Jul-11
Directory:	0711PAH.MS4\	**Matrix:**	Leachate
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.30	0.137	M
Acenaphthylene	208-96-8	4.35	0.044	M
Acenaphthene	83-32-9	4.47	0.020	M
Fluorene	86-73-7	4.86	0.019	M
Phenanthrene	85-01-8	5.72	0.054	M
Anthracene	120-12-7	5.77	0.019	M
Fluoranthene	206-44-0	7.07	0.037	M
Pyrene	129-00-0	7.36	0.030	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.440	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	112
Acenaphthene-d10	112
Phenanthrene-d10	115
Chrysene-d12	116
Perylene-d12	109

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	85

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-7-2 1.1-1.4	**Job Number:**	W12_2035
LIMS ID Number:	EX1127071	**Date Booked in:**	30-Jun-11
QC Batch Number:	110607	**Date Extracted:**	11-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Jul-11
Directory:	0711PAH.MS4\	**Matrix:**	Leachate
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.30	0.119	100
Acenaphthylene	208-96-8	4.35	5.380	100
Acenaphthene	83-32-9	4.48	34.400	99
Fluorene	86-73-7	4.86	5.820	97
Phenanthrene	85-01-8	5.71	4.290	100
Anthracene	120-12-7	5.77	1.700	100
Fluoranthene	206-44-0	7.06	0.897	100
Pyrene	129-00-0	7.35	0.722	100
Benzo[a]anthracene	56-55-3	9.04	0.245	100
Chrysene	218-01-9	9.10	0.204	100
Benzo[b]fluoranthene	205-99-2	10.58	0.194	100
Benzo[k]fluoranthene	207-08-9	10.62	0.067	100
Benzo[a]pyrene	50-32-8	11.01	0.169	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.39	0.076	M
Dibenzo[a,h]anthracene	53-70-3	12.42	0.019	M
Benzo[g,h,i]perylene	191-24-2	12.69	0.080	M
Total (USEPA16) PAHs	-	-	54.382	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	124
Phenanthrene-d10	129
Chrysene-d12	132
Perylene-d12	129

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	70
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 122035 Blank	**Job Number:**	W12_2035
LIMS ID Number:	EX1127072	**Date Booked in:**	30-Jun-11
QC Batch Number:	110607	**Date Extracted:**	11-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Jul-11
Directory:	0711PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	77
Acenaphthene-d10	78
Phenanthrene-d10	77
Chrysene-d12	75
Perylene-d12	72

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 122035 Blank Spike	**Job Number:**	W12_2035
LIMS ID Number:	EX1127073	**Date Booked in:**	30-Jun-11
QC Batch Number:	110607	**Date Extracted:**	11-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Jul-11
Directory:	0711PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.30	92	M
Acenaphthylene	208-96-8	4.35	83	M
Acenaphthene	83-32-9	4.48	87	M
Fluorene	86-73-7	4.86	89	M
Phenanthrene	85-01-8	5.72	94	M
Anthracene	120-12-7	5.77	92	M
Fluoranthene	206-44-0	7.07	94	M
Pyrene	129-00-0	7.36	87	M
Benzo[a]anthracene	56-55-3	9.05	106	M
Chrysene	218-01-9	9.10	85	M
Benzo[b]fluoranthene	205-99-2	10.58	100	M
Benzo[k]fluoranthene	207-08-9	10.61	86	M
Benzo[a]pyrene	50-32-8	11.01	93	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.39	89	M
Dibenzo[a,h]anthracene	53-70-3	12.42	80	M
Benzo[g,h,i]perylene	191-24-2	12.70	89	M
Total (USEPA16) PAHs	-	-	1445	-

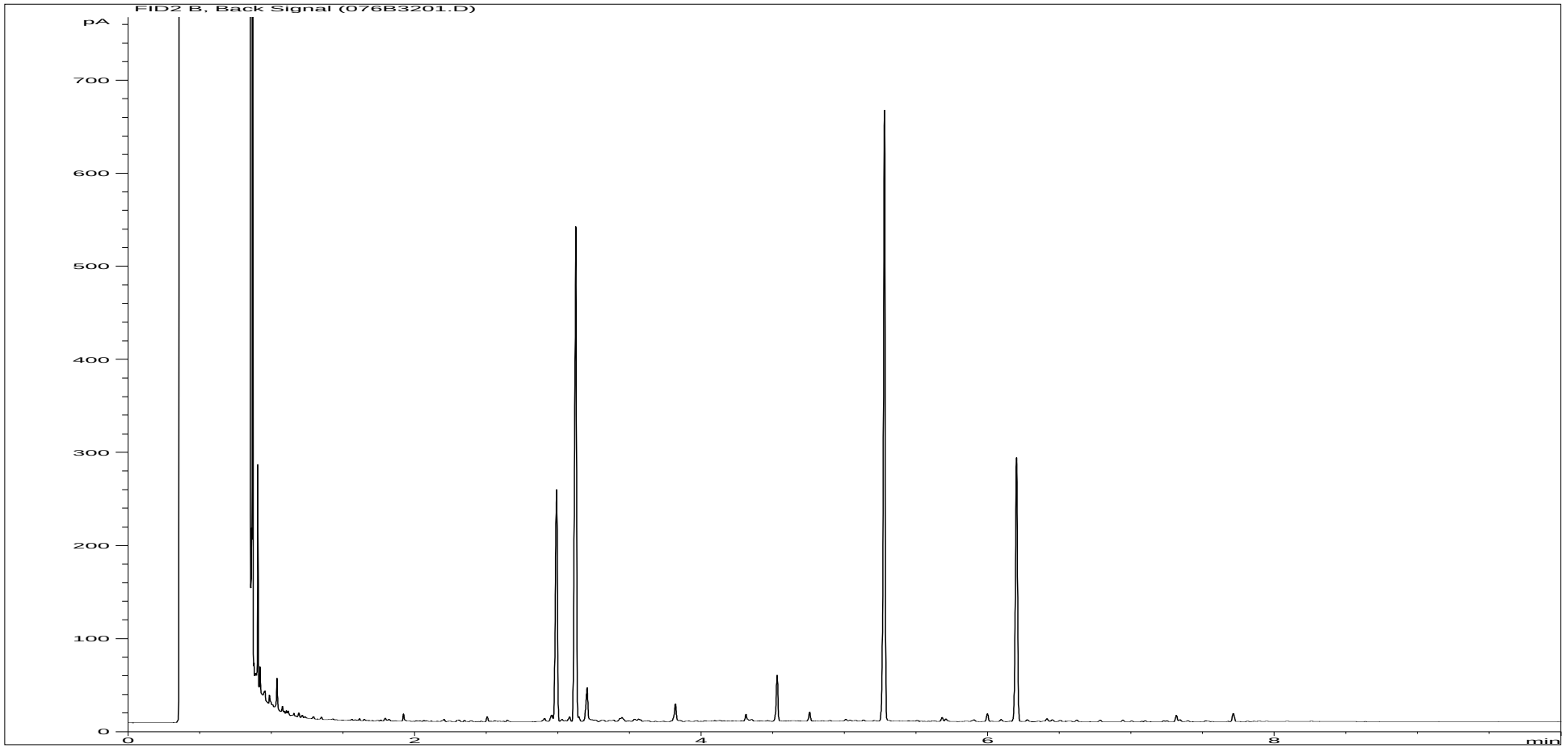
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	96
Phenanthrene-d10	99
Chrysene-d12	104
Perylene-d12	100

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

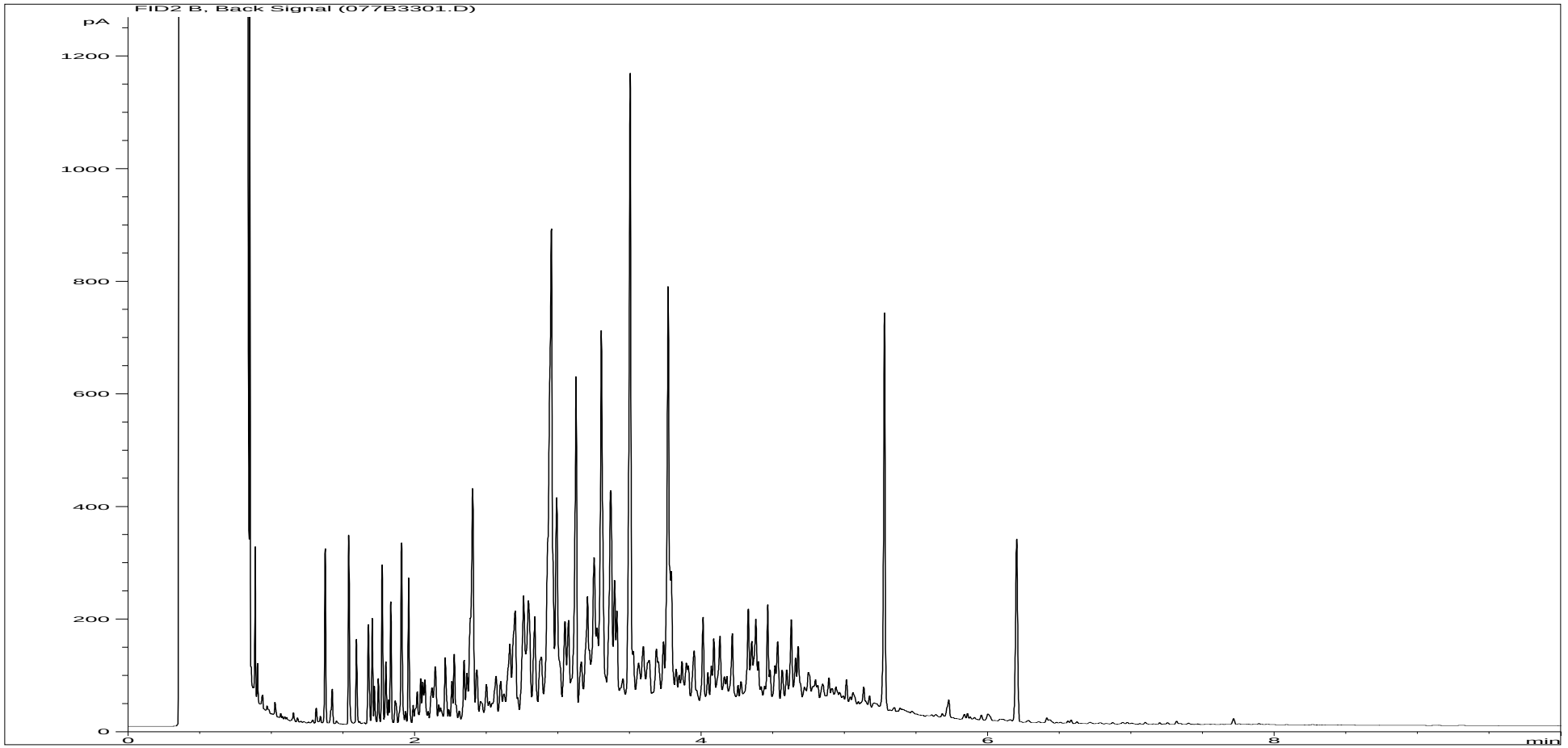
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1127070	**Job Number:**	W12_2035
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12-2 2.3-3.3
Acquisition Date/Time:	08-Jul-11, 20:41:49		
Datafile:	D:\TES\DATA\Y2011\070811TPH_GC15\070811 2011-07-08 11-40-53\076B3201.D		

Where individual results are flagged see report notes for status.

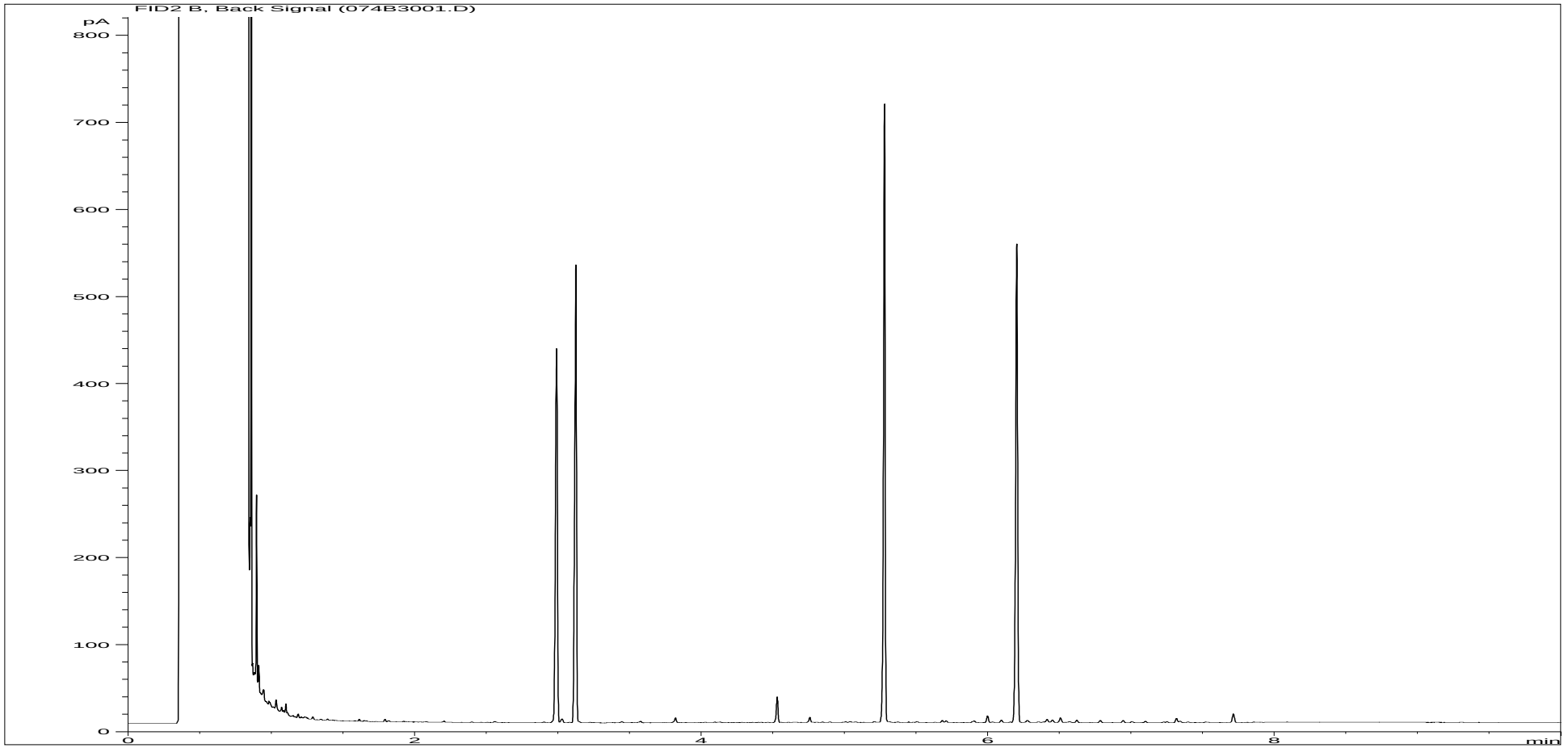
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1127071	**Job Number:**	W12_2035
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7-2 1.1-1.4
Acquisition Date/Time:	08-Jul-11, 20:59:08		
Datafile:	D:\TES\DATA\Y2011\070811TPH_GC15\070811 2011-07-08 11-40-53\077B3301.D		

Where individual results are flagged see report notes for status.

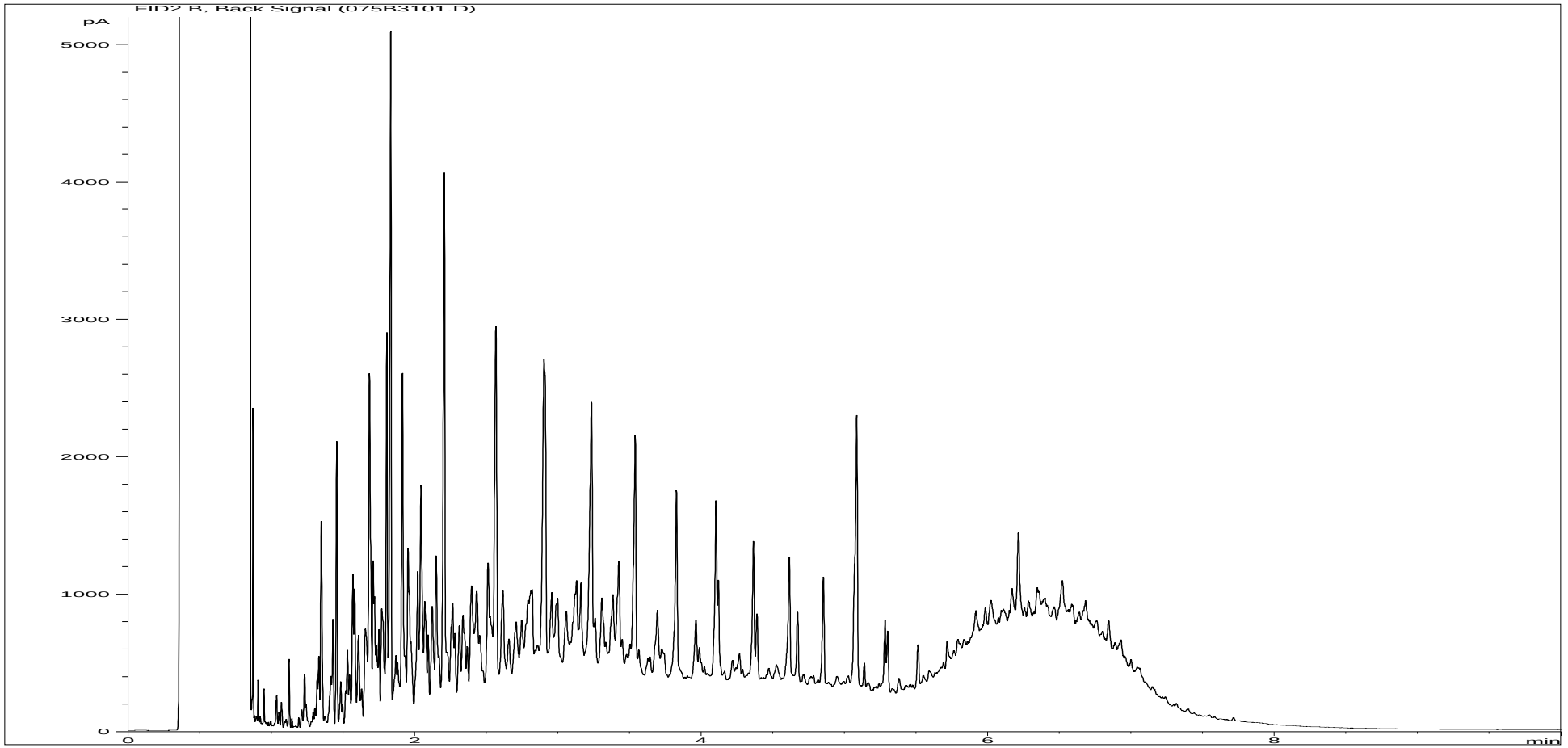
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1127072	**Job Number:**	W12_2035
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 122035 Blank
Acquisition Date/Time:	08-Jul-11, 20:07:04		
Datafile:	D:\TES\DATA\Y2011\070811TPH_GC15\070811 2011-07-08 11-40-53\074B3001.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1127073	**Job Number:**	W12_2035
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 122035 Blank Spike
Acquisition Date/Time:	08-Jul-11, 20:24:32		
Datafile:	D:\TES\DATA\Y2011\070811TPH_GC15\070811 2011-07-08 11-40-53\075B3101.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W122035

Customer Worley Parsons Komex
Site Maelor Works
Report No W122035

Consignment No
Date Logged 30-Jun-2011

Report Due 04-Jul-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		LeachPrep	PAHMSW	PHEHPLC	SFAPI				SFAS	TPHFID	VOCHSAW
		Sampled	Report B (CENC)	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Leachate Prep	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	BTEX Analysis HSA MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	
EX/1127070	MW11-12-2 2.3-3.3	13/06/11																									
EX/1127071	MW11-7-2 1.1-1.4	14/06/11																									
EX/1127072	Report 122035 Blank	13/06/11																									
EX/1127073	Report 122035 Blank Spike	13/06/11																									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W122035

Consignment No
Date Logged 30-Jun-2011

Report Due 04-Jul-2011

ID Number	Description	MethodID	WSLM13	WSLM2	WSLM3
		Sampled	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓
EX/1127070	MW11-12-2 2.3-3.3	13/06/11			
EX/1127071	MW11-7-2 1.1-1.4	14/06/11			
EX/1127072	Report 122035 Blank	13/06/11			
EX/1127073	Report 122035 Blank Spike	13/06/11			

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/121950 (Ver. 1)
Your Ref: 50065-29

July 6, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

LEACHATE SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
LEACHATE SAMPLE ANALYSIS

UKAS TESTING
1252

Report No. EXR/121950 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 3 samples described in this report were logged for analysis by Scientifics on 29-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 06-Jul-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 7)
GC-FID Chromatograms (Pages 8 to 10)
Analytical and Deviating Sample Overview (Pages 11 to 12)
Table of Report Notes (Page 13)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 06-Jul-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS
Method Reporting Limits :				100	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001	0.01
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**
1126588	TP11-6-1 0.3-0.6	17-Jun-11	10.6	248	3	49	<0.001	0.004	<0.0001	Req	0.003	0.002	0.007	0.14	0.005	0.0002	0.001	0.01
1126589	QC Blank		7.05	<100	<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001	<0.01
1126590	Blank Spike (% Recovery)				99	98	99	95	98	Req	98	100	100	98	99	104	99	99

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121950**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l				
Method Codes :			SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW				
Method Reporting Limits :			0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2				
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes				
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**				
1126588	TP11-6-1 0.3-0.6	17-Jun-11	<0.2	<0.02	<0.02	<0.05	3.5	<0.1	0.05	<0.02	<1	<1	<1	<2				
1126589	QC Blank		<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	<0.01	<0.02	<1	<1	<1	<2				
1126590	Blank Spike (% Recovery)		102	97	100	102	108	105	97		106	102	101	309				

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121950**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1126588	TP11-6-1 0.3-0.6	17-Jun-11	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1126589	QC Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1126590	Blank Spike (% Recovery)		97	97	98	88	109											

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Burton-on-Trent, Staffordshire, DE15 0YZ

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121950**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-6-1 0.3-0.6	**Job Number:**	W12_1950
LIMS ID Number:	EX1126588	**Date Booked in:**	29-Jun-11
QC Batch Number:	110589	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Leachate
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.13	0.058	96
Acenaphthylene	208-96-8	4.17	0.022	96
Acenaphthene	83-32-9	4.29	0.010	90
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.46	0.045	97
Anthracene	120-12-7	5.50	0.021	97
Fluoranthene	206-44-0	6.75	0.096	66
Pyrene	129-00-0	7.02	0.086	70
Benzo[a]anthracene	56-55-3	8.68	0.052	91
Chrysene	218-01-9	8.72	0.049	88
Benzo[b]fluoranthene	205-99-2	10.19	0.063	78
Benzo[k]fluoranthene	207-08-9	10.22	0.023	78
Benzo[a]pyrene	50-32-8	10.61	0.047	61
Indeno[1,2,3-cd]pyrene	193-39-5	11.98	0.032	57
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.26	0.048	82
Total (USEPA16) PAHs	-	-	< 0.672	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	89
Acenaphthene-d10	86
Phenanthrene-d10	86
Chrysene-d12	82
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121950 Blank	**Job Number:**	W12_1950
LIMS ID Number:	EX1126589	**Date Booked in:**	29-Jun-11
QC Batch Number:	110589	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	94
Phenanthrene-d10	93
Chrysene-d12	87
Perylene-d12	83

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121950 Blank Spike	**Job Number:**	W12_1950
LIMS ID Number:	EX1126590	**Date Booked in:**	29-Jun-11
QC Batch Number:	110589	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	02-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.13	96.500	97
Acenaphthylene	208-96-8	4.17	84.400	100
Acenaphthene	83-32-9	4.29	88.800	99
Fluorene	86-73-7	4.65	76.200	95
Phenanthrene	85-01-8	5.46	92.200	99
Anthracene	120-12-7	5.51	83.000	98
Fluoranthene	206-44-0	6.75	91.900	89
Pyrene	129-00-0	7.02	87.400	99
Benzo[a]anthracene	56-55-3	8.67	102.000	96
Chrysene	218-01-9	8.72	95.100	99
Benzo[b]fluoranthene	205-99-2	10.19	87.900	78
Benzo[k]fluoranthene	207-08-9	10.22	95.000	64
Benzo[a]pyrene	50-32-8	10.61	83.100	90
Indeno[1,2,3-cd]pyrene	193-39-5	11.98	62.100	74
Dibenzo[a,h]anthracene	53-70-3	12.02	67.800	81
Benzo[g,h,i]perylene	191-24-2	12.27	88.500	75
Total (USEPA16) PAHs	-	-	1381.900	-

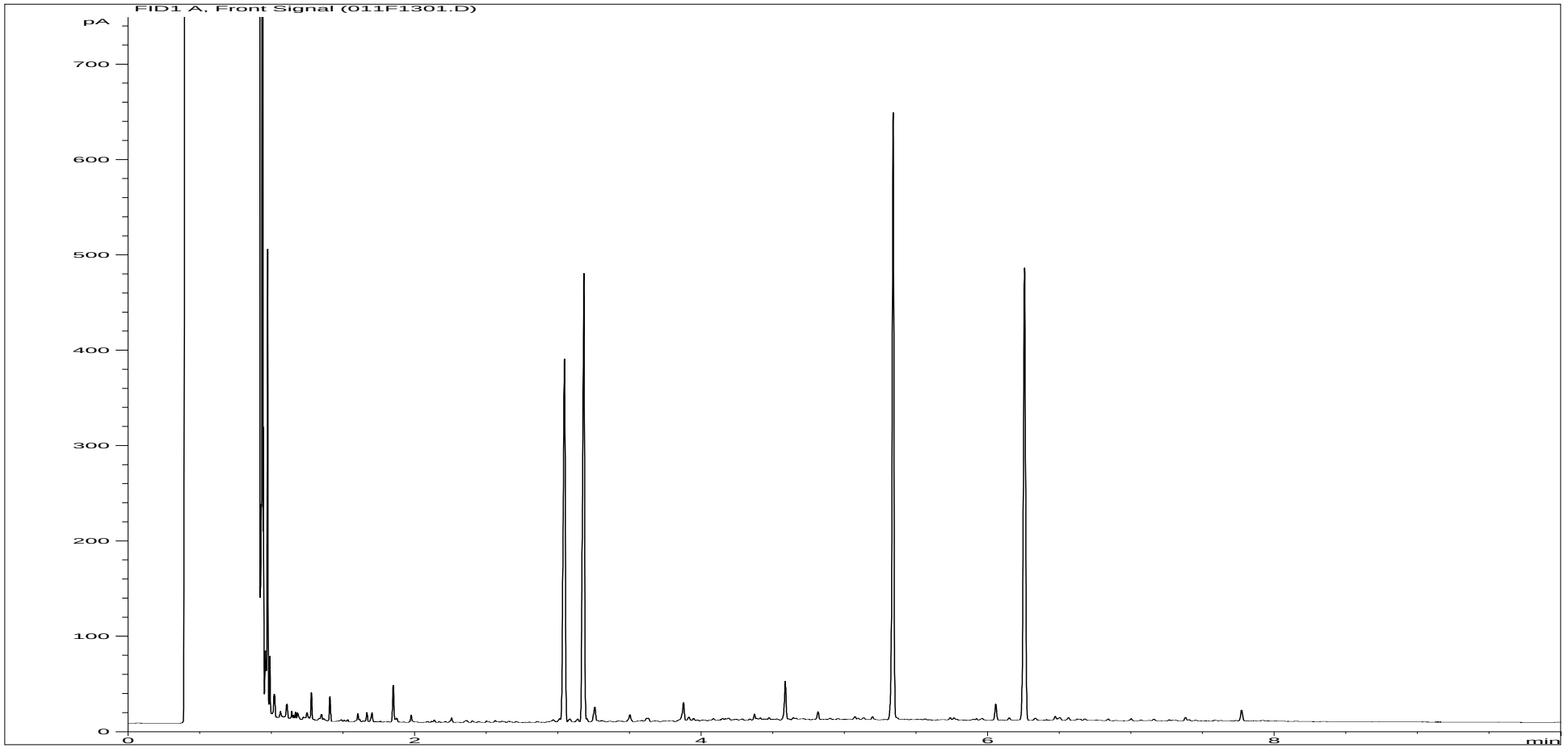
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	86
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

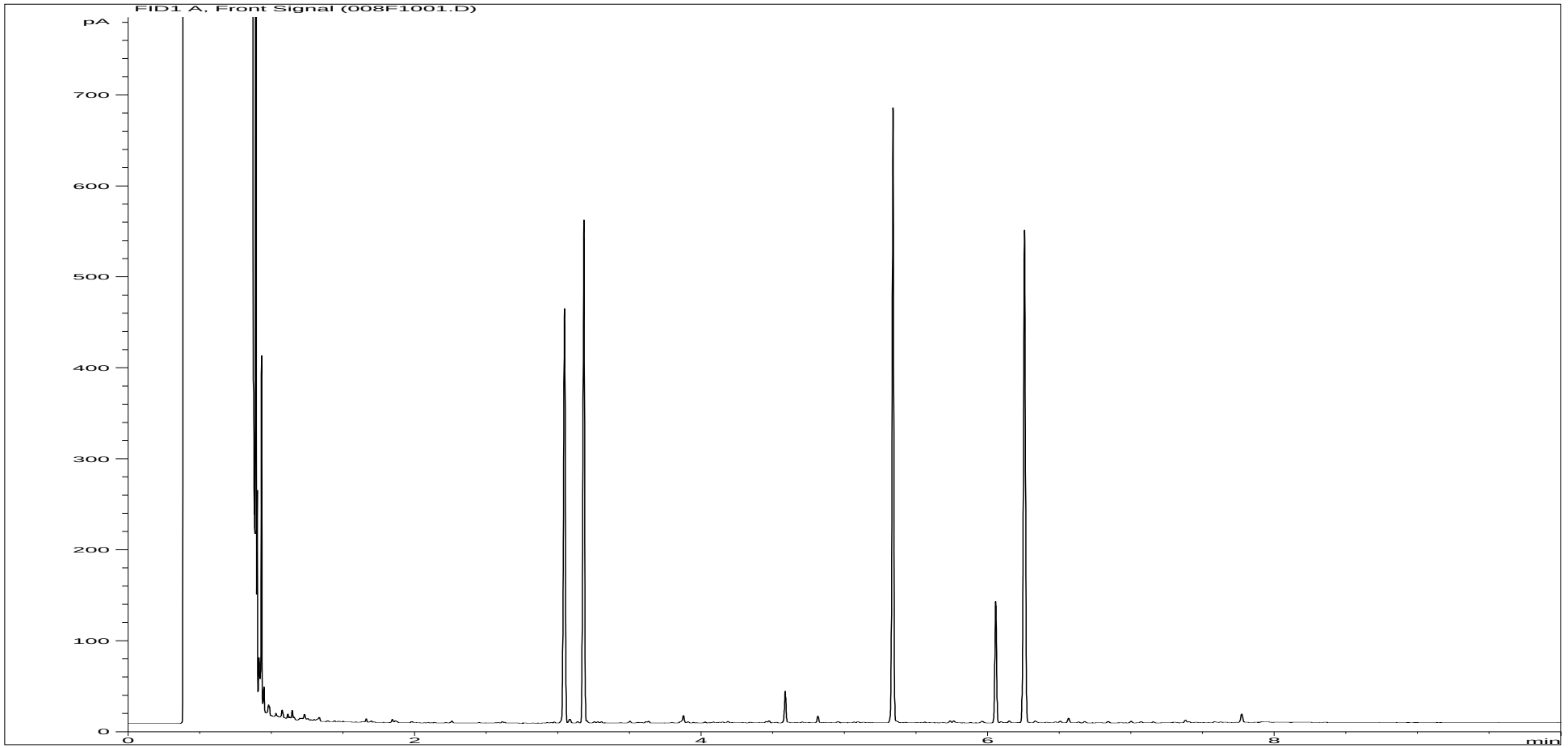
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126588	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	TP11-6-1 0.3-0.6
Acquisition Date/Time:	04-Jul-11, 13:24:39		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\011F1301.D		

Where individual results are flagged see report notes for status.

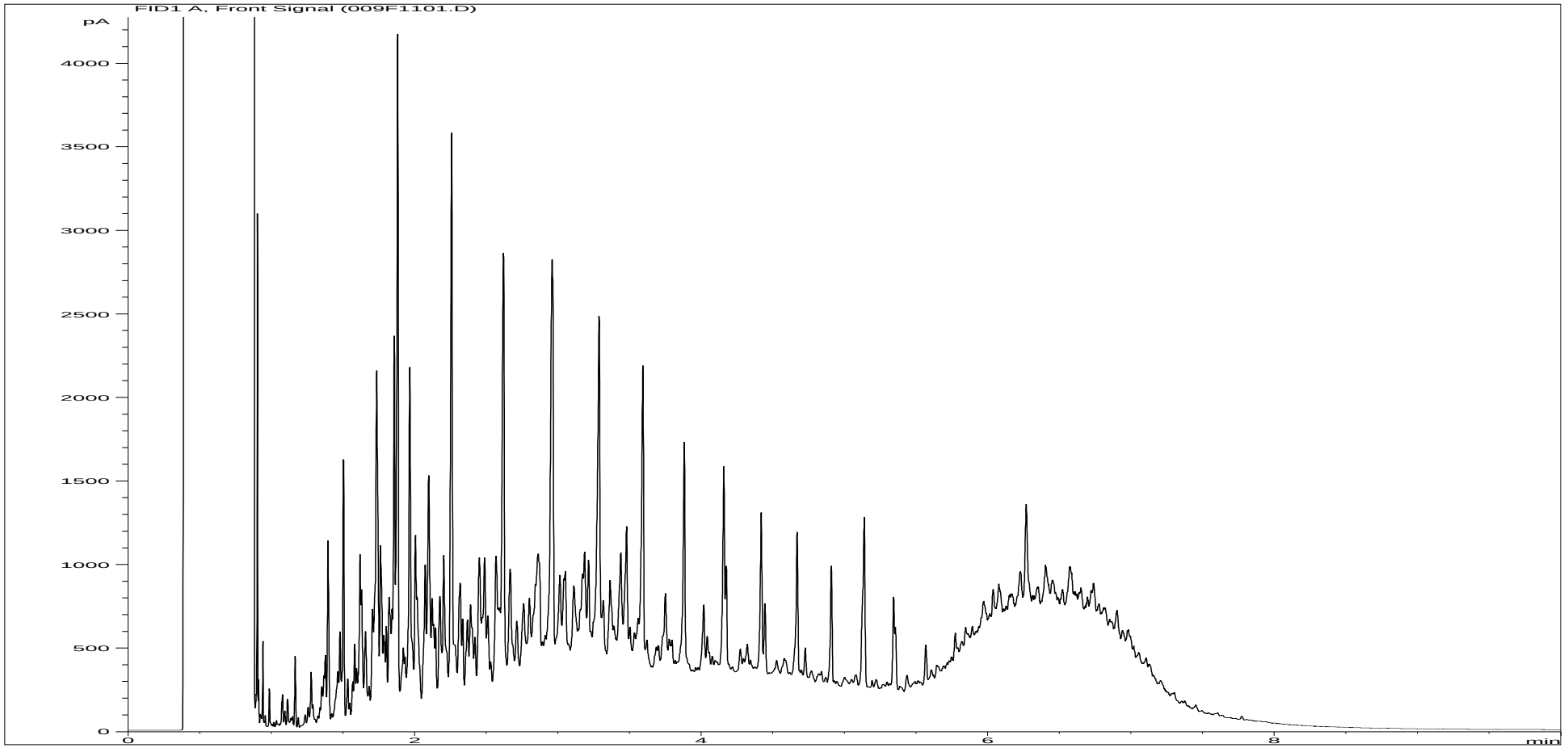
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126589	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121950 Blank
Acquisition Date/Time:	04-Jul-11, 12:33:03		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\008F1001.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126590	**Job Number:**	W12_1950
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121950 Blank Spike
Acquisition Date/Time:	04-Jul-11, 12:50:18		
Datafile:	D:\TES\DATA\Y2011\070411TPH_GC15\070411 2011-07-04 09-24-00\009F1101.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W121950

Customer Worley Parsons Komex
Site Maelor Works
Report No W121950

Consignment No
Date Logged 29-Jun-2011

Report Due 01-Jul-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		LeachPrep	PAHMSW	PHEHPLC	SFAPI				SFAS	TPHFID	VOCHSAW
		Sampled	Report B (CENC)	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Leachate Prep	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	BTEX Analysis HSA MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	
EX/1126588	TP11-6-1 0.3-0.6	17/06/11																									
EX/1126589	Report 121950 Blank	17/06/11																									
EX/1126590	Report 121950 Blank Spike	17/06/11																									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W121950

Consignment No
Date Logged 29-Jun-2011

Report Due 01-Jul-2011

ID Number	Description	MethodID	WSLM13	WSLM2	WSLM3
		Sampled	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓
EX/1126588	TP11-6-1 0.3-0.6	17/06/11			
EX/1126589	Report 121950 Blank	17/06/11			
EX/1126590	Report 121950 Blank Spike	17/06/11			

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/121880 (Ver. 1)
Your Ref: 50065-29

July 6, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

LEACHATE SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
LEACHATE SAMPLE ANALYSIS

1252

Report No. EXR/121880 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 3 samples described in this report were logged for analysis by Scientifics on 27-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 06-Jul-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 7)
GC-FID Chromatograms (Pages 8 to 10)
Analytical and Deviating Sample Overview (Pages 11 to 12)
Table of Report Notes (Page 13)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 06-Jul-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS
Method Reporting Limits :				100	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001	0.01
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**
1126337	TP11-2-3 2.6-2.9	16-Jun-11	8.6	183	4	13	0.003	0.002	<0.0001	Req	0.016	<0.001	0.016	0.36	0.002	<0.0001	<0.001	10.3
1126338	QC Blank		7.06	<100	<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001	<0.01
1126339	Blank Spike (% Recovery)				102	97	98	103	101	Req	98	99	101	99	102	100	98	99

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121880**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l				
		Method Codes :	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW				
		Method Reporting Limits :	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2				
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes				
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**				
1126337	TP11-2-3 2.6-2.9	**16-Jun-11**	<0.2	<0.02	0.52	<0.05	16	0.42	0.26	<0.52	<1	<1	<1	5				
1126338	QC Blank		<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	<0.01	<0.02	<1	<1	<1	<2				
1126339	Blank Spike (% Recovery)		103	102	101	104	106	100	91		100	99	100	306				

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121880**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1126337	TP11-2-3 2.6-2.9	**16-Jun-11**	<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1126338	QC Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1126339	Blank Spike (% Recovery)		93	99	106	93	106											

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	05-Jul-11
Report Number	**EXR/121880**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	TP11-2-3 2.6-2.9	**Job Number:**	W12_1880
LIMS ID Number:	EX1126337	**Date Booked in:**	27-Jun-11
QC Batch Number:	110584	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	01-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Leachate
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.13	0.075	88
Acenaphthylene	208-96-8	4.17	0.265	99
Acenaphthene	83-32-9	4.29	0.109	91
Fluorene	86-73-7	4.66	0.071	85
Phenanthrene	85-01-8	5.46	0.014	72
Anthracene	120-12-7	5.51	0.057	87
Fluoranthene	206-44-0	6.75	0.067	75
Pyrene	129-00-0	7.02	0.049	79
Benzo[a]anthracene	56-55-3	8.68	0.030	60
Chrysene	218-01-9	8.72	0.015	92
Benzo[b]fluoranthene	205-99-2	10.20	0.015	73
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.817	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	105
Acenaphthene-d10	105
Phenanthrene-d10	111
Chrysene-d12	107
Perylene-d12	104

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	69
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121880 Blank	**Job Number:**	W12_1880
LIMS ID Number:	EX1126338	**Date Booked in:**	27-Jun-11
QC Batch Number:	110584	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	01-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	115
Acenaphthene-d10	111
Phenanthrene-d10	112
Chrysene-d12	108
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121880 Blank Spike	**Job Number:**	W12_1880
LIMS ID Number:	EX1126339	**Date Booked in:**	27-Jun-11
QC Batch Number:	110584	**Date Extracted:**	01-Jul-11
Quantitation File:	Initial Calibration	**Date Analysed:**	01-Jul-11
Directory:	701PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.13	76.700	93
Acenaphthylene	208-96-8	4.17	74.000	99
Acenaphthene	83-32-9	4.29	76.300	99
Fluorene	86-73-7	4.66	72.300	99
Phenanthrene	85-01-8	5.46	77.700	99
Anthracene	120-12-7	5.51	79.600	96
Fluoranthene	206-44-0	6.75	80.700	81
Pyrene	129-00-0	7.03	75.800	100
Benzo[a]anthracene	56-55-3	8.68	88.100	96
Chrysene	218-01-9	8.73	84.500	97
Benzo[b]fluoranthene	205-99-2	10.19	71.600	73
Benzo[k]fluoranthene	207-08-9	10.23	74.600	67
Benzo[a]pyrene	50-32-8	10.61	72.100	89
Indeno[1,2,3-cd]pyrene	193-39-5	11.98	61.000	77
Dibenzo[a,h]anthracene	53-70-3	12.02	57.600	70
Benzo[g,h,i]perylene	191-24-2	12.27	68.700	90
Total (USEPA16) PAHs	-	-	1191.300	-

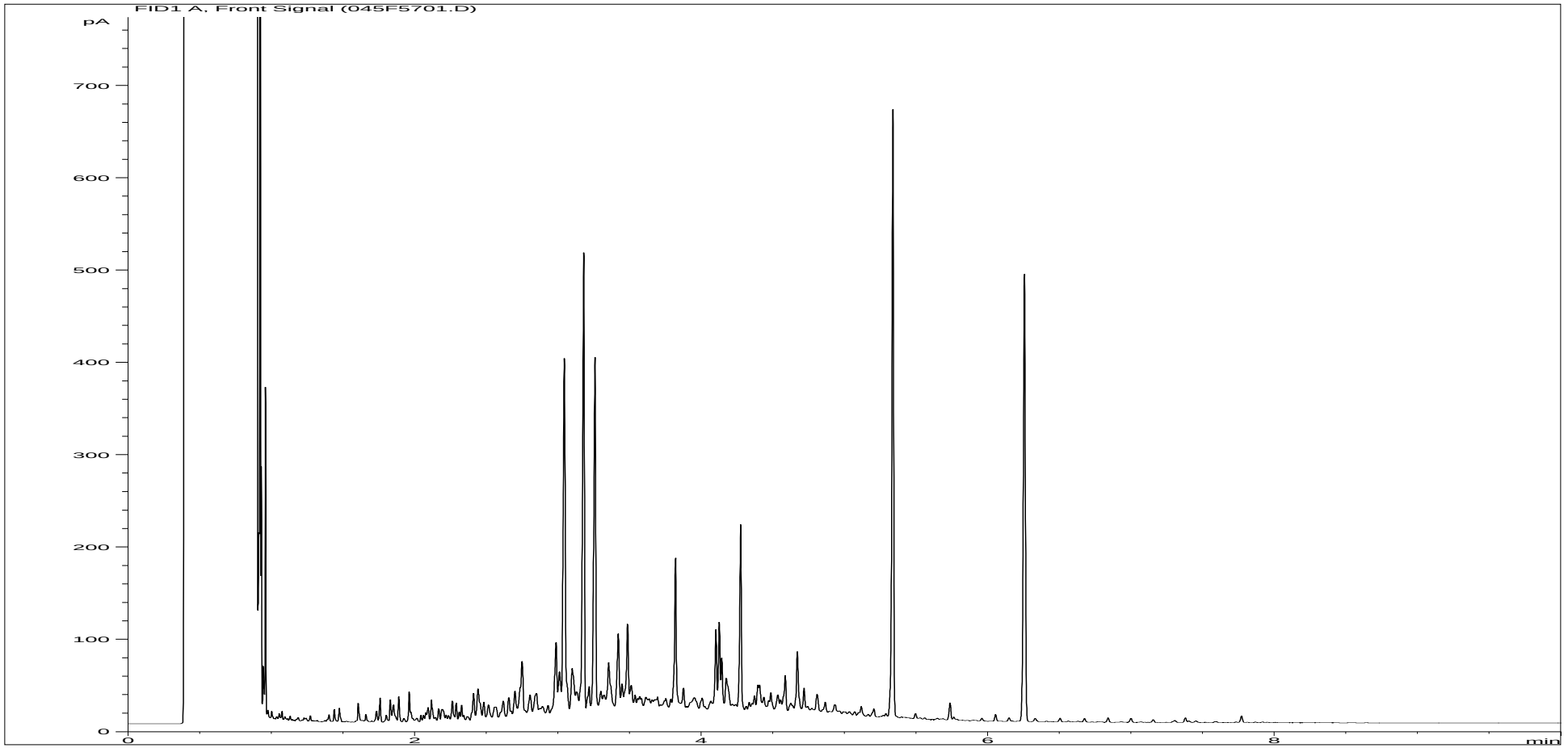
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	113
Acenaphthene-d10	109
Phenanthrene-d10	112
Chrysene-d12	105
Perylene-d12	103

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	85

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

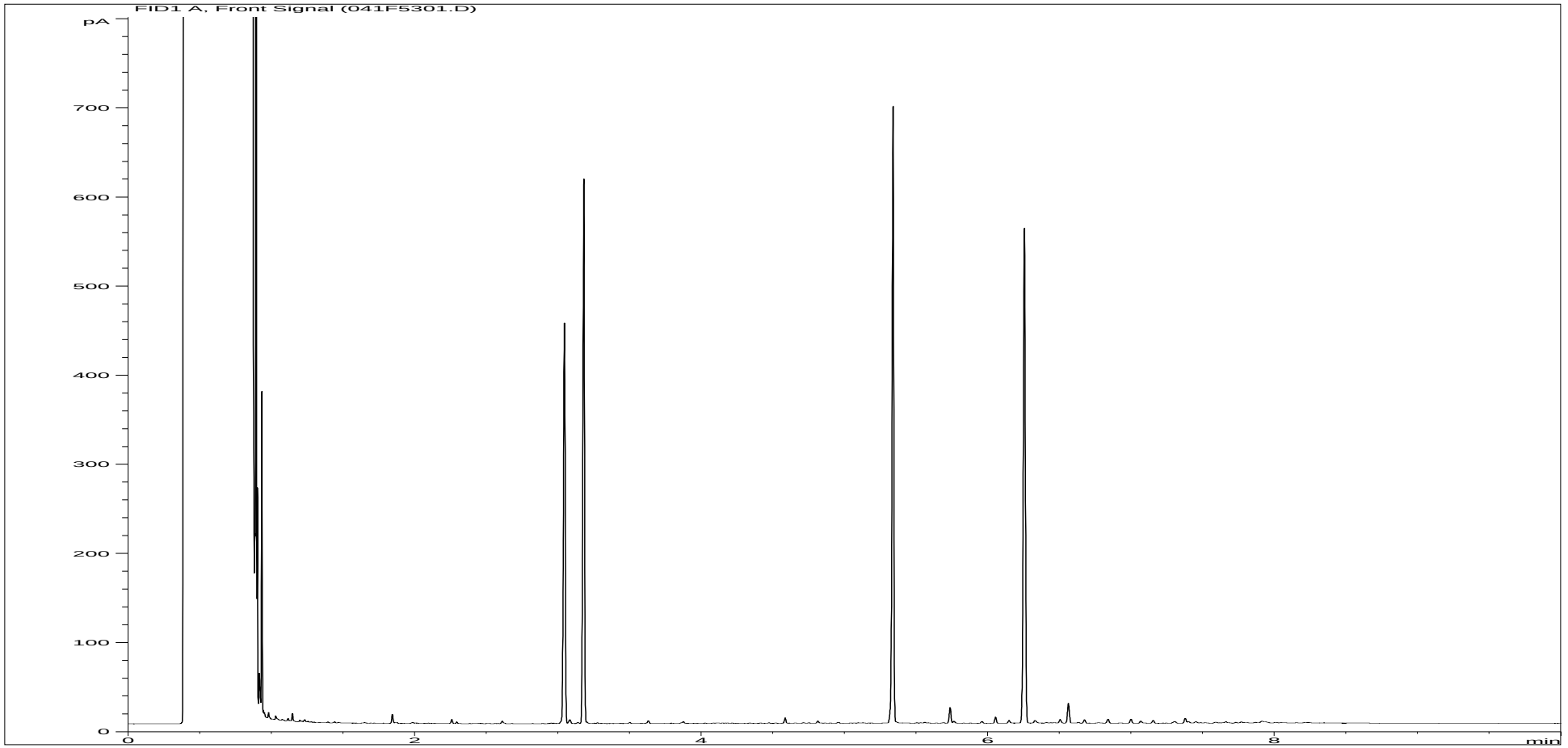
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126337	**Job Number:**	W12_1880
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	TP11-2-3 2.6-2.9
Acquisition Date/Time:	02-Jul-11, 02:08:40		
Datafile:	D:\TES\DATA\Y2011\070111TPH_GC15\070111 2011-07-01 09-25-50\045F5701.D		

Where individual results are flagged see report notes for status.

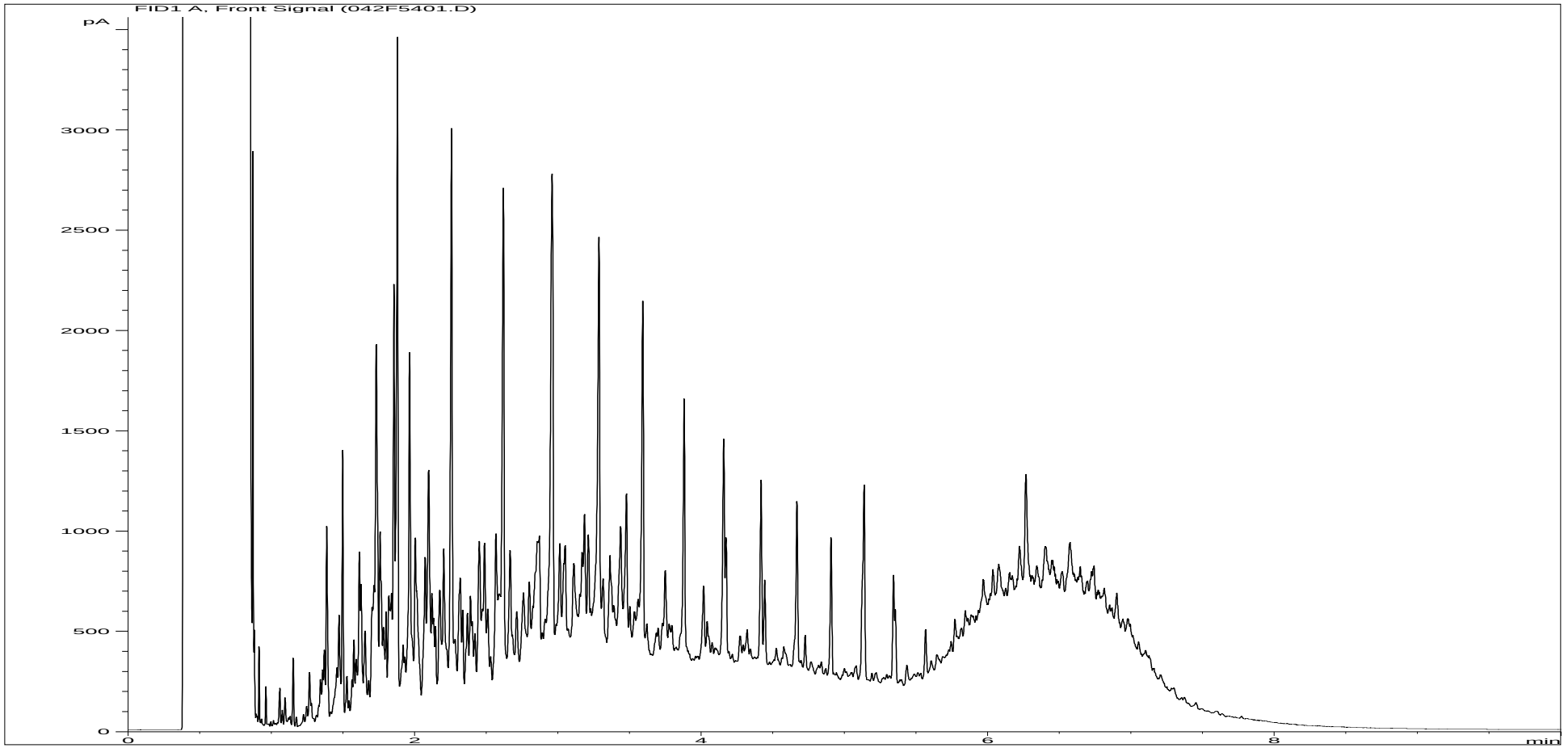
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126338	**Job Number:**	W12_1880
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121880 Blank
Acquisition Date/Time:	02-Jul-11, 01:00:47		
Datafile:	D:\TES\DATA\Y2011\070111TPH_GC15\070111 2011-07-01 09-25-50\041F5301.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126339	**Job Number:**	W12_1880
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121880 Blank Spike
Acquisition Date/Time:	02-Jul-11, 01:17:50		
Datafile:	D:\TES\DATA\Y2011\070111TPH_GC15\070111 2011-07-01 09-25-50\042F5401.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W121880

Customer Worley Parsons Komex
Site Maelor Works
Report No W121880

Consignment No
Date Logged 27-Jun-2011

Report Due 30-Jun-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		LeachPrep	PAHMSW	PHEHPLC	SFAPI				SFAS	TPHFID	VOCHSAW
		Sampled	Report B (CENC)	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Leachate Prep	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	BTEX Analysis HSA MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	
EX/1126337	TP11-2-3 2.6-2.9	16/06/11																									
EX/1126338	Report 121880 Blank	16/06/11																									
EX/1126339	Report 121880 Blank Spike	16/06/11																									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W121880

Customer **Worley Parsons Komex**
Site **Maelor Works**
Report No **W121880**

Consignment No
Date Logged 27-Jun-2011

Report Due 30-Jun-2011

ID Number	Description	MethodID	WSLM13	WSLM2	WSLM3
		Sampled	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓
EX/1126337	TP11-2-3 2.6-2.9	16/06/11			
EX/1126338	Report 121880 Blank	16/06/11			
EX/1126339	Report 121880 Blank Spike	16/06/11			

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/121817 (Ver. 1)
Your Ref: 50065-29

July 1, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

LEACHATE SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
LEACHATE SAMPLE ANALYSIS

1252

Report No. EXR/121817 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 3 samples described in this report were logged for analysis by Scientifics on 24-Jun-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 01-Jul-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 7)
GC-FID Chromatograms (Pages 8 to 10)
Analytical and Deviating Sample Overview (Pages 11 to 12)
Table of Method Descriptions (Page 13)
Table of Report Notes (Page 14)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 01-Jul-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS
Method Reporting Limits :				100	1	3.0	0.001	0.001	0.0001	0.01	0.001	0.001	0.002	0.01	0.001	0.0001	0.001	0.01
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**
1126082	MW11-08B-1 0.7-1.4	14-Jun-11	8.1	214	2	42	0.003	0.002	<0.0001	Req	0.005	<0.001	0.067	0.05	0.008	<0.0001	<0.001	<0.01
1126083	Blank		7.06	<100	<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001	<0.01
1126084	Blank Spike (%Recovery)				103	98	105	97	98	Req	103	102	99	98	98	100	95	100

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	01-Jul-11
Report Number	**EXR/121817**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l				
		Method Codes :	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW				
		Method Reporting Limits :	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.1	1	1	1	2				
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes				
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (0.01)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**				
1126082	MW11-08B-1 0.7-1.4	14-Jun-11	<0.2	<0.02	<0.02	<0.05	14	33.50	0.89	<0.02	2	1	128	200				
1126083	Blank		<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	<0.01	<0.02	<1	<1	<1	<2				
1126084	Blank Spike (%Recovery)		102	102	99	110	96	98	94		103	100	100	300				

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	01-Jul-11
Report Number	**EXR/121817**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l											
		Method Codes :	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC											
		Method Reporting Limits :	0.0005	0.0005	0.0005	0.0005	0.0005											
		UKAS Accredited :	no	no	no	no	no											
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**											
1126082	MW11-08B-1 0.7-1.4	**14-Jun-11**	0.0272	<0.0005	0.0026	<0.1	<0.0005											
1126083	Blank		<0.0005	<0.0005	<0.0005	<0.1	<0.0005											
1126084	Blank Spike (%Recovery)		99	106	111	110	111											

scientifics

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Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Leachate Sample Analysis

Date Printed	01-Jul-11
Report Number	**EXR/121817**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-08B-1 0.7-1.4	**Job Number:**	W12_1817
LIMS ID Number:	EX1126082	**Date Booked in:**	24-Jun-11
QC Batch Number:	110574	**Date Extracted:**	28-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Jun-11
Directory:	628PAH.MS10\	**Matrix:**	Leachate
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.13	0.479	85
Acenaphthylene	208-96-8	4.17	1.360	87
Acenaphthene	83-32-9	4.29	13.700	97
Fluorene	86-73-7	4.66	1.980	99
Phenanthrene	85-01-8	5.46	1.090	99
Anthracene	120-12-7	5.51	0.320	98
Fluoranthene	206-44-0	6.75	0.116	97
Pyrene	129-00-0	7.03	0.119	95
Benzo[a]anthracene	56-55-3	8.69	0.029	54
Chrysene	218-01-9	8.73	0.014	71
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 19.267	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	100
Phenanthrene-d10	99
Chrysene-d12	99
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121817 Blank	**Job Number:**	W12_1817
LIMS ID Number:	EX1126083	**Date Booked in:**	24-Jun-11
QC Batch Number:	110574	**Date Extracted:**	28-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Jun-11
Directory:	628PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	96
Phenanthrene-d10	96
Chrysene-d12	94
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 121817 Blank Spike	**Job Number:**	W12_1817
LIMS ID Number:	EX1126084	**Date Booked in:**	24-Jun-11
QC Batch Number:	110574	**Date Extracted:**	28-Jun-11
Quantitation File:	Initial Calibration	**Date Analysed:**	29-Jun-11
Directory:	628PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.13	85	96
Acenaphthylene	208-96-8	4.17	79	99
Acenaphthene	83-32-9	4.29	81	99
Fluorene	86-73-7	4.66	77	96
Phenanthrene	85-01-8	5.46	83	99
Anthracene	120-12-7	5.51	83	98
Fluoranthene	206-44-0	6.75	88	82
Pyrene	129-00-0	7.03	82	74
Benzo[a]anthracene	56-55-3	8.68	97	97
Chrysene	218-01-9	8.73	88	94
Benzo[b]fluoranthene	205-99-2	10.19	81	77
Benzo[k]fluoranthene	207-08-9	10.23	84	65
Benzo[a]pyrene	50-32-8	10.61	83	77
Indeno[1,2,3-cd]pyrene	193-39-5	11.98	66	80
Dibenzo[a,h]anthracene	53-70-3	12.02	65	72
Benzo[g,h,i]perylene	191-24-2	12.27	83	73
Total (USEPA16) PAHs	-	-	1305	-

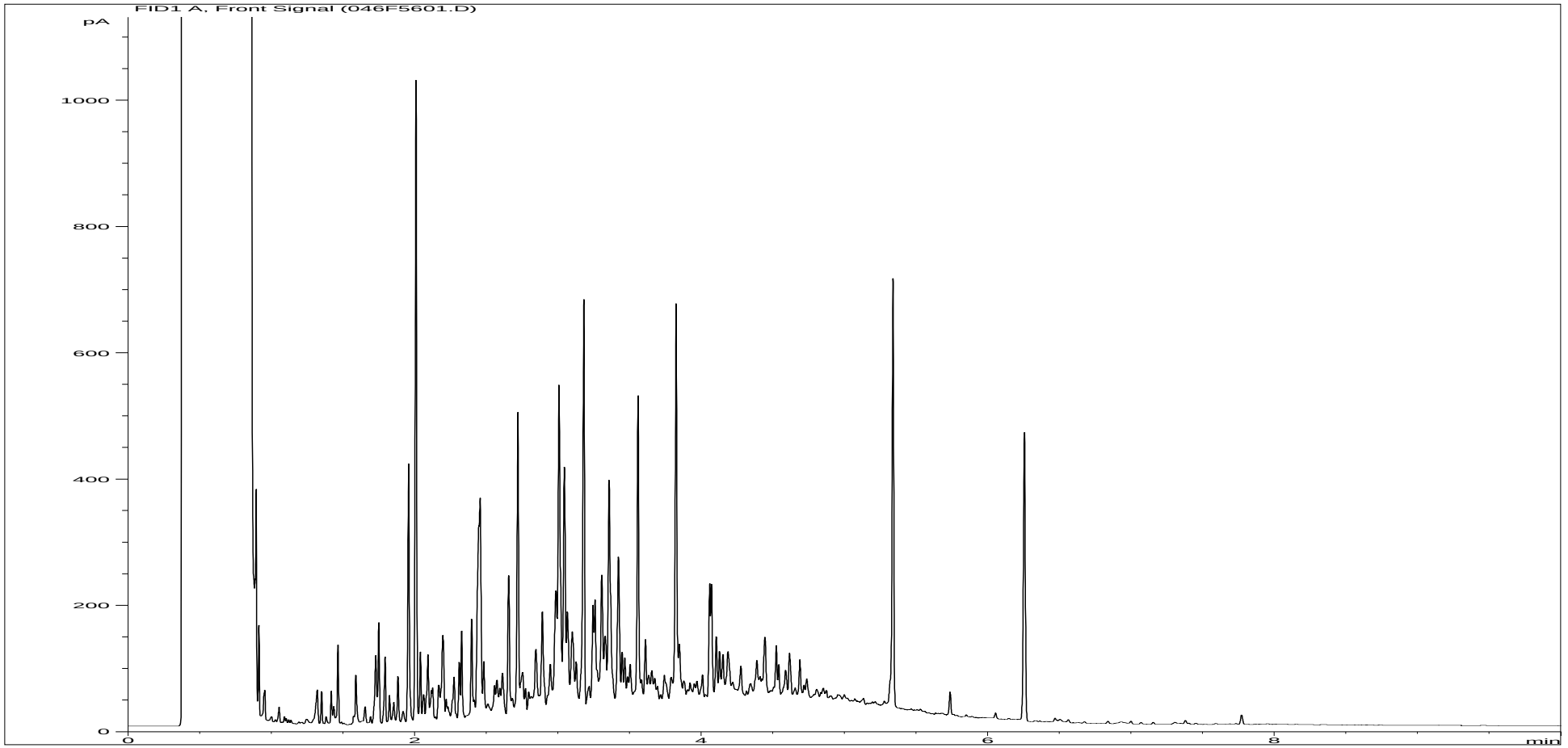
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	100
Phenanthrene-d10	101
Chrysene-d12	98
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

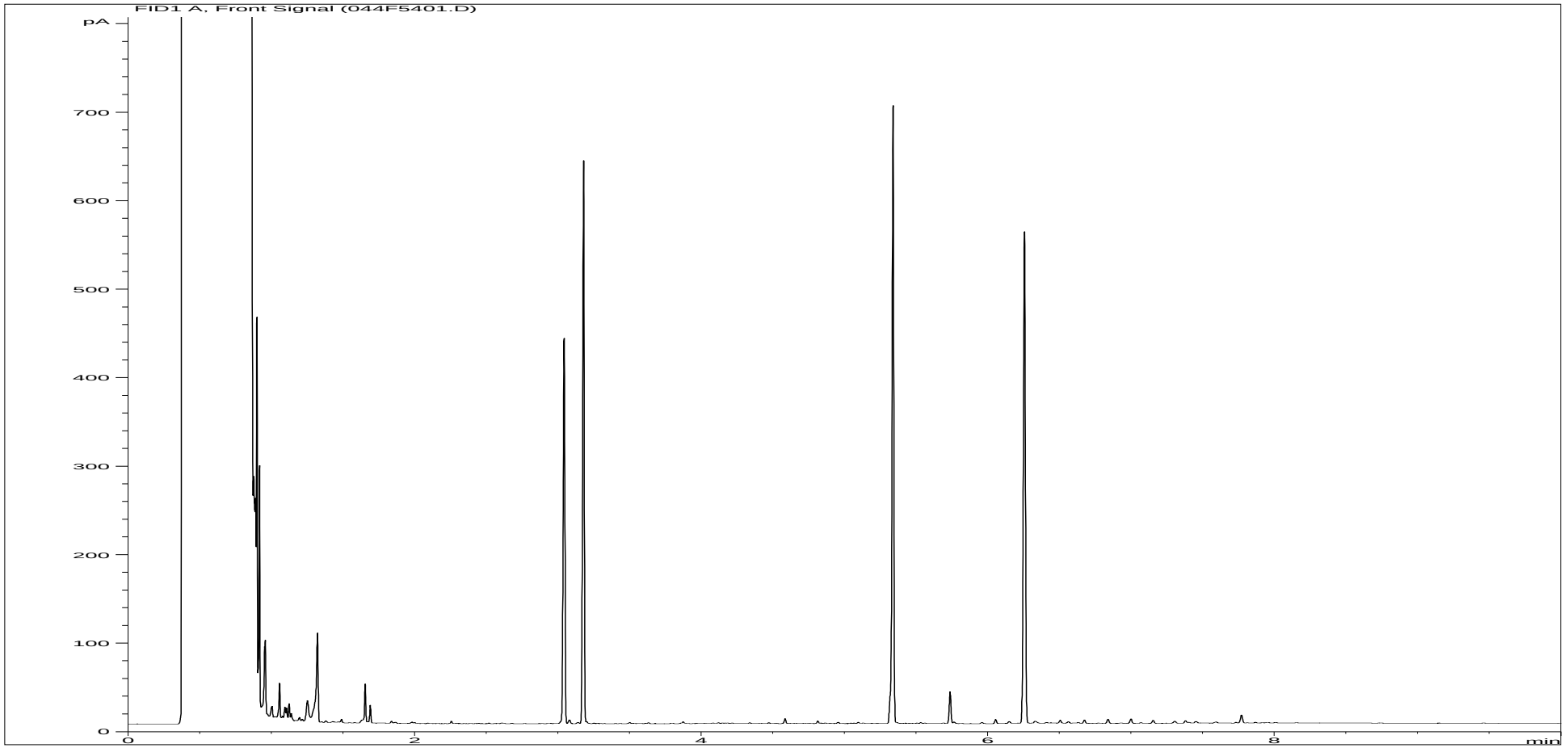
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126082	**Job Number:**	W12_1817
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-08B-1 0.7-1.4
Acquisition Date/Time:	29-Jun-11, 01:44:28		
Datafile:	D:\TES\DATA\Y2011\062811TPH_GC15\062811 2011-06-28 07-51-35\046F5601.D		

Where individual results are flagged see report notes for status.

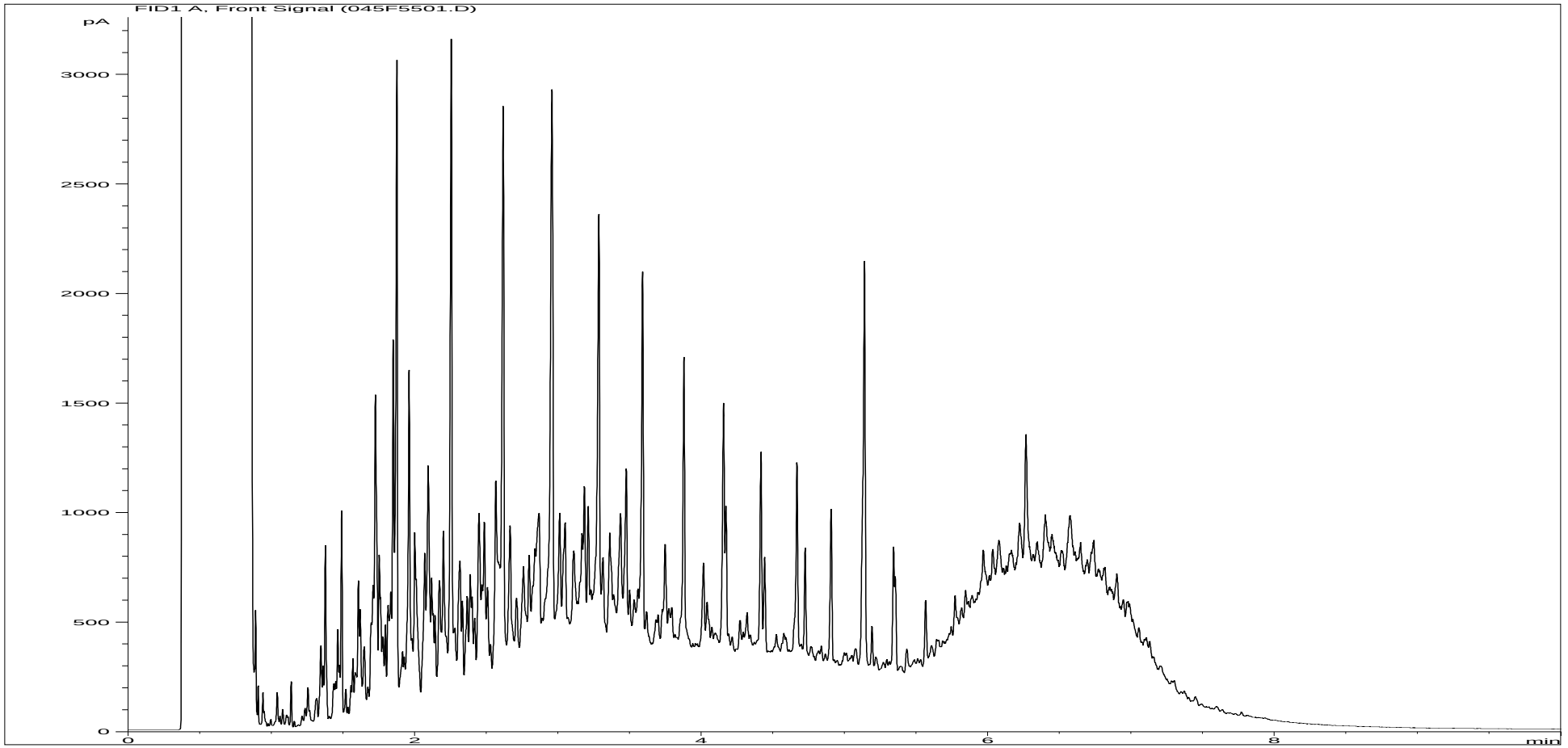
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126083	**Job Number:**	W12_1817
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121817 Blank
Acquisition Date/Time:	29-Jun-11, 01:10:29		
Datafile:	D:\TES\DATA\Y2011\062811TPH_GC15\062811 2011-06-28 07-51-35\044F5401.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1126084	**Job Number:**	W12_1817
Multiplier:	0.005	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 121817 Blank Spike
Acquisition Date/Time:	29-Jun-11, 01:27:28		
Datafile:	D:\TES\DATA\Y2011\062811TPH_GC15\062811 2011-06-28 07-51-35\045F5501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W121817

Customer Worley Parsons Komex
Site Maelor Works
Report No W121817

Consignment No
Date Logged 24-Jun-2011

Report Due 29-Jun-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		LeachPrep	PAHMSW	PHEHPLC	SFAPI				SFAS	TPHFID	VOCHSAW
		Sampled	Report B (CENC)	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Leachate Prep	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	BTEX Analysis HSA MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	
EX/1126082	MW11-08B-1 0.7-1.4	14/06/11																									
EX/1126083	Report 121817 Blank	14/06/11																									
EX/1126084	Report 121817 Blank Spike	14/06/11																									

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W121817

Consignment No
Date Logged 24-Jun-2011

Report Due 29-Jun-2011

ID Number	Description	MethodID	WSLM13	WSLM2	WSLM3
		Sampled	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓
EX/1126082	MW11-08B-1 0.7-1.4	14/06/11			
EX/1126083	Report 121817 Blank	14/06/11			
EX/1126084	Report 121817 Blank Spike	14/06/11			

Note: For analysis where the Report Due date is greater than 7 days (Volatiles, PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TPHFID	As Received	Determination of pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/126316 (Ver. 1)
Your Ref: 50065-29

October 20, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/126316 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 7 samples described in this report were logged for analysis by Scientifics on 07-Oct-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 20-Oct-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
Table of TPH (Si) banding (0.01) (Page 12)
GC-FID Chromatograms (Pages 13 to 33)
Analytical and Deviating Sample Overview (Pages 34 to 35)
Table of Method Descriptions (Page 36)
Table of Report Notes (Page 37)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 20-Oct-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	0.001	0.001	0.0001		0.001	0.001	0.002	0.01	0.001	0.0001	0.001
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units w**	**Conductivity uS/cm @ 25C w**	**Suspended Solids w**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH GC-MS (16) o**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**
1143791	MW11 - 4	05-Oct-11	6.9	862	35	93	15	0.001	0.005	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	0.002	<0.0001	<0.001
1143792	Pond A	05-Oct-11	6.8	339	231	12	30	<0.001	0.003	<0.0001	Req	<0.001	<0.001	<0.002	0.75	0.002	0.0002	0.001
1143793	Pond B	05-Oct-11	6.9	616	857	37	49	<0.001	0.005	<0.0001	Req	<0.001	<0.001	<0.002	0.38	<0.001	0.0002	0.002
1143794	French Drain	05-Oct-11	7.1	1570	47	23	400	0.005	0.007	<0.0001	Req	0.003	<0.001	0.01	0.15	0.002	<0.0001	0.001
1143795	River	05-Oct-11	8.1	824	<5	58	72	0.001	0.004	0.0001	Req	<0.001	<0.001	0.028	<0.01	<0.001	<0.0001	<0.001
1143796	QC Blank		7.05	<100	<5	<1	<3	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002	<0.01	<0.001	<0.0001	<0.001
1143797	Blank Spike (% Recovery)				98	101	99	103	99	95	Req	103	104	97	98	97	106	92

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Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**20-Oct-2011**
Report Number	**EXR/126316**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Method Codes :			KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID	TPHFID-Si	SFAPI	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW
Method Reporting Limits :			0.01	0.2	0.02	0.02	0.05	0.1	0.1	0.01	0.01	0.02	1	1	1	2	5	5
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Ammoniacal Nitrogen as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon w**	**GRO-HSA o**	**TPH GC (0.01)**	**TPH GC (AA)**	**Complex Cyanide as CN**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**m/p Xylenes**	**o Xylene**
1143791	MW11 - 4	05-Oct-11	21.6	<0.2	<0.02	<0.02	0.09	8.9	<0.1	0.51	Req	<0.02	<1	<1	<1	<2	<1	<1
1143792	Pond A	05-Oct-11	1.7	<0.2	<0.02	0.34	2.44	12	<0.1	0.18	Req	<0.34	<1	<1	<1	<2	<1	<1
1143793	Pond B	05-Oct-11	0.7	<0.2	<0.02	<0.02	3.22	8.9	<0.1	0.16	Req	<0.02	<1	<1	<1	<2	<1	<1
1143794	French Drain	05-Oct-11	59.0	<0.2	0.03	0.32	<0.05	15	<0.1	0.04	Req	0.29	<1	<1	<1	<2	<1	<1
1143795	River	05-Oct-11	<0.01	<0.2	<0.02	<0.02	<0.05	2.4	<0.1	0.02	Req	<0.02	<1	<1	<1	<2	<1	<1
1143796	QC Blank		<0.01	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	<0.01	Req	<0.02	<1	<1	<1	<2	<1	<1
1143797	Blank Spike (% Recovery)		98	98	101	99	101	100	112	99	Req		104	96	101	100	100	101

scientifics

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**20-Oct-2011**
Report Number	**EXR/126316**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l									
		Method Codes :	VOCHSAW	PHEHPLCVL	PHEHPLCVL	PHEHPLCVL	PHEHPLCVL	PHEHPLCVL	PHEHPLCVL	PHEHPLCVL									
		Method Reporting Limits :	2	0.0005	0.0005	0.0005	0.1	0.0005	0.1	0.1									
		UKAS Accredited :	No	No	No	No	No	No	No	No									
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**MTBE**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**	**Resorcinol**	**Catechol**									
1143791	MW11 - 4	05-Oct-11	<1	0.0222	<0.0005	0.0095	<0.1	0.0028	<0.1	<0.1									
1143792	Pond A	05-Oct-11	<1	0.0427	0.1890	<0.0005	<0.1	<0.0005	<0.1	<0.1									
1143793	Pond B	05-Oct-11	<1	<0.0005	0.0236	<0.0005	<0.1	<0.0005	<0.1	<0.1									
1143794	French Drain	05-Oct-11	<1	<0.0005	<0.0005	<0.0005	<0.1	<0.0005	<0.1	<0.1									
1143795	River	05-Oct-11	<1	<0.0005	<0.0005	<0.0005	<0.1	<0.0005	<0.1	<0.1									
1143796	QC Blank		<1	<0.0005	<0.0005	<0.0005	<0.1	<0.0005	<0.1	<0.1									
1143797	Blank Spike (% Recovery)			102	91	107	93	109	81	94									

scientifics

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**20-Oct-2011**
Report Number	**EXR/126316**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	MW11 - 4	**Job Number:**	W12_6316
LIMS ID Number:	EX1143791	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	4.400	91
Acenaphthylene	208-96-8	4.49	0.055	69
Acenaphthene	83-32-9	4.62	0.419	95
Fluorene	86-73-7	5.02	0.029	66
Phenanthrene	85-01-8	5.89	0.025	60
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	7.26	0.019	65
Pyrene	129-00-0	7.56	0.019	61
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 5.056	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	98
Phenanthrene-d10	103
Chrysene-d12	106
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	64
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	Pond A	**Job Number:**	W12_6316
LIMS ID Number:	EX1143792	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	13-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	10.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.100	-
Acenaphthylene	208-96-8	-	< 0.100	-
Acenaphthene	83-32-9	-	< 0.100	-
Fluorene	86-73-7	-	< 0.100	-
Phenanthrene	85-01-8	-	< 0.100	-
Anthracene	120-12-7	-	< 0.100	-
Fluoranthene	206-44-0	-	< 0.100	-
Pyrene	129-00-0	-	< 0.100	-
Benzo[a]anthracene	56-55-3	-	< 0.100	-
Chrysene	218-01-9	-	< 0.100	-
Benzo[b]fluoranthene	205-99-2	-	< 0.100	-
Benzo[k]fluoranthene	207-08-9	-	< 0.100	-
Benzo[a]pyrene	50-32-8	-	< 0.100	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.100	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.100	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.100	-
Total (USEPA16) PAHs	-	-	< 1.600	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	98
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	8
Terphenyl-d14	10

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	Pond B	**Job Number:**	W12_6316
LIMS ID Number:	EX1143793	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	14-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	10.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.100	-
Acenaphthylene	208-96-8	-	< 0.100	-
Acenaphthene	83-32-9	-	< 0.100	-
Fluorene	86-73-7	-	< 0.100	-
Phenanthrene	85-01-8	-	< 0.100	-
Anthracene	120-12-7	-	< 0.100	-
Fluoranthene	206-44-0	-	< 0.100	-
Pyrene	129-00-0	-	< 0.100	-
Benzo[a]anthracene	56-55-3	-	< 0.100	-
Chrysene	218-01-9	-	< 0.100	-
Benzo[b]fluoranthene	205-99-2	-	< 0.100	-
Benzo[k]fluoranthene	207-08-9	-	< 0.100	-
Benzo[a]pyrene	50-32-8	-	< 0.100	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.100	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.100	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.100	-
Total (USEPA16) PAHs	-	-	< 1.600	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	83
Acenaphthene-d10	86
Phenanthrene-d10	87
Chrysene-d12	86
Perylene-d12	81

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	8
Terphenyl-d14	10

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	French Drain	**Job Number:**	W12_6316
LIMS ID Number:	EX1143794	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	14-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	85
Acenaphthene-d10	88
Phenanthrene-d10	87
Chrysene-d12	83
Perylene-d12	76

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	70
Terphenyl-d14	86

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	River	**Job Number:**	W12_6316
LIMS ID Number:	EX1143795	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	14-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	103
Phenanthrene-d10	107
Chrysene-d12	112
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	QC Blank	**Job Number:**	W12_6316
LIMS ID Number:	EX1143796	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	14-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	99
Phenanthrene-d10	101
Chrysene-d12	103
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons: Maelor Works		
Sample Details:	Blank Spike (% Recovery)	**Job Number:**	W12_6316
LIMS ID Number:	EX1143797	**Date Booked in:**	07-Oct-11
QC Batch Number:	110907	**Date Extracted:**	13-Oct-11
Quantitation File:	Initial Calibration	**Date Analysed:**	14-Oct-11
Directory:	013PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	93	70
Acenaphthylene	208-96-8	4.50	88	87
Acenaphthene	83-32-9	4.62	89	97
Fluorene	86-73-7	5.02	91	92
Phenanthrene	85-01-8	5.89	97	98
Anthracene	120-12-7	5.94	90	97
Fluoranthene	206-44-0	7.26	94	83
Pyrene	129-00-0	7.55	94	61
Benzo[a]anthracene	56-55-3	9.25	105	98
Chrysene	218-01-9	9.30	95	99
Benzo[b]fluoranthene	205-99-2	10.78	96	64
Benzo[k]fluoranthene	207-08-9	10.83	92	81
Benzo[a]pyrene	50-32-8	11.22	81	80
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	86	64
Dibenzo[a,h]anthracene	53-70-3	12.64	82	71
Benzo[g,h,i]perylene	191-24-2	12.93	90	20
Total (USEPA16) PAHs	-	-	1463	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	95
Acenaphthene-d10	90
Phenanthrene-d10	98
Chrysene-d12	94
Perylene-d12	89

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons : Maelor Works
Job Number: W12_6316
QC Batch Number: 110904
Directory: D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\076B3501.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

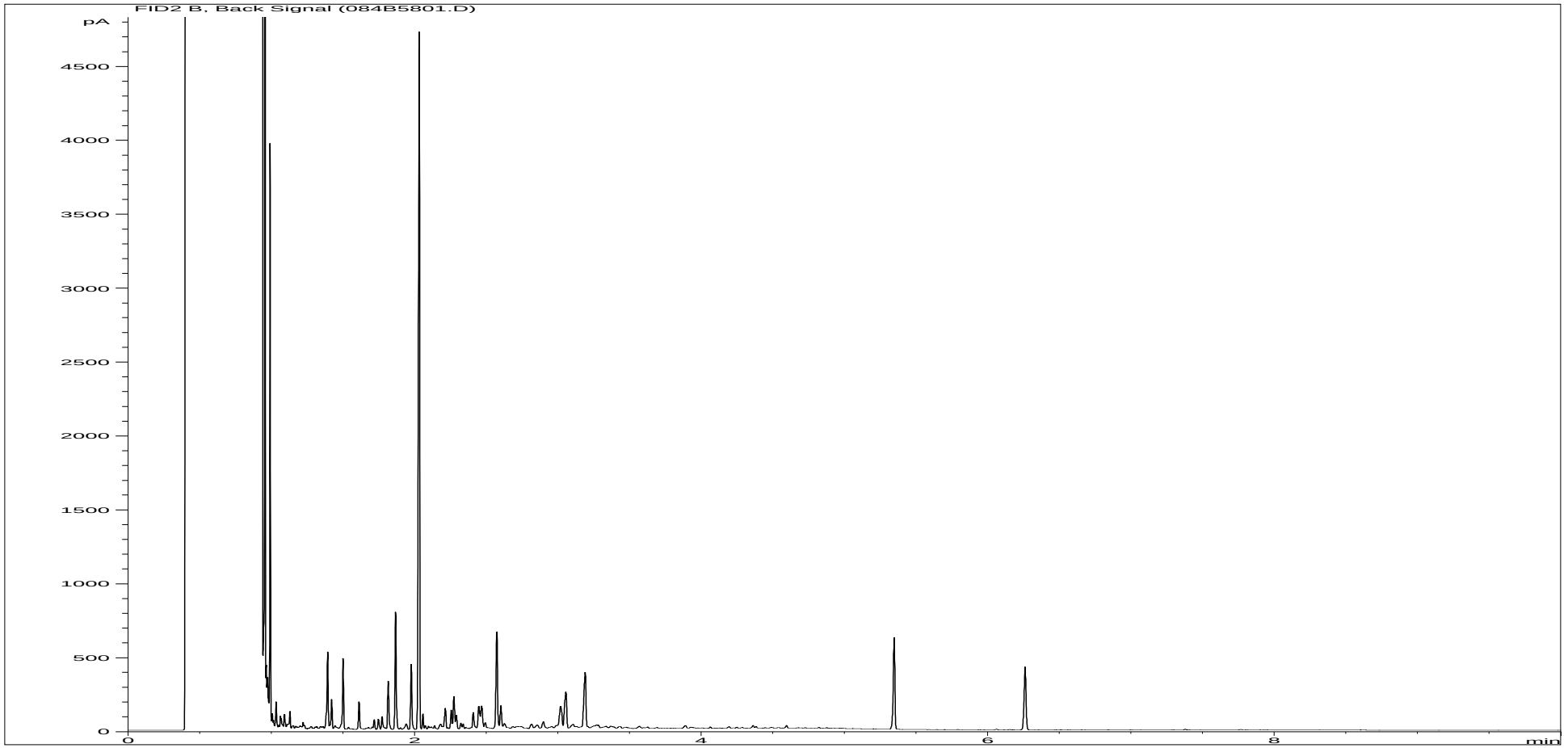
Matrix: Water
Date Booked ir 07-Oct-11
Date Extracted 12-Oct-11
Date Analysed 13-Oct-11, 18:03:37

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1143791	MW11 - 4	<0.01	0.114	<0.01	0.256	<0.01	0.024	<0.01	<0.01	<0.01	<0.01	0.014	0.407
EX1143792	Pond A	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.013	0.021	0.029	0.056
EX1143793	Pond B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.014	0.029	0.029
EX1143794	French Drain	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1143795	River	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01
EX1143796	QC Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1143797	Blank Spike (% Recovery)	0.537	0.191	0.9	0.301	1.79	0.581	1.1	0.316	2.97	0.718	7.37	2.13

Where individual results are flagged see report notes for status.

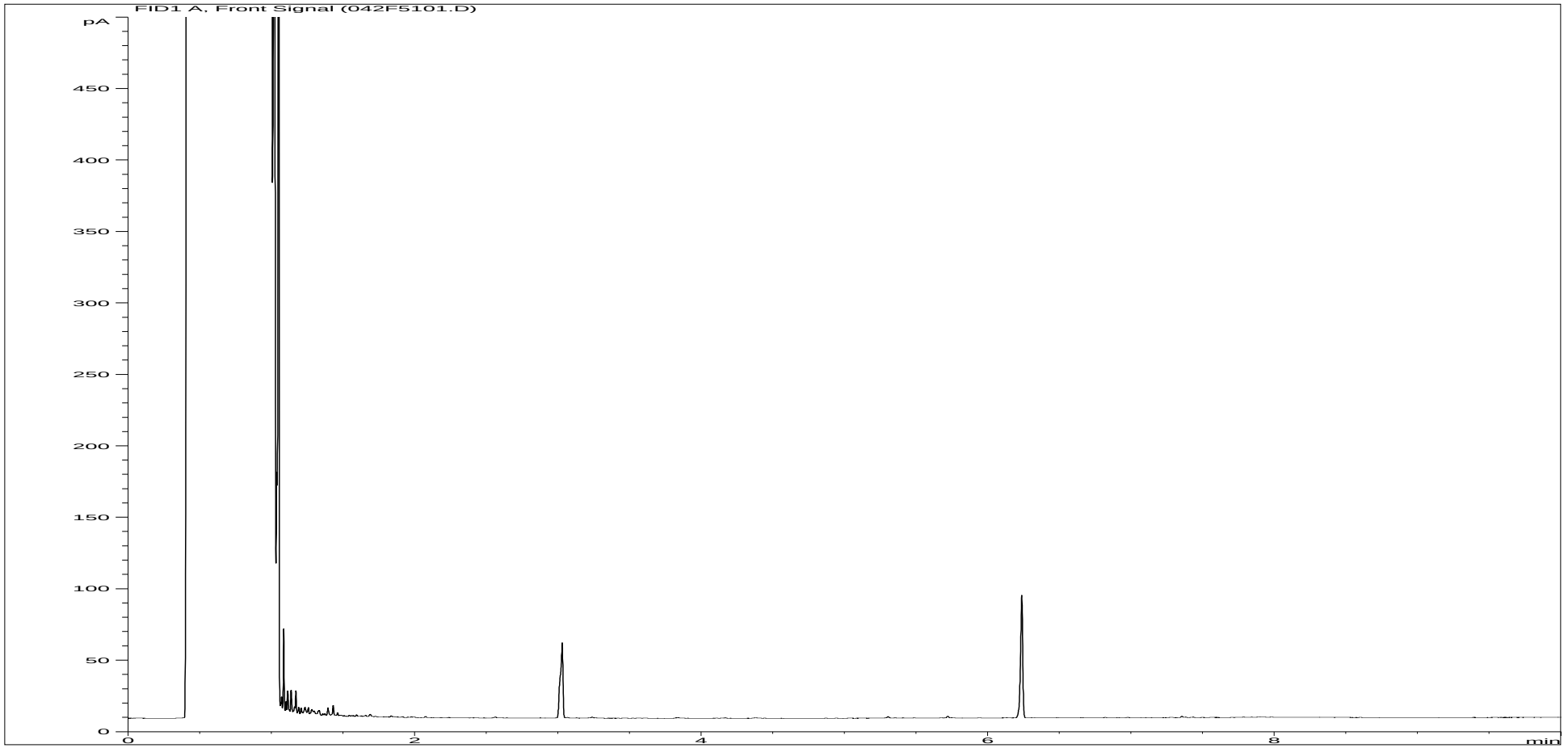
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143791	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11 - 4
Acquisition Date/Time:	19-Oct-11, 01:45:37		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\084B5801.D		

Where individual results are flagged see report notes for status.

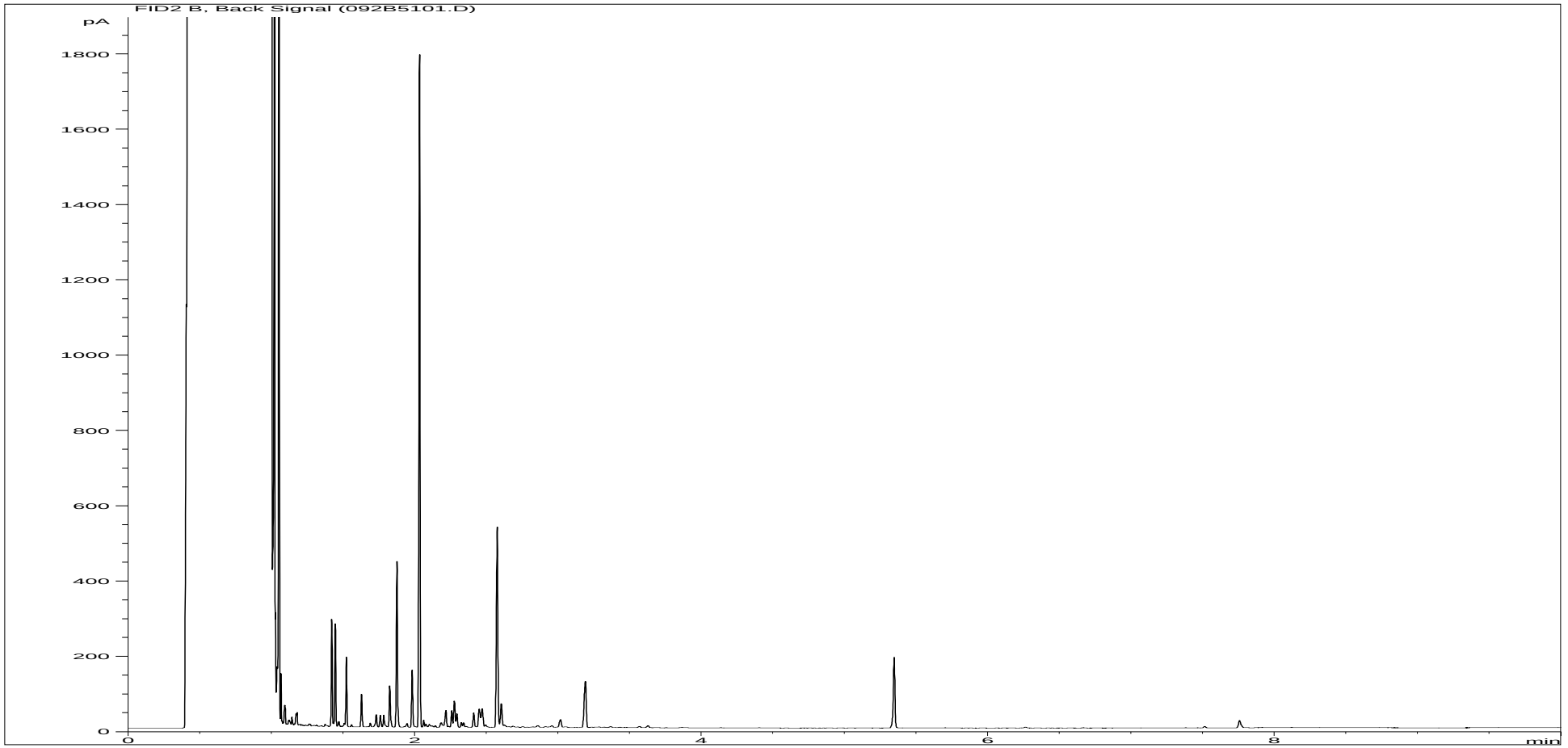
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143791ALI	**Job Number:**	W12_6316
Multiplier:	0.019	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11 - 4
Acquisition Date/Time:	13-Oct-11, 22:39:16		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\042F5101.D		

Where individual results are flagged see report notes for status.

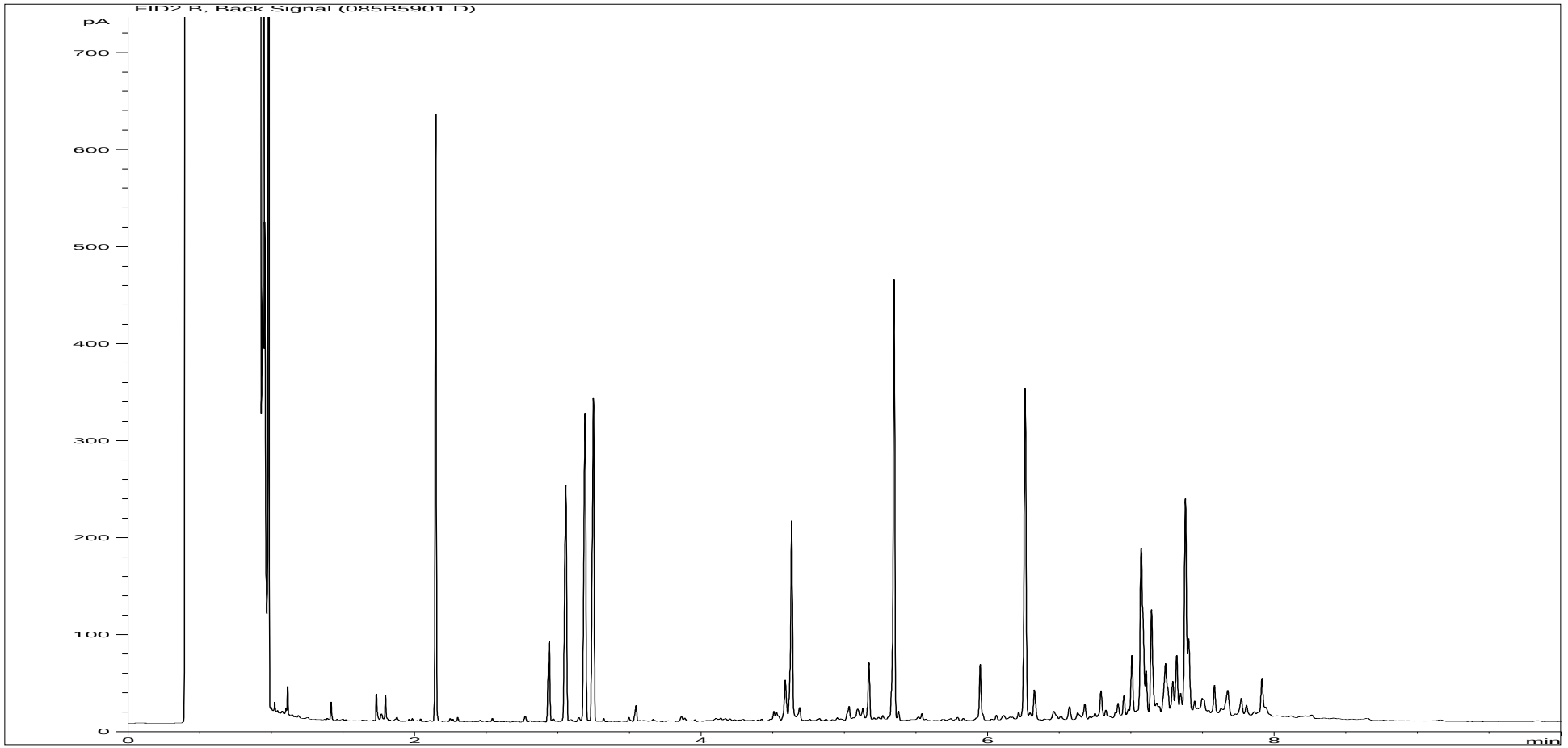
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143791ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11 - 4
Acquisition Date/Time:	13-Oct-11, 22:39:16		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\092B5101.D		

Where individual results are flagged see report notes for status.

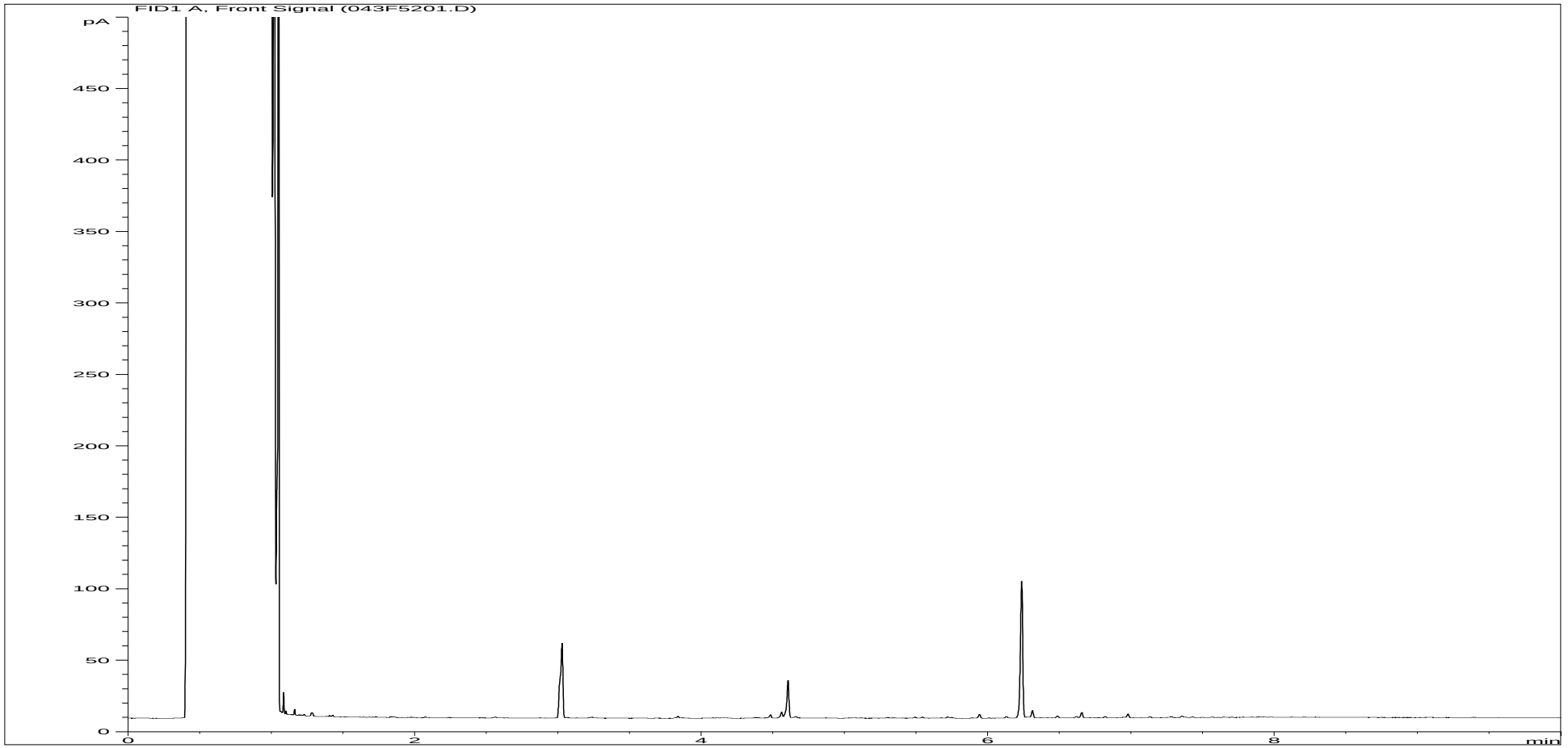
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143792	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond A
Acquisition Date/Time:	19-Oct-11, 02:02:46		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\085B5901.D		

Where individual results are flagged see report notes for status.

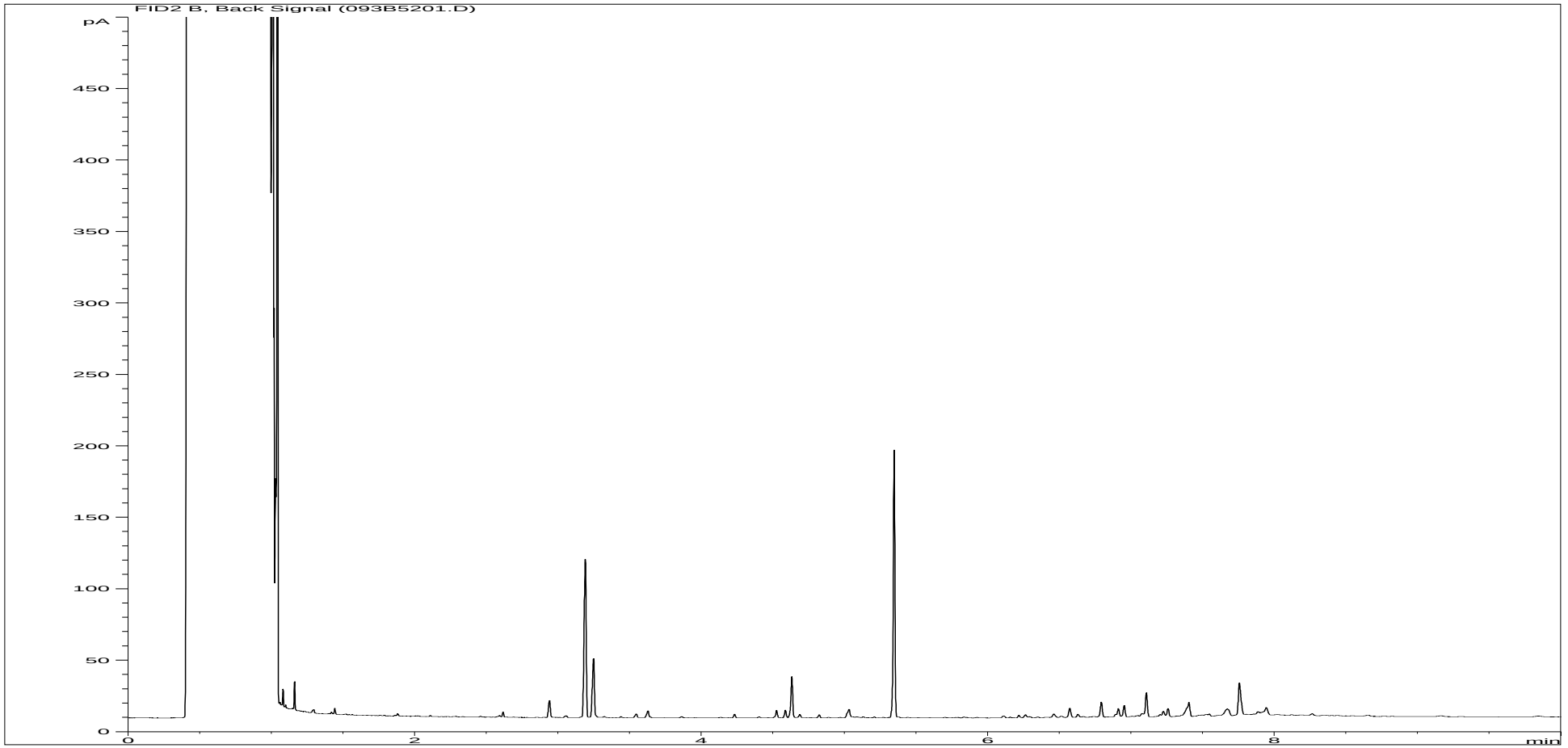
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143792ALI	**Job Number:**	W12_6316
Multiplier:	0.019	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond A
Acquisition Date/Time:	13-Oct-11, 22:56:27		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\043F5201.D		

Where individual results are flagged see report notes for status.

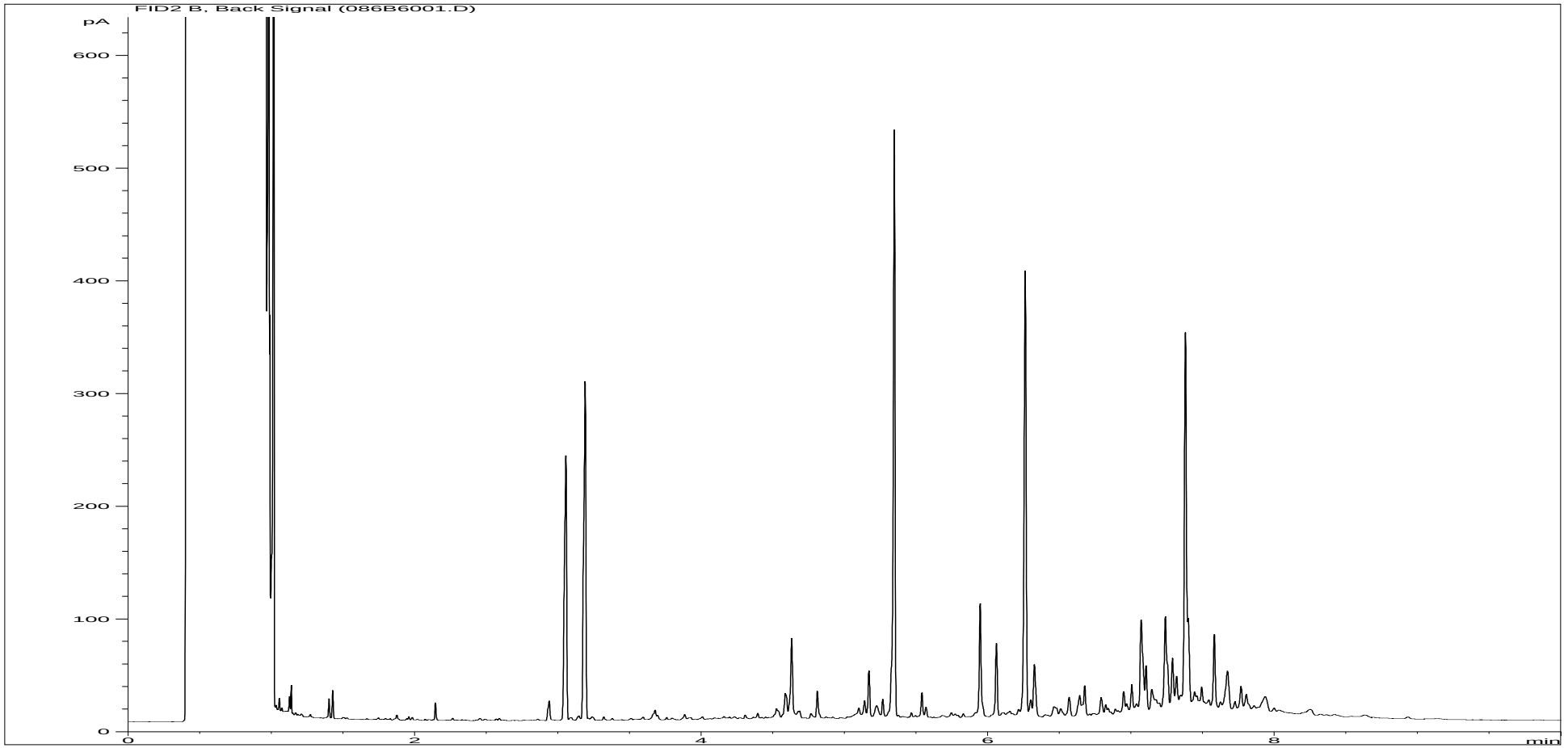
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143792ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond A
Acquisition Date/Time:	13-Oct-11, 22:56:27		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\093B5201.D		

Where individual results are flagged see report notes for status.

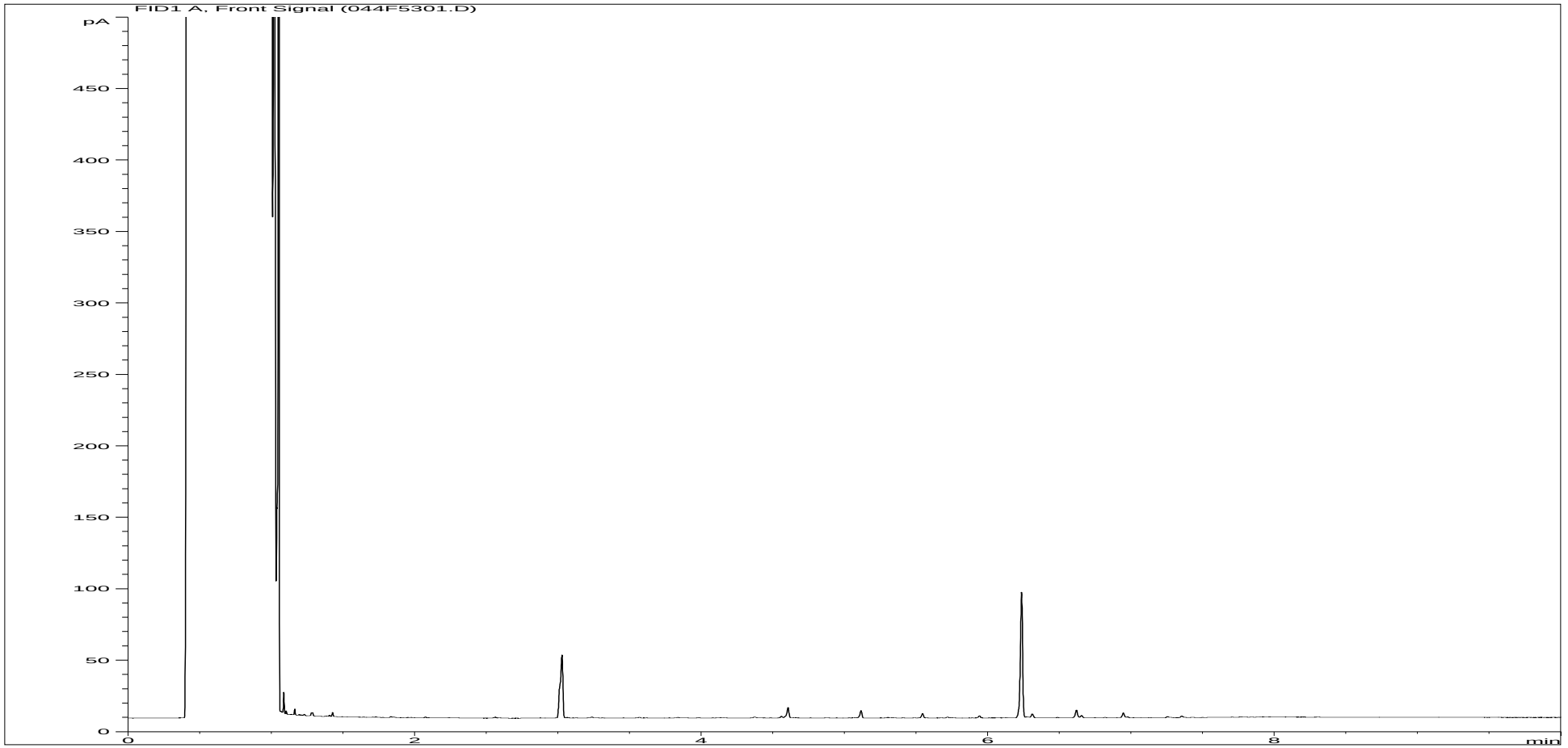
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143793	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond B
Acquisition Date/Time:	19-Oct-11, 02:19:50		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\086B6001.D		

Where individual results are flagged see report notes for status.

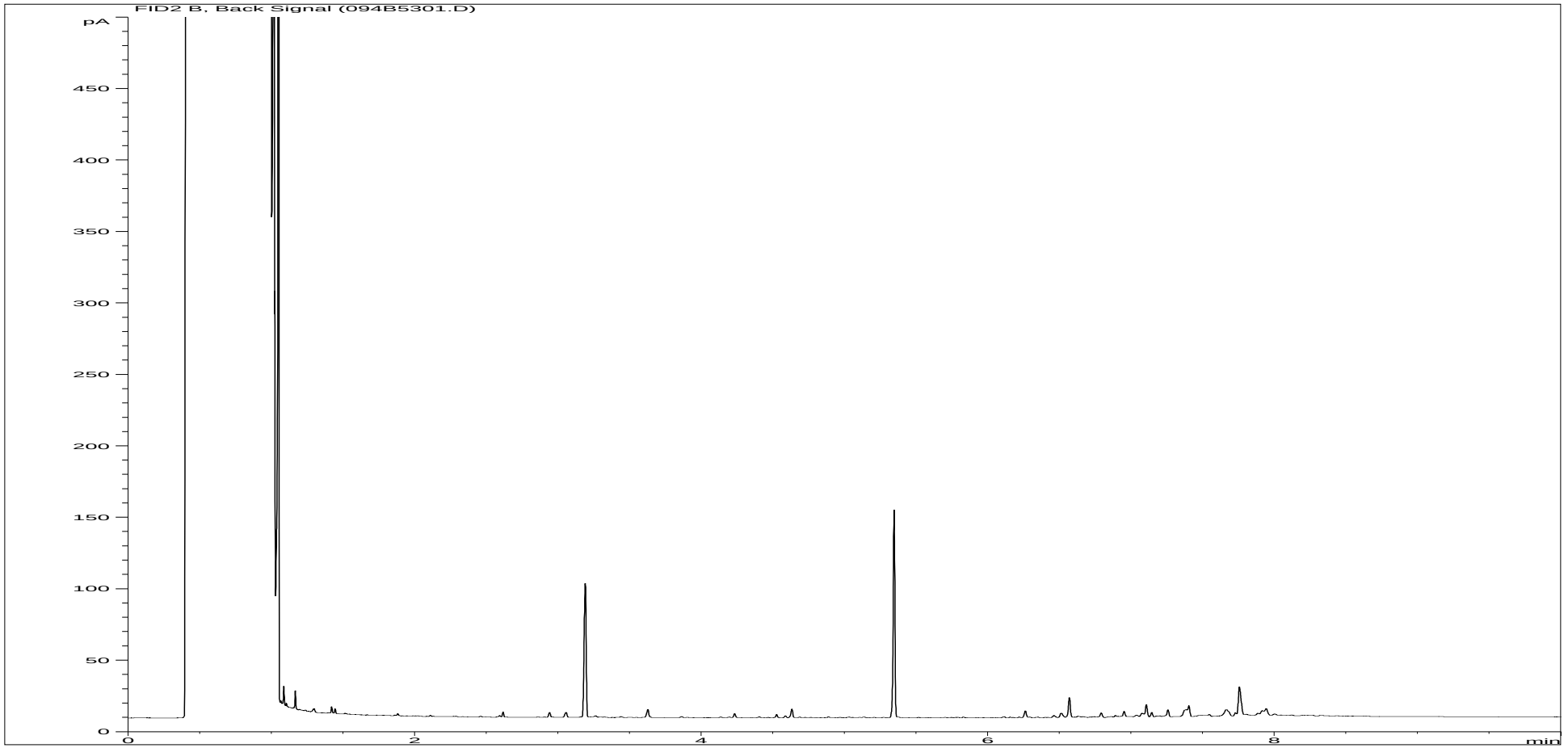
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143793ALI	**Job Number:**	W12_6316
Multiplier:	0.019	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond B
Acquisition Date/Time:	13-Oct-11, 23:13:34		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\044F5301.D		

Where individual results are flagged see report notes for status.

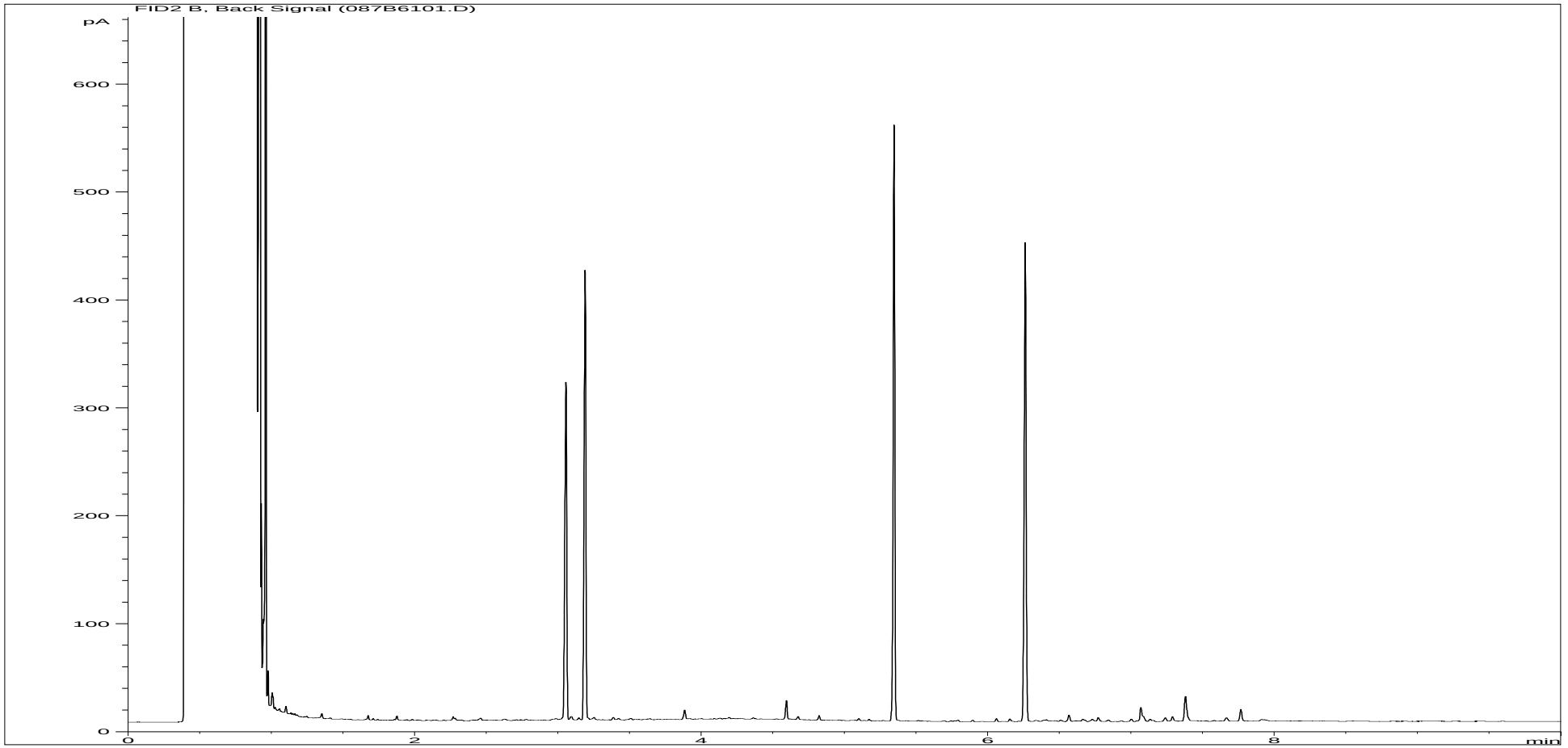
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143793ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Pond B
Acquisition Date/Time:	13-Oct-11, 23:13:34		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\094B5301.D		

Where individual results are flagged see report notes for status.

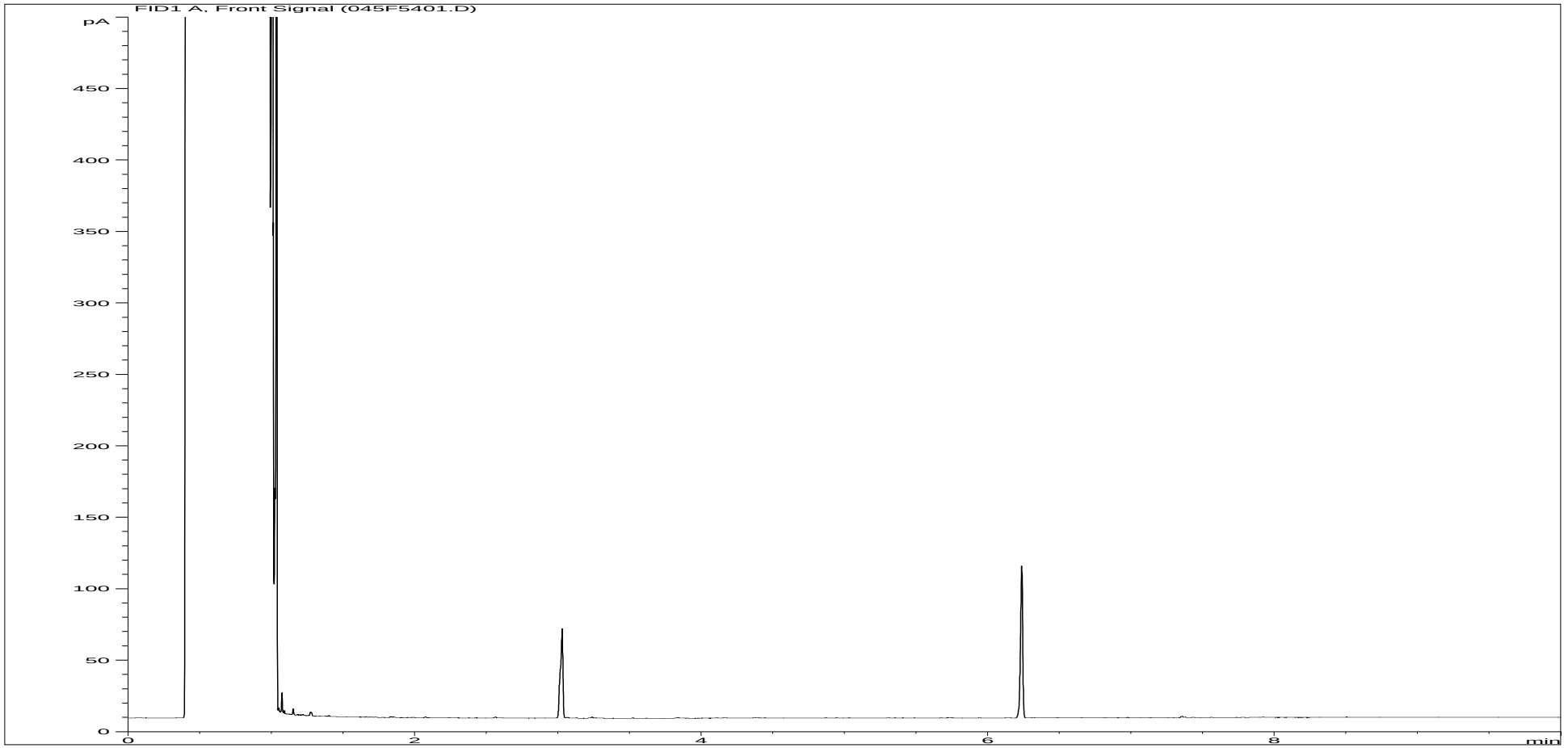
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143794	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	French Drain
Acquisition Date/Time:	19-Oct-11, 02:36:50		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\087B6101.D		

Where individual results are flagged see report notes for status.

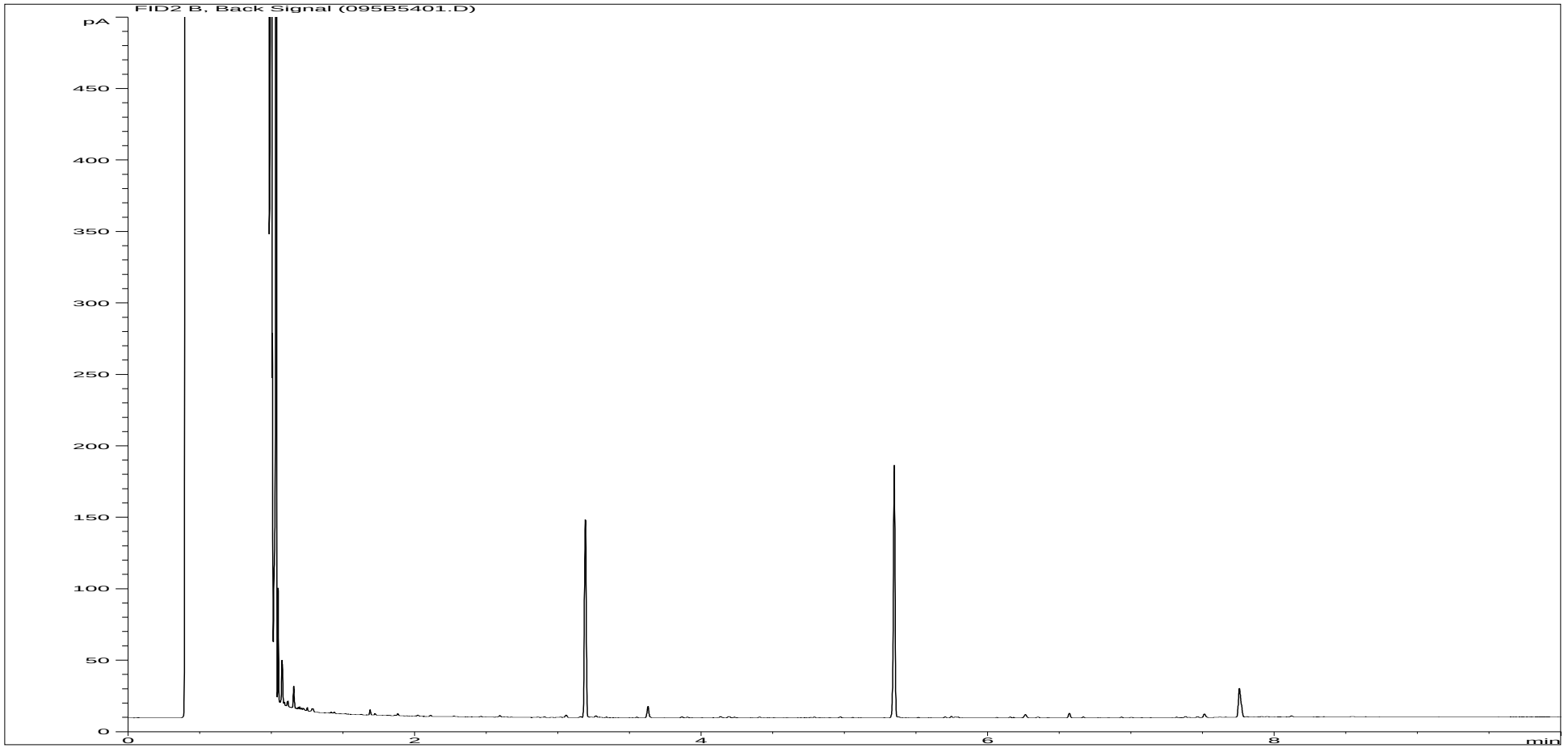
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143794ALI	**Job Number:**	W12_6316
Multiplier:	0.019	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	French Drain
Acquisition Date/Time:	13-Oct-11, 23:30:49		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\045F5401.D		

Where individual results are flagged see report notes for status.

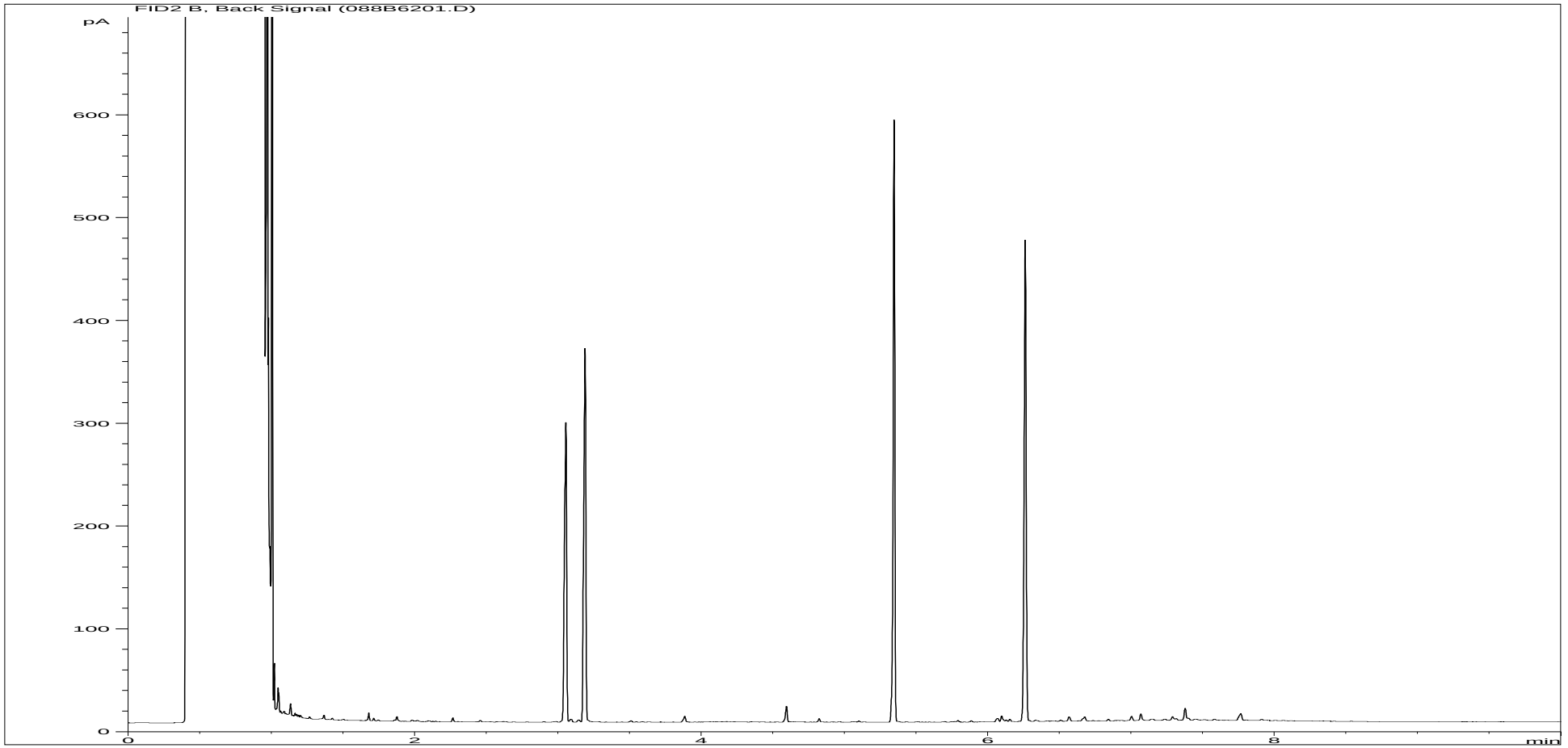
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143794ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	French Drain
Acquisition Date/Time:	13-Oct-11, 23:30:49		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\095B5401.D		

Where individual results are flagged see report notes for status.

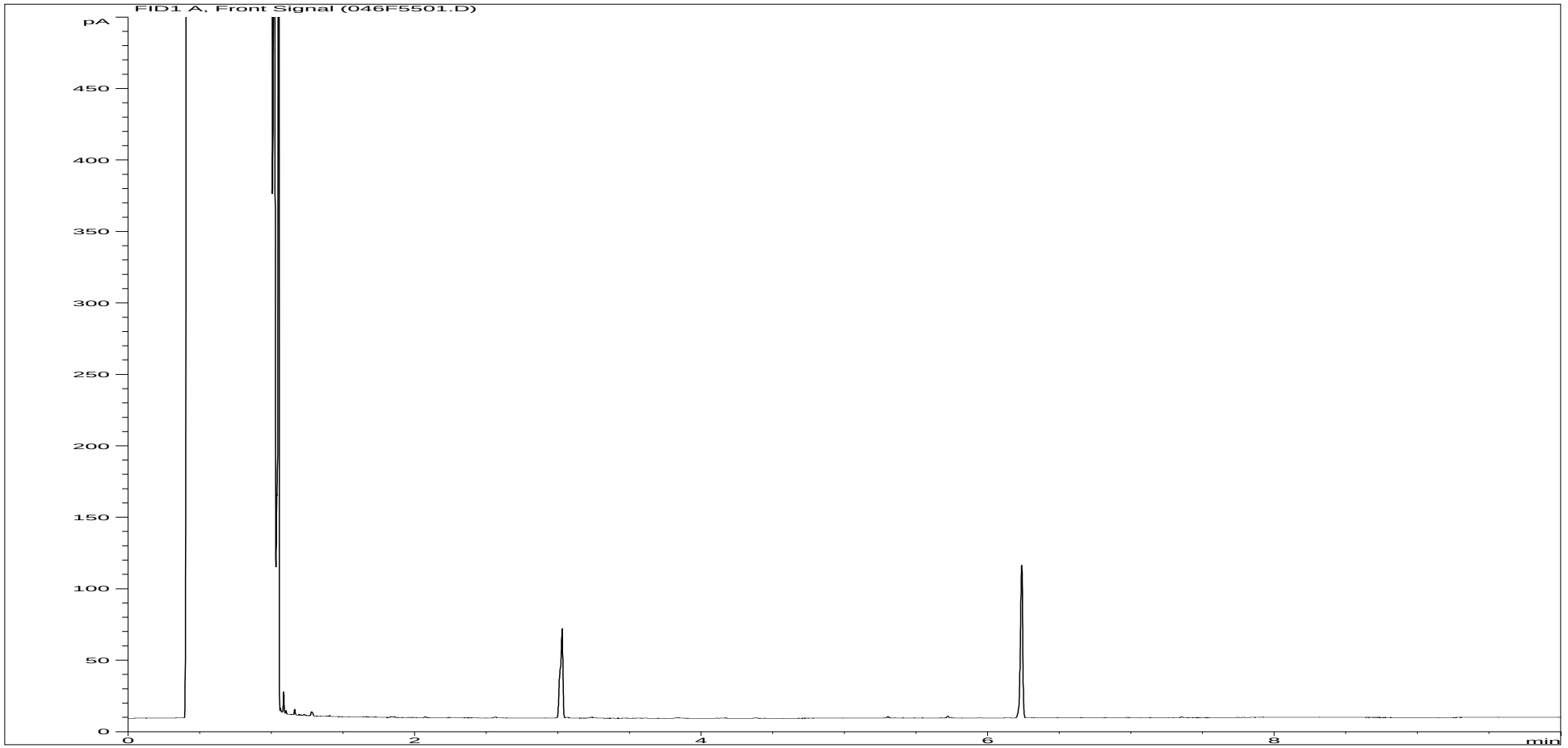
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143795	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	River
Acquisition Date/Time:	19-Oct-11, 02:53:55		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\088B6201.D		

Where individual results are flagged see report notes for status.

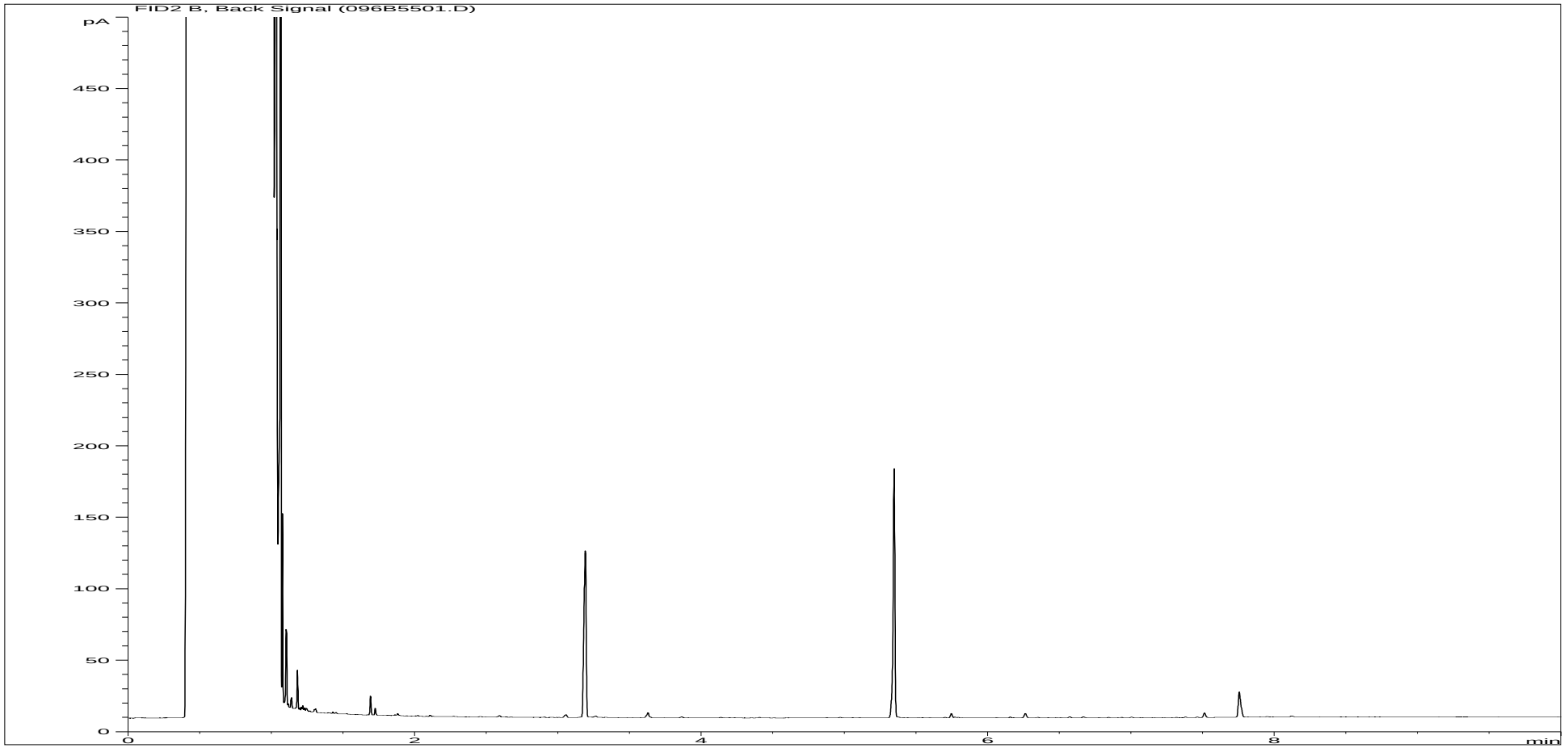
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143795ALI	**Job Number:**	W12_6316
Multiplier:	0.019	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	River
Acquisition Date/Time:	13-Oct-11, 23:48:00		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\046F5501.D		

Where individual results are flagged see report notes for status.

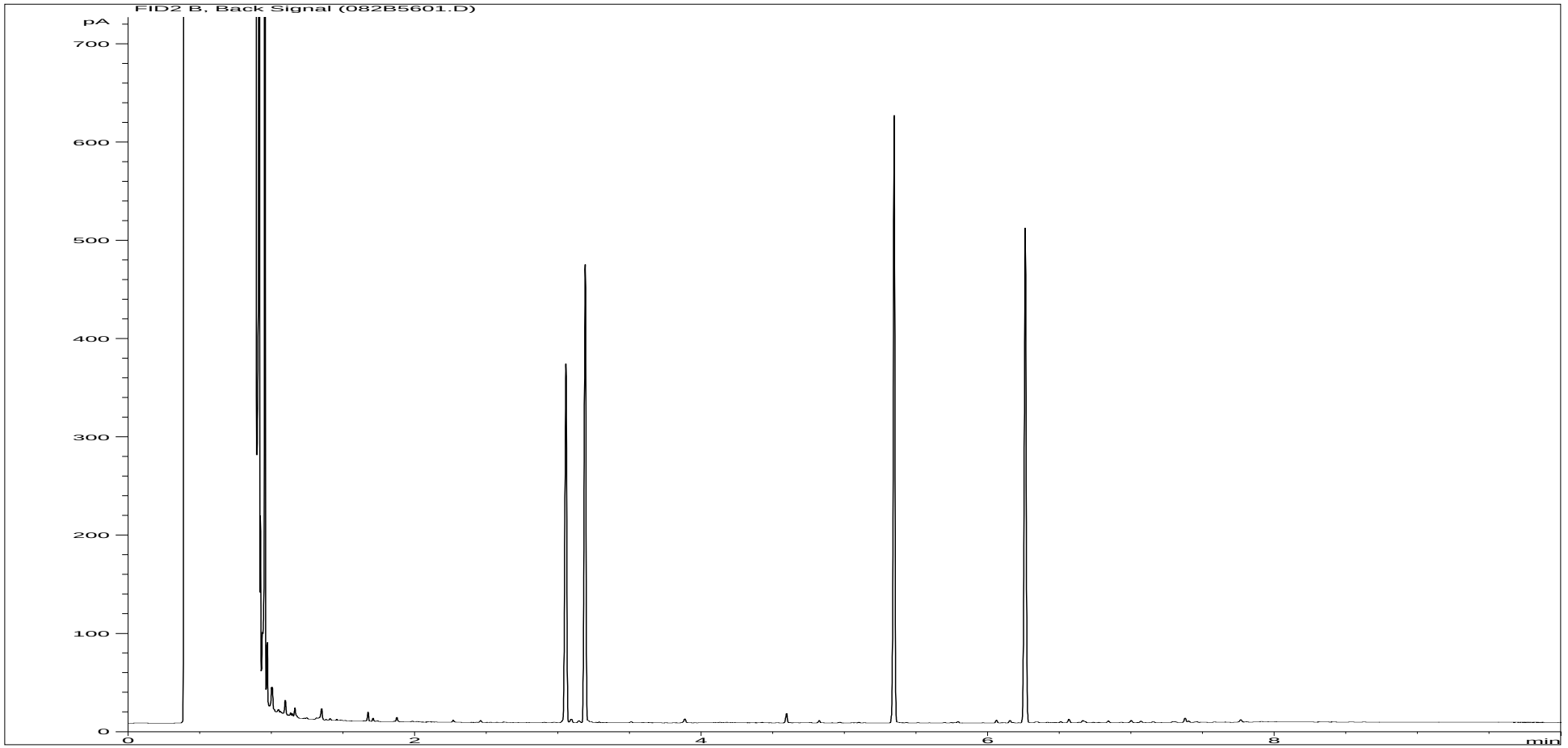
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143795ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	River
Acquisition Date/Time:	13-Oct-11, 23:48:00		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\096B5501.D		

Where individual results are flagged see report notes for status.

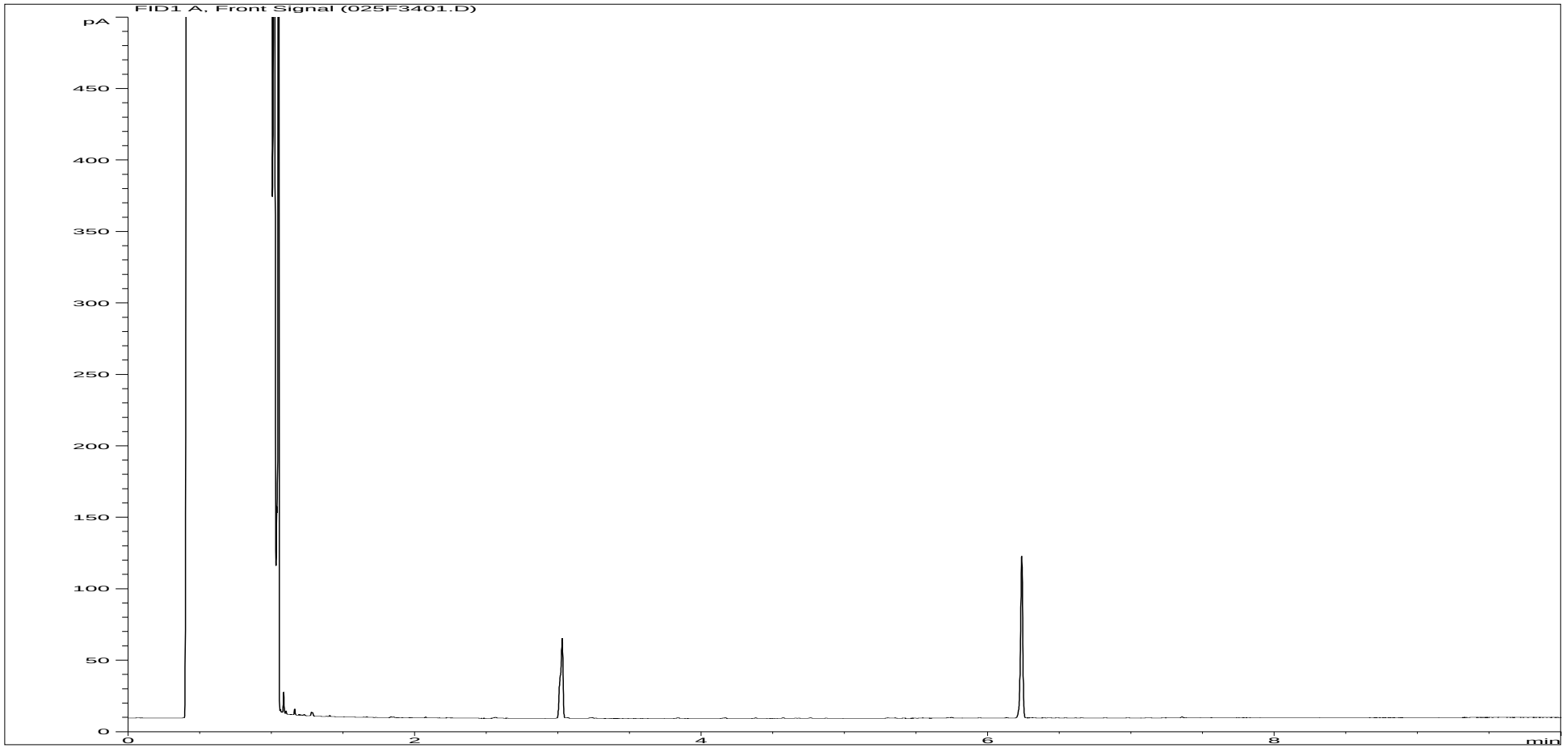
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143796	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	QC Blank
Acquisition Date/Time:	19-Oct-11, 01:11:26		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\082B5601.D		

Where individual results are flagged see report notes for status.

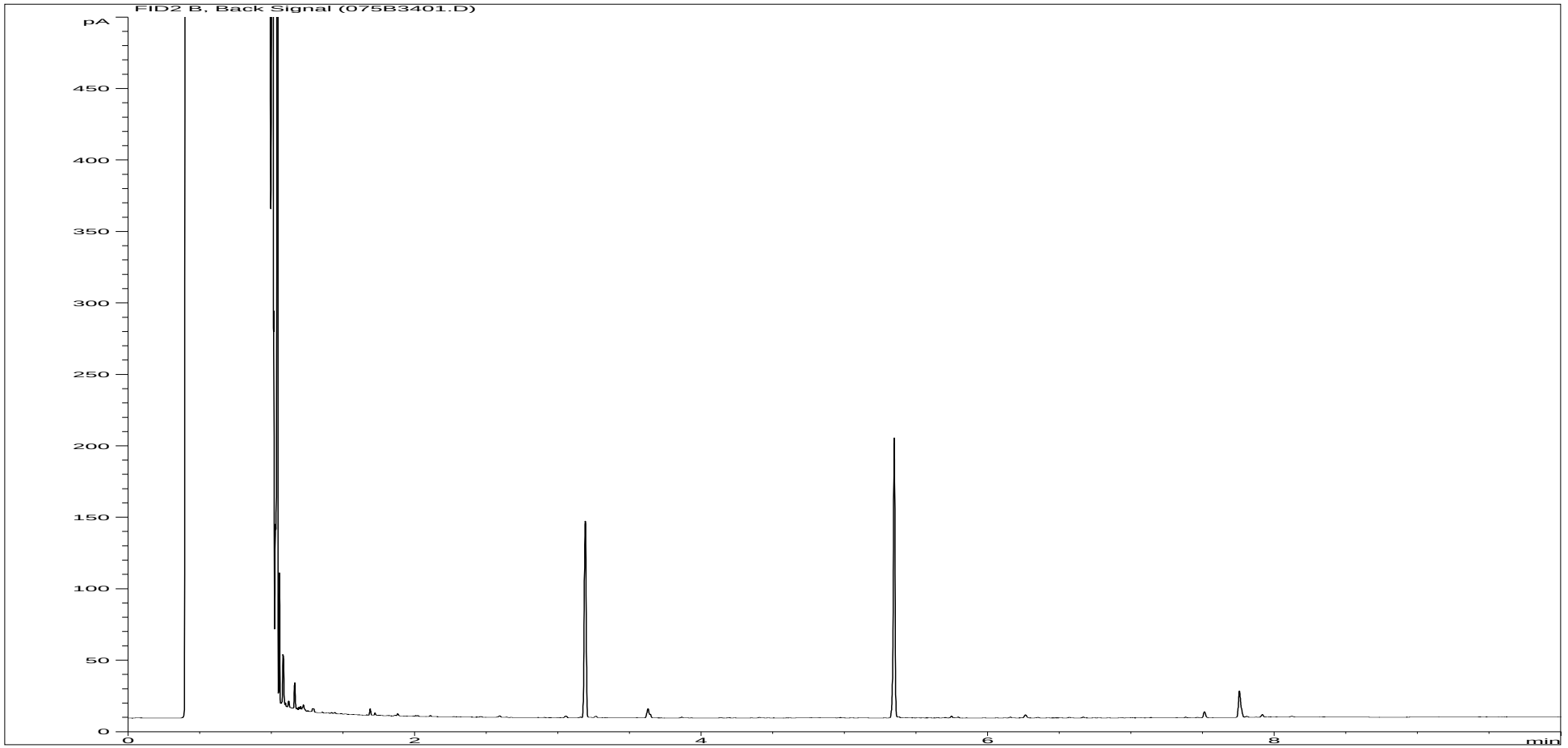
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143796ALI	**Job Number:**	W12_6316
Multiplier:	0.02	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	QC Blank
Acquisition Date/Time:	13-Oct-11, 17:46:28		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\025F3401.D		

Where individual results are flagged see report notes for status.

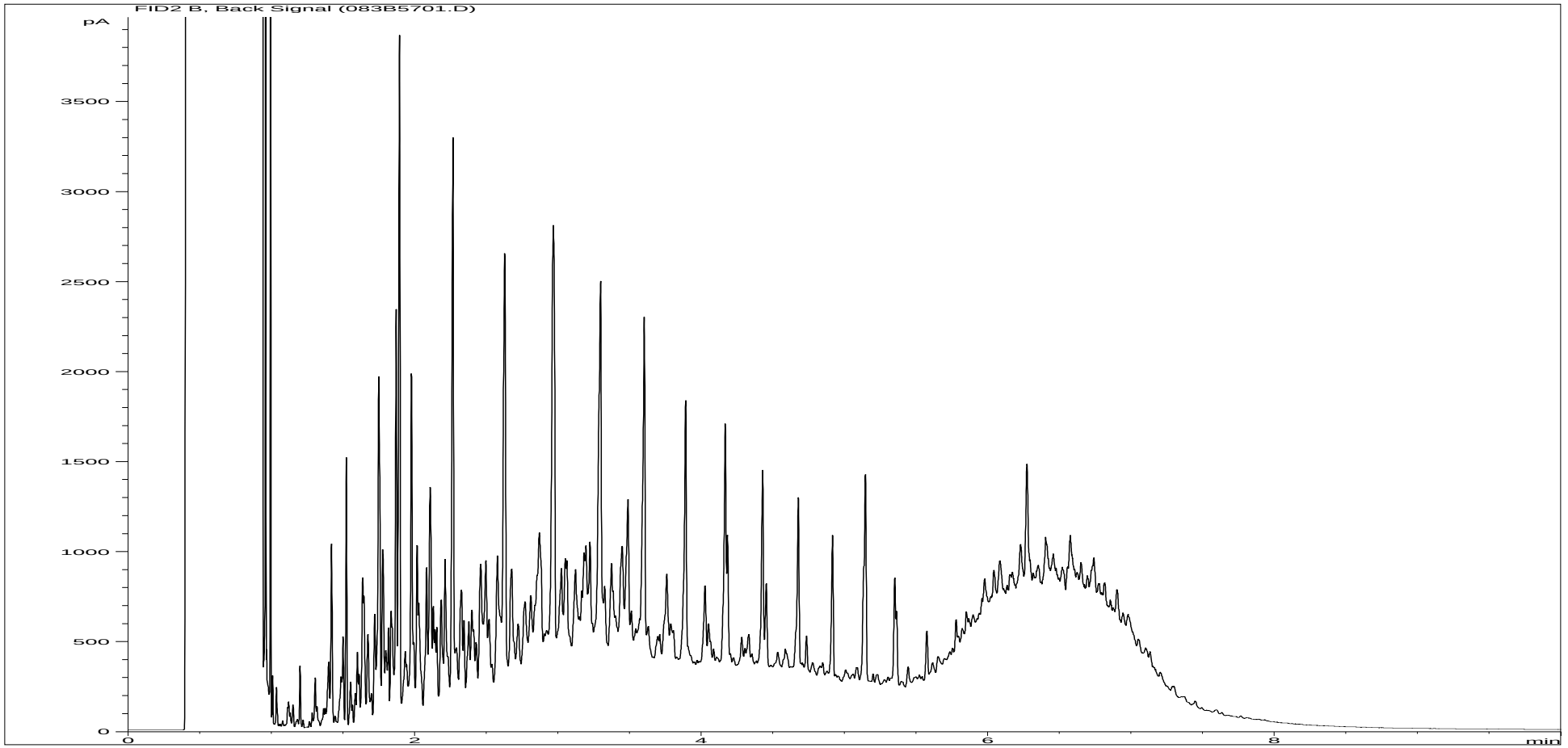
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143796ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	QC Blank
Acquisition Date/Time:	13-Oct-11, 17:46:28		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\075B3401.D		

Where individual results are flagged see report notes for status.

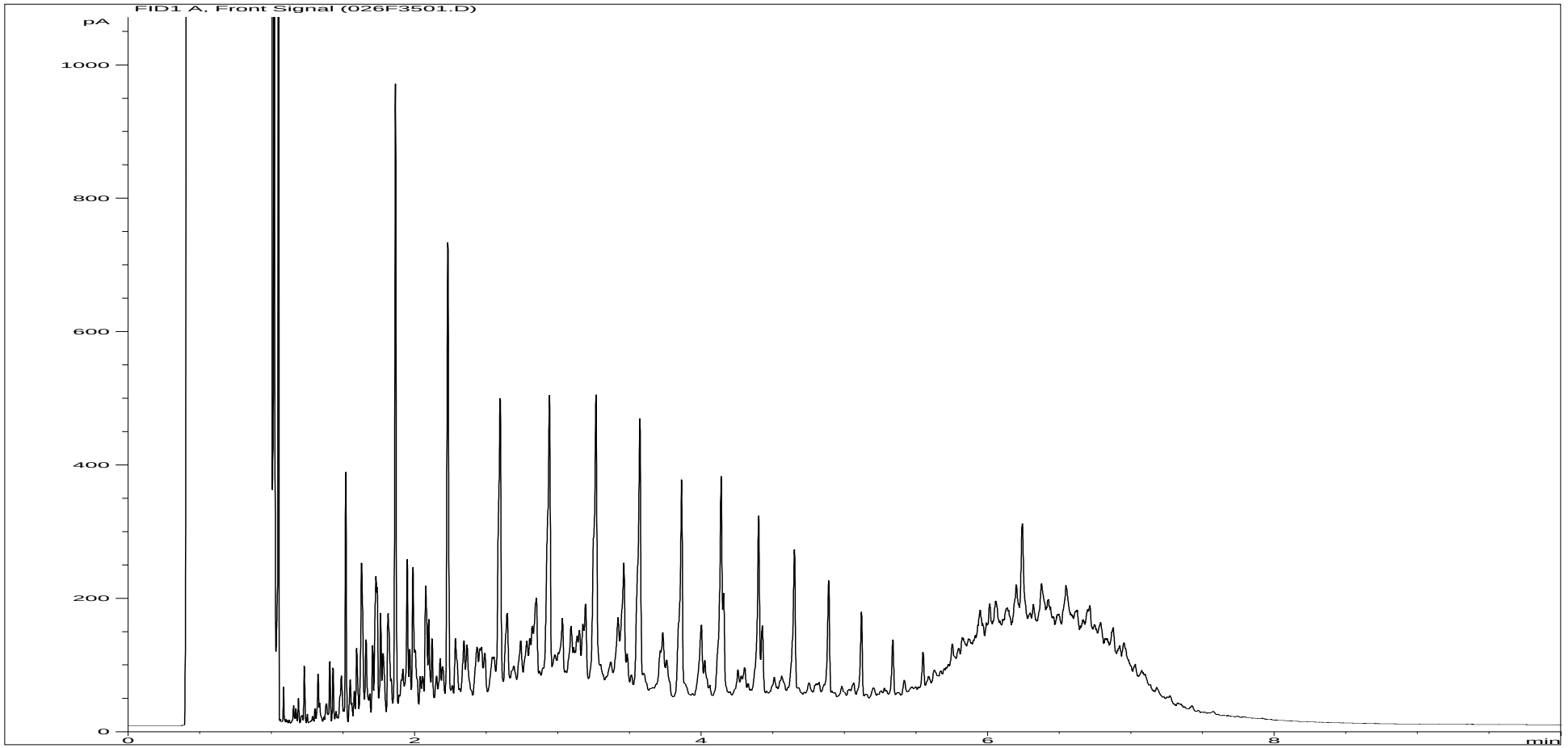
Petroleum Hydrocarbons (C8 to C40) by GC/FID



Sample ID:	EX1143797	**Job Number:**	W12_6316
Multiplier:	0.005	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Blank Spike (% Recovery)
Acquisition Date/Time:	19-Oct-11, 01:28:36		
Datafile:	D:\TES\DATA\Y2011\101811TPH_GC15\101811 2011-10-18 08-25-36\083B5701.D		

Where individual results are flagged see report notes for status.

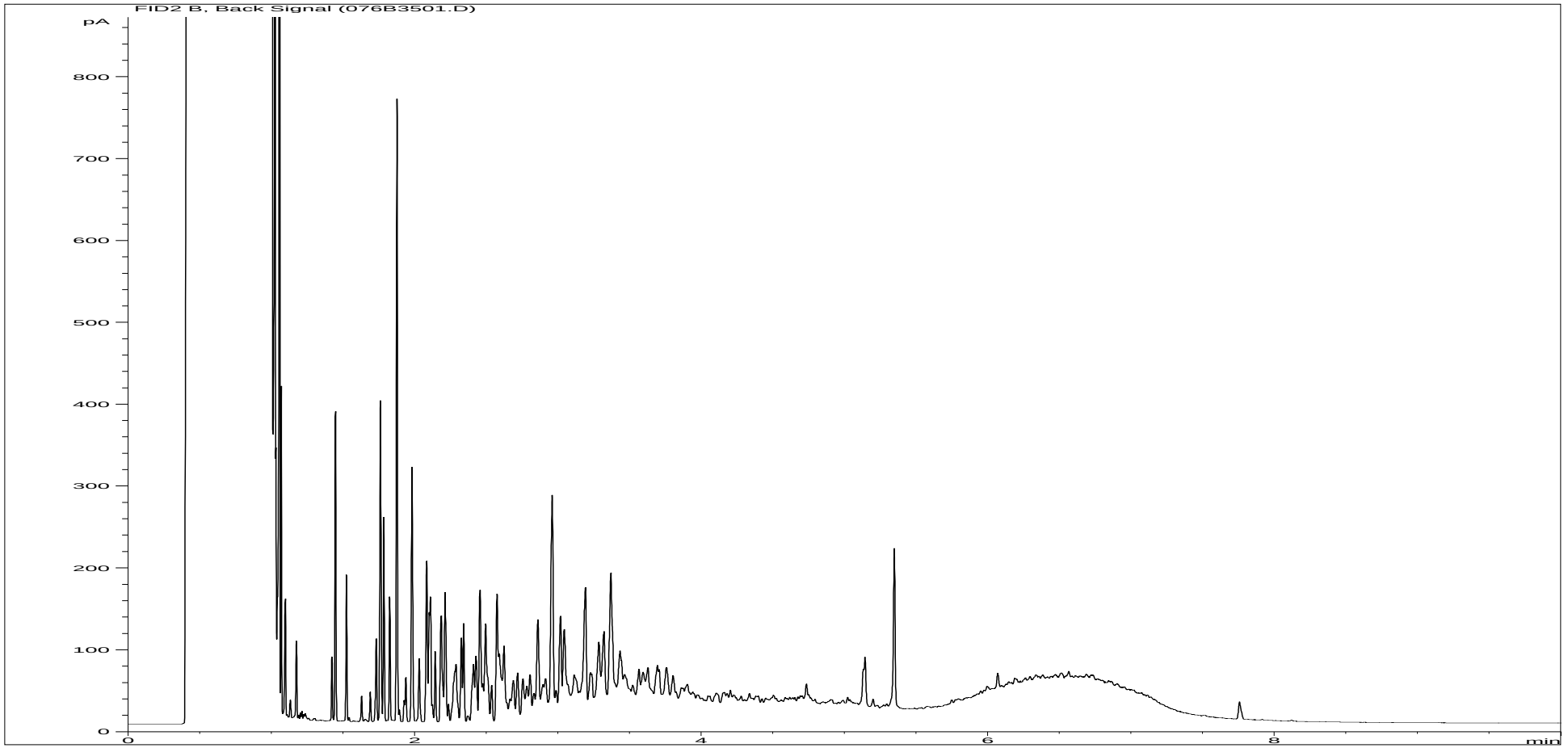
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1143797ALI	**Job Number:**	W12_6316
Multiplier:	0.02	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Blank Spike (% Recovery)
Acquisition Date/Time:	13-Oct-11, 18:03:37		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\026F3501.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1143797ARO	**Job Number:**	W12_6316
Multiplier:	0.015	**Client:**	Worley Parsons
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Blank Spike (% Recovery)
Acquisition Date/Time:	13-Oct-11, 18:03:37		
Datafile:	D:\TES\DATA\Y2011\101311TPH_GC15\101311 2011-10-13 08-22-03\076B3501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W126316

Customer Worley Parsons
Site Maelor Works
Report No W126316

Consignment No W29918
Date Logged 07-Oct-2011

Report Due 19-Oct-2011

ID Number	Description	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS		PAHMSW	PHEHPLCVL	SFAPI				SFAS	TPHFID	TPHFID-SI	VOCHSAW
		Sampled	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	PAH GC-MS (16)	Phenols by HPLC Analysis (NGP)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	TPH GC (0.01)	TPH GC (SI) (0.01)	BTEX + MTBE Analysis HSA GC-MS
Accredited to ISO17025				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	
EX/1143791	MW11 - 4	05/10/11																									
EX/1143792	Pond A	05/10/11																									
EX/1143793	Pond B	05/10/11																									
EX/1143794	French Drain	05/10/11																									
EX/1143795	River	05/10/11																									
EX/1143796	QC Blank																										
EX/1143797	Blank Spike (% Recovery)																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer Worley Parsons
Site Maelor Works
Report No W126316

Consignment No W29918
Date Logged 07-Oct-2011

Report Due 19-Oct-2011

ID Number	Description	MethodID	WSLM10	WSLM13	WSLM2	WSLM3
		Sampled	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	pH units
	Accredited to ISO17025		✓	✓	✓	✓
EX/1143791	MW11 - 4	05/10/11				
EX/1143792	Pond A	05/10/11				
EX/1143793	Pond B	05/10/11				
EX/1143794	French Drain	05/10/11				
EX/1143795	River	05/10/11				
EX/1143796	QC Blank					
EX/1143797	Blank Spike (% Recovery)					

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLCVL	As Received	Determination of Phenols by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TPHFID	As Received	Determination of pentane extractable hydrocarbons in water by GCFID
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123725 (Ver. 1)
Your Ref: 305001-50065-29

August 17, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123725 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 10 samples described in this report were logged for analysis by Scientifics on 03-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 17-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

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Table of PAH (MS-SIM) (10) Results (Pages 5 to 14)
Table of TPH (Si) banding (0.01) (Page 15)
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On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 17-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1133286	MW99-202	01-Aug-11	2.9	2540	1824	2316	16	4360	577	212	25	<1	0.133	0.317	0.0038	Req	0.265	<0.001
1133287	MW11-5	02-Aug-11	4.5	4830	197	1650	216	1240	632	17	64	29	0.004	<0.001	<0.0001	Req	0.004	<0.001
1133288	MW11-5A	02-Aug-11	8.7	2840.	317	1627	213	1260	621	18	66	29	0.004	<0.001	<0.0001	Req	0.002	<0.001
1133289	MW11-6	02-Aug-11	11.6	1340	14	388	48	257	155	<1	30	42	0.009	<0.001	<0.0001	Req	0.003	0.001
1133290	MW11-6A	02-Aug-11	11.6	1200	13	383	48	257	153	<1	29	42	0.009	<0.001	<0.0001	Req	0.003	0.001
1133291	MW5	02-Aug-11	8.9	551	149	128	54	10	48	2	37	3	0.002	0.002	<0.0001	Req	0.003	<0.001
1133292	MW11-7	02-Aug-11	7.4	1020	41	326	80	76	119	7	49	12	0.007	0.005	<0.0001	Req	<0.001	<0.001
1133293	MW11-8	02-Aug-11	7.1	1110	31	338	94	8	122	8	40	30	0.004	0.006	<0.0001	Req	<0.001	<0.001
1133294	QC Blank		7.01	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1133295	Blank Spike (% Recovery)				101		102	101	98	99	100	102	109	101	103	Req	106	105

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1133286	MW99-202	01-Aug-11	8.65	111	652	763	26.3	0.017	<0.0001	<0.001	13.6	<0.2	<0.2	<0.02	<0.02	<0.05	15	<0.1
1133287	MW11-5	02-Aug-11	0.004	0.94	0.43	1.37	0.08	0.005	<0.0001	0.008	10.9	<0.2	0.72	0.03	0.27	<0.05	8.2	0.1
1133288	MW11-5A	02-Aug-11	<0.002	0.64	0.62	1.26	0.02	0.005	<0.0001	0.008	10.6	<0.2	0.75	0.02	0.29	<0.05	8.1	0.1
1133289	MW11-6	02-Aug-11	<0.002	<0.01	0.60	0.49	<0.01	0.008	<0.0001	0.006	6.6	<0.2	0.27	<0.02	0.04	0.64	21	0.2
1133290	MW11-6A	02-Aug-11	<0.002	0.02	0.23	0.25	<0.01	0.008	<0.0001	0.006	7.2	<0.2	0.23	<0.02	0.05	0.62	21	0.2
1133291	MW5	02-Aug-11	<0.002	29.8	2.35	32.1	<0.01	0.003	<0.0001	<0.001	0.17	0.9	<0.2	<0.02	<0.02	<0.05	3.6	<0.1
1133292	MW11-7	02-Aug-11	<0.002	1.88	1.88	3.76	<0.01	0.004	<0.0001	0.002	8.9	<0.2	<0.2	<0.02	<0.02	<0.05	17	<0.1
1133293	MW11-8	02-Aug-11	<0.002	2.0	15.4	17.4	4.67	0.023	<0.0001	0.001	14.3	1.0	<0.2	<0.02	<0.02	<0.05	22	4.1
1133294	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1133295	Blank Spike (% Recovery)		96	99	97	100	98	96	105	93	101	101	99	100	100	103	102	98

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1133286	MW99-202	01-Aug-11	Req	20.7	<0.02	3.1	14	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133287	MW11-5	02-Aug-11	Req	0.13	0.24	2.8	15	13	11	1	9	1.4	0.5	0.2	<0.1	0.0188		
1133288	MW11-5A	02-Aug-11	Req	0.15	0.27	2.7	11	12	11	1	11	1.0	0.3	0.1	<0.1	0.0123		
1133289	MW11-6	02-Aug-11	Req	0.02	<0.04	2.2	13	48	11	<1	14	0.9	0.8	0.3	<0.1	0.0397		
1133290	MW11-6A	02-Aug-11	Req	0.01	<0.05	1.5	8	49	10	<1	14	0.9	0.8	0.3	<0.1	0.0596		
1133291	MW5	02-Aug-11	Req	0.66	<0.02	4.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133292	MW11-7	02-Aug-11	Req	1.02	<0.02	1.7	9	<1	<1	<1	<2	0.0189	0.0080	0.0032	<0.1	<0.0005		
1133293	MW11-8	02-Aug-11	Req	4.08	<0.02	1.0	12	83	2	<1	64	0.0289	0.0046	0.0357	<0.1	0.0064		
1133294	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133295	Blank Spike (% Recovery)		Req	102			99	106	103	102	314	102	111	111	111	105		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	17-Aug-11
Report Number	**EXR/123725**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-202	**Job Number:**	W12_3725
LIMS ID Number:	EX1133286	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.258	M
Acenaphthylene	208-96-8	4.29	0.040	M
Acenaphthene	83-32-9	4.41	0.051	M
Fluorene	86-73-7	4.79	0.073	M
Phenanthrene	85-01-8	5.63	0.169	M
Anthracene	120-12-7	5.68	0.049	M
Fluoranthene	206-44-0	6.96	0.113	M
Pyrene	129-00-0	7.25	0.099	M
Benzo[a]anthracene	56-55-3	8.92	0.030	M
Chrysene	218-01-9	8.98	0.021	M
Benzo[b]fluoranthene	205-99-2	10.46	0.025	M
Benzo[k]fluoranthene	207-08-9	10.50	0.013	M
Benzo[a]pyrene	50-32-8	10.89	0.020	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.991	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	97
Phenanthrene-d10	100
Chrysene-d12	88
Perylene-d12	78

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5	**Job Number:**	W12_3725
LIMS ID Number:	EX1133287	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	14.100	100
Acenaphthylene	208-96-8	4.29	3.400	100
Acenaphthene	83-32-9	4.41	0.346	69
Fluorene	86-73-7	4.79	1.100	97
Phenanthrene	85-01-8	5.63	0.163	100
Anthracene	120-12-7	5.68	0.307	100
Fluoranthene	206-44-0	6.96	0.362	100
Pyrene	129-00-0	7.25	0.241	100
Benzo[a]anthracene	56-55-3	8.93	0.051	M
Chrysene	218-01-9	8.98	0.033	M
Benzo[b]fluoranthene	205-99-2	10.46	0.018	M
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	10.89	0.015	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 20.176	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	101
Phenanthrene-d10	106
Chrysene-d12	98
Perylene-d12	92

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5A	**Job Number:**	W12_3725
LIMS ID Number:	EX1133288	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	6.090	100
Acenaphthylene	208-96-8	4.29	2.730	100
Acenaphthene	83-32-9	4.41	0.330	M
Fluorene	86-73-7	4.79	0.906	96
Phenanthrene	85-01-8	5.63	0.119	100
Anthracene	120-12-7	5.68	0.234	100
Fluoranthene	206-44-0	6.96	0.352	100
Pyrene	129-00-0	7.25	0.232	100
Benzo[a]anthracene	56-55-3	8.93	0.041	M
Chrysene	218-01-9	8.98	0.025	M
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 11.119	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	101
Phenanthrene-d10	106
Chrysene-d12	97
Perylene-d12	90

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	82

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6	**Job Number:**	W12_3725
LIMS ID Number:	EX1133289	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	87.800	100
Acenaphthylene	208-96-8	4.29	20.900	100
Acenaphthene	83-32-9	4.41	2.350	90
Fluorene	86-73-7	4.79	8.870	99
Phenanthrene	85-01-8	5.63	9.930	100
Anthracene	120-12-7	5.68	1.990	100
Fluoranthene	206-44-0	6.96	2.230	100
Pyrene	129-00-0	7.24	1.440	100
Benzo[a]anthracene	56-55-3	8.92	0.176	M
Chrysene	218-01-9	8.98	0.133	M
Benzo[b]fluoranthene	205-99-2	10.46	0.060	M
Benzo[k]fluoranthene	207-08-9	10.49	0.021	M
Benzo[a]pyrene	50-32-8	10.88	0.043	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 135.973	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	104
Phenanthrene-d10	110
Chrysene-d12	104
Perylene-d12	100

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	82

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6A	**Job Number:**	W12_3725
LIMS ID Number:	EX1133290	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.23	70.100	100
Acenaphthylene	208-96-8	4.29	23.100	100
Acenaphthene	83-32-9	4.41	2.610	82
Fluorene	86-73-7	4.79	9.870	99
Phenanthrene	85-01-8	5.63	11.100	100
Anthracene	120-12-7	5.68	2.250	100
Fluoranthene	206-44-0	6.96	2.490	100
Pyrene	129-00-0	7.24	1.600	100
Benzo[a]anthracene	56-55-3	8.92	0.209	M
Chrysene	218-01-9	8.98	0.158	M
Benzo[b]fluoranthene	205-99-2	10.46	0.076	M
Benzo[k]fluoranthene	207-08-9	10.49	0.027	M
Benzo[a]pyrene	50-32-8	10.88	0.057	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.020	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.56	0.014	M
Total (USEPA16) PAHs	-	-	< 123.691	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	107
Phenanthrene-d10	112
Chrysene-d12	108
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5	**Job Number:**	W12_3725
LIMS ID Number:	EX1133291	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.29	0.012	M
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.25	0.023	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.175	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	101
Chrysene-d12	90
Perylene-d12	82

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	90
Terphenyl-d14	91

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-7	**Job Number:**	W12_3725
LIMS ID Number:	EX1133292	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	0.014	M
Acenaphthylene	208-96-8	4.29	1.030	100
Acenaphthene	83-32-9	4.41	0.425	67
Fluorene	86-73-7	4.79	0.113	M
Phenanthrene	85-01-8	5.62	0.048	100
Anthracene	120-12-7	5.68	0.239	100
Fluoranthene	206-44-0	6.96	1.500	100
Pyrene	129-00-0	7.24	1.270	100
Benzo[a]anthracene	56-55-3	8.92	0.097	M
Chrysene	218-01-9	8.96	0.081	M
Benzo[b]fluoranthene	205-99-2	10.46	0.089	M
Benzo[k]fluoranthene	207-08-9	10.49	0.037	M
Benzo[a]pyrene	50-32-8	10.88	0.077	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.032	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.56	0.034	M
Total (USEPA16) PAHs	-	-	< 5.096	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	58
Acenaphthene-d10	102
Phenanthrene-d10	108
Chrysene-d12	107
Perylene-d12	106

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	84

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-8	**Job Number:**	W12_3725
LIMS ID Number:	EX1133293	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.18	1190.000	99
Acenaphthylene	208-96-8	4.29	2.280	100
Acenaphthene	83-32-9	4.34	114.000	92
Fluorene	86-73-7	4.79	18.100	100
Phenanthrene	85-01-8	5.63	19.800	100
Anthracene	120-12-7	5.68	5.650	100
Fluoranthene	206-44-0	6.96	4.050	100
Pyrene	129-00-0	7.24	3.680	100
Benzo[a]anthracene	56-55-3	8.92	0.980	100
Chrysene	218-01-9	8.98	0.782	100
Benzo[b]fluoranthene	205-99-2	10.45	0.509	100
Benzo[k]fluoranthene	207-08-9	10.47	0.289	100
Benzo[a]pyrene	50-32-8	10.88	0.514	100
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	0.193	M
Dibenzo[a,h]anthracene	53-70-3	12.30	0.065	M
Benzo[g,h,i]perylene	191-24-2	12.56	0.182	M
Total (USEPA16) PAHs	-	-	< 1361.074	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	121
Acenaphthene-d10	114
Phenanthrene-d10	114
Chrysene-d12	112
Perylene-d12	125

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123725 Blank	**Job Number:**	W12_3725
LIMS ID Number:	EX1133294	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	91
Phenanthrene-d10	95
Chrysene-d12	83
Perylene-d12	72

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	89
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123725 Blank Spike	**Job Number:**	W12_3725
LIMS ID Number:	EX1133295	**Date Booked in:**	03-Aug-11
QC Batch Number:	110731	**Date Extracted:**	11-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	11-Aug-11
Directory:	0811PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.23	102	M
Acenaphthylene	208-96-8	4.29	84	M
Acenaphthene	83-32-9	4.41	88	M
Fluorene	86-73-7	4.79	91	M
Phenanthrene	85-01-8	5.63	99	M
Anthracene	120-12-7	5.68	89	M
Fluoranthene	206-44-0	6.96	87	M
Pyrene	129-00-0	7.25	83	M
Benzo[a]anthracene	56-55-3	8.93	104	M
Chrysene	218-01-9	8.98	99	M
Benzo[b]fluoranthene	205-99-2	10.46	102	M
Benzo[k]fluoranthene	207-08-9	10.50	97	M
Benzo[a]pyrene	50-32-8	10.89	88	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.26	69	M
Dibenzo[a,h]anthracene	53-70-3	12.30	73	M
Benzo[g,h,i]perylene	191-24-2	12.56	82	M
Total (USEPA16) PAHs	-	-	1436	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	89
Phenanthrene-d10	93
Chrysene-d12	82
Perylene-d12	73

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	98
Terphenyl-d14	99

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3725
QC Batch Number: 110731
Directory: D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\059B1201.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

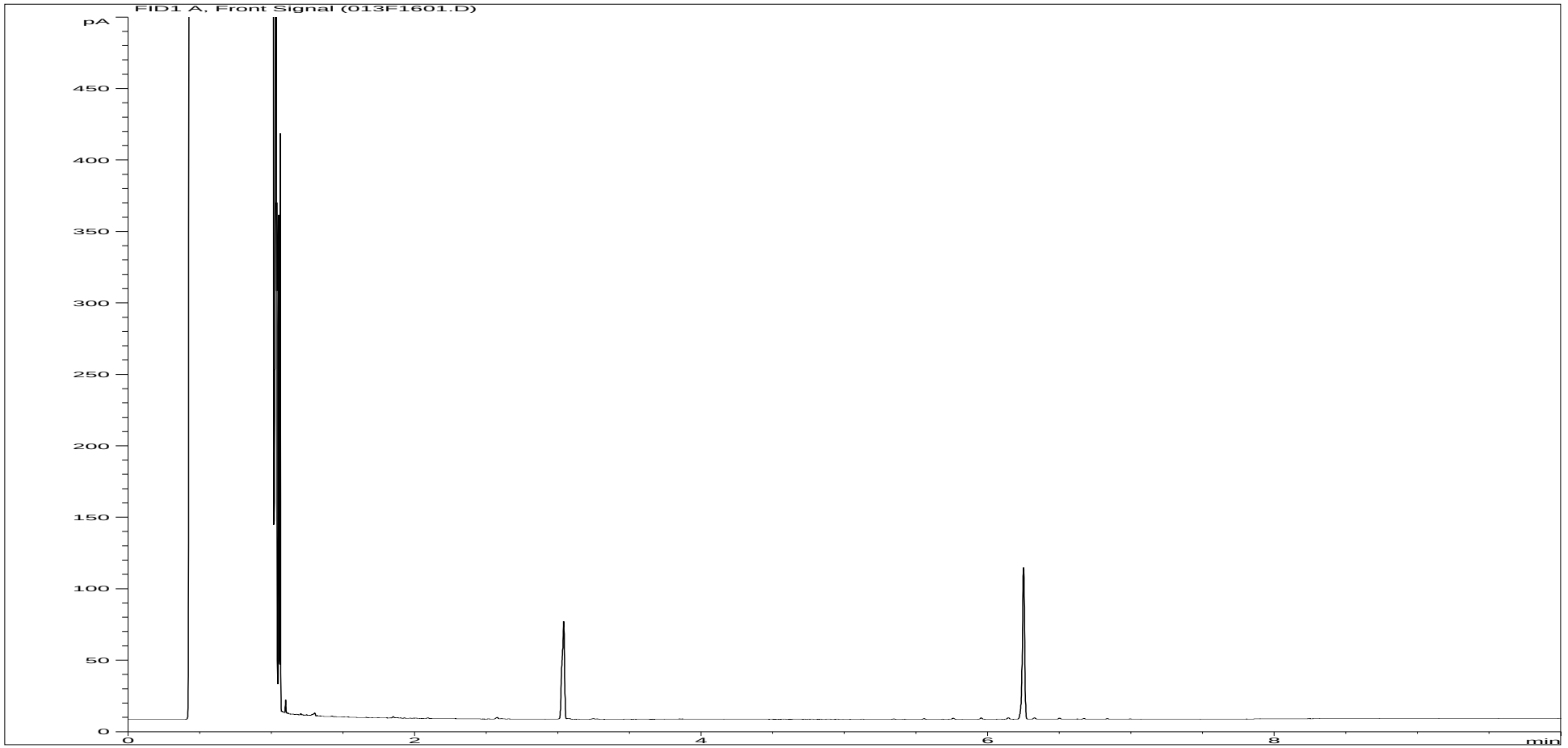
Matrix: Water
Date Booked ir 03-Aug-11
Date Extracted 11-Aug-11
Date Analysed 12-Aug-11, 12:56:29

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1133286	MW99-202	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133287	MW11-5	<0.01	0.021	<0.01	0.035	<0.01	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	0.085
EX1133288	MW11-5A	<0.01	0.018	<0.01	0.022	<0.01	0.017	<0.01	<0.01	<0.01	0.011	0.011	0.078
EX1133289	MW11-6	<0.01	0.032	<0.01	0.142	<0.01	0.12	<0.01	0.037	0.019	<0.01	0.026	0.334
EX1133290	MW11-6A	<0.01	0.033	<0.01	0.129	<0.01	0.124	<0.01	0.04	0.016	<0.01	0.021	0.332
EX1133291	MW5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133292	MW11-7	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	0.017	<0.01	<0.01	<0.01	0.054
EX1133293	MW11-8	<0.01	0.331	0.016	0.93	0.122	0.507	0.158	0.196	0.2	0.106	0.518	2.07
EX1133294	Report 123725 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133295	Report 123725 Blank Spike	0.611	0.237	0.94	0.383	1.64	0.663	0.98	0.328	2.55	0.786	6.79	2.42

Where individual results are flagged see report notes for status.

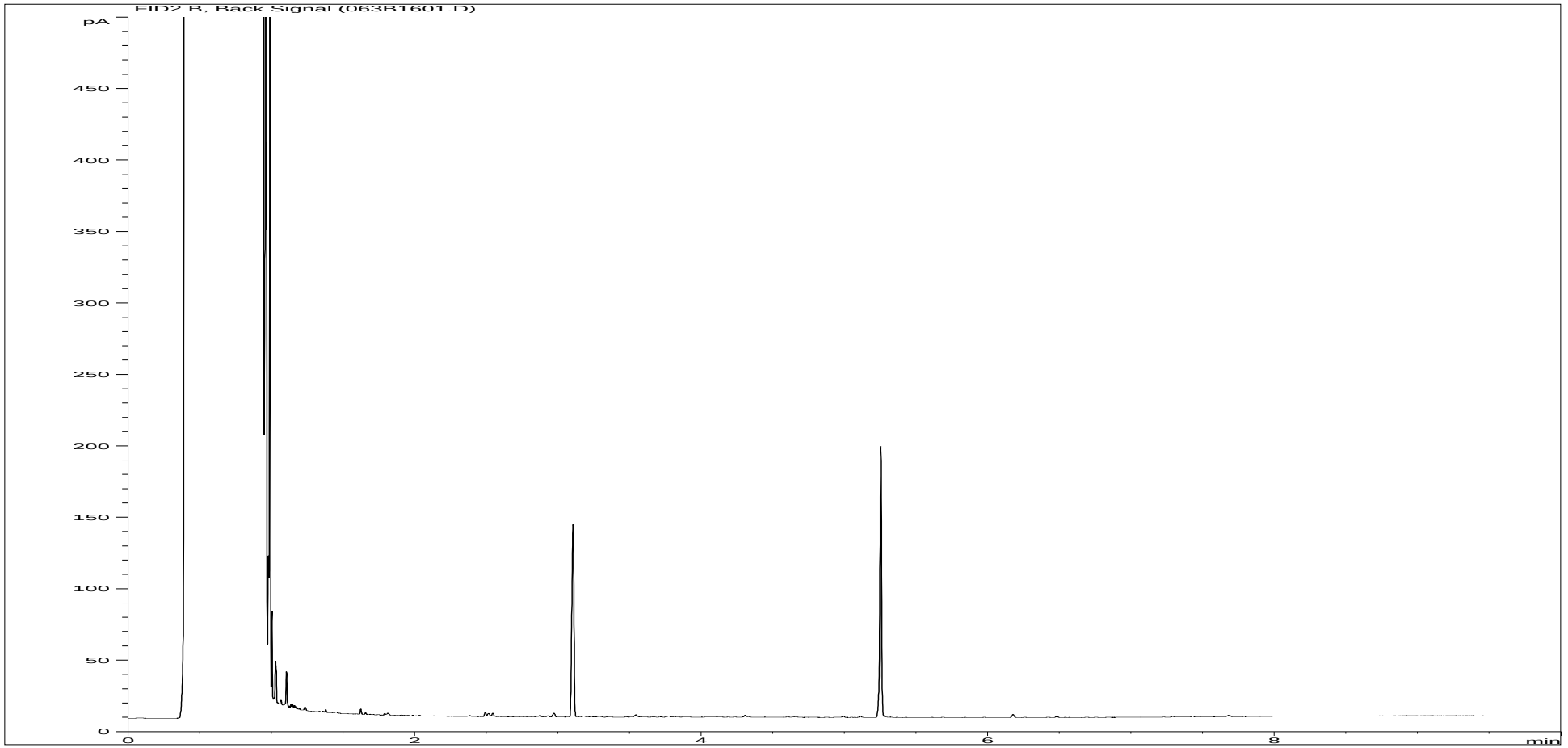
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133286ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	12-Aug-11, 14:05:54		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\013F1601.D		

Where individual results are flagged see report notes for status.

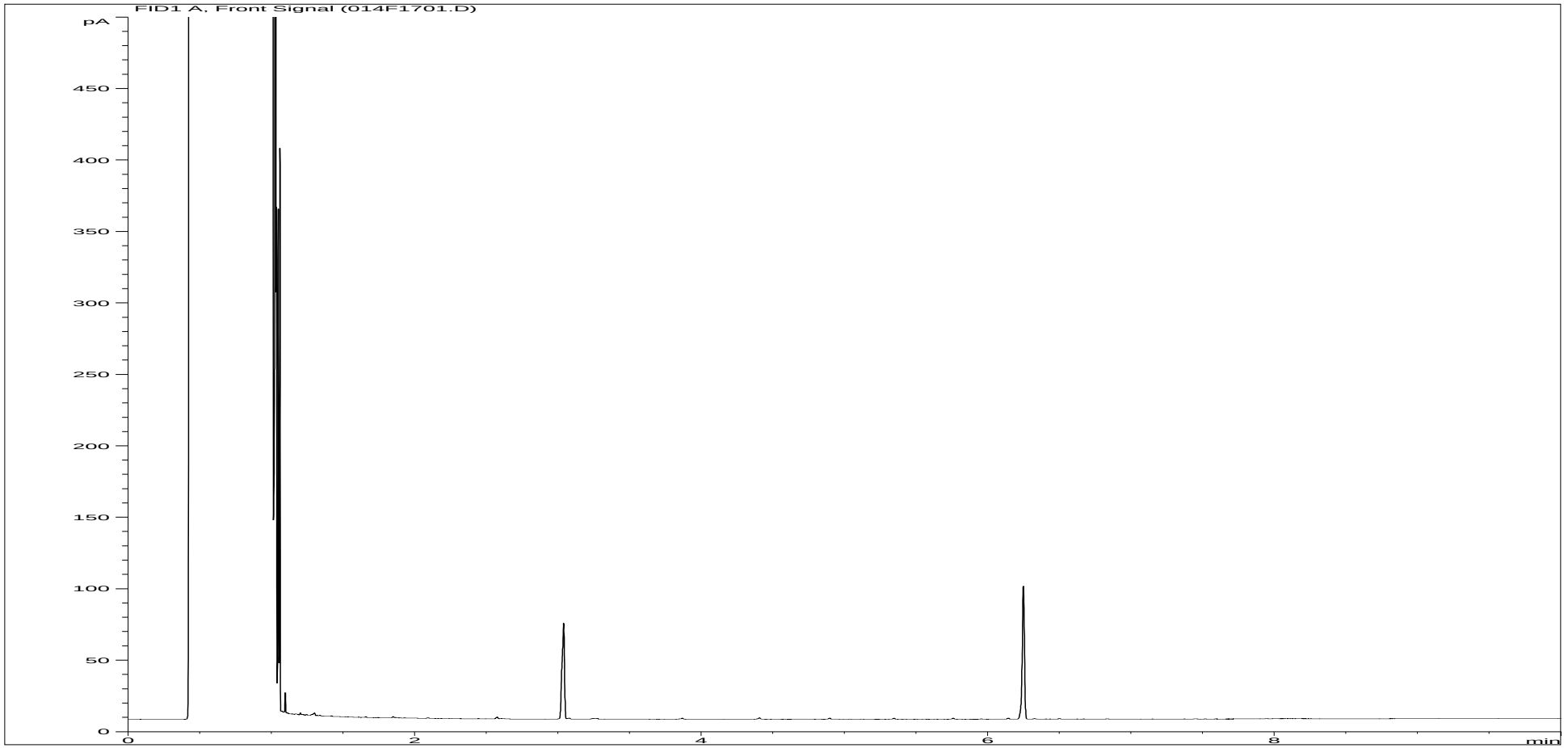
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133286ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	12-Aug-11, 14:05:54		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\063B1601.D		

Where individual results are flagged see report notes for status.

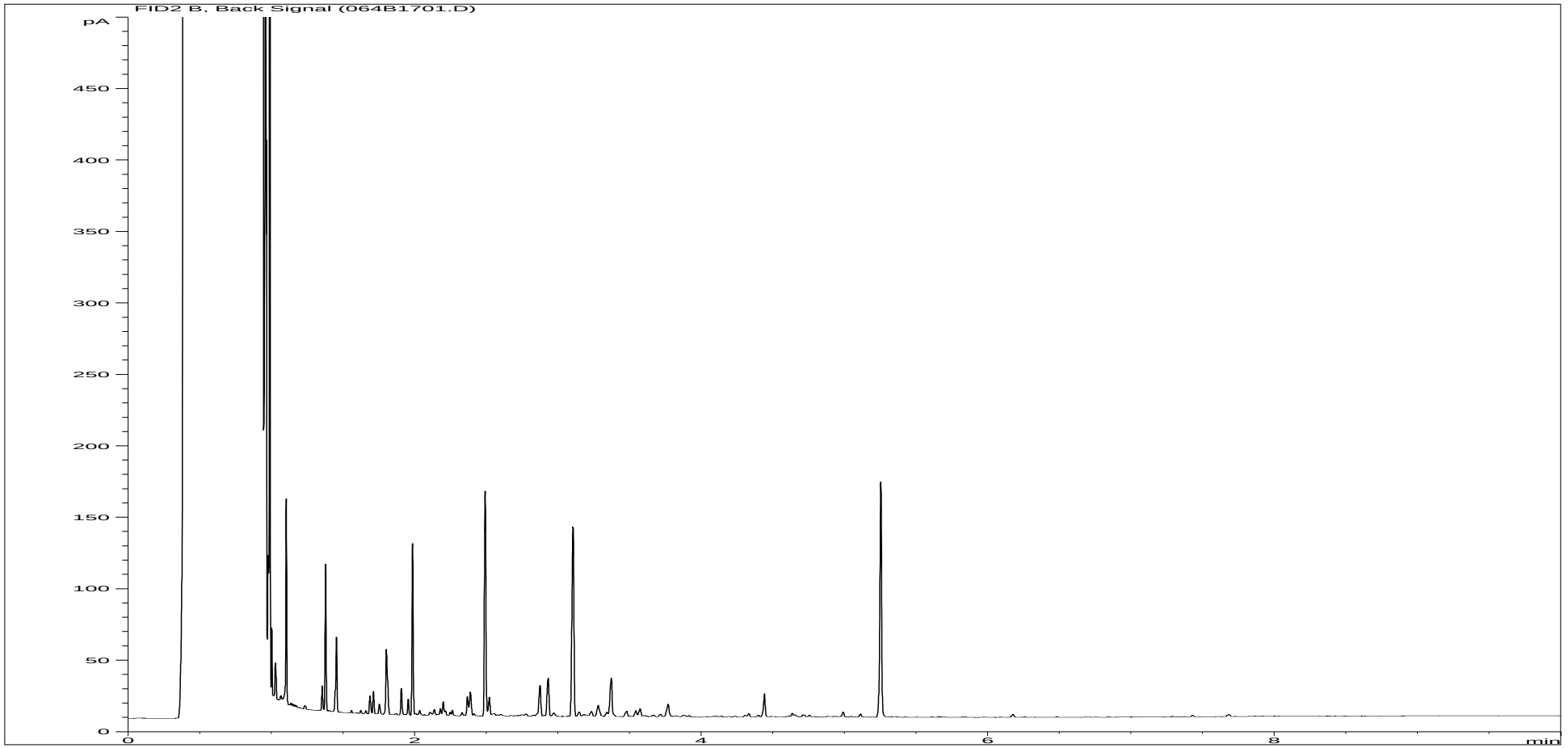
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133287ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	12-Aug-11, 14:23:19		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\014F1701.D		

Where individual results are flagged see report notes for status.

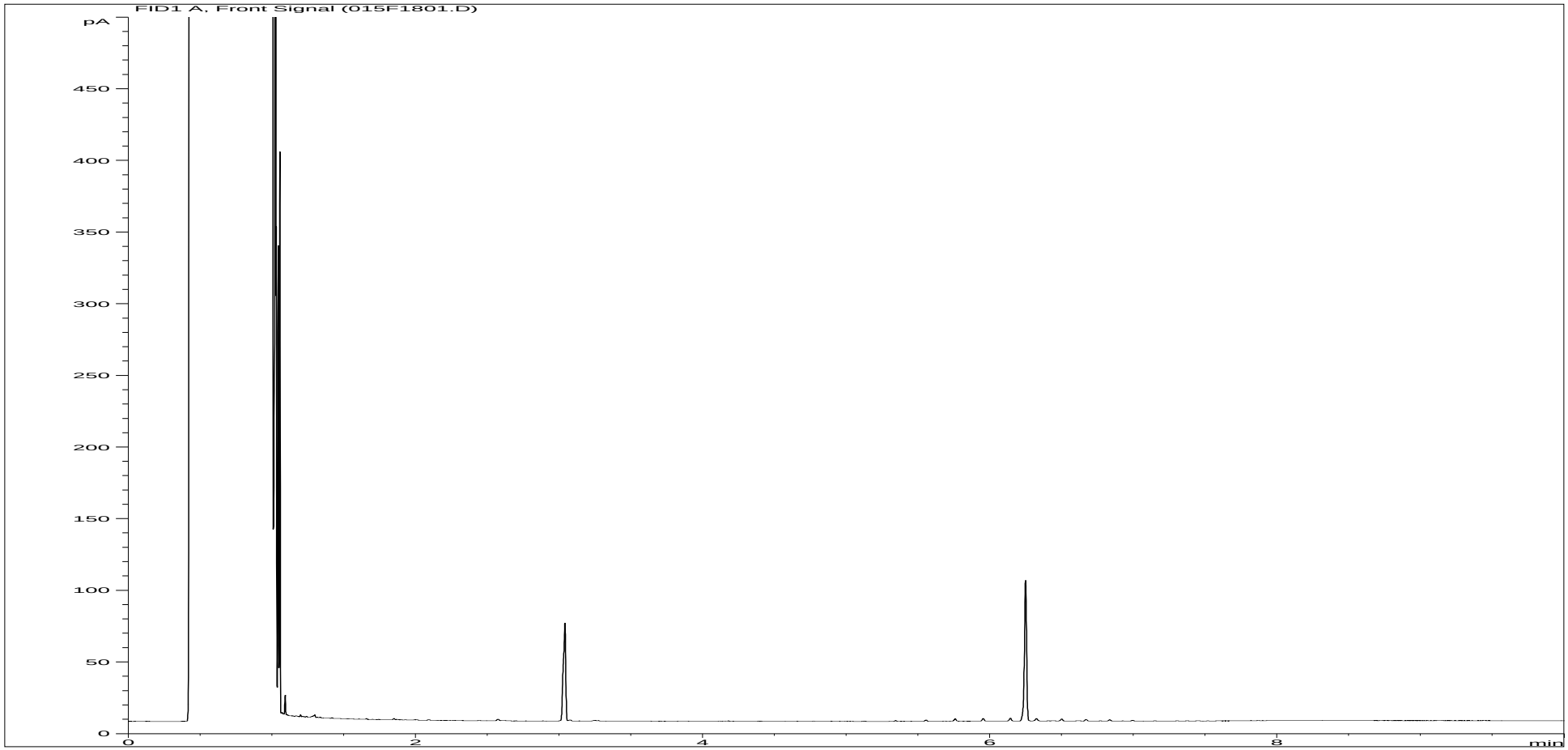
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133287ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	12-Aug-11, 14:23:19		
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Where individual results are flagged see report notes for status.

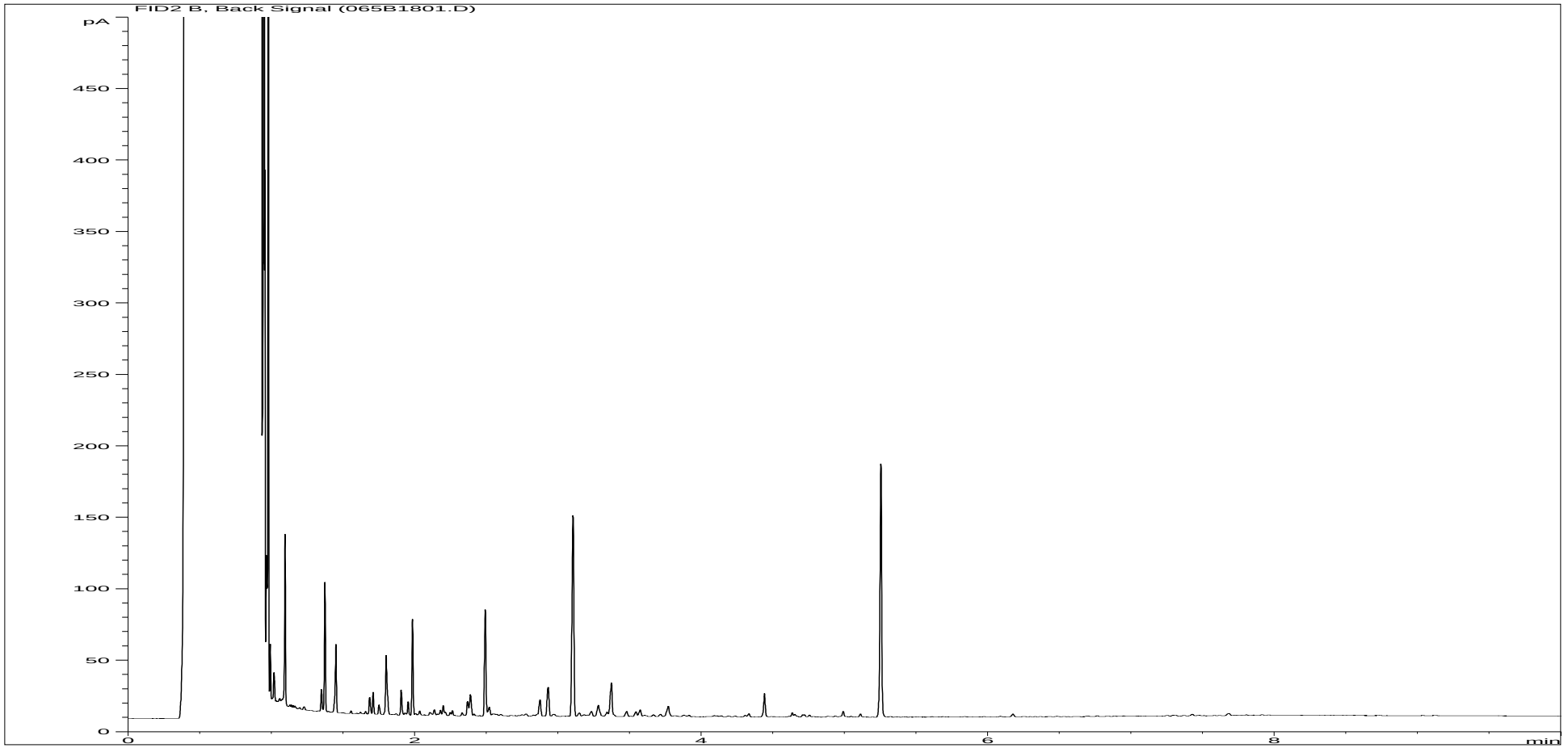
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133288ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5A
Acquisition Date/Time:	12-Aug-11, 14:40:34		
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Where individual results are flagged see report notes for status.

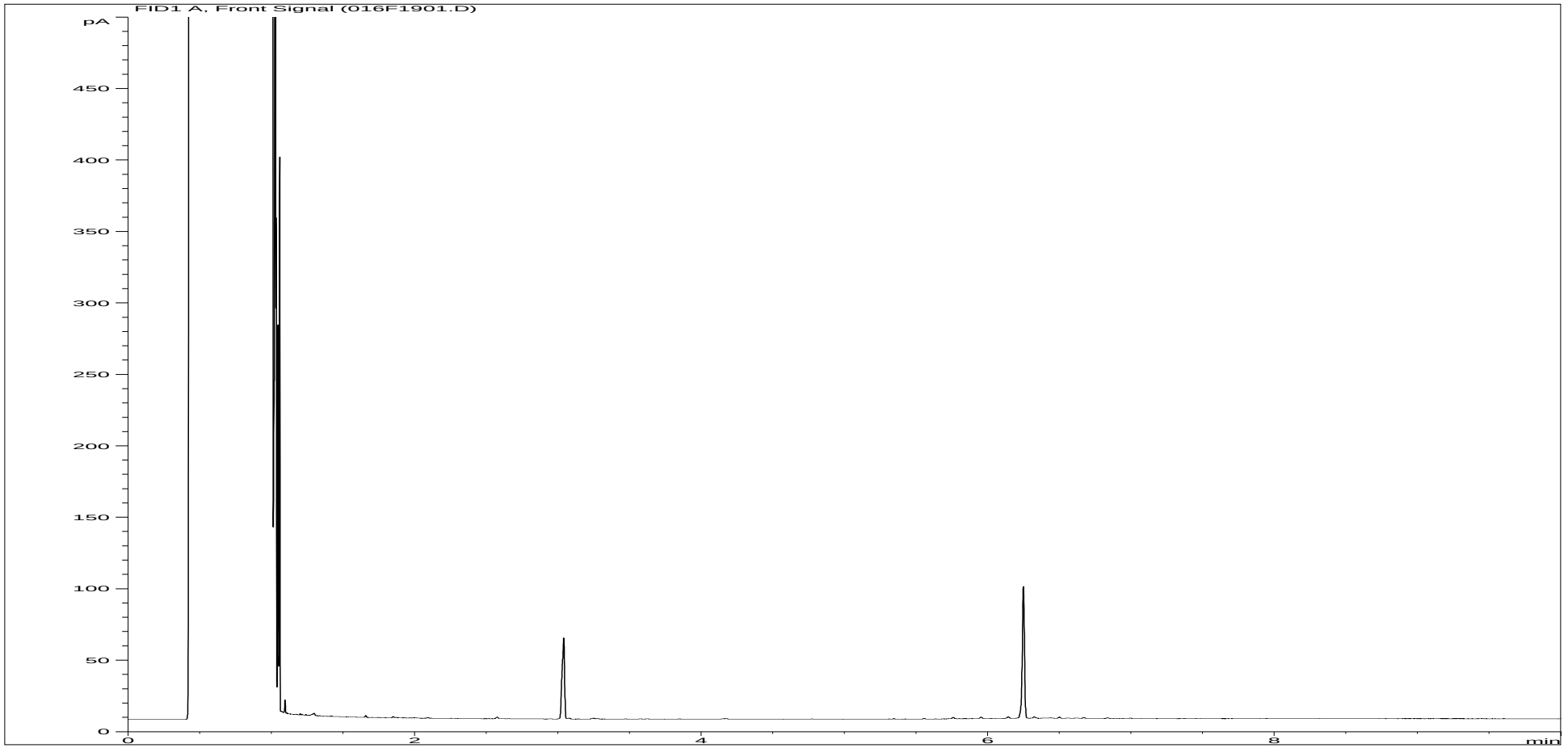
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133288ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5A
Acquisition Date/Time:	12-Aug-11, 14:40:34		
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Where individual results are flagged see report notes for status.

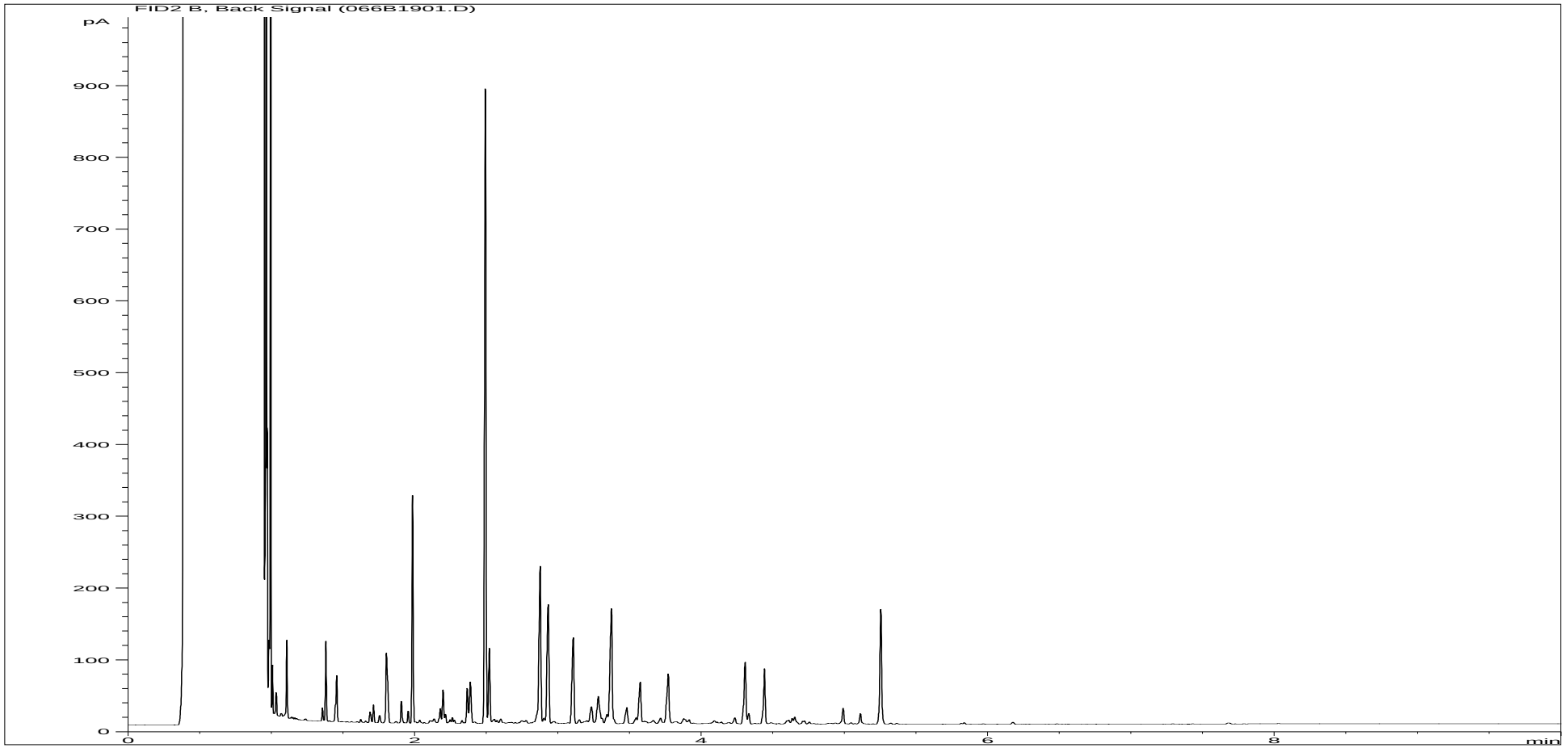
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133289ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	12-Aug-11, 14:58:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\016F1901.D		

Where individual results are flagged see report notes for status.

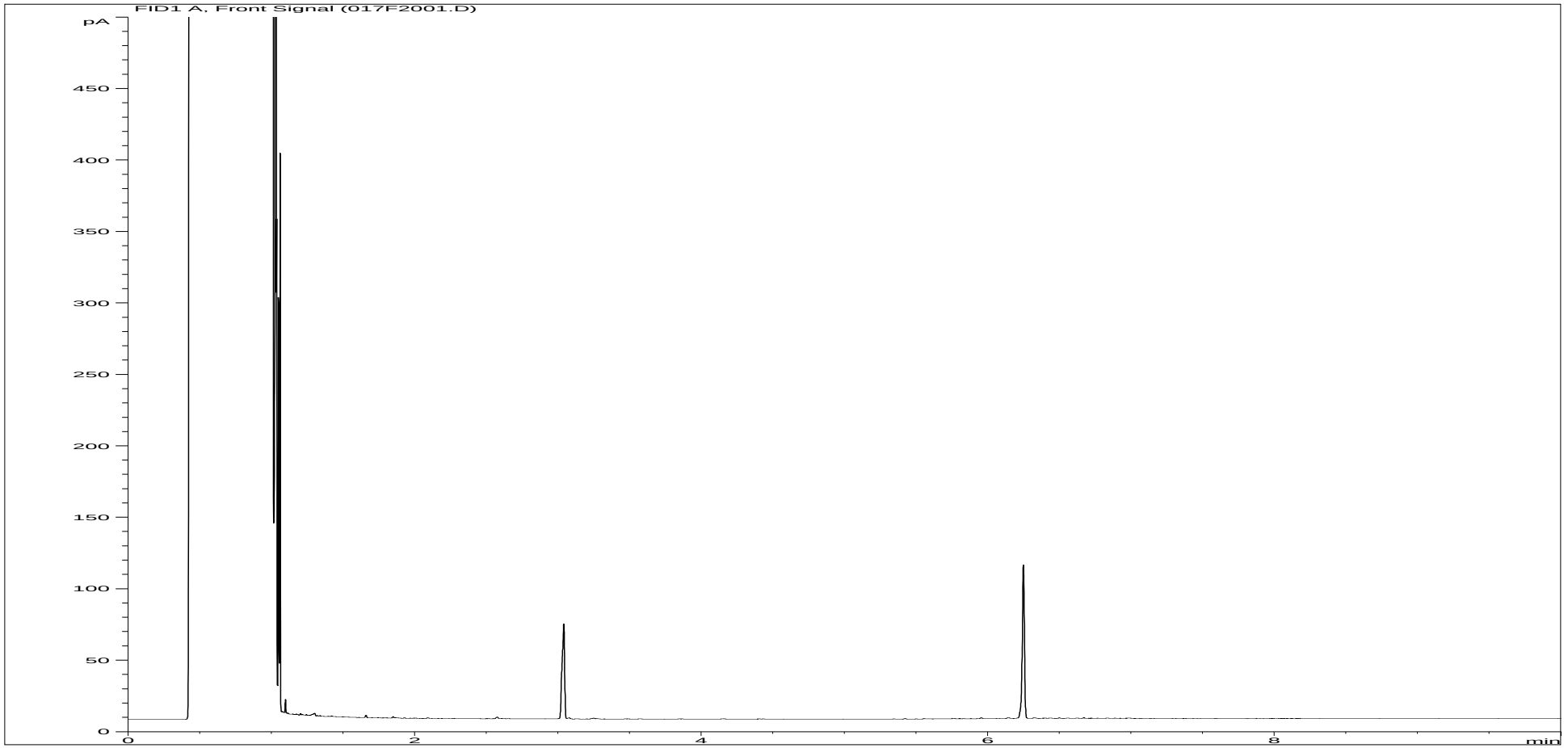
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133289ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	12-Aug-11, 14:58:08		
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Where individual results are flagged see report notes for status.

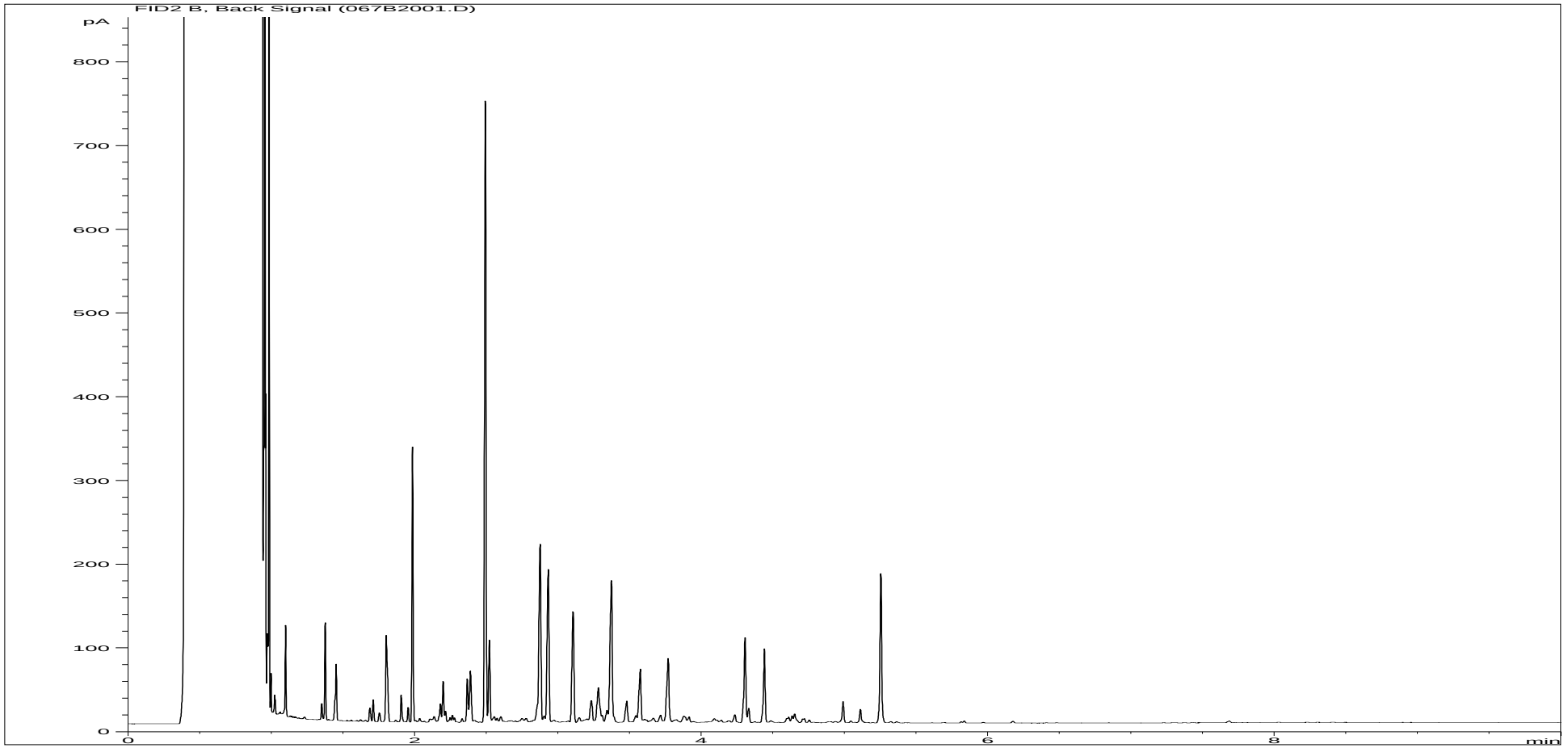
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133290ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6A
Acquisition Date/Time:	12-Aug-11, 15:15:31		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\017F2001.D		

Where individual results are flagged see report notes for status.

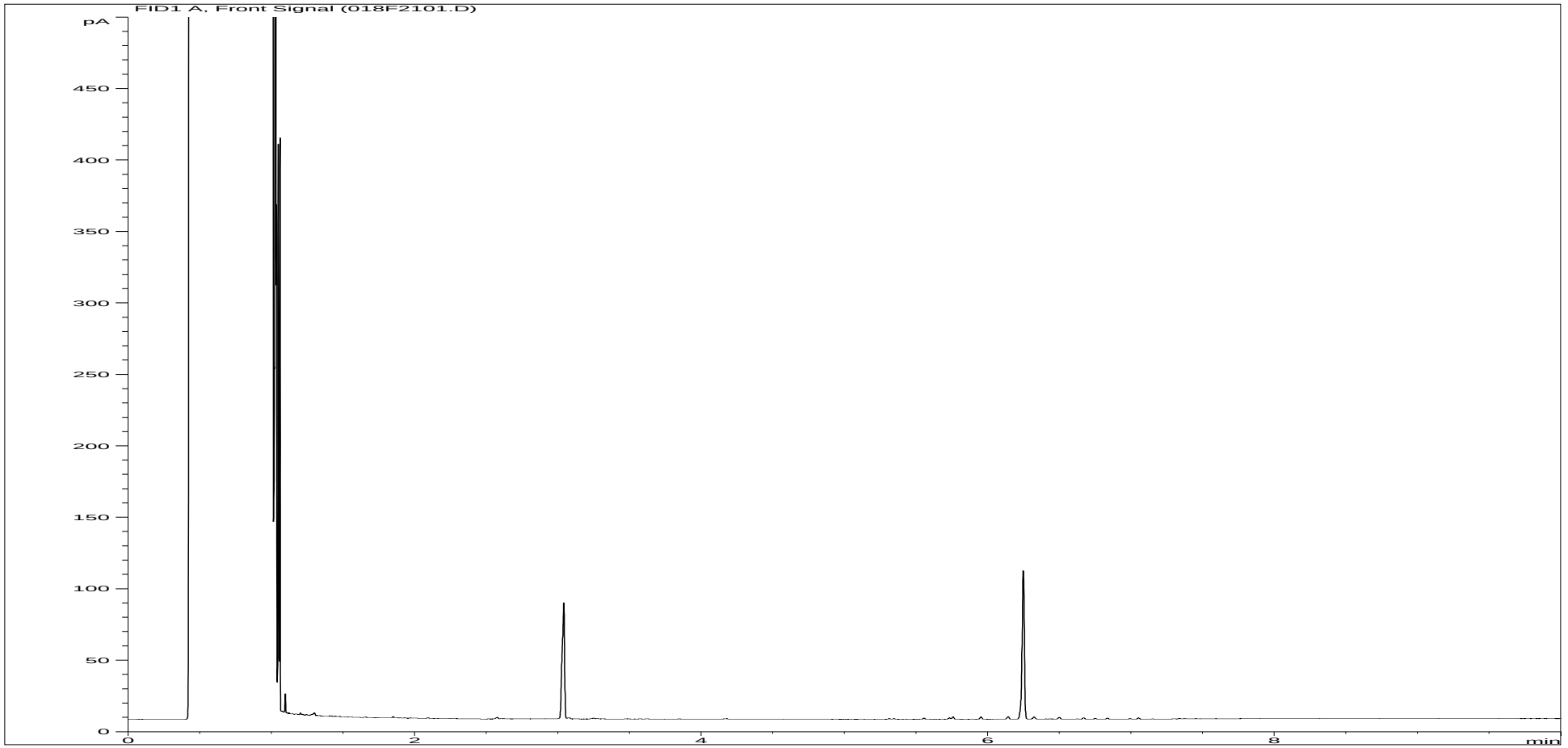
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133290ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6A
Acquisition Date/Time:	12-Aug-11, 15:15:31		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\067B2001.D		

Where individual results are flagged see report notes for status.

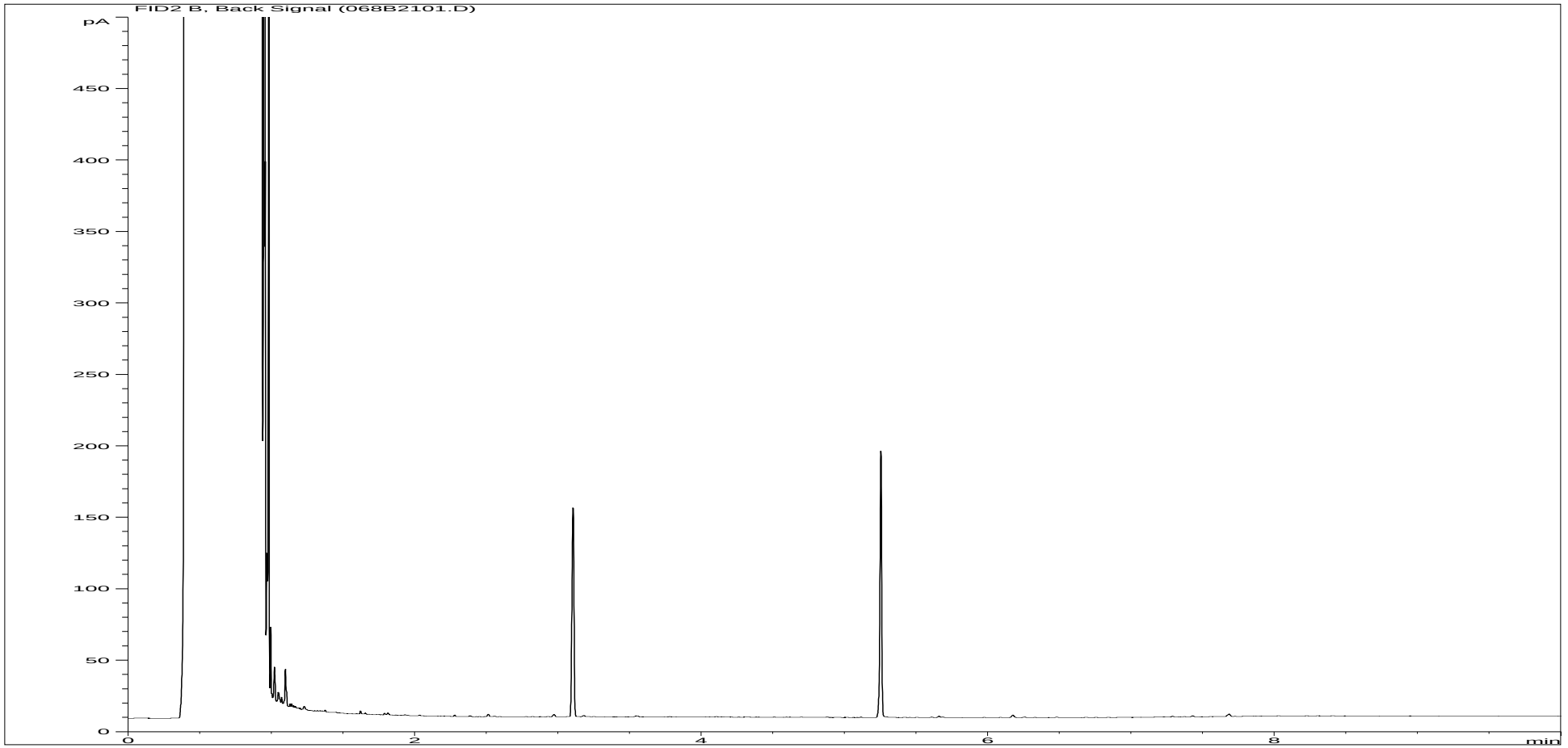
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133291ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	12-Aug-11, 15:32:50		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\018F2101.D		

Where individual results are flagged see report notes for status.

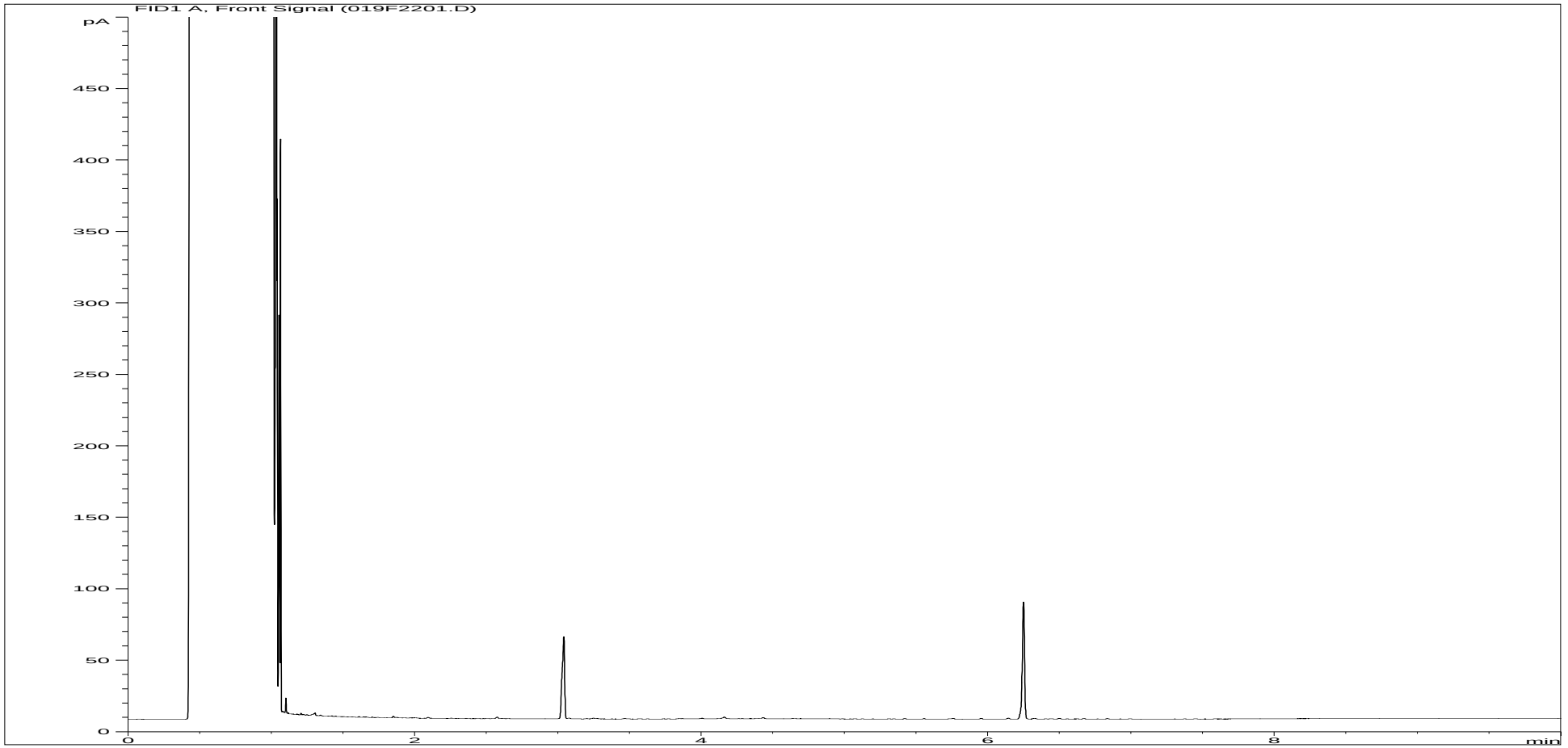
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133291ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	12-Aug-11, 15:32:50		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\068B2101.D		

Where individual results are flagged see report notes for status.

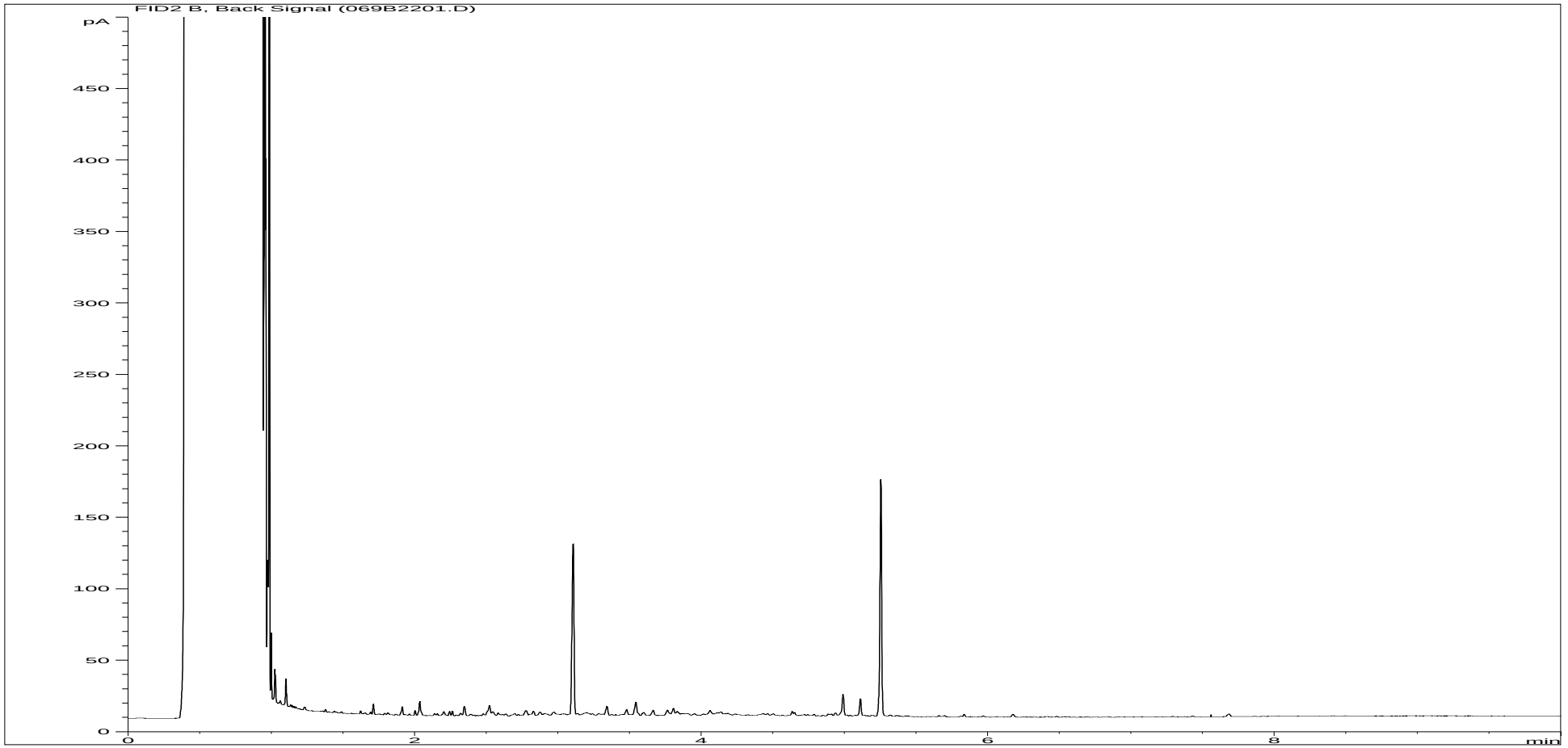
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133292ALI	**Job Number:**	W12_3725
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	12-Aug-11, 15:50:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\019F2201.D		

Where individual results are flagged see report notes for status.

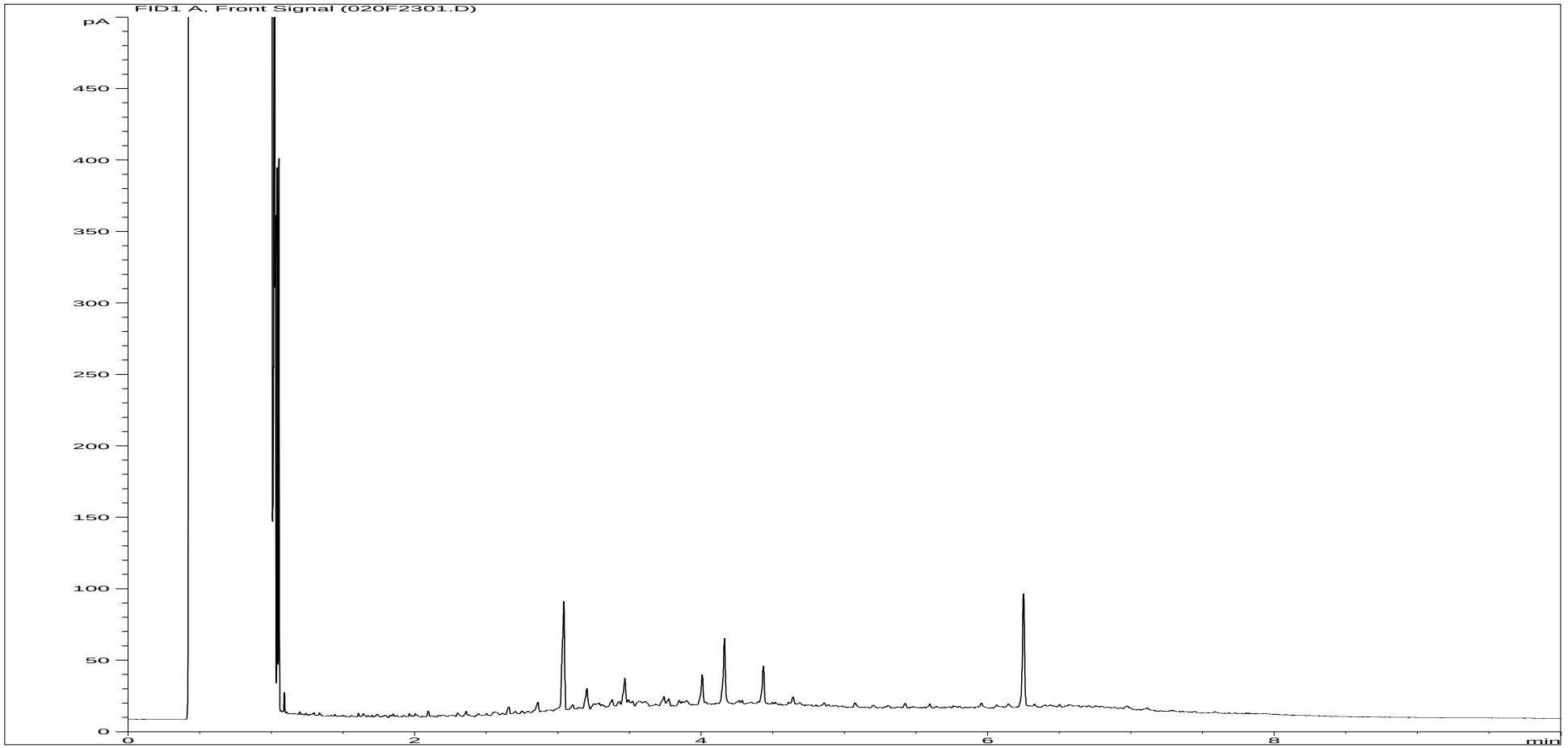
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133292ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	12-Aug-11, 15:50:08		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\069B2201.D		

Where individual results are flagged see report notes for status.

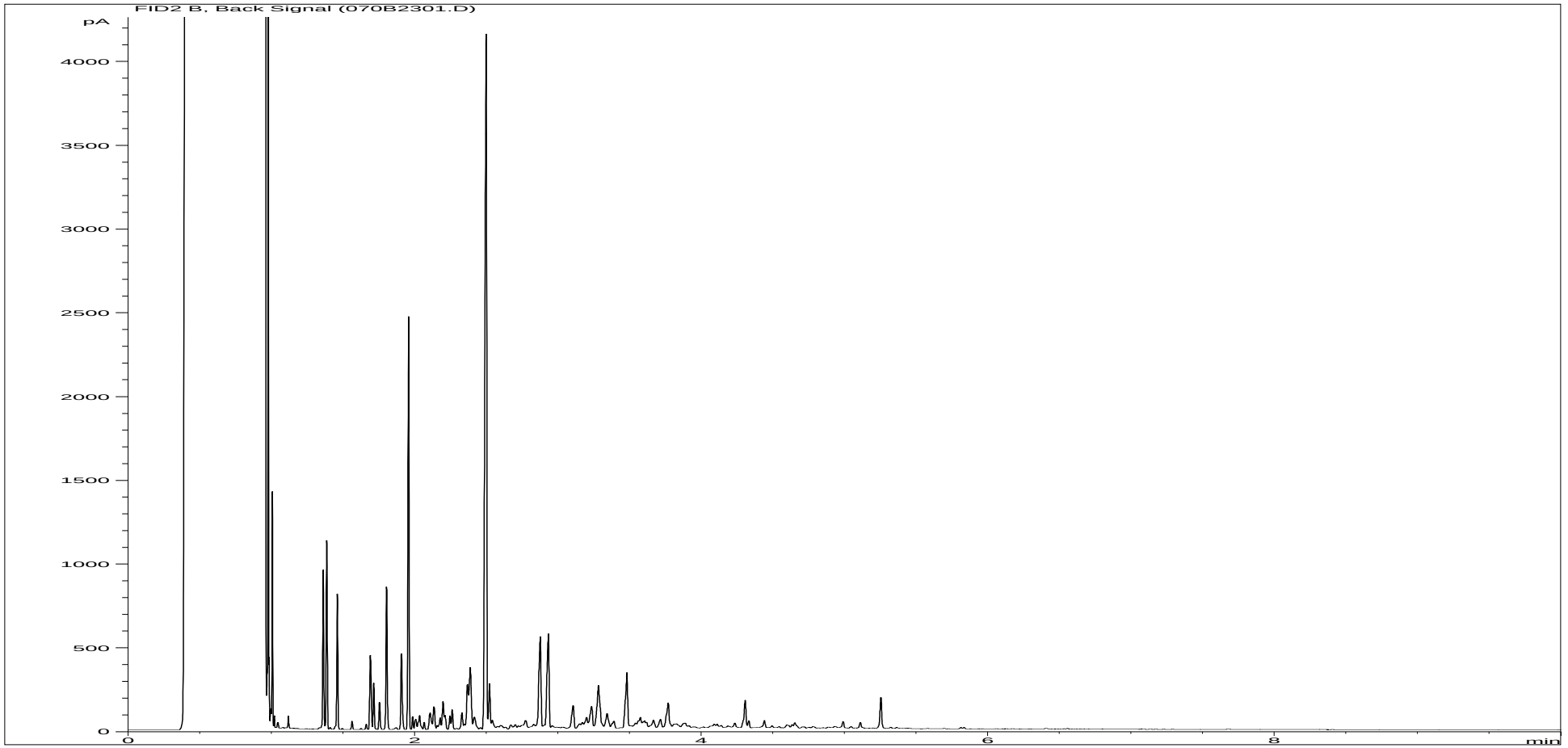
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133293ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	12-Aug-11, 16:07:41		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\020F2301.D		

Where individual results are flagged see report notes for status.

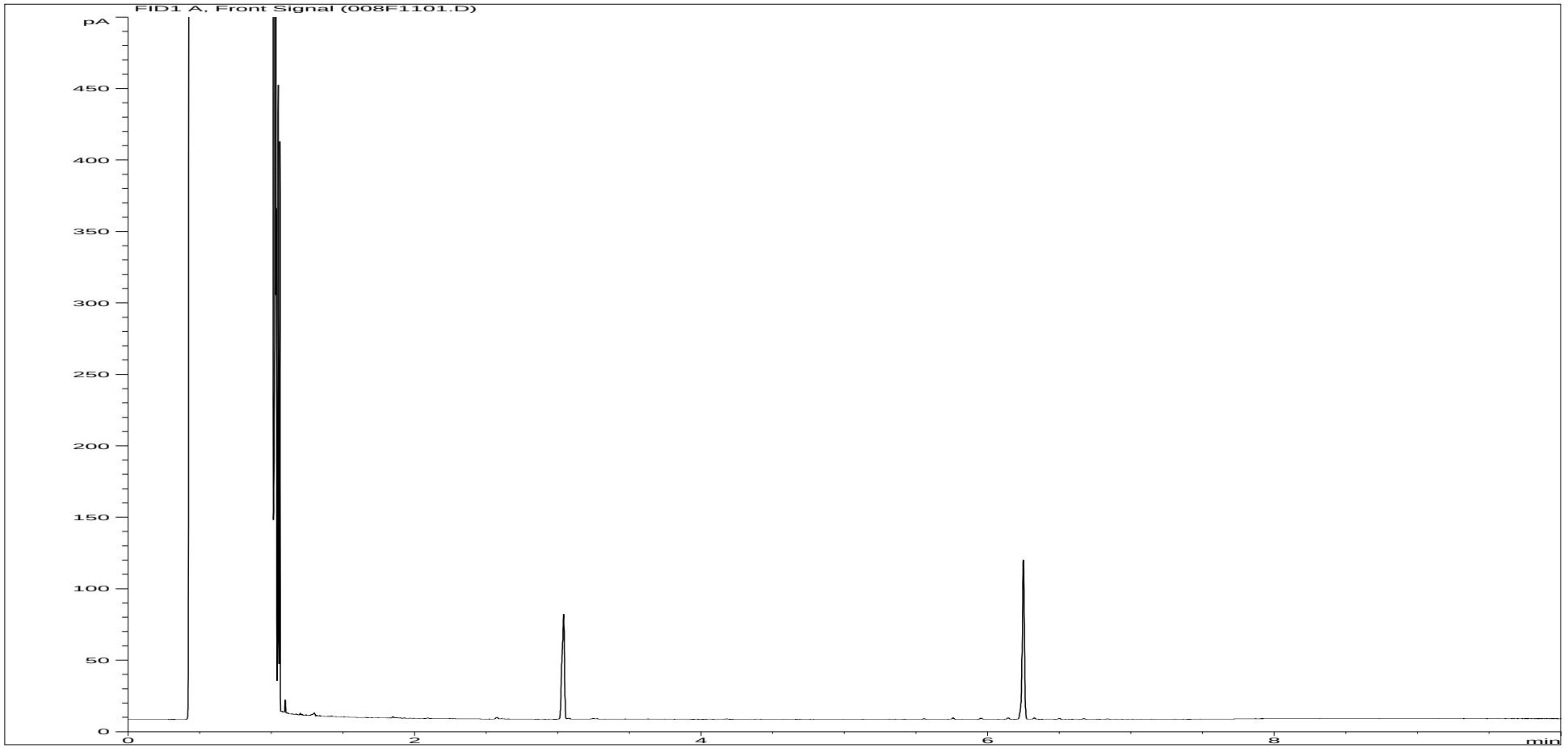
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133293ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	12-Aug-11, 16:07:41		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\070B2301.D		

Where individual results are flagged see report notes for status.

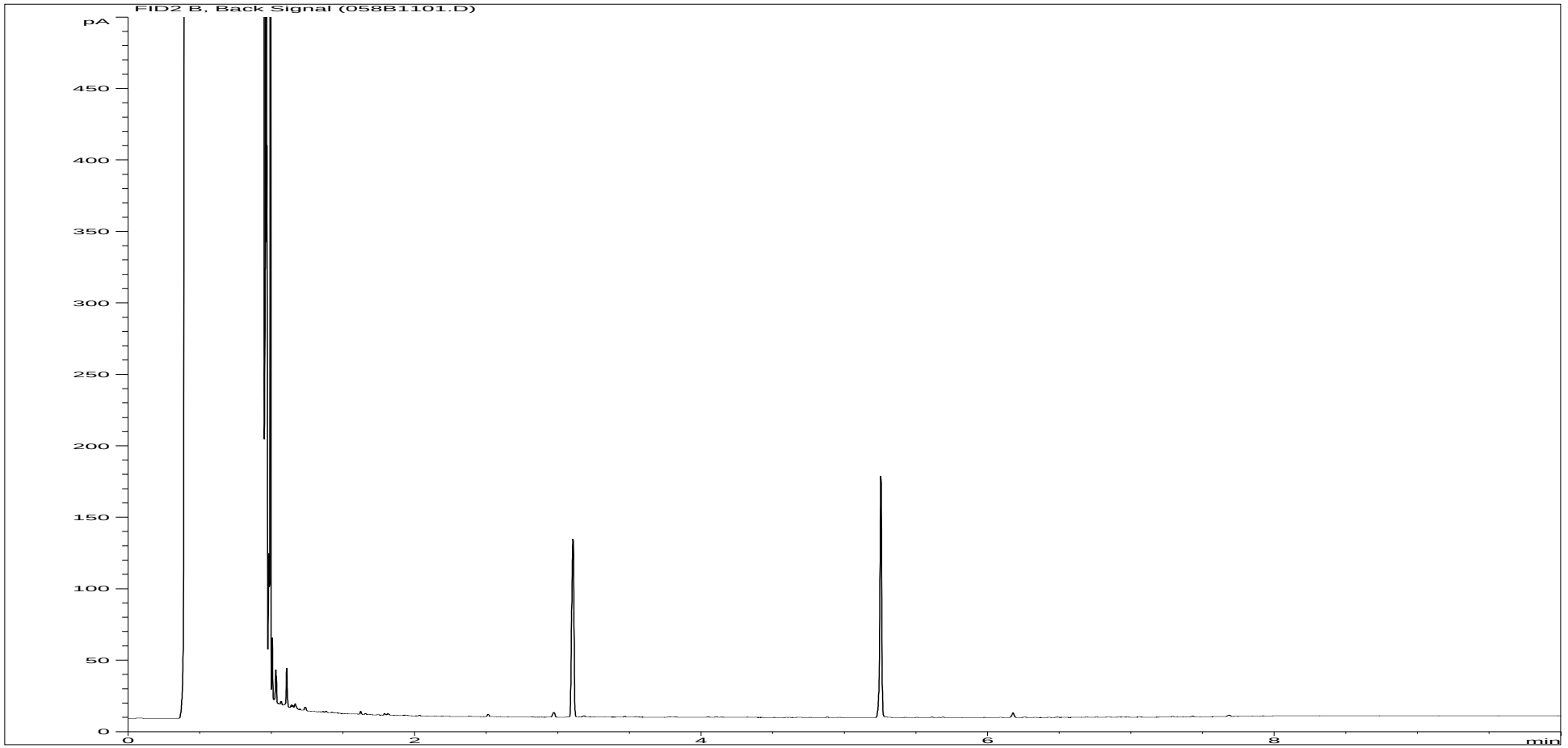
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133294ALI	**Job Number:**	W12_3725
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank
Acquisition Date/Time:	12-Aug-11, 12:39:14		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\008F1101.D		

Where individual results are flagged see report notes for status.

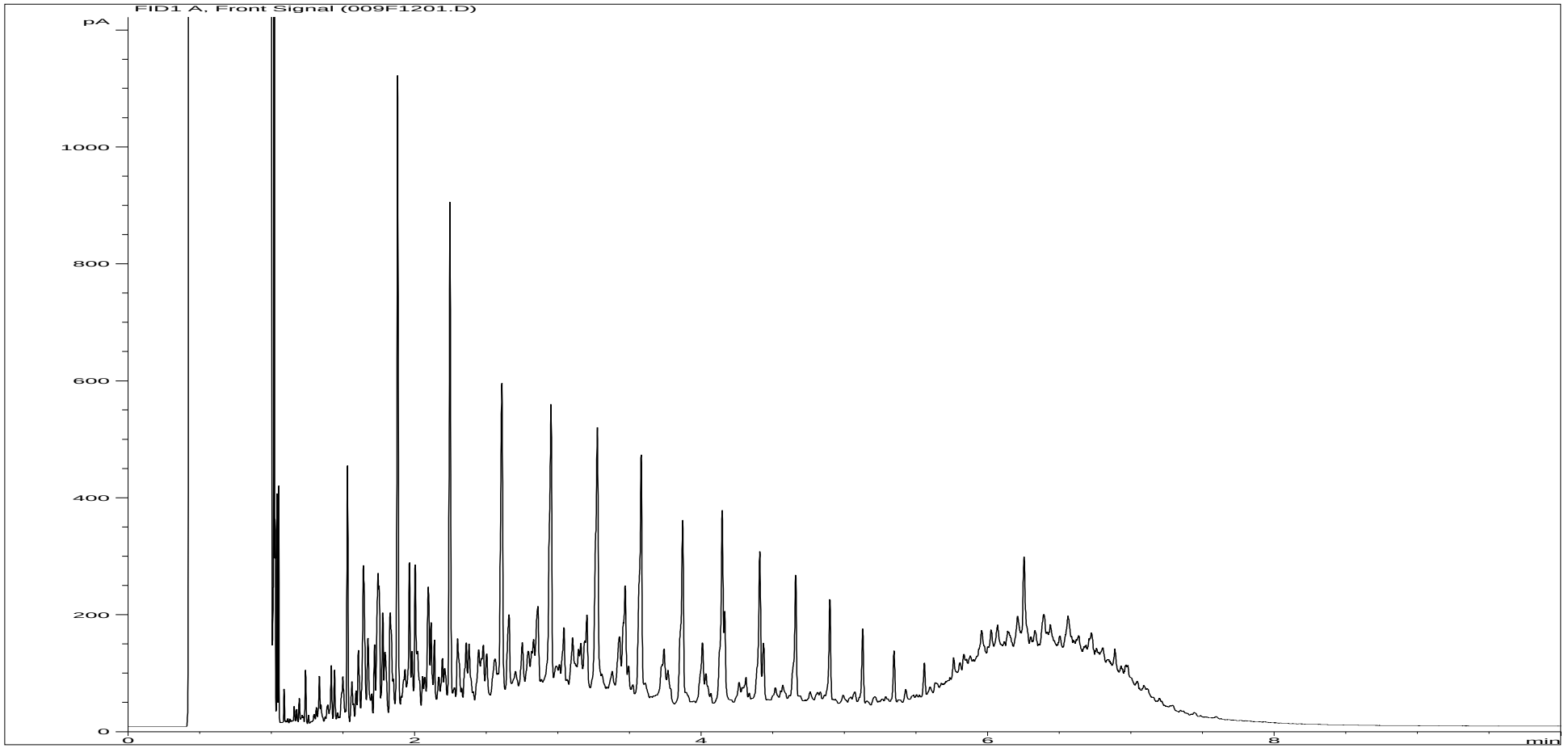
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133294ARO	**Job Number:**	W12_3725
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank
Acquisition Date/Time:	12-Aug-11, 12:39:14		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\058B1101.D		

Where individual results are flagged see report notes for status.

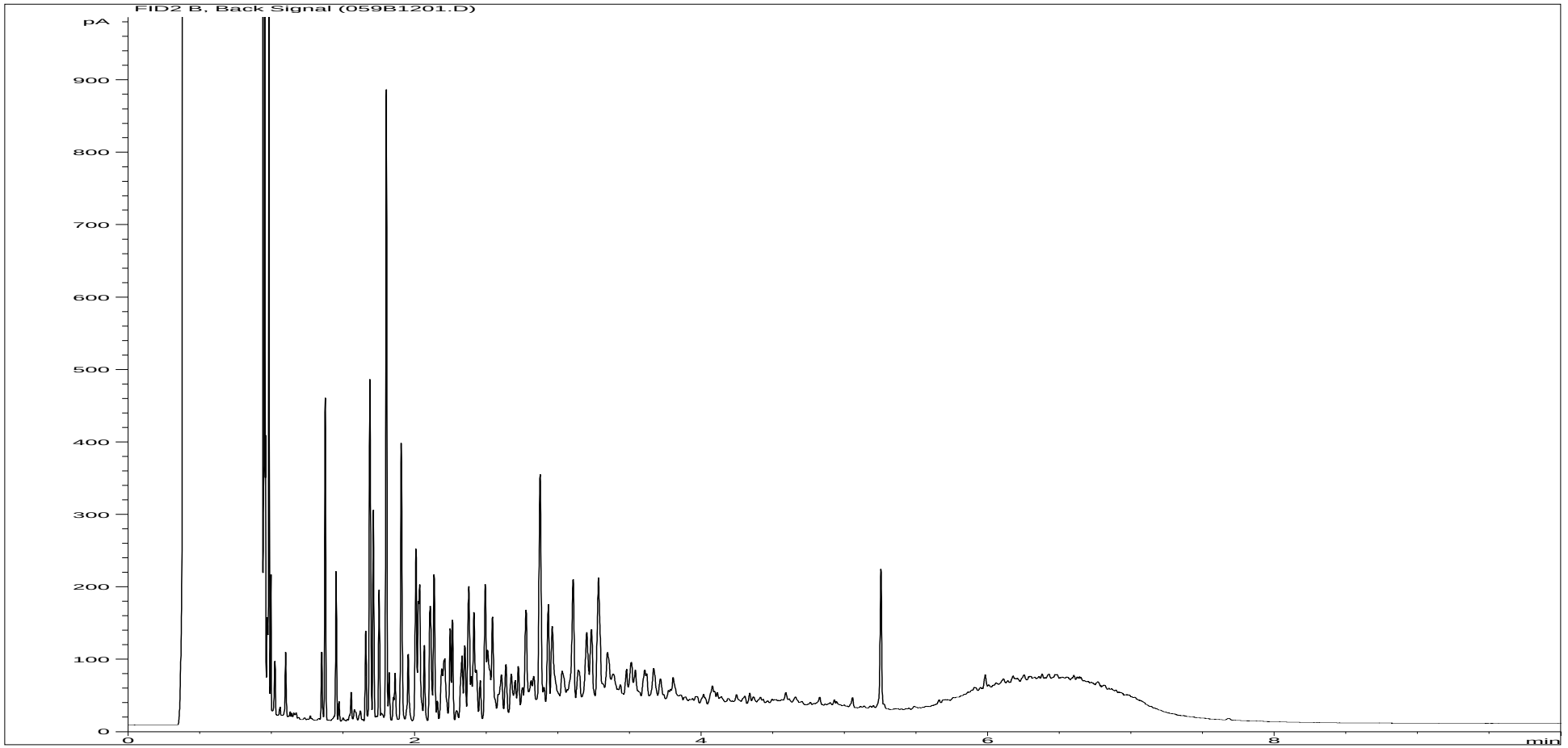
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133295ALI	**Job Number:**	W12_3725
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank Spike
Acquisition Date/Time:	12-Aug-11, 12:56:29		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\009F1201.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133295ARO	**Job Number:**	W12_3725
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123725 Blank Spike
Acquisition Date/Time:	12-Aug-11, 12:56:29		
Datafile:	D:\TES\DATA\Y2011\080121TPH_GC15\081211 2011-08-12 08-30-13\059B1201.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W123725

Consignment No 28293
Date Logged 03-Aug-2011

Report Due 16-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1133286	MW99-202	01/08/11																									
EX/1133287	MW11-5	02/08/11																									
EX/1133288	MW11-5A	02/08/11																									
EX/1133289	MW11-6	02/08/11																									
EX/1133290	MW11-6A	02/08/11																									
EX/1133291	MW5	02/08/11																									
EX/1133292	MW11-7	02/08/11																									
EX/1133293	MW11-8	02/08/11																									
EX/1133294	Report 123725 Blank	01/08/11																									
EX/1133295	Report 123725 Blank Spike	01/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123725

Customer Worley Parsons Komex
Site Maelor Works
Report No W123725

Consignment No 28293
Date Logged 03-Aug-2011

Report Due 16-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1133286	MW99-202	01/08/11															
EX/1133287	MW11-5	02/08/11															
EX/1133288	MW11-5A	02/08/11															
EX/1133289	MW11-6	02/08/11															
EX/1133290	MW11-6A	02/08/11															
EX/1133291	MW5	02/08/11															
EX/1133292	MW11-7	02/08/11															
EX/1133293	MW11-8	02/08/11															
EX/1133294	Report 123725 Blank	01/08/11															
EX/1133295	Report 123725 Blank Spike	01/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123669 (Ver. 1)
Your Ref: 305001-50065-29

August 15, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123669 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 02-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 15-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1133058	MW11-10	01-Aug-11	11.8	958	36	215	27	45	86	<1	27	19	0.007	<0.001	<0.0001	Req	0.001	0.001
1133059	MW3	01-Aug-11	8.8	513	14	225	22	30	77	8	9	5	0.001	0.001	<0.0001	Req	0.001	<0.001
1133060	MW11-17	01-Aug-11	7.7	939	1807	439	24	68	85	55	33	2	0.002	0.003	0.0001	Req	0.002	<0.001
1133061	QC Blank		7.01	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1133062	Blank Spike (% Recovery)				100		99	98	96	98	98	101	104	97	97	Req	104	104

scientifics
Bretby Business Park, Ashby Road
Burton-on-Trent, Staffordshire, DE15 0YZ
Tel +44 (0) 1283 554400
Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1133058	MW11-10	01-Aug-11	0.004	0.03	0.08	0.11	<0.01	0.04	0.0001	0.002	2.0	<0.2	<0.2	<0.02	<0.02	<0.05	4.8	<0.1
1133059	MW3	01-Aug-11	0.004	0.45	0.16	0.61	<0.01	<0.001	<0.0001	0.002	0.02	1.6	<0.2	<0.02	<0.02	<0.05	1.5	<0.1
1133060	MW11-17	01-Aug-11	0.003	4.12	3.09	7.21	<0.01	0.001	0.0001	0.001	0.03	<0.2	<0.2	<0.02	<0.02	<0.05	2.8	<0.1
1133061	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1133062	Blank Spike (% Recovery)		101		104	99	96	98	102	95	100		99	99	99	103	109	98

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1133058	MW11-10	01-Aug-11	Req	0.01	<0.02	7.1	3	<1	<1	<1	<2	<0.0005	0.0045	<0.0005	<0.1	<0.0005		
1133059	MW3	01-Aug-11	Req	1.35	<0.02	6.8	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133060	MW11-17	01-Aug-11	Req	0.58	<0.02	6.7	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133061	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1133062	Blank Spike (% Recovery)		Req	101			97	98	96	97	290	102	111	111	111	105		

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	15-Aug-11
Report Number	**EXR/123669**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-10	**Job Number:**	W12_3669
LIMS ID Number:	EX1133058	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.180	100
Acenaphthylene	208-96-8	4.29	0.031	M
Acenaphthene	83-32-9	4.41	0.150	M
Fluorene	86-73-7	4.79	0.080	M
Phenanthrene	85-01-8	5.63	0.268	100
Anthracene	120-12-7	5.68	0.078	100
Fluoranthene	206-44-0	6.96	0.310	100
Pyrene	129-00-0	7.25	0.246	100
Benzo[a]anthracene	56-55-3	8.93	0.034	M
Chrysene	218-01-9	8.98	0.036	M
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 1.473	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	99
Phenanthrene-d10	102
Chrysene-d12	103
Perylene-d12	98

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW3	**Job Number:**	W12_3669
LIMS ID Number:	EX1133059	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.24	0.010	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	92
Acenaphthene-d10	91
Phenanthrene-d10	93
Chrysene-d12	91
Perylene-d12	84

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	73
Terphenyl-d14	83

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-17	**Job Number:**	W12_3669
LIMS ID Number:	EX1133060	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	10-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	97
Phenanthrene-d10	100
Chrysene-d12	100
Perylene-d12	94

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	69
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123669 Blank	**Job Number:**	W12_3669
LIMS ID Number:	EX1133061	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	99
Phenanthrene-d10	102
Chrysene-d12	104
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123669 Blank Spike	**Job Number:**	W12_3669
LIMS ID Number:	EX1133062	**Date Booked in:**	02-Aug-11
QC Batch Number:	110723	**Date Extracted:**	08-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Aug-11
Directory:	0809PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.24	76	M
Acenaphthylene	208-96-8	4.29	71	M
Acenaphthene	83-32-9	4.41	71	M
Fluorene	86-73-7	4.79	74	M
Phenanthrene	85-01-8	5.63	77	100
Anthracene	120-12-7	5.68	76	100
Fluoranthene	206-44-0	6.96	74	100
Pyrene	129-00-0	7.25	71	M
Benzo[a]anthracene	56-55-3	8.93	91	M
Chrysene	218-01-9	8.98	83	M
Benzo[b]fluoranthene	205-99-2	10.46	85	M
Benzo[k]fluoranthene	207-08-9	10.50	79	M
Benzo[a]pyrene	50-32-8	10.89	75	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.27	68	M
Dibenzo[a,h]anthracene	53-70-3	12.30	67	M
Benzo[g,h,i]perylene	191-24-2	12.56	75	M
Total (USEPA16) PAHs	-	-	76	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	101
Phenanthrene-d10	104
Chrysene-d12	106
Perylene-d12	100

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3669
QC Batch Number: 110723
Directory: D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\074B3501.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

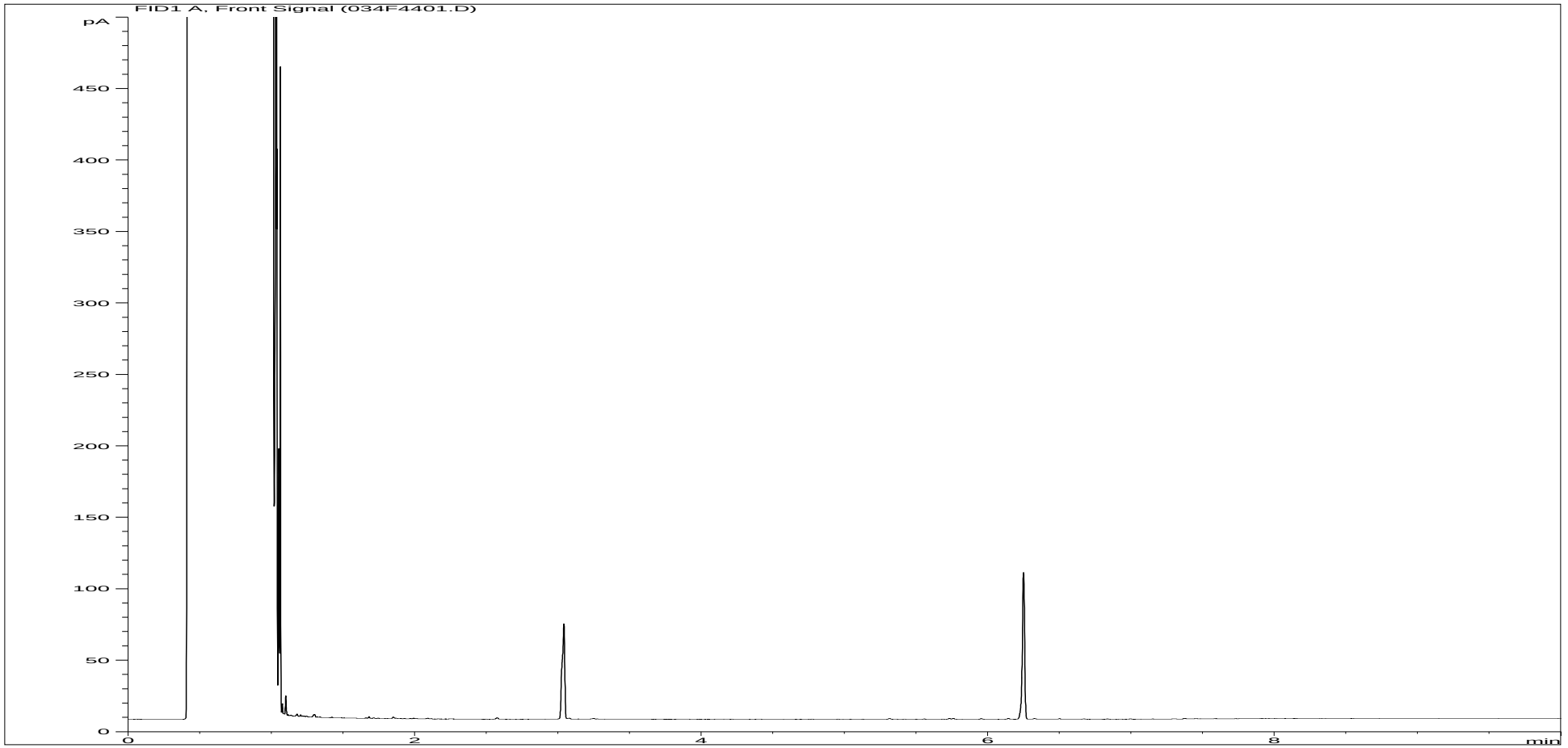
Matrix: Water
Date Booked in 02-Aug-11
Date Extracted 09-Aug-11
Date Analysed 09-Aug-11, 20:30:17

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1133058	MW11-10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.014
EX1133059	MW3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
EX1133060	MW11-17	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	<0.01
EX1133061	Report 123669 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1133062	Report 123669 Blank Spik	0.725	0.221	1.11	0.353	1.88	0.6	1.08	0.288	2.78	0.679	7.64	2.16

Where individual results are flagged see report notes for status.

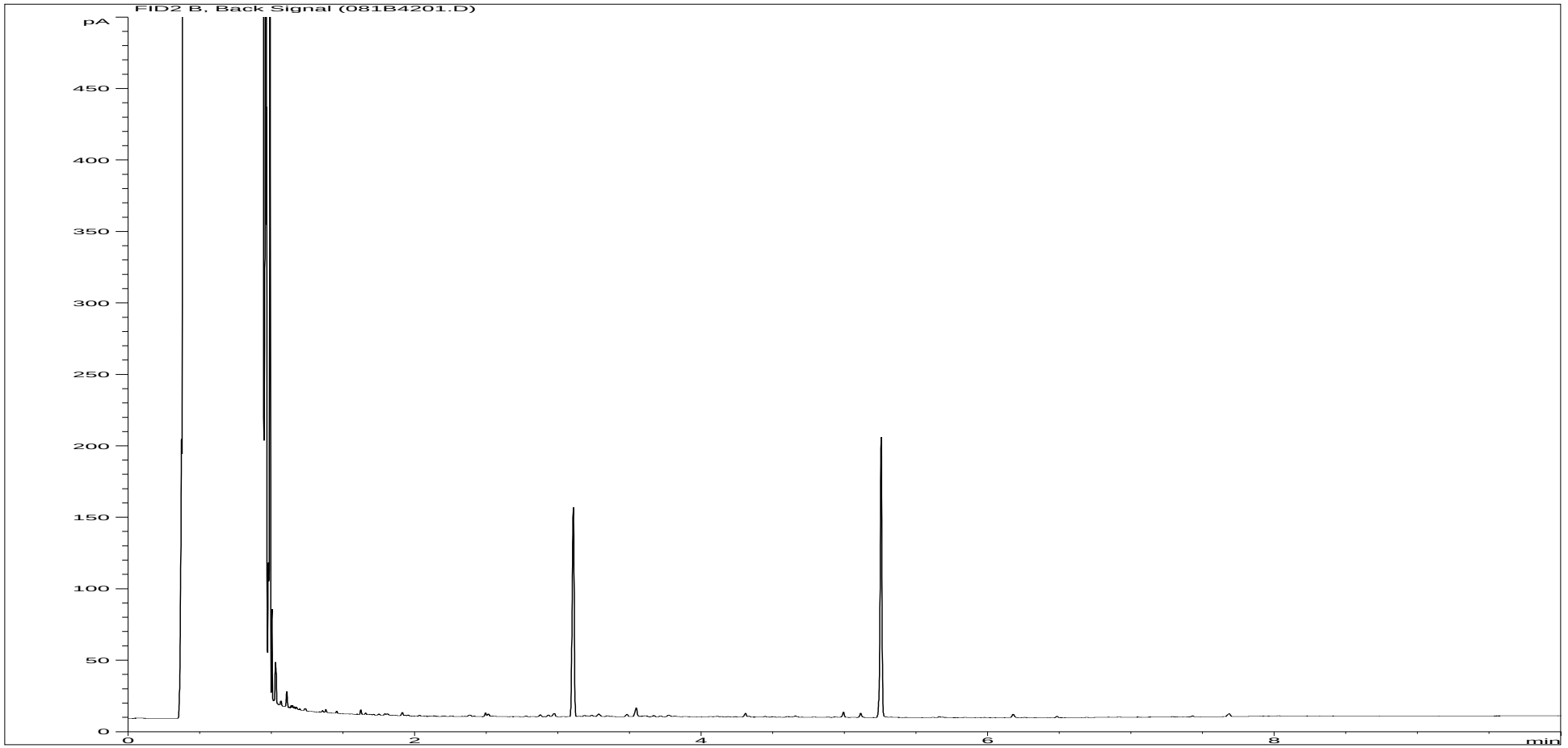
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133058ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	09-Aug-11, 23:05:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\034F4401.D		

Where individual results are flagged see report notes for status.

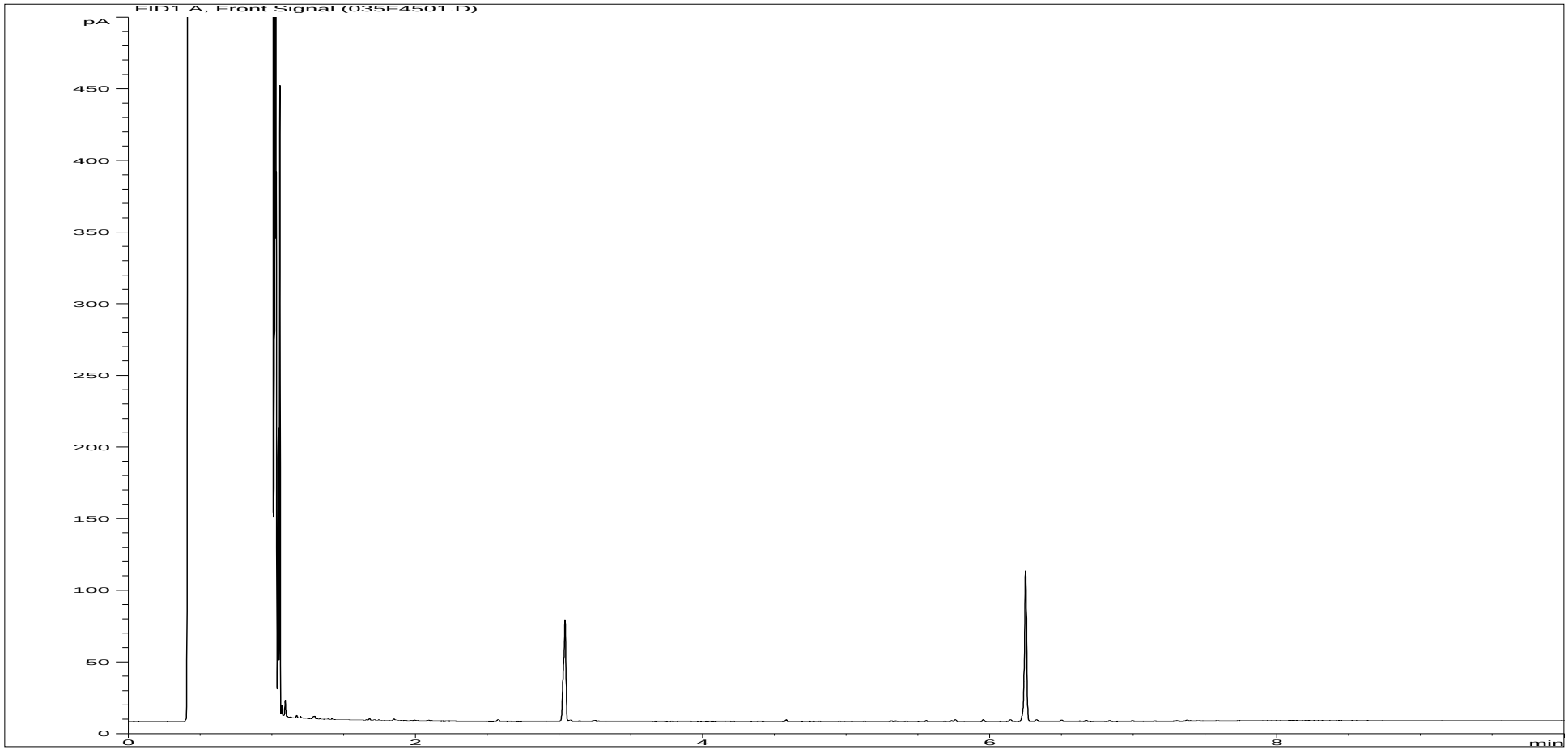
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133058ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	09-Aug-11, 22:31:16		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\081B4201.D		

Where individual results are flagged see report notes for status.

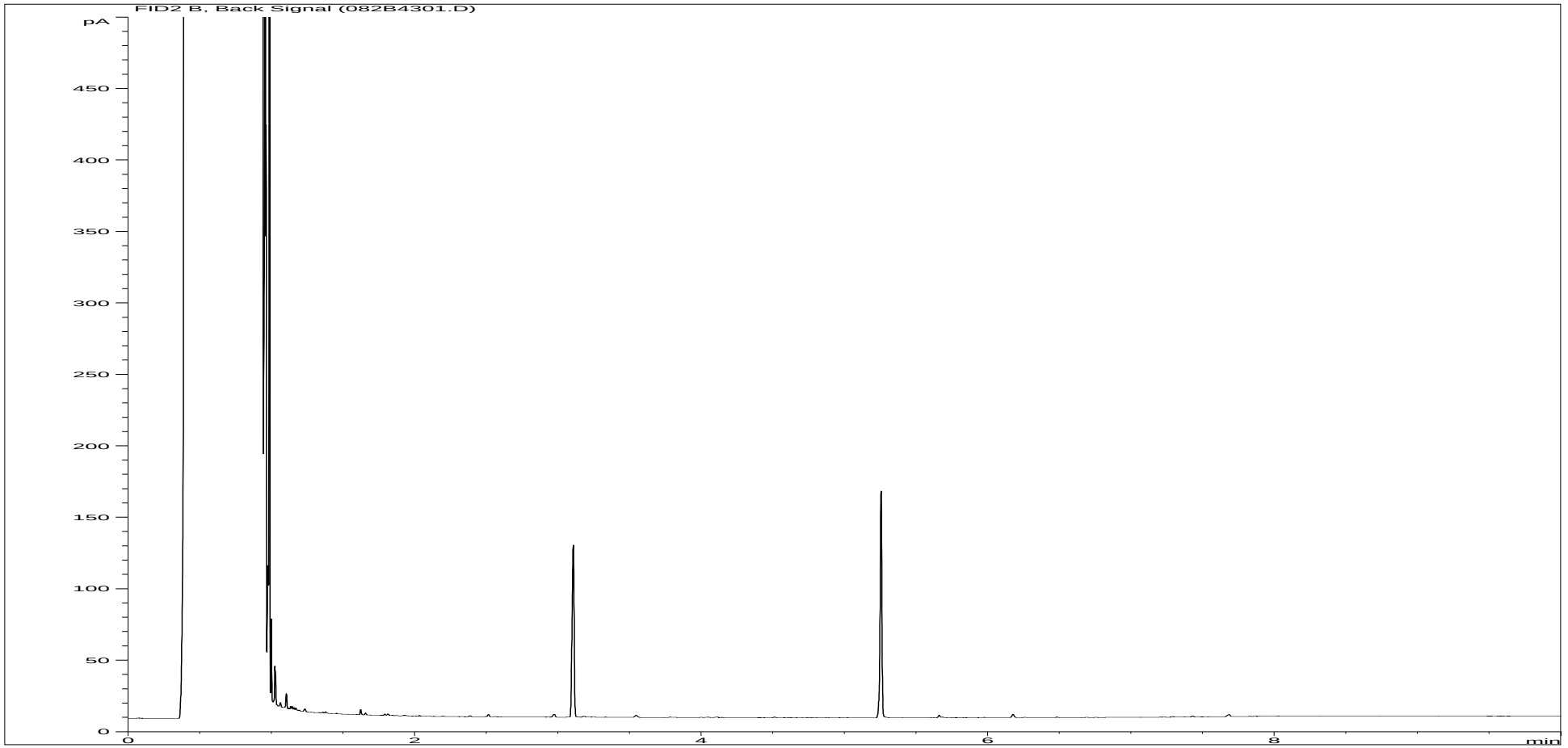
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133059ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	09-Aug-11, 23:22:42		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\035F4501.D		

Where individual results are flagged see report notes for status.

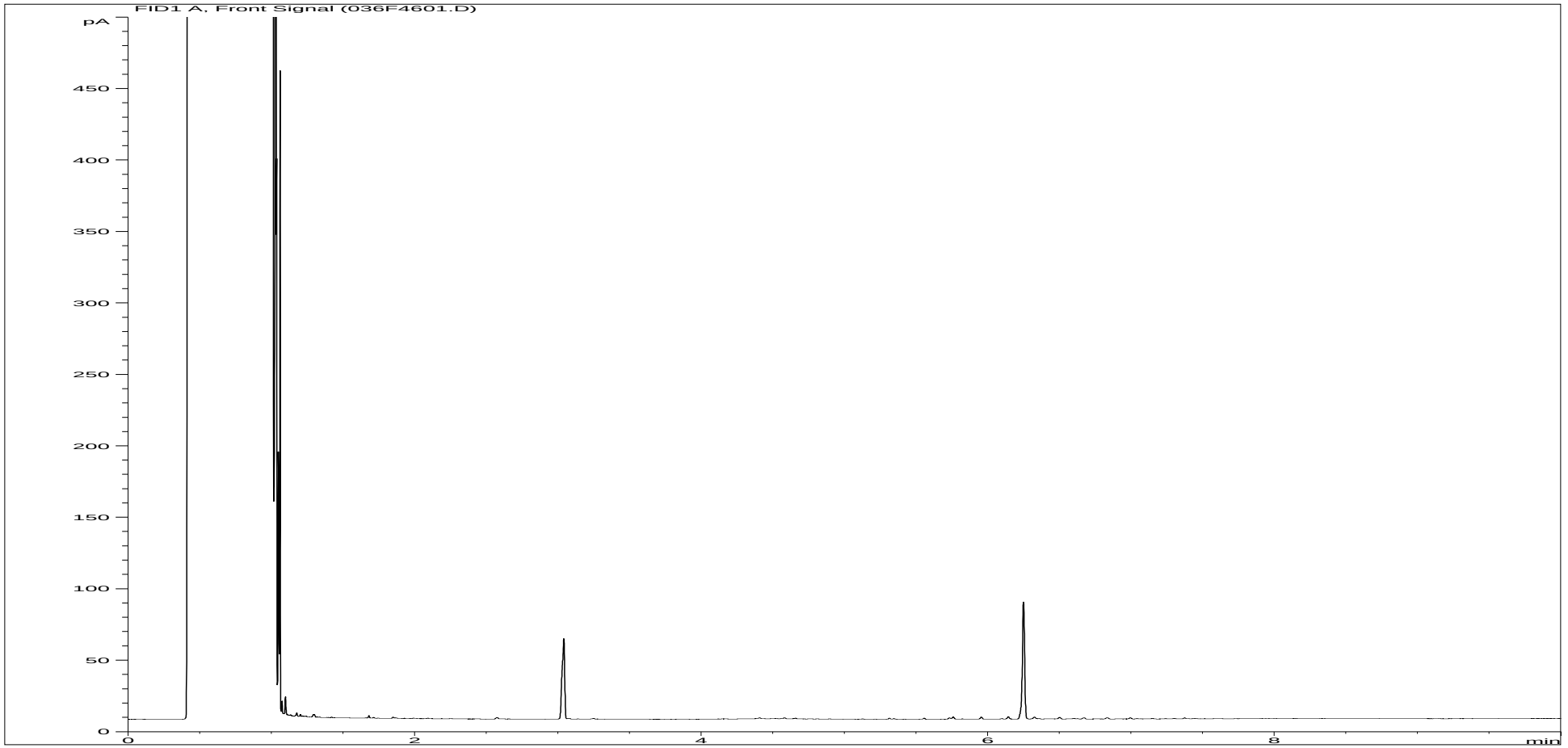
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133059ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	09-Aug-11, 22:48:25		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\082B4301.D		

Where individual results are flagged see report notes for status.

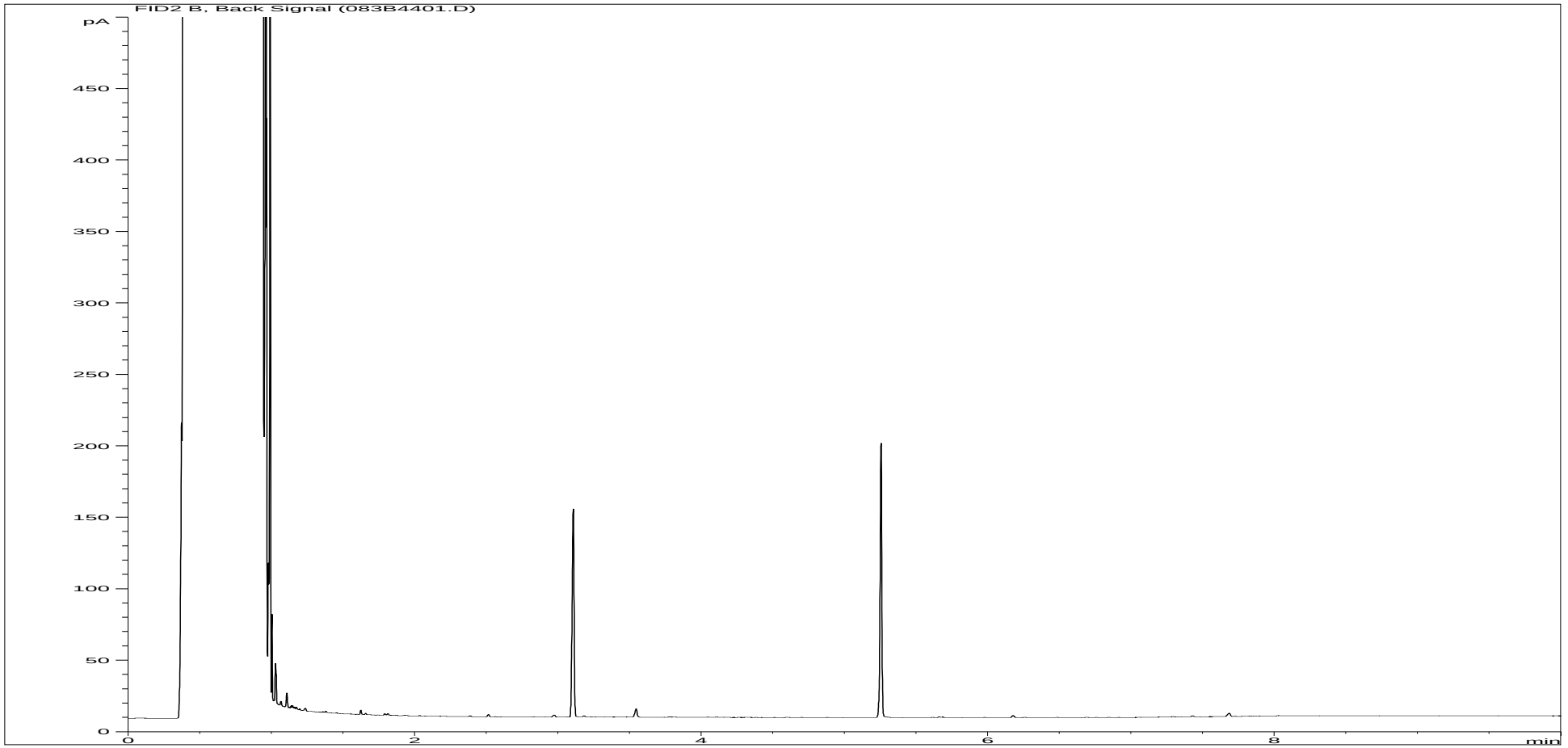
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133060ALI	**Job Number:**	W12_3669
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	09-Aug-11, 23:40:02		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\036F4601.D		

Where individual results are flagged see report notes for status.

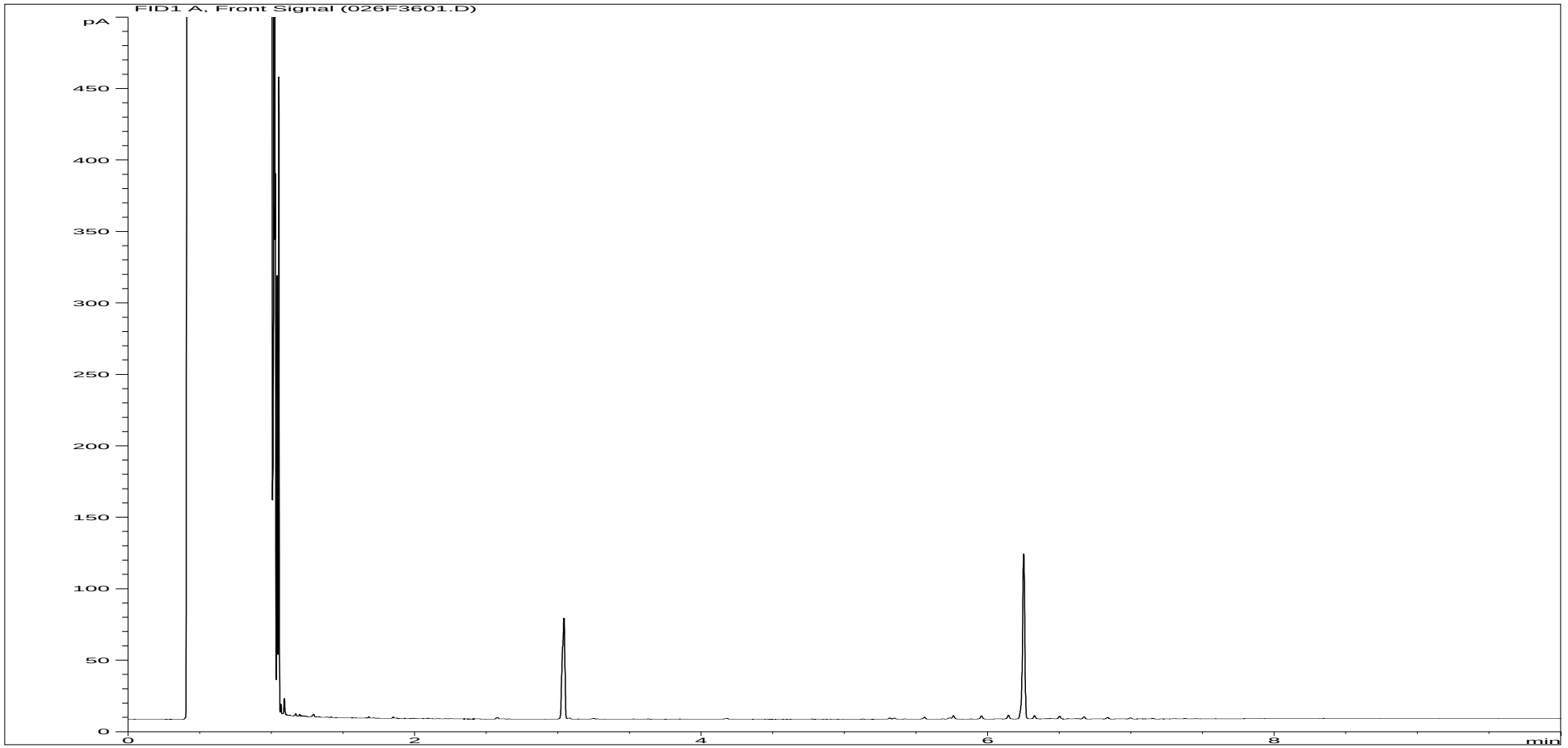
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133060ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	09-Aug-11, 23:05:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\083B4401.D		

Where individual results are flagged see report notes for status.

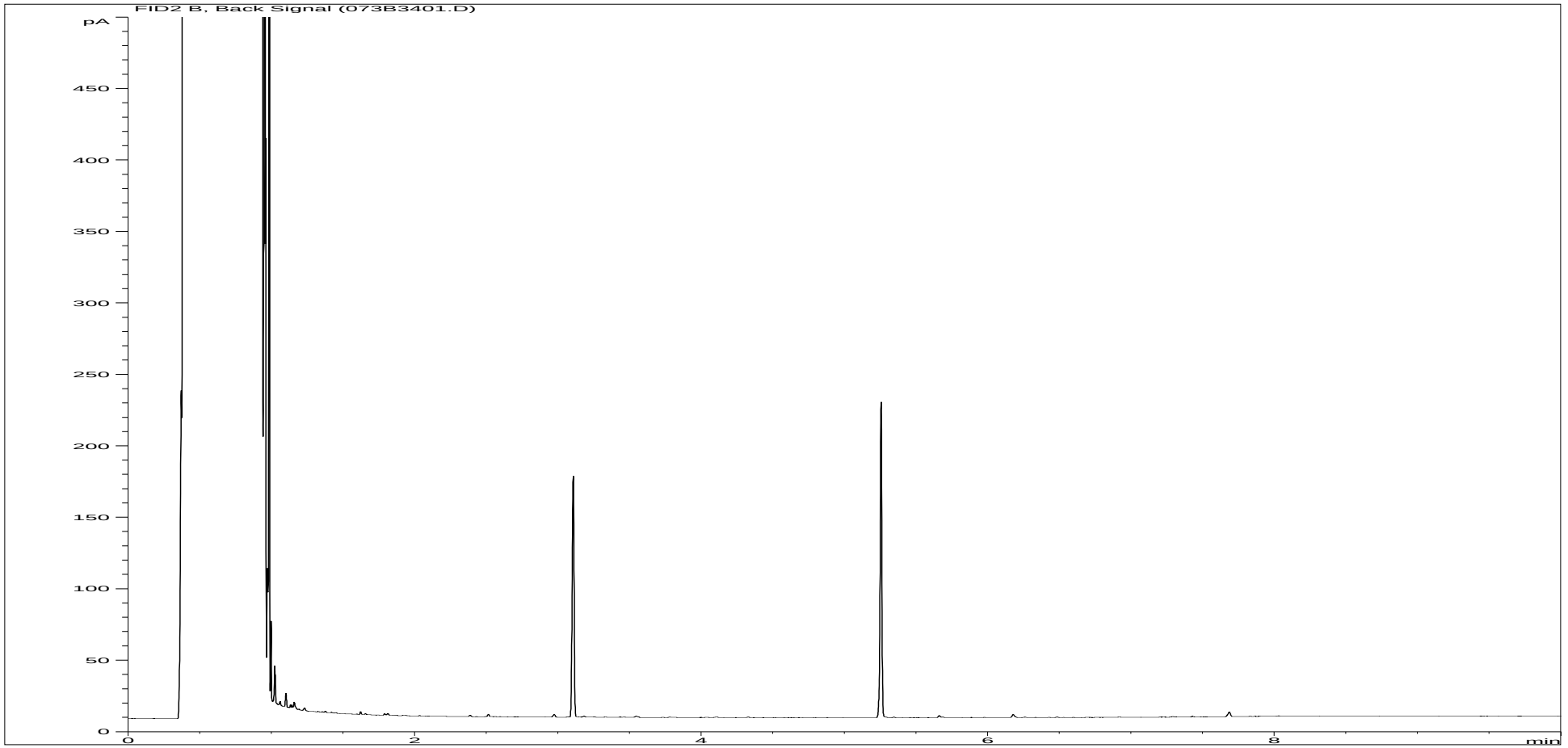
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133061ALI	**Job Number:**	W12_3669
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank
Acquisition Date/Time:	09-Aug-11, 20:47:54		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\026F3601.D		

Where individual results are flagged see report notes for status.

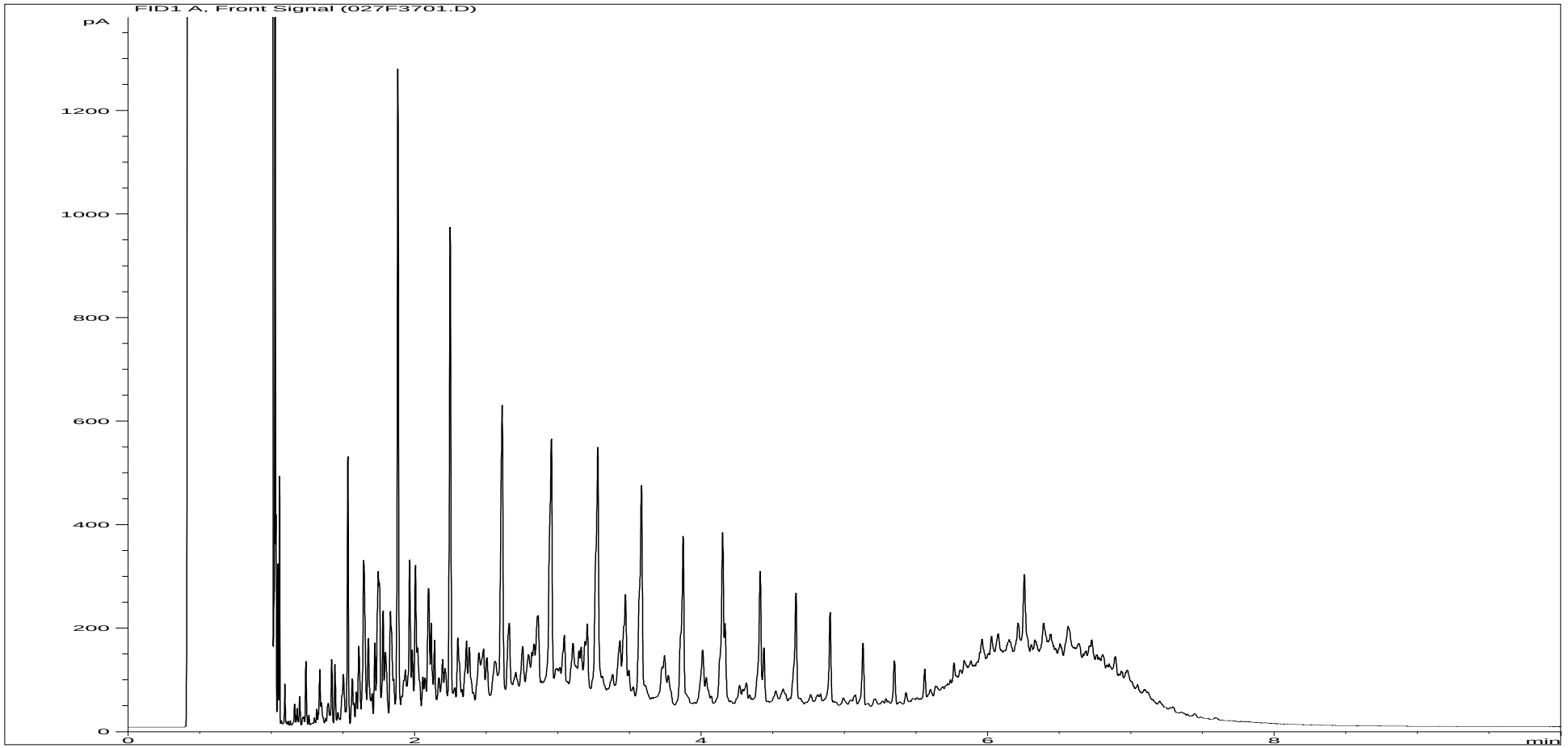
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133061ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank
Acquisition Date/Time:	09-Aug-11, 20:13:18		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\073B3401.D		

Where individual results are flagged see report notes for status.

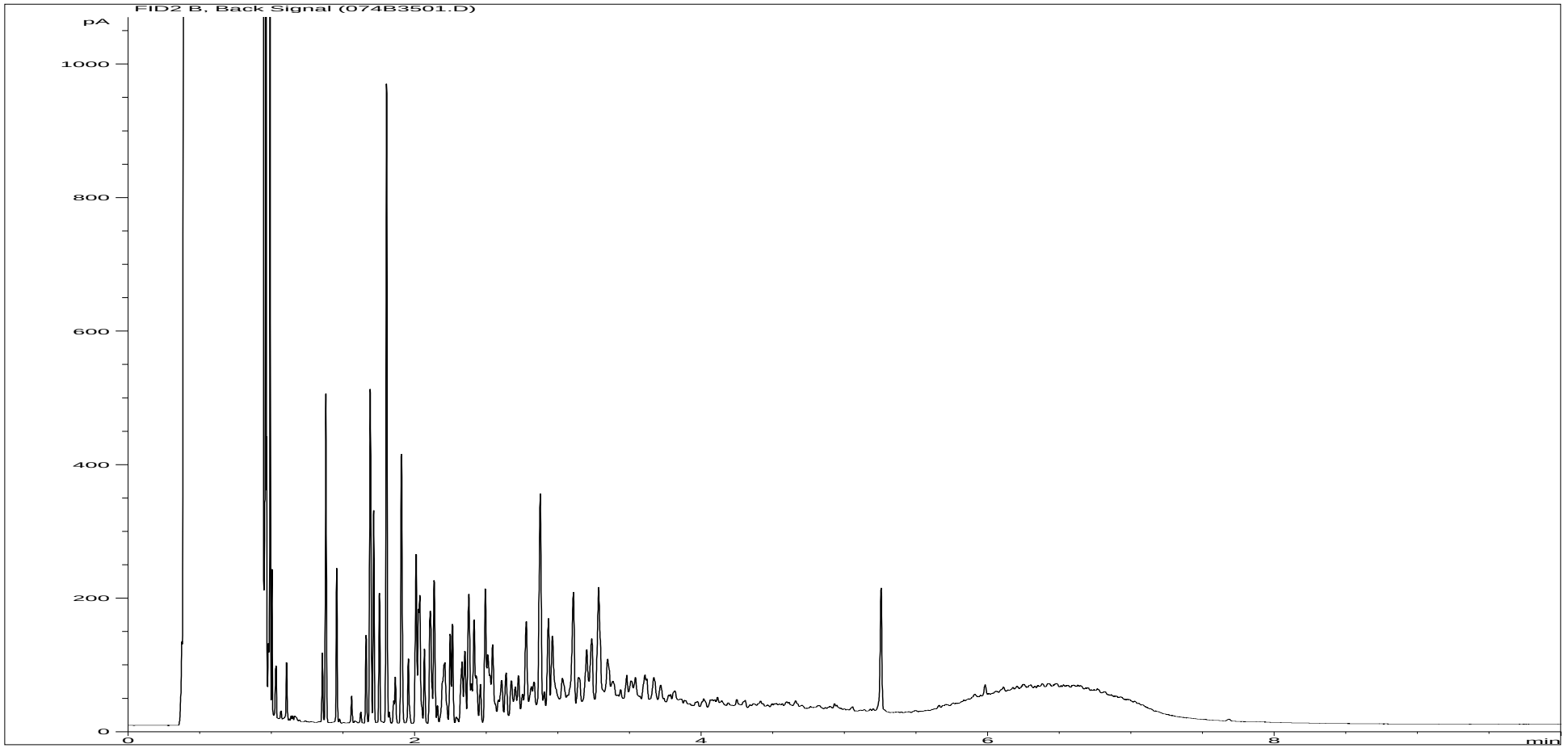
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1133062ALI	**Job Number:**	W12_3669
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank Spike
Acquisition Date/Time:	09-Aug-11, 21:05:13		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\027F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1133062ARO	**Job Number:**	W12_3669
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123669 Blank Spike
Acquisition Date/Time:	09-Aug-11, 20:30:17		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\074B3501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123669

Customer Worley Parsons Komex
Site Maelor Works
Report No W123669

Consignment No 28261
Date Logged 02-Aug-2011

Report Due 15-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1133058	MW11-10	01/08/11																									
EX/1133059	MW3	01/08/11																									
EX/1133060	MW11-17	01/08/11																									
EX/1133061	Report 123669 Blank	01/08/11																									
EX/1133062	Report 123669 Blank Spike	01/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123669

Customer **Worley Parsons Komex**
Site **Maelor Works**
Report No **W123669**

Consignment No 28261
Date Logged 02-Aug-2011

Report Due 15-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1133058	MW11-10	01/08/11															
EX/1133059	MW3	01/08/11															
EX/1133060	MW11-17	01/08/11															
EX/1133061	Report 123669 Blank	01/08/11															
EX/1133062	Report 123669 Blank Spike	01/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123605 (Ver. 1)
Your Ref: 305001-50065-29

August 12, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123605 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 9 samples described in this report were logged for analysis by Scientifics on 01-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 12-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 13)
Table of TPH (Si) banding (0.01) (Page 14)
GC-FID Chromatograms (Pages 15 to 32)
Analytical and Deviating Sample Overview (Pages 33 to 34)
Table of Method Descriptions (Page 35)
Table of Report Notes (Page 36)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 12-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132782	MW11-1	**28-Jul-11**	7.2	1010	98	363	87	181	89	34	69	4	0.002	0.002	<0.0001	Req	0.002	<0.001
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132784	MW99-107	**29-Jul-11**	6.9	4780	182	2161	1350	111	576	175	124	3	0.006	0.004	0.0003	Req	<0.001	<0.001
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132786	MW99-110	**29-Jul-11**	7.2	906	124	216	129	69	75	7	76	5	0.003	0.002	<0.0001	Req	<0.001	<0.001
1132787	MW99-204	**29-Jul-11**	7.4	436	33	156	16	51	56	4	10	9	<0.001	0.002	<0.0001	Req	<0.001	<0.001
1132788	QC Blank		7.06	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132789	Blank Spike (% Recovery)				100		101	97	96	98	99	99	97	95	92	Req	97	98

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

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Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
Method Reporting Limits :			0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132782	MW11-1	28-Jul-11	0.009	1.08	0.98	2.06	<0.01	<0.001	<0.0001	0.003	0.02	0.4	<0.2	<0.02	0.04	<0.05	3.7	<0.1
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132784	MW99-107	29-Jul-11	0.006	1.92	2.15	4.07	<0.01	0.001	<0.0001	0.003	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.1	<0.1
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1132786	MW99-110	29-Jul-11	0.012	1.94	0.63	2.57	<0.01	<0.001	<0.0001	<0.001	1.4	0.3	<0.2	<0.02	<0.02	0.05	2.5	<0.1
1132787	MW99-204	29-Jul-11	<0.002	21.5	0.88	22.4	0.06	<0.001	<0.0001	0.002	0.05	0.2	<0.2	<0.02	<0.02	<0.05	2.4	<0.1
1132788	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132789	Blank Spike (% Recovery)		94		96	99	96	96	96	91	100		99	99	97	104	102	99

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
UKAS Accredited :			yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1132782	MW11-1	**28-Jul-11**	Req	0.12	<0.04	6.3	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1132784	MW99-107	**29-Jul-11**	Req	0.29	<0.02	4.5	<1	4	<1	<1	<7	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1132786	MW99-110	**29-Jul-11**	Req	6.14	<0.02	3.7	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132787	MW99-204	**29-Jul-11**	Req	1.35	<0.02	5.2	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132788	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132789	Blank Spike (% Recovery)		Req	101			97	85	79	81	244	89	100	105	99	106		

scientifics

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	12-Aug-11
Report Number	**EXR/123605**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1	**Job Number:**	W12_3605
LIMS ID Number:	EX1132782	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.017	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.167	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	76
Phenanthrene-d10	76
Chrysene-d12	74
Perylene-d12	67

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	78
Terphenyl-d14	94

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-4	**Job Number:**	W12_3605
LIMS ID Number:	EX1132783	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	451.000	100
Acenaphthylene	208-96-8	4.31	0.125	M
Acenaphthene	83-32-9	4.43	0.441	71
Fluorene	86-73-7	4.81	0.061	M
Phenanthrene	85-01-8	5.65	0.044	M
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.99	0.016	M
Pyrene	129-00-0	7.28	0.015	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 451.792	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	56
Acenaphthene-d10	88
Phenanthrene-d10	88
Chrysene-d12	88
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	70
Terphenyl-d14	84

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-107	**Job Number:**	W12_3605
LIMS ID Number:	EX1132784	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.26	0.086	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.236	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	77
Acenaphthene-d10	76
Phenanthrene-d10	76
Chrysene-d12	74
Perylene-d12	66

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-110	**Job Number:**	W12_3605
LIMS ID Number:	EX1132786	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	7.00	0.011	M
Pyrene	129-00-0	7.28	0.013	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.164	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	72
Acenaphthene-d10	74
Phenanthrene-d10	74
Chrysene-d12	70
Perylene-d12	63

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	91
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-204	**Job Number:**	W12_3605
LIMS ID Number:	EX1132787	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.28	0.014	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.164	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	74
Phenanthrene-d10	74
Chrysene-d12	72
Perylene-d12	63

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123605 Blank	**Job Number:**	W12_3605
LIMS ID Number:	EX1132788	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	72
Acenaphthene-d10	72
Phenanthrene-d10	72
Chrysene-d12	68
Perylene-d12	59

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	88
Terphenyl-d14	99

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123605 Blank Spike	**Job Number:**	W12_3605
LIMS ID Number:	EX1132789	**Date Booked in:**	01-Aug-11
QC Batch Number:	110715	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.26	87	0
Acenaphthylene	208-96-8	4.31	84	0
Acenaphthene	83-32-9	4.43	88	0
Fluorene	86-73-7	4.81	90	0
Phenanthrene	85-01-8	5.66	99	0
Anthracene	120-12-7	5.71	91	0
Fluoranthene	206-44-0	6.99	94	0
Pyrene	129-00-0	7.28	92	0
Benzo[a]anthracene	56-55-3	8.96	104	0
Chrysene	218-01-9	9.01	99	0
Benzo[b]fluoranthene	205-99-2	10.49	97	0
Benzo[k]fluoranthene	207-08-9	10.53	84	0
Benzo[a]pyrene	50-32-8	10.92	89	0
Indeno[1,2,3-cd]pyrene	193-39-5	12.30	68	0
Dibenzo[a,h]anthracene	53-70-3	12.34	73	0
Benzo[g,h,i]perylene	191-24-2	12.60	77	0
Total (USEPA16) PAHs	-	-	88	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	68
Acenaphthene-d10	66
Phenanthrene-d10	65
Chrysene-d12	62
Perylene-d12	56

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	101
Terphenyl-d14	112

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3605
QC Batch Number: 110715
Directory: D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\065B3101.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

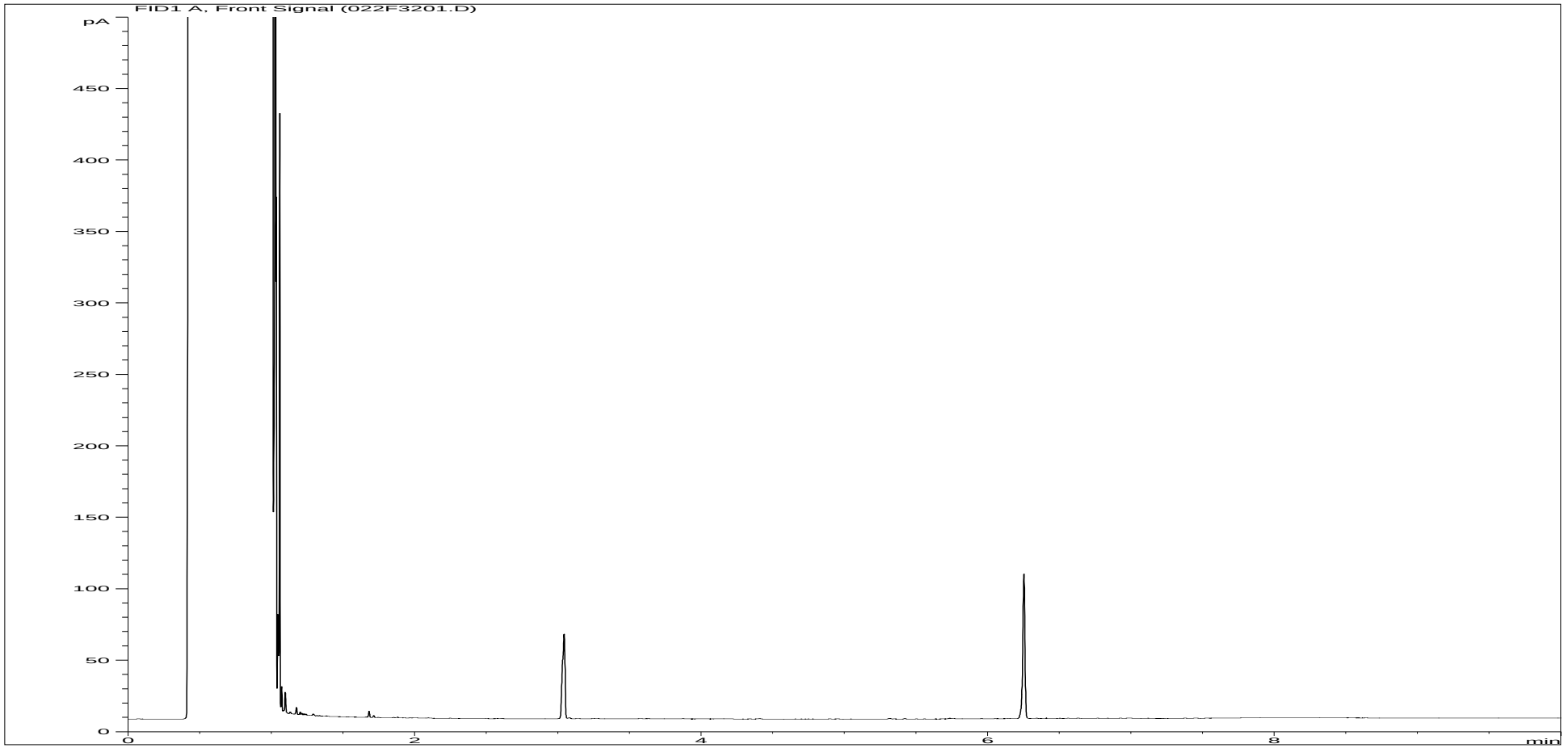
Matrix: Water
Date Booked in 01-Aug-11
Date Extracted 04-Aug-11
Date Analysed 05-Aug-11, 20:09:14

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1132782	MW11-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1132784	MW99-107	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1132786	MW99-110	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132787	MW99-204	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132788	Report 123605 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132789	Report 123605 Blank Spike	0.576	0.189	0.93	0.309	1.75	0.568	1.04	0.288	2.72	0.68	7.08	2.06

Where individual results are flagged see report notes for status.

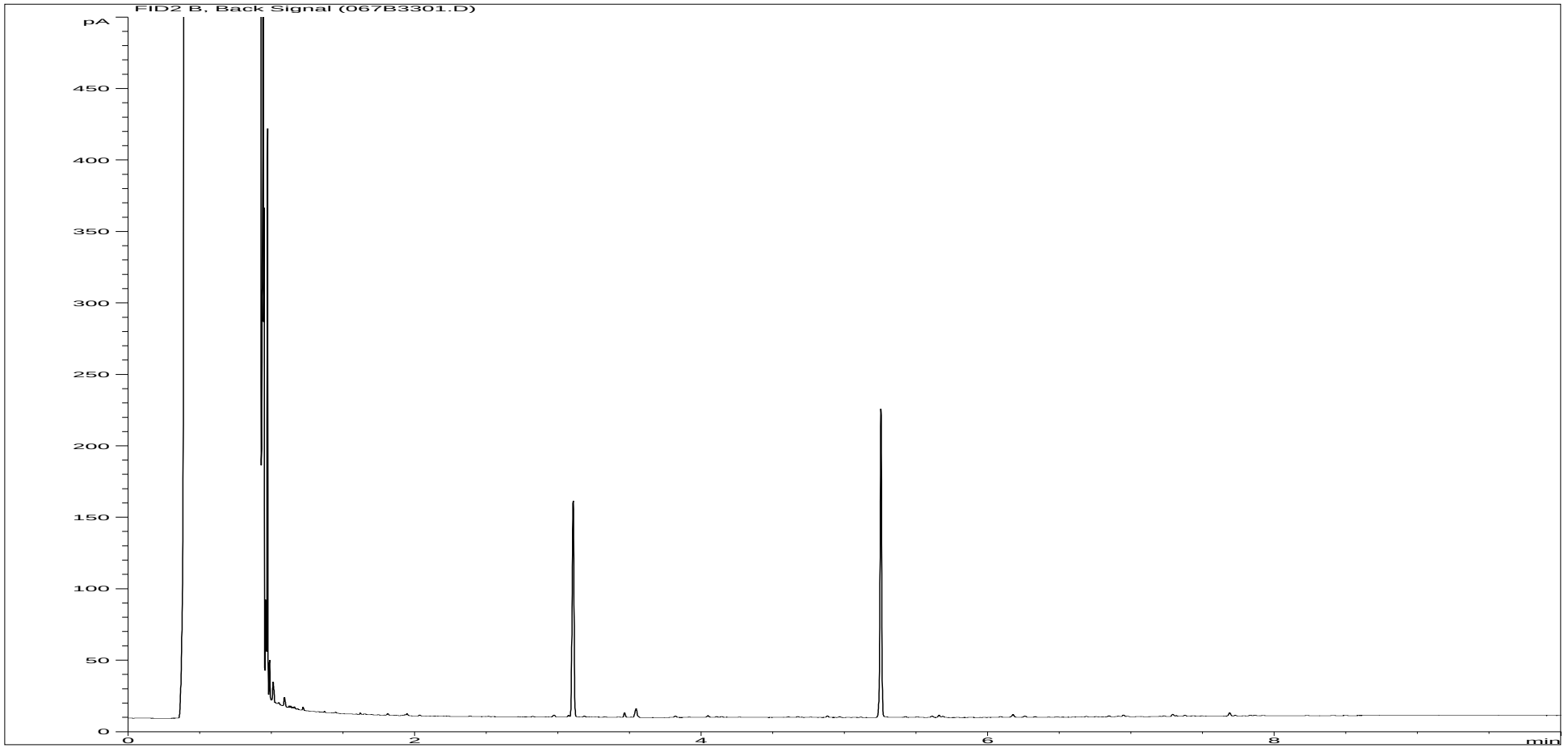
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132782ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	05-Aug-11, 20:27:03		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\022F3201.D		

Where individual results are flagged see report notes for status.

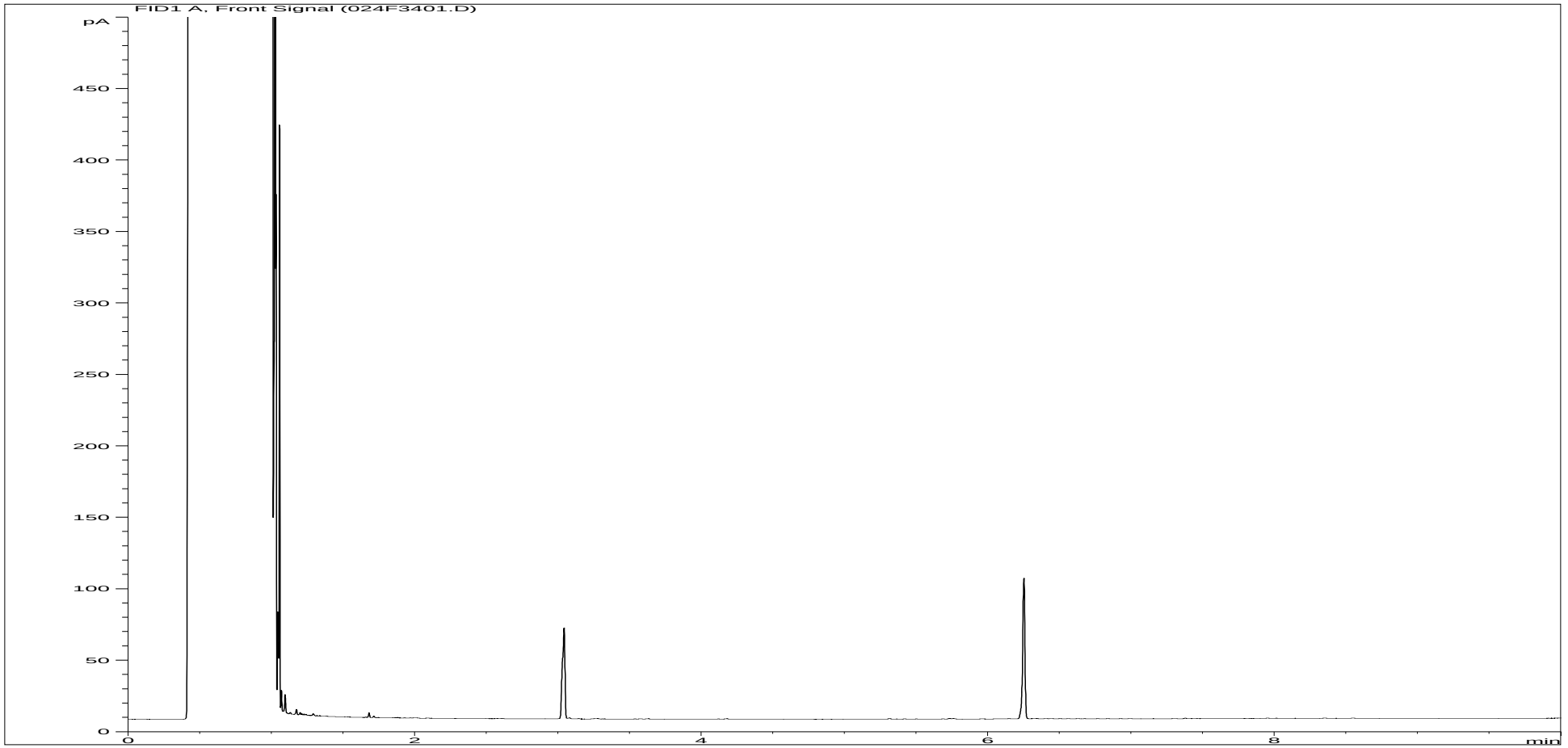
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132782ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	05-Aug-11, 20:44:31		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\067B3301.D		

Where individual results are flagged see report notes for status.

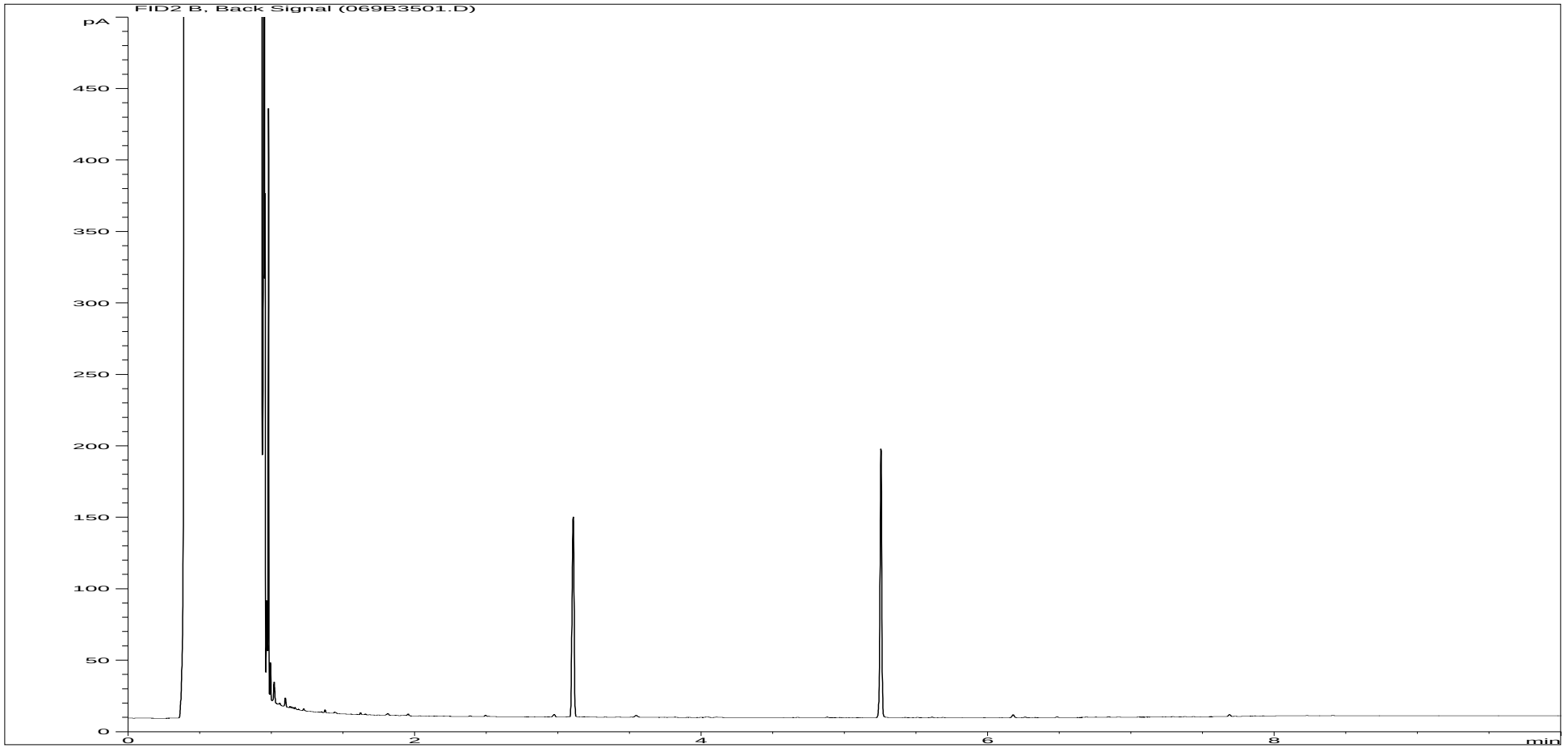
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132784ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	05-Aug-11, 21:01:52		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\024F3401.D		

Where individual results are flagged see report notes for status.

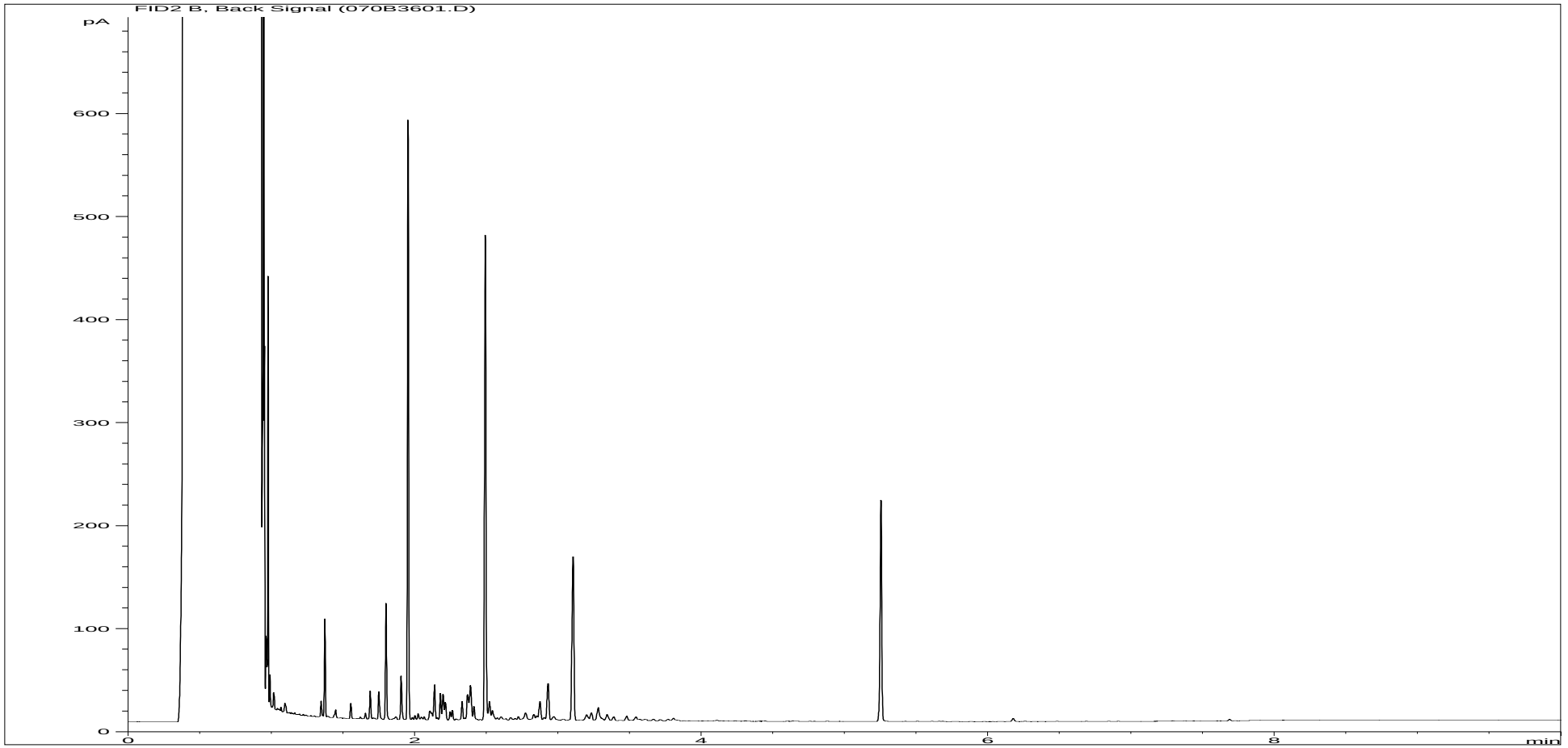
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132784ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	05-Aug-11, 21:19:10		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\069B3501.D		

Where individual results are flagged see report notes for status.

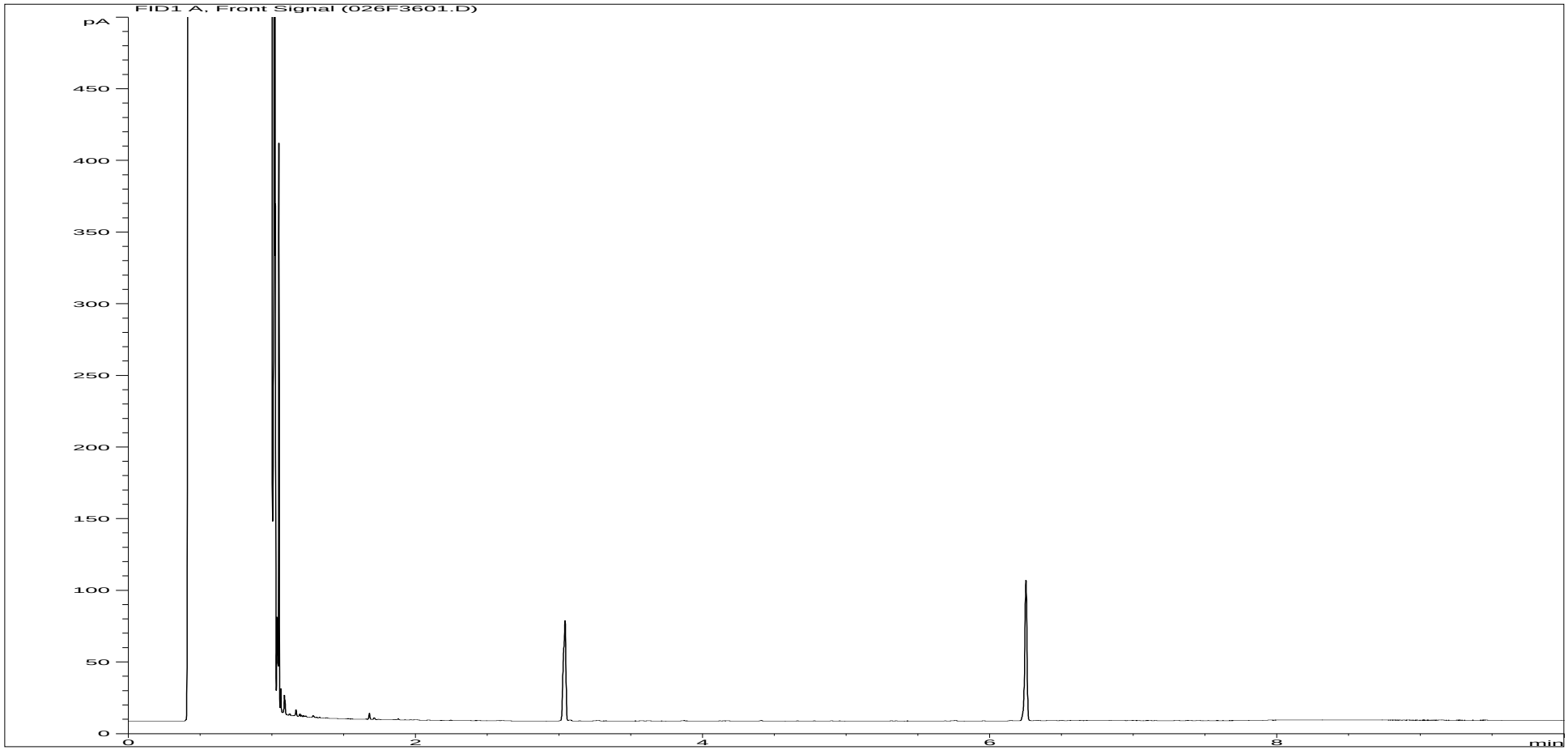
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132785ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-15
Acquisition Date/Time:	05-Aug-11, 21:36:37		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\070B3601.D		

Where individual results are flagged see report notes for status.

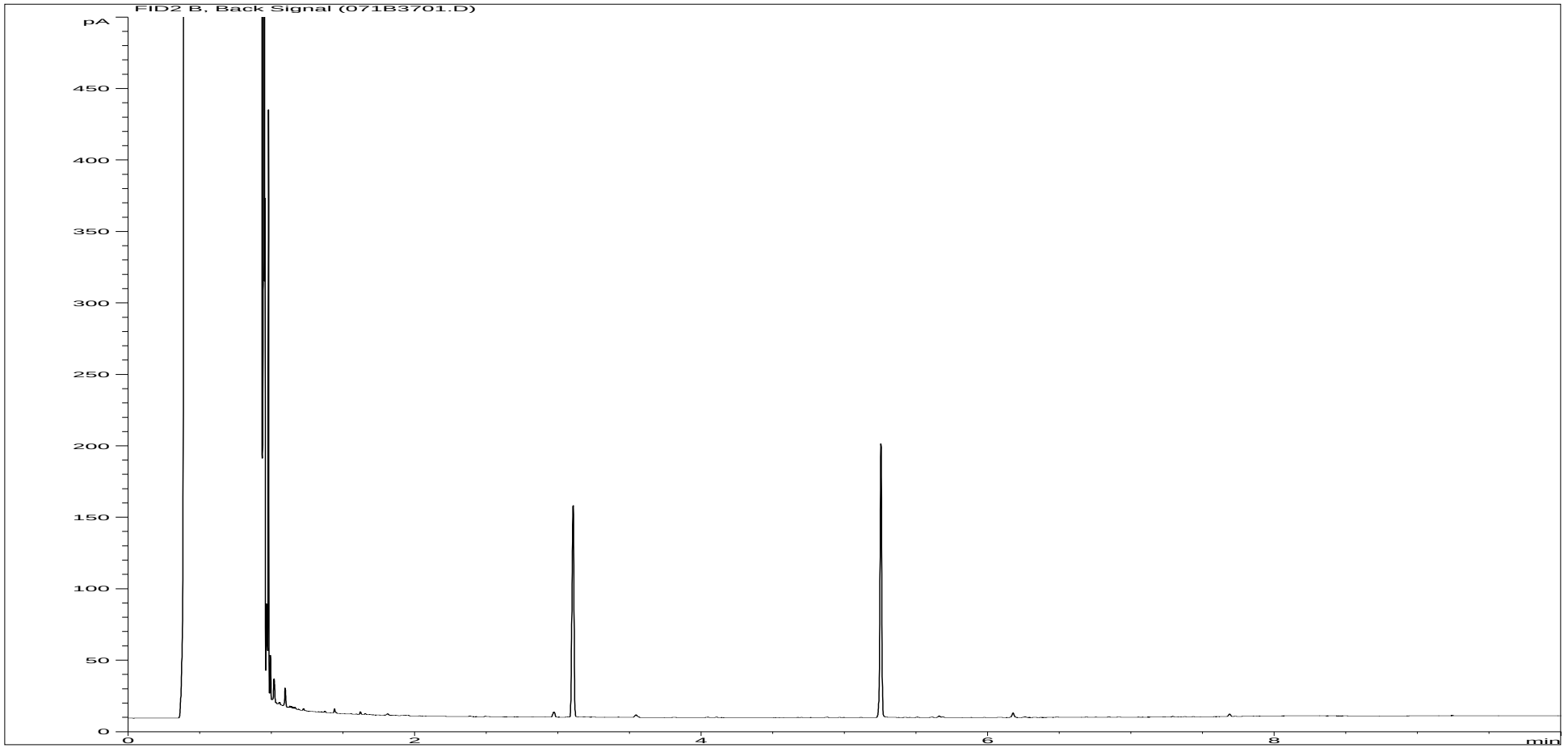
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132786ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	05-Aug-11, 21:36:37		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\026F3601.D		

Where individual results are flagged see report notes for status.

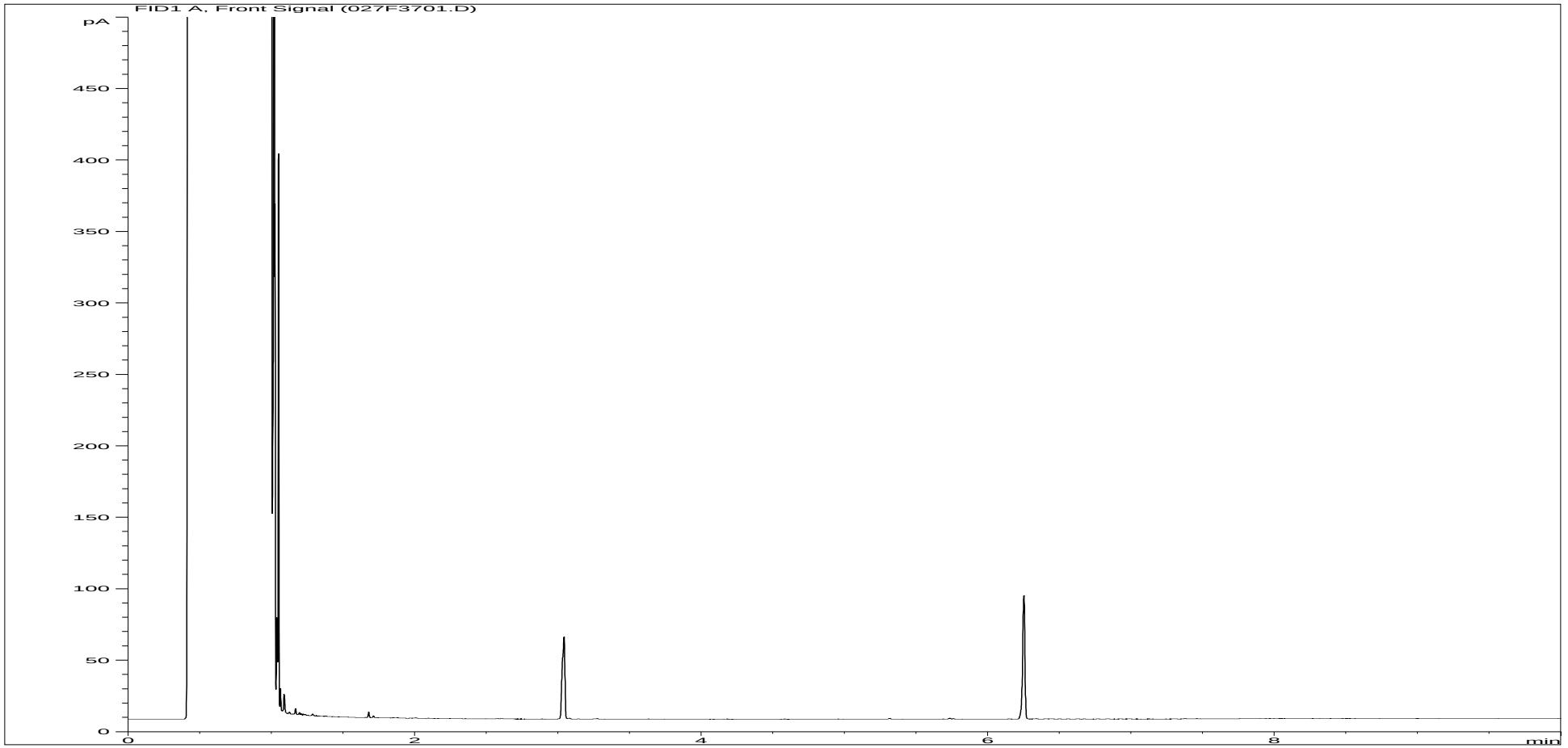
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132786ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	05-Aug-11, 21:54:02		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\071B3701.D		

Where individual results are flagged see report notes for status.

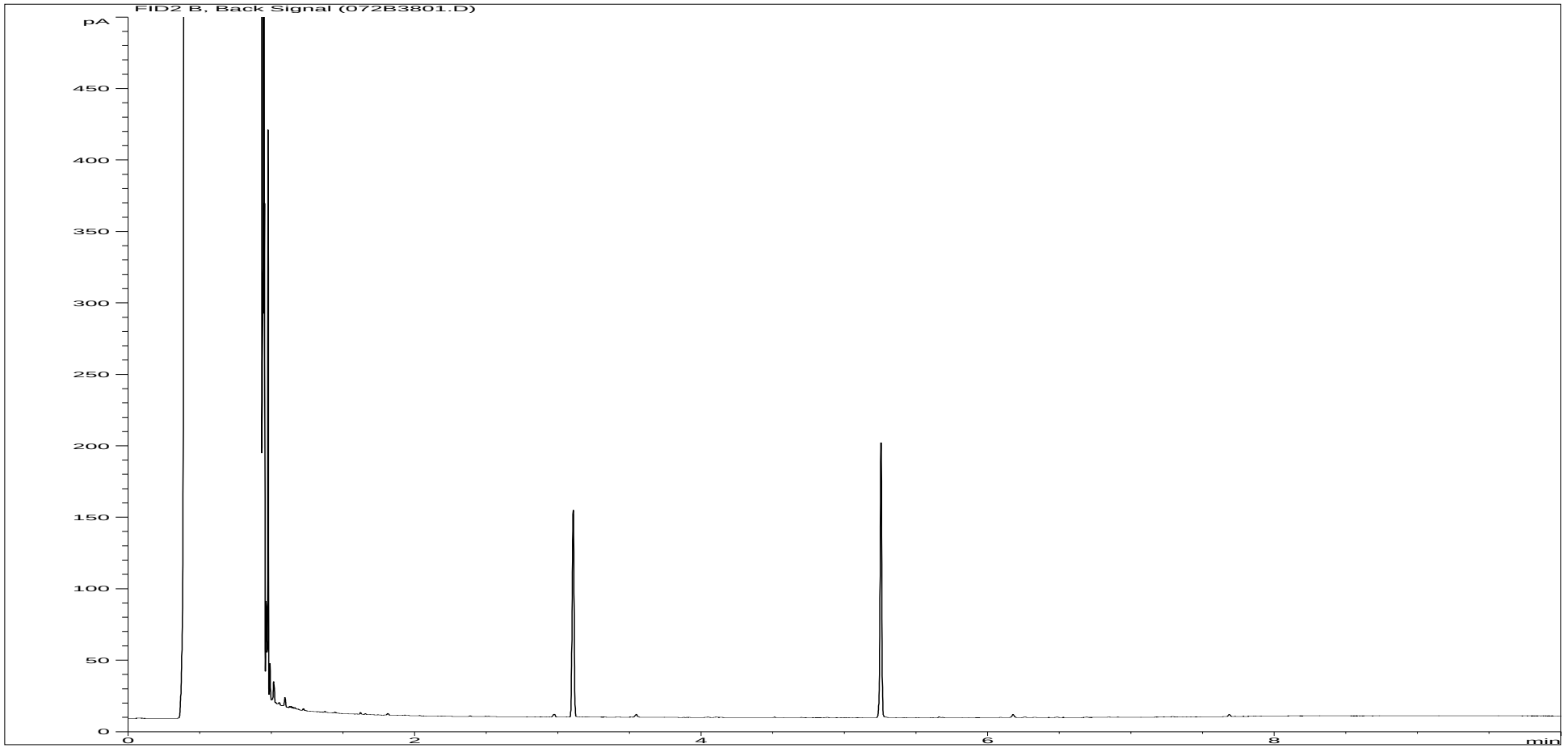
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132787ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	05-Aug-11, 21:54:02		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\027F3701.D		

Where individual results are flagged see report notes for status.

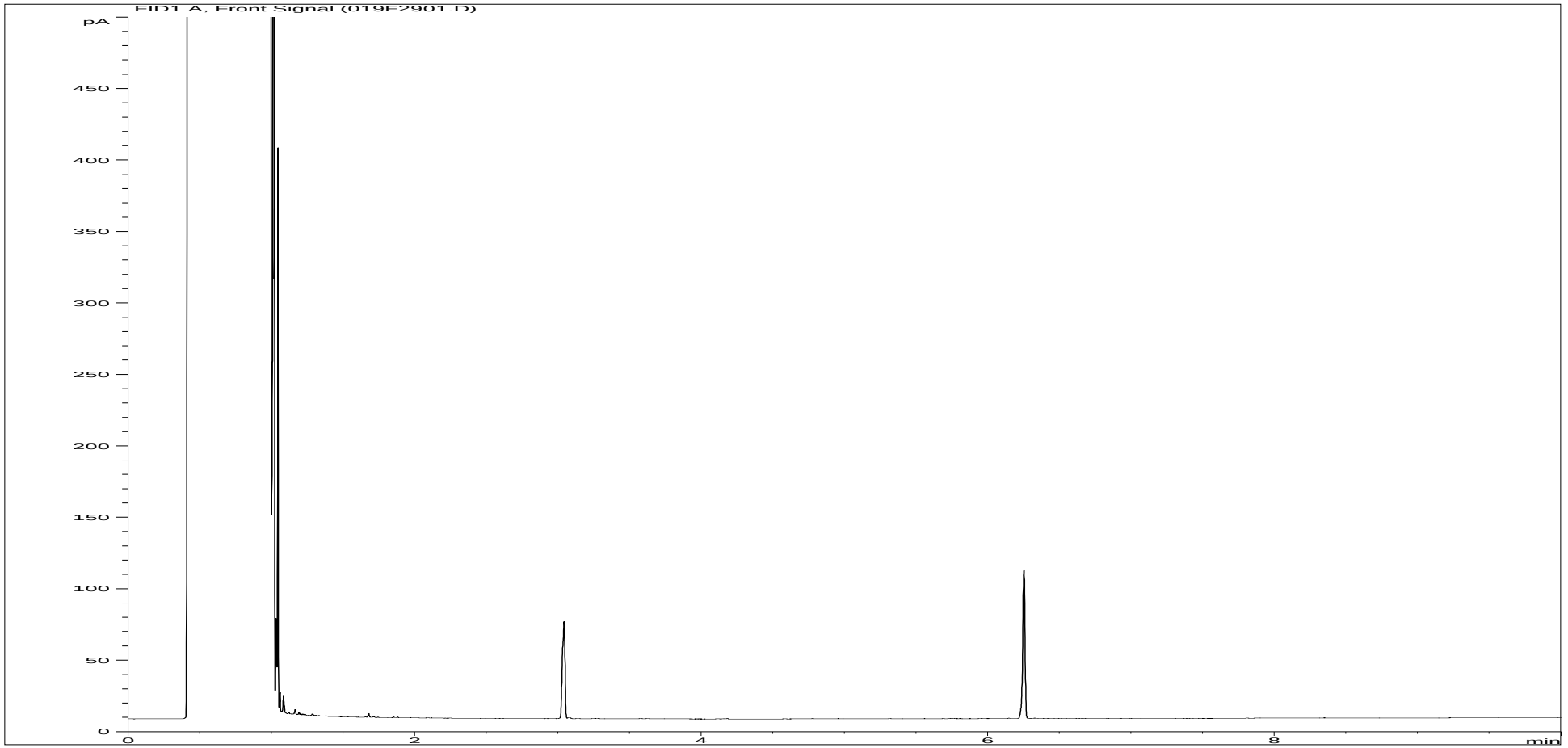
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132787ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	05-Aug-11, 22:11:18		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\072B3801.D		

Where individual results are flagged see report notes for status.

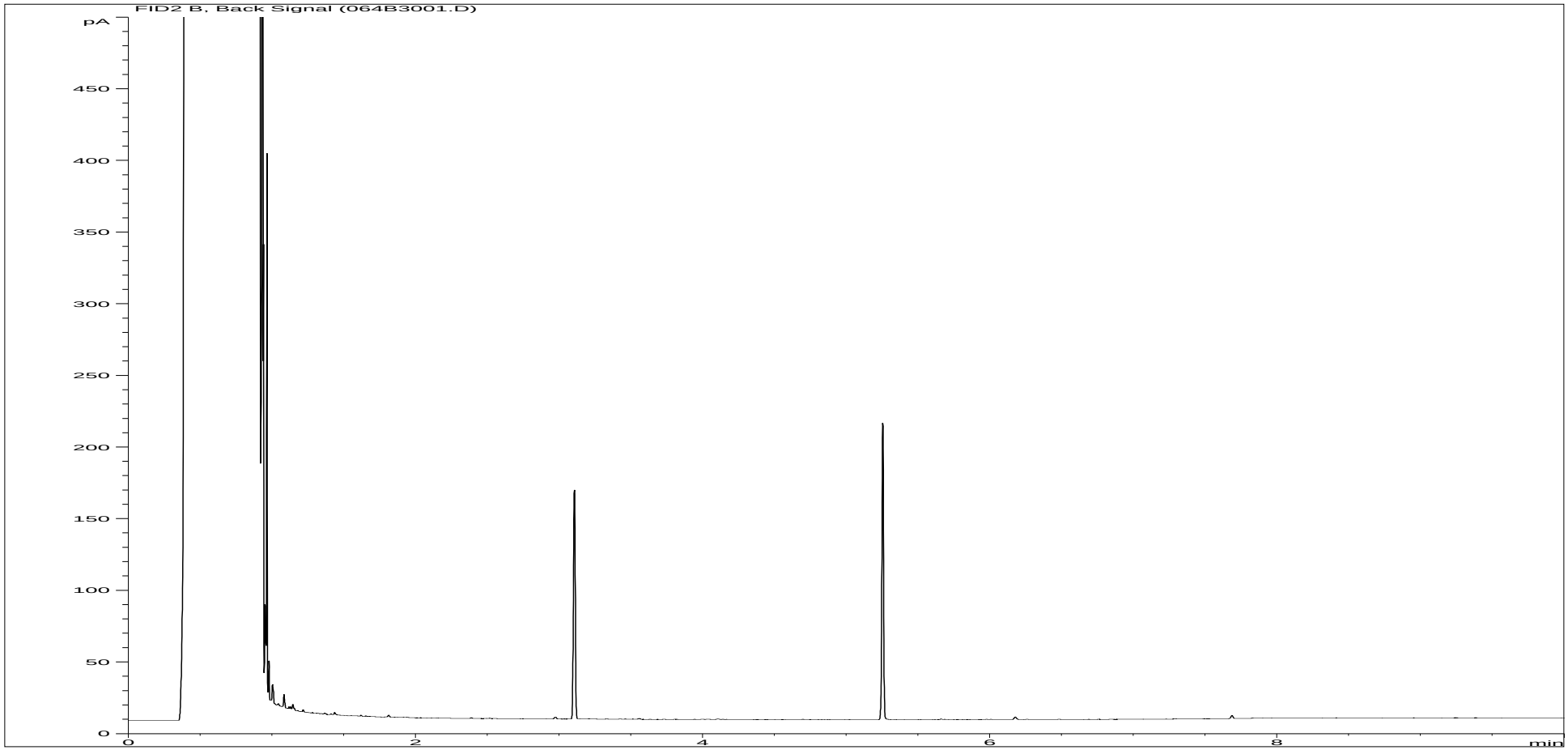
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132788ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank
Acquisition Date/Time:	05-Aug-11, 19:34:07		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\019F2901.D		

Where individual results are flagged see report notes for status.

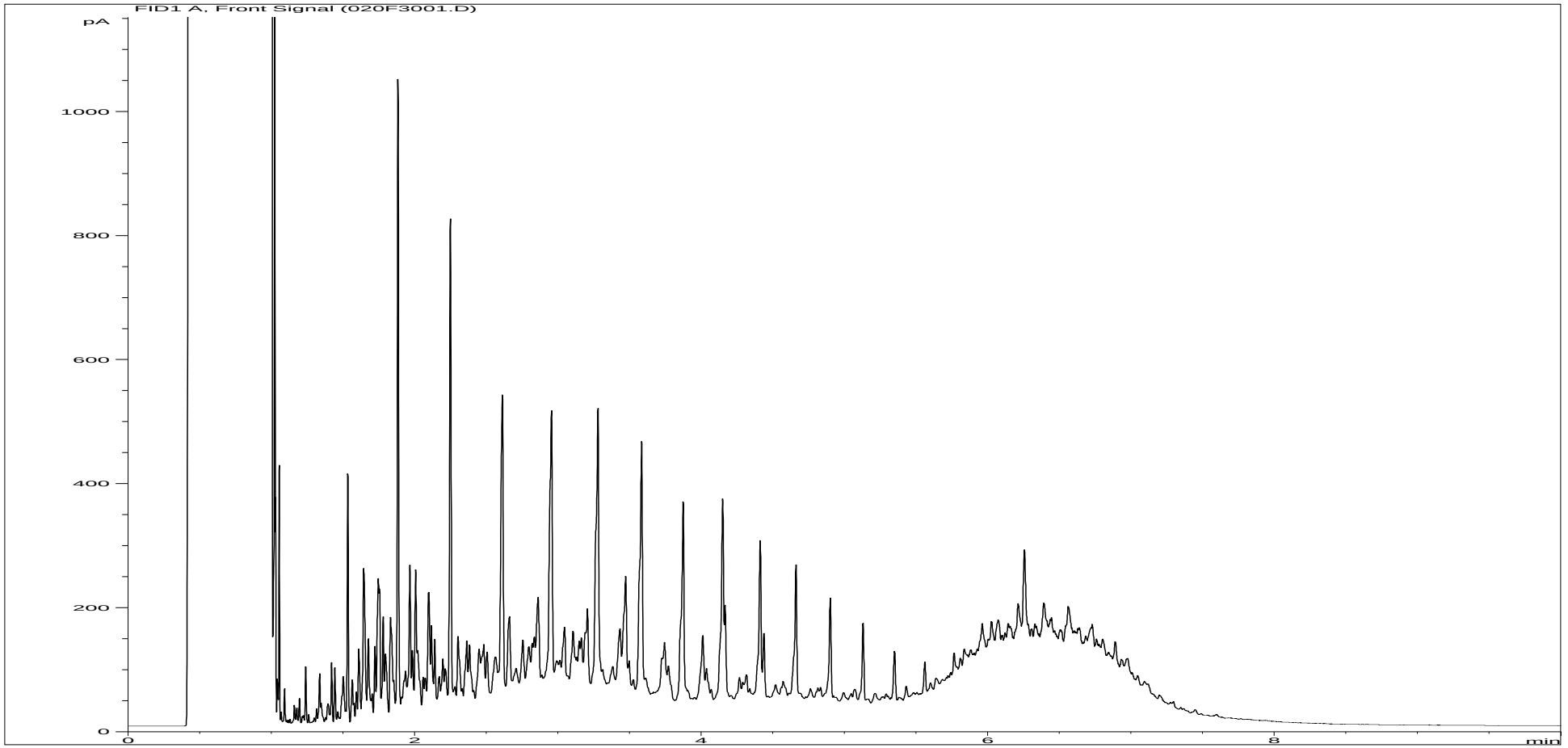
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132788ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank
Acquisition Date/Time:	05-Aug-11, 19:51:34		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\064B3001.D		

Where individual results are flagged see report notes for status.

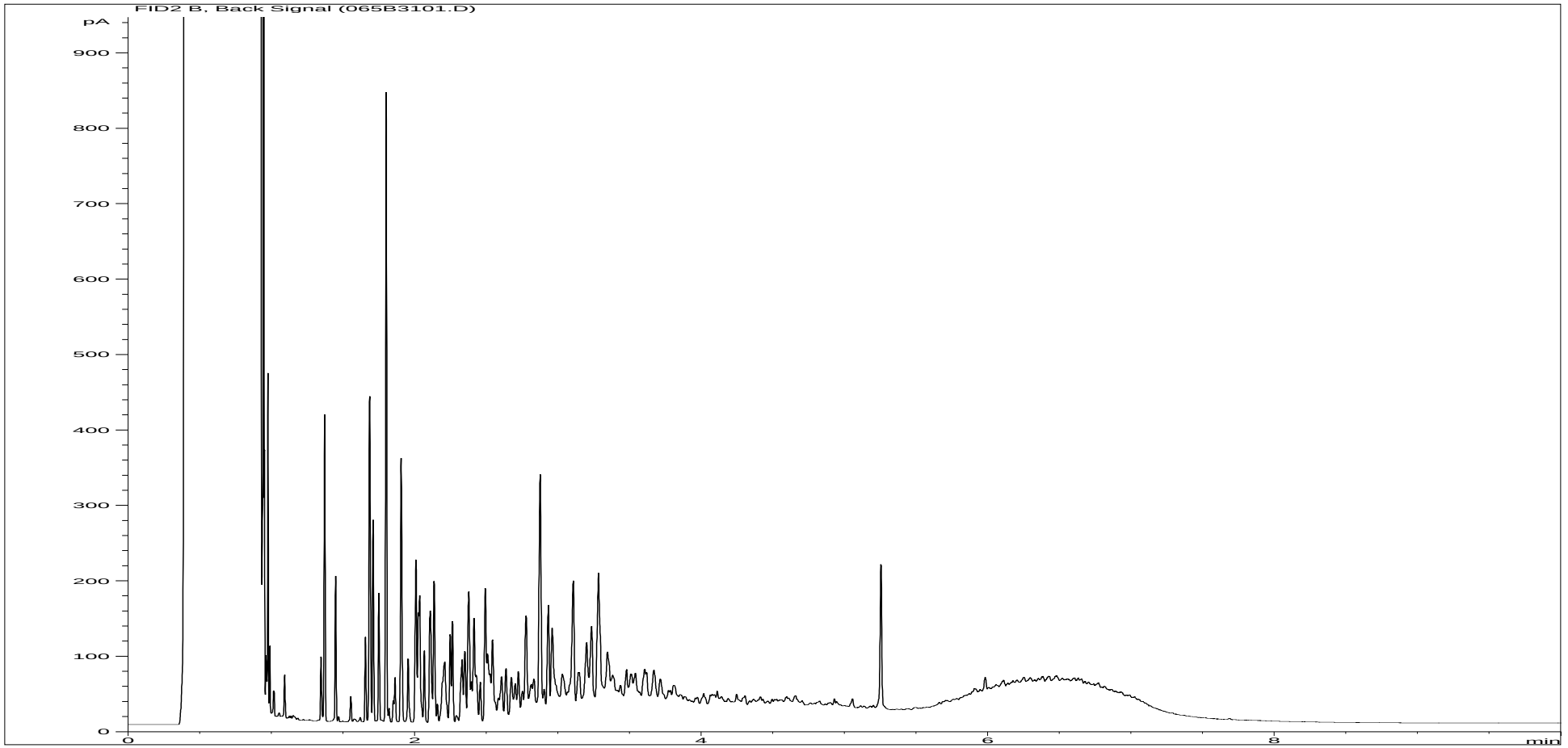
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132789ALI	**Job Number:**	W12_3605
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank Spike
Acquisition Date/Time:	05-Aug-11, 19:51:34		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\020F3001.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132789ARO	**Job Number:**	W12_3605
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123605 Blank Spike
Acquisition Date/Time:	05-Aug-11, 20:09:14		
Datafile:	D:\TES\DATA\Y2011\080511TPH_GC15\080511 2011-08-05 08-14-13\065B3101.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W123605

Consignment No 28243
Date Logged 01-Aug-2011

Report Due 12-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[redacted]	[redacted]	[redacted]																									
EX/1132782	MW11-1	28/07/11																									
[redacted]	[redacted]	[redacted]																									
EX/1132784	MW99-107	29/07/11																									
[redacted]	[redacted]	[redacted]																									
EX/1132786	MW99-110	29/07/11																									
EX/1132787	MW99-204	29/07/11																									
EX/1132788	Report 123605 Blank																										
EX/1132789	Report 123605 Blank Spike																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123605

Customer Worley Parsons Komex
Site Maelor Works
Report No W123605

Consignment No 28243
Date Logged 01-Aug-2011

Report Due 12-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
[redacted]	[redacted]	[redacted]															
EX/1132782	MW11-1	28/07/11															
[redacted]	[redacted]	[redacted]															
EX/1132784	MW99-107	29/07/11															
[redacted]	[redacted]	[redacted]															
EX/1132786	MW99-110	29/07/11															
EX/1132787	MW99-204	29/07/11															
EX/1132788	Report 123605 Blank																
EX/1132789	Report 123605 Blank Spike																

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123572 (Ver. 1)
Your Ref: 305001-50065-29

August 11, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123572 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 8 samples described in this report were logged for analysis by Scientifics on 29-Jul-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 11-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 12)
Table of TPH (Si) banding (0.01) (Page 13)
GC-FID Chromatograms (Pages 14 to 29)
Analytical and Deviating Sample Overview (Pages 30 to 31)
Table of Method Descriptions (Page 32)
Table of Report Notes (Page 33)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 11-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

		Units :		uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
		Method Codes :	WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
		Method Reporting Limits :		100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1132641	MW11-13	**27-Jul-11**	7.1	671	1580	260	26	32	89	9	39	6	0.002	0.006	<0.0001	Req	<0.001	<0.001
1132642	MW11-16	**28-Jul-11**	7.0	1570	26	920	19	215	317	31	22	3	0.009	0.017	<0.0001	Req	0.002	<0.001
1132643	MW99-104	**28-Jul-11**	6.9	1620	118	549	22	301	180	24	20	7	0.003	0.012	<0.0001	Req	<0.001	<0.001
1132644	MW11-2	**28-Jul-11**	7.6	3420	587	1631	100	1630	575	47	260	31	0.007	0.007	<0.0001	Req	0.005	0.001
1132645	MW99-106	**28-Jul-11**	7.4	2350	35	485	37	280	151	26	11	5	0.002	0.016	<0.0001	Req	<0.001	<0.001
1132646	MW99-102	**28-Jul-11**	7.0	1030	21	385	31	57	131	14	9	3	0.002	0.009	<0.0001	Req	<0.001	<0.001
1132647	QC Blank		7.06	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132648	Blank Spike (% Recovery)				101		99	97	96	97	100	100	96	95	95	Req	94	94

scientifics

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1132641	MW11-13	**27-Jul-11**	<0.002	5.74	6.86	12.6	<0.01	0.002	<0.0001	0.001	0.2	<0.2	<0.2	<0.02	0.06	<0.05	2.6	<0.1
1132642	MW11-16	**28-Jul-11**	0.004	1.63	3.28	4.91	0.03	0.003	<0.0001	0.001	1.9	<0.2	<0.2	0.02	0.24	<0.05	23	<0.1
1132643	MW99-104	**28-Jul-11**	<0.002	5.70	29.3	35.0	0.12	0.002	<0.0001	0.001	64.0	<0.2	5.05	0.04	0.43	<0.05	14	<0.1
1132644	MW11-2	**28-Jul-11**	0.004	3.21	4.52	7.73	1.91	0.013	<0.0001	0.003	9.9	<0.2	2.94	0.42	3.98	<0.05	45	<0.1
1132645	MW99-106	**28-Jul-11**	<0.002	1.39	3.28	4.67	0.1	0.006	<0.0001	0.002	164	<0.2	<0.2	0.06	0.32	0.18	21	0.2
1132646	MW99-102	**28-Jul-11**	<0.002	0.67	5.92	6.59	<0.01	0.001	<0.0001	<0.001	16.8	<0.2	<0.2	<0.02	0.04	<0.05	6.2	<0.1
1132647	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132648	Blank Spike (% Recovery)		99	100	100	100	95	96	103	98	99		100	99	99	106	107	99

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1132641	MW11-13	27-Jul-11	Req	1.27	<0.06	4.8	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132642	MW11-16	28-Jul-11	Req	38	0.22	6.4	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132643	MW99-104	28-Jul-11	Req	6.9	0.39	3.2	68	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132644	MW11-2	28-Jul-11	Req	2.9	3.56	4.1	14	<1	<1	<1	<2	0.0123	0.0029	0.0069	<0.1	0.0313		
1132645	MW99-106	28-Jul-11	Req	9.3	0.26	0.7	171	<1	<1	<1	<3	0.216	0.228	0.117	0.1	0.231		
1132646	MW99-102	28-Jul-11	Req	5.3	<0.04	3.8	16	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132647	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132648	Blank Spike (% Recovery)		Req	96			89	85	79	81	244	89	100	105	99	106		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	11-Aug-11
Report Number	**EXR/123572**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13	**Job Number:**	W12_3572
LIMS ID Number:	EX1132641	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.22	0.018	33
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.168	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	89
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	101
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	88
Terphenyl-d14	106

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-16	**Job Number:**	W12_3572
LIMS ID Number:	EX1132642	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	87
Acenaphthene-d10	88
Phenanthrene-d10	89
Chrysene-d12	93
Perylene-d12	104

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-104	**Job Number:**	W12_3572
LIMS ID Number:	EX1132643	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.038	91
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.38	0.011	89
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.65	0.018	75
Pyrene	129-00-0	6.92	0.014	97
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.201	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	93
Acenaphthene-d10	90
Phenanthrene-d10	91
Chrysene-d12	82
Perylene-d12	87

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	92

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Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-2	**Job Number:**	W12_3572
LIMS ID Number:	EX1132644	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.11	0.032	86
Acenaphthene	83-32-9	4.23	0.441	97
Fluorene	86-73-7	4.59	0.091	60
Phenanthrene	85-01-8	5.38	0.064	96
Anthracene	120-12-7	5.42	0.049	95
Fluoranthene	206-44-0	6.65	0.540	99
Pyrene	129-00-0	6.92	0.339	100
Benzo[a]anthracene	56-55-3	8.56	0.091	85
Chrysene	218-01-9	8.61	0.048	58
Benzo[b]fluoranthene	205-99-2	10.07	0.071	61
Benzo[k]fluoranthene	207-08-9	10.10	0.034	62
Benzo[a]pyrene	50-32-8	10.49	0.065	85
Indeno[1,2,3-cd]pyrene	193-39-5	11.86	0.033	60
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.14	0.032	79
Total (USEPA16) PAHs	-	-	< 1.950	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	93
Phenanthrene-d10	97
Chrysene-d12	104
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	67
Terphenyl-d14	79

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-106	**Job Number:**	W12_3572
LIMS ID Number:	EX1132645	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.689	83
Acenaphthylene	208-96-8	4.11	4.090	99
Acenaphthene	83-32-9	4.23	7.400	98
Fluorene	86-73-7	4.59	0.142	57
Phenanthrene	85-01-8	5.37	0.036	80
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.65	0.012	65
Pyrene	129-00-0	6.92	0.010	61
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 12.469	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	120
Acenaphthene-d10	90
Phenanthrene-d10	98
Chrysene-d12	106
Perylene-d12	121

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_3572
LIMS ID Number:	EX1132646	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.07	0.014	73
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.22	0.022	68
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.176	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	91
Acenaphthene-d10	90
Phenanthrene-d10	92
Chrysene-d12	100
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123572 Blank	**Job Number:**	W12_3572
LIMS ID Number:	EX1132647	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	96
Acenaphthene-d10	94
Phenanthrene-d10	96
Chrysene-d12	98
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	86
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123572 Blank Spike	**Job Number:**	W12_3572
LIMS ID Number:	EX1132648	**Date Booked in:**	29-Jul-11
QC Batch Number:	110714	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Aug-11
Directory:	804PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.07	88	91
Acenaphthylene	208-96-8	4.11	79	99
Acenaphthene	83-32-9	4.23	89	95
Fluorene	86-73-7	4.59	80	99
Phenanthrene	85-01-8	5.38	85	97
Anthracene	120-12-7	5.42	72	98
Fluoranthene	206-44-0	6.65	79	72
Pyrene	129-00-0	6.92	76	78
Benzo[a]anthracene	56-55-3	8.56	96	97
Chrysene	218-01-9	8.61	84	96
Benzo[b]fluoranthene	205-99-2	10.07	75	91
Benzo[k]fluoranthene	207-08-9	10.11	90	92
Benzo[a]pyrene	50-32-8	10.49	81	88
Indeno[1,2,3-cd]pyrene	193-39-5	11.86	73	92
Dibenzo[a,h]anthracene	53-70-3	11.90	73	83
Benzo[g,h,i]perylene	191-24-2	12.14	83	70
Total (USEPA16) PAHs	-	-	80	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	85
Acenaphthene-d10	86
Phenanthrene-d10	87
Chrysene-d12	92
Perylene-d12	97

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	109

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3572
QC Batch Number: 110722
Directory: D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\025F1601.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

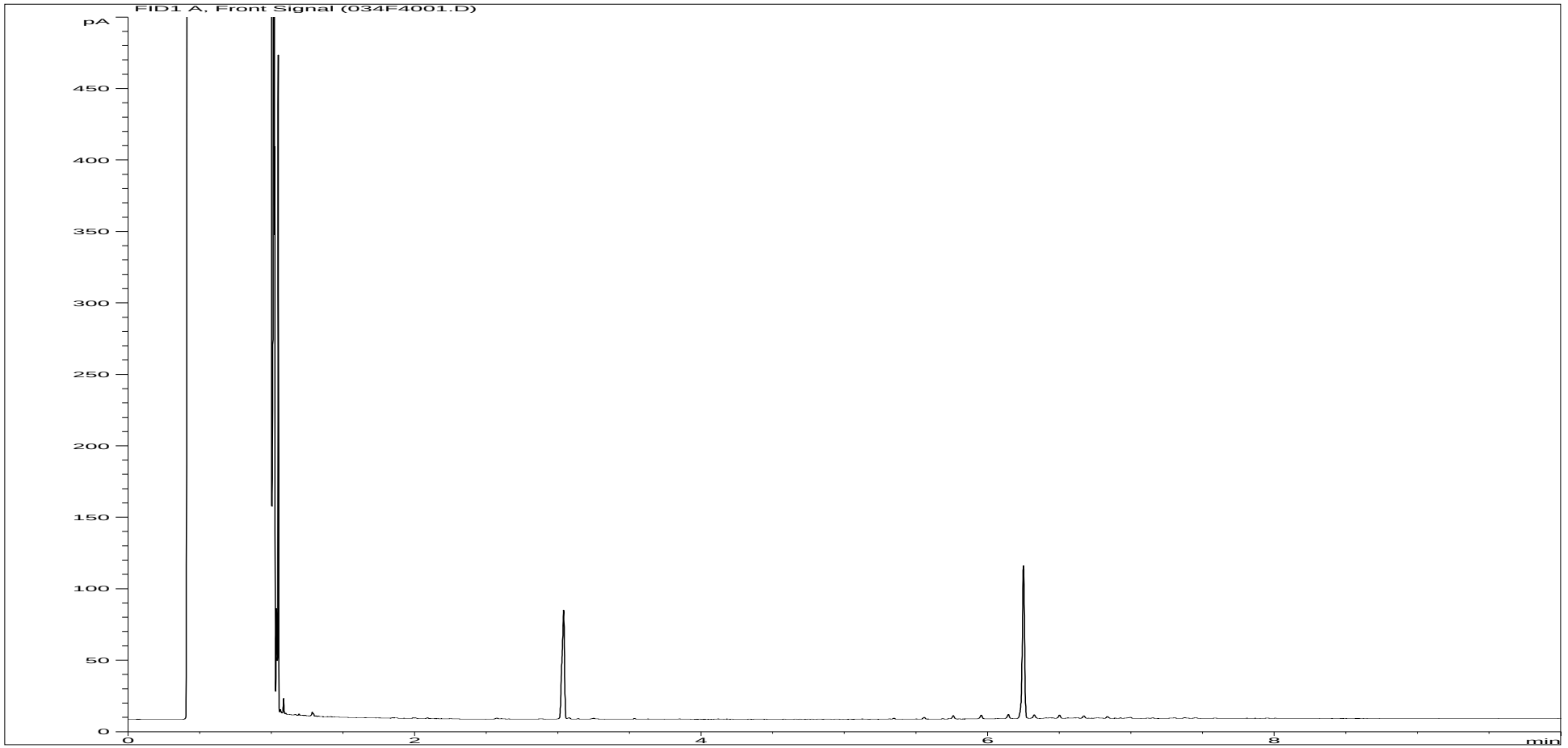
Matrix: Water
Date Booked in 29-Jul-11
Date Extracted 09-Aug-11
Date Analysed 09-Aug-11, 15:02:49

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1132641	MW11-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	0.015	<0.01
EX1132642	MW11-16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132643	MW99-104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132644	MW11-2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.018
EX1132645	MW99-106	<0.01	0.033	<0.01	0.169	<0.01	0.065	<0.01	<0.01	<0.01	<0.01	<0.01	0.275
EX1132646	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132647	Report 123572 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132648	Report 123572 Blank Spike	0.638	0.19	1	0.311	1.73	0.545	1.01	0.281	2.61	0.685	7.03	2.05

Where individual results are flagged see report notes for status.

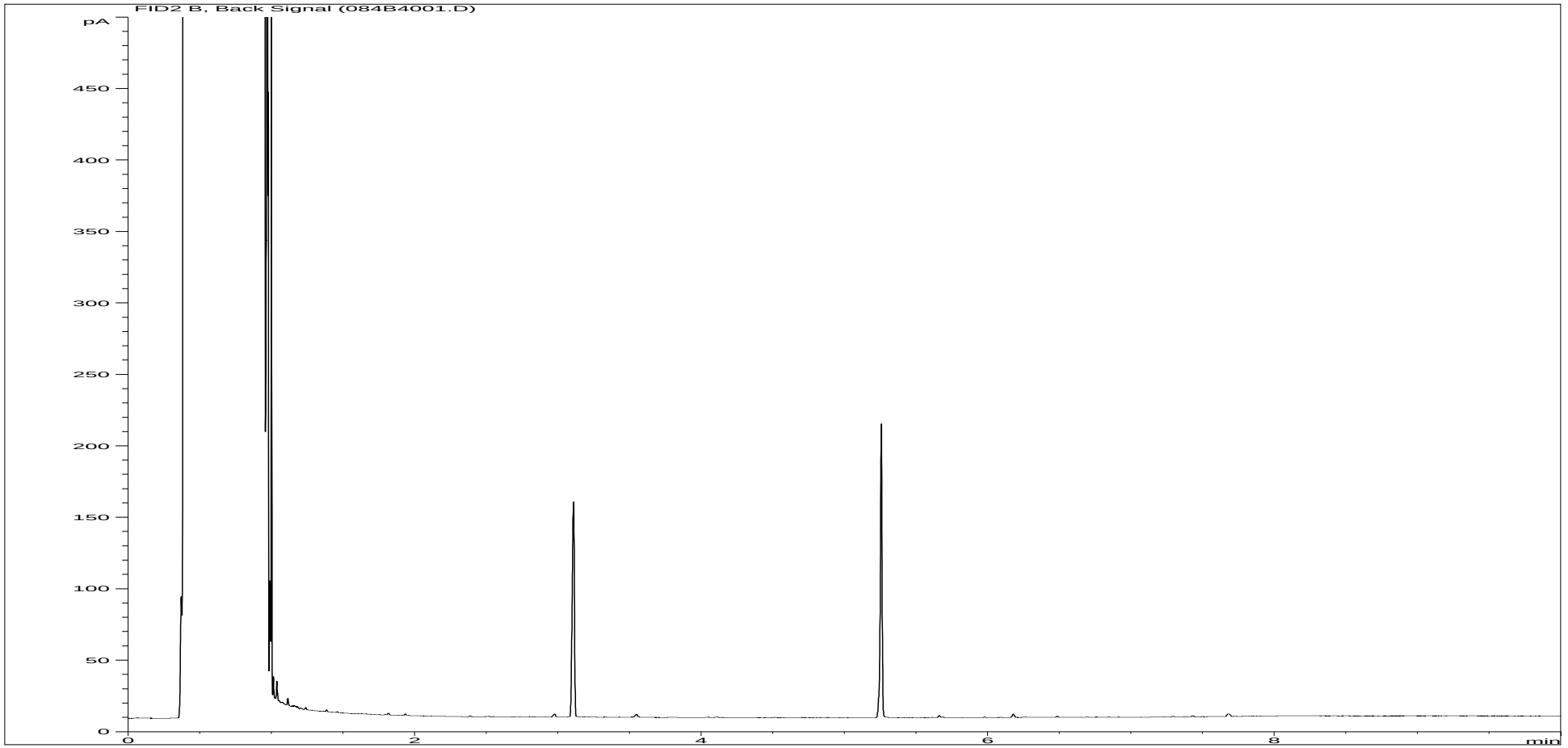
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132641ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	04-Aug-11, 22:21:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\034F4001.D		

Where individual results are flagged see report notes for status.

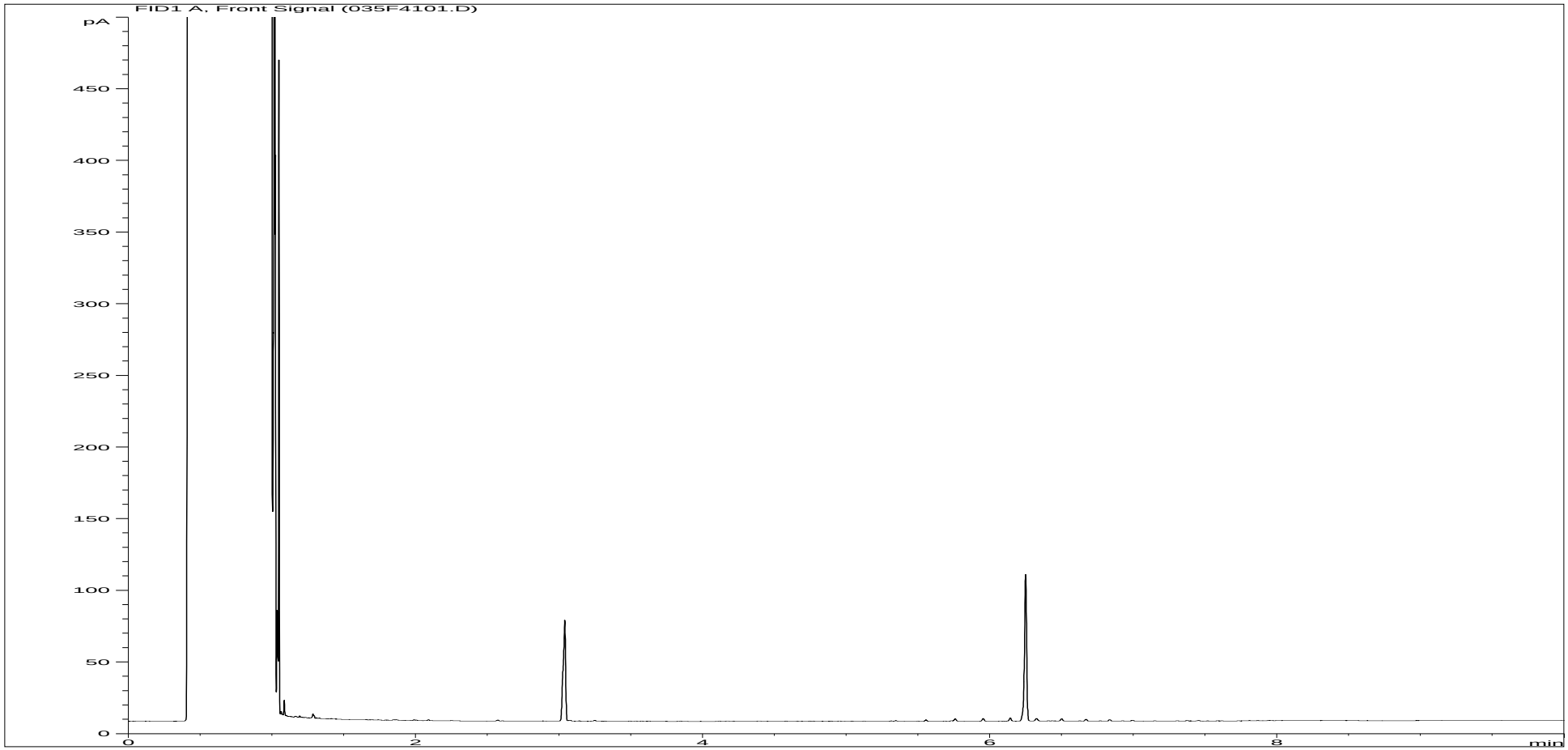
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132641ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	04-Aug-11, 22:21:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\084B4001.D		

Where individual results are flagged see report notes for status.

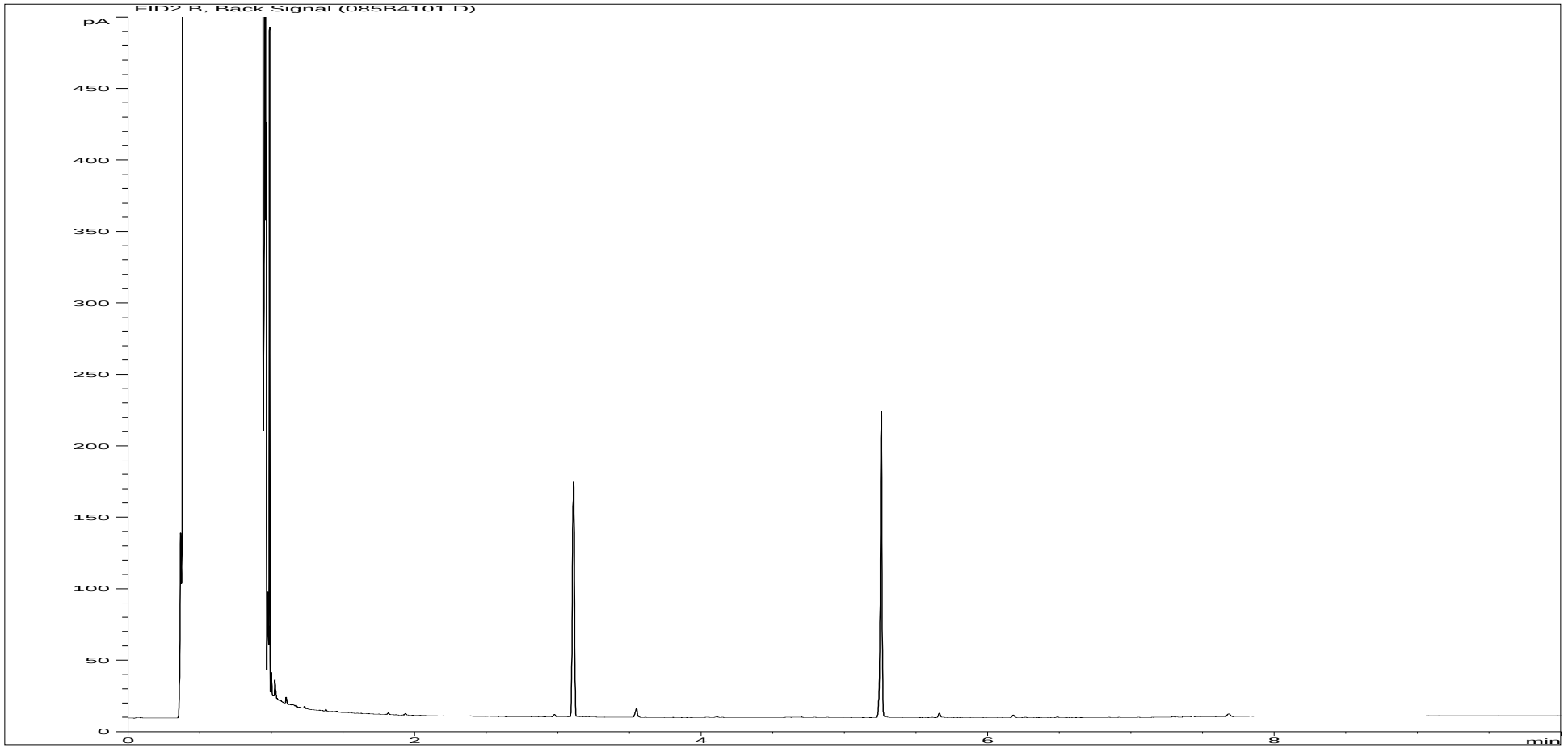
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132642ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	04-Aug-11, 22:38:51		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\035F4101.D		

Where individual results are flagged see report notes for status.

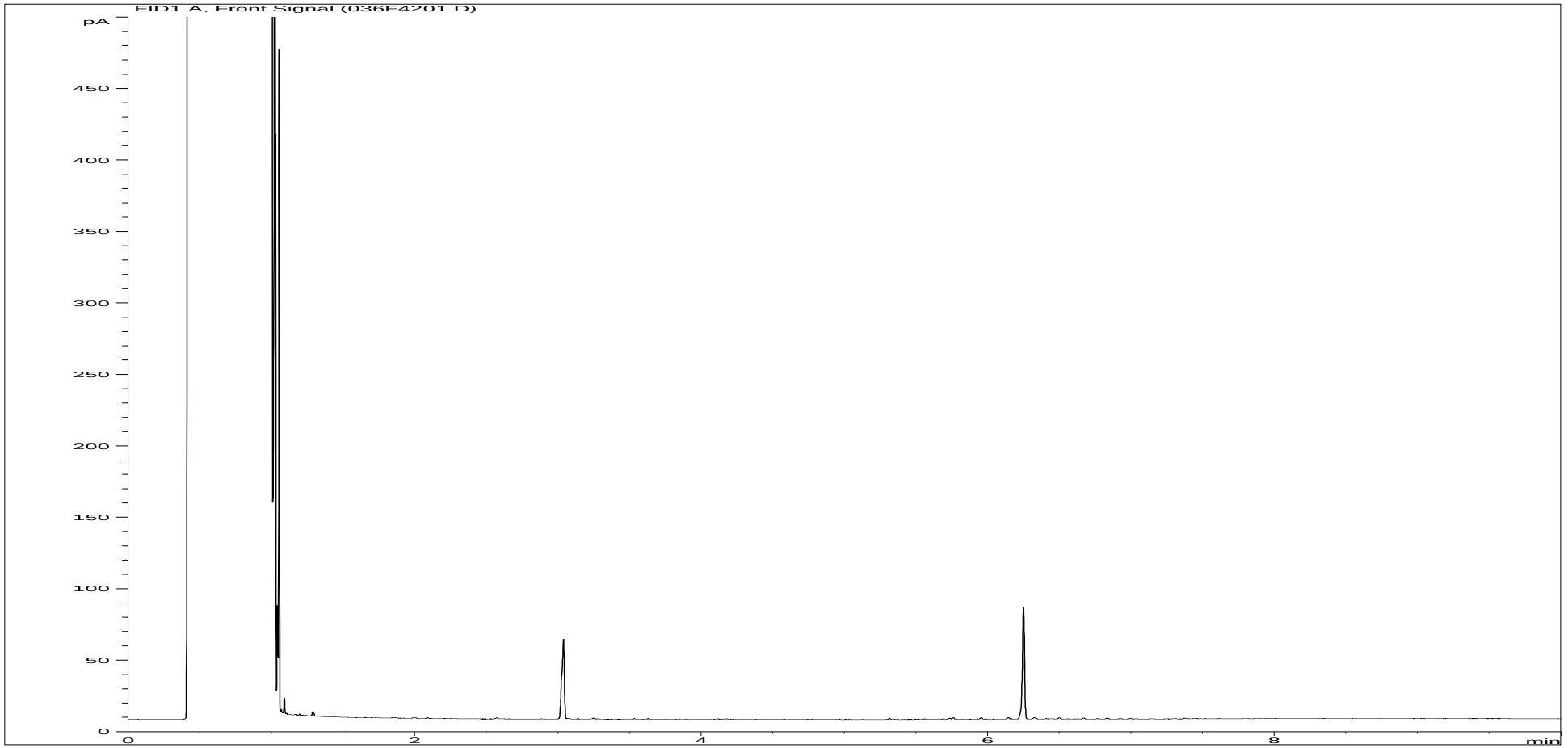
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132642ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	04-Aug-11, 22:38:51		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\085B4101.D		

Where individual results are flagged see report notes for status.

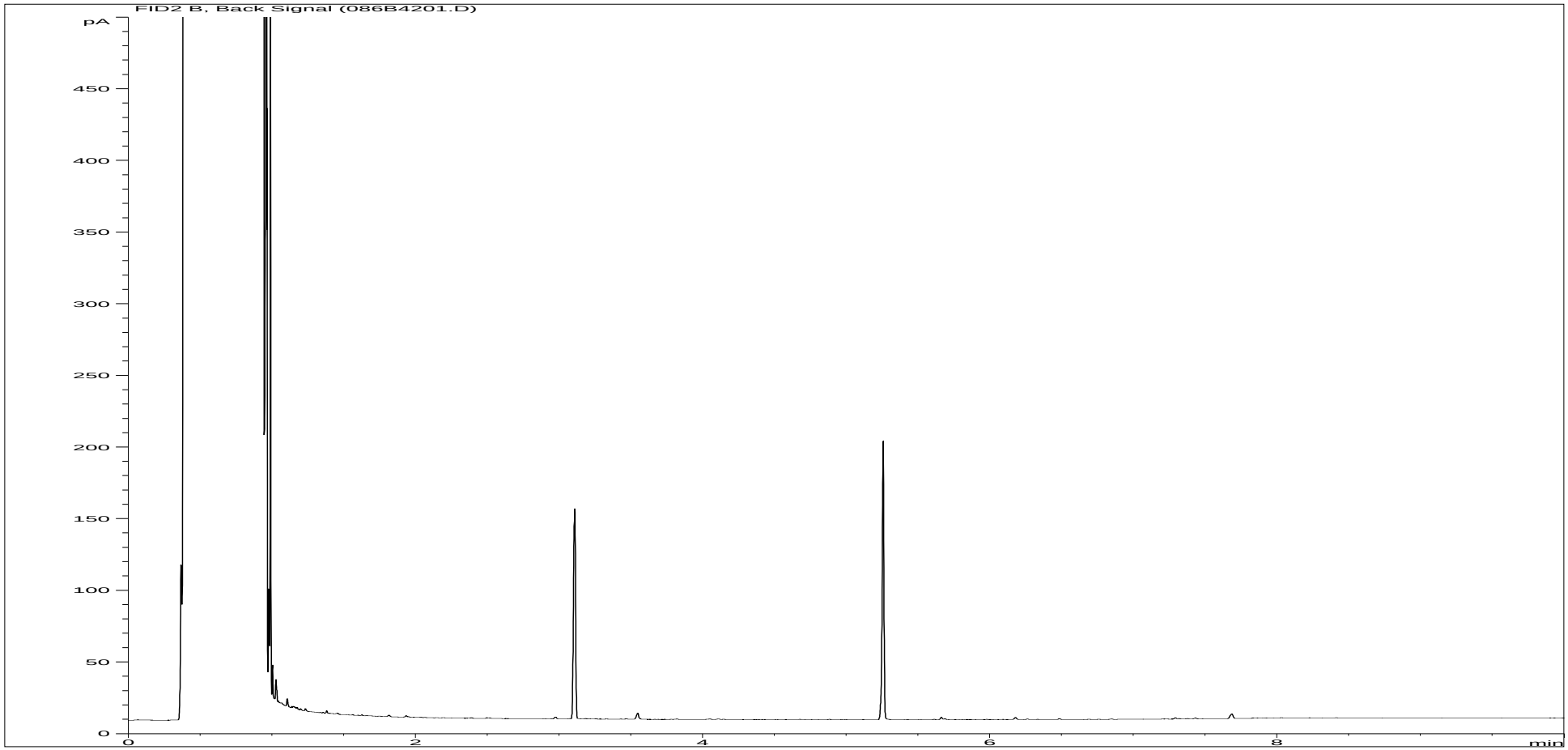
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132643ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	04-Aug-11, 22:56:09		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\036F4201.D		

Where individual results are flagged see report notes for status.

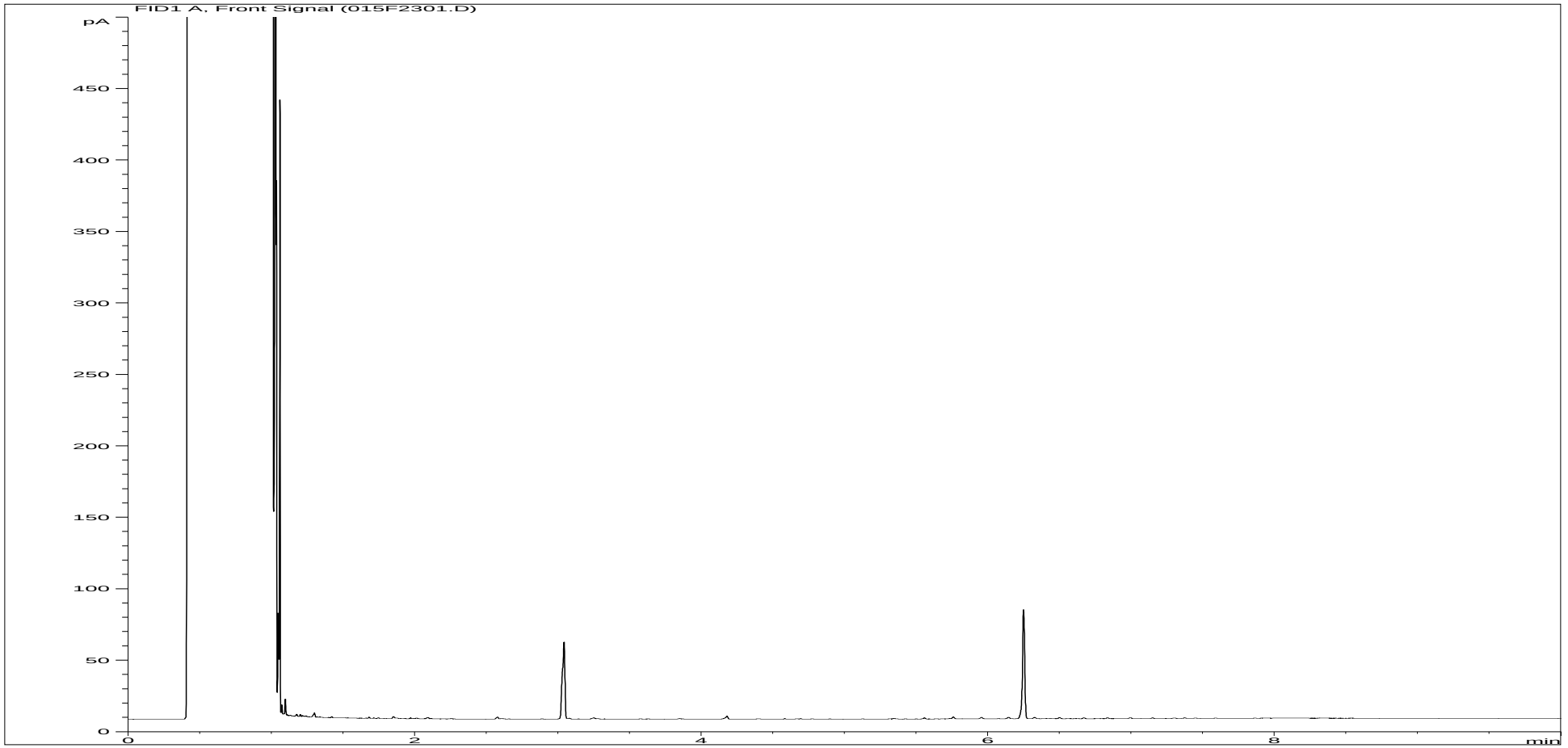
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132643ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	04-Aug-11, 22:56:09		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\086B4201.D		

Where individual results are flagged see report notes for status.

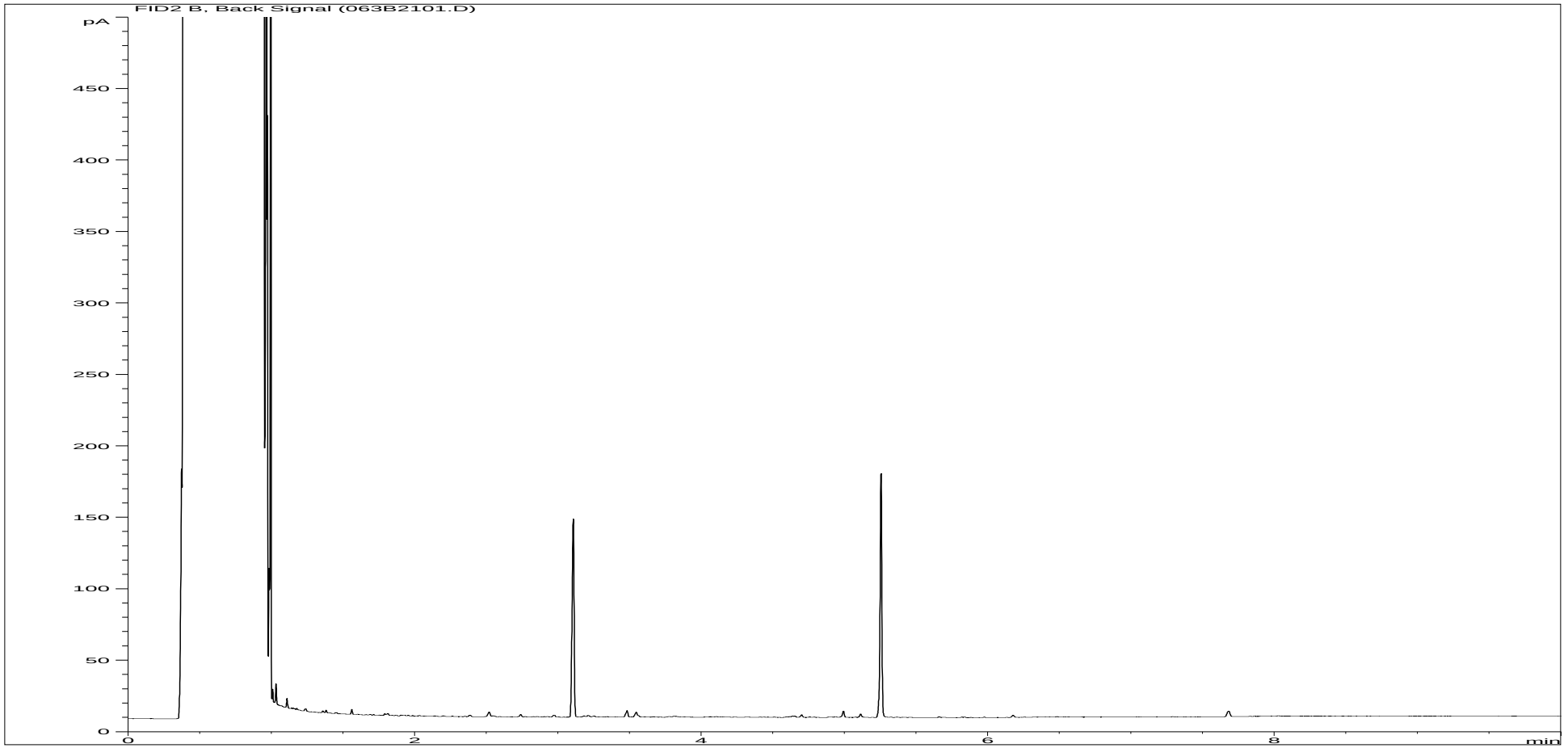
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132644ALI	**Job Number:**	W12_3572
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Aug-11, 17:02:57		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\015F2301.D		

Where individual results are flagged see report notes for status.

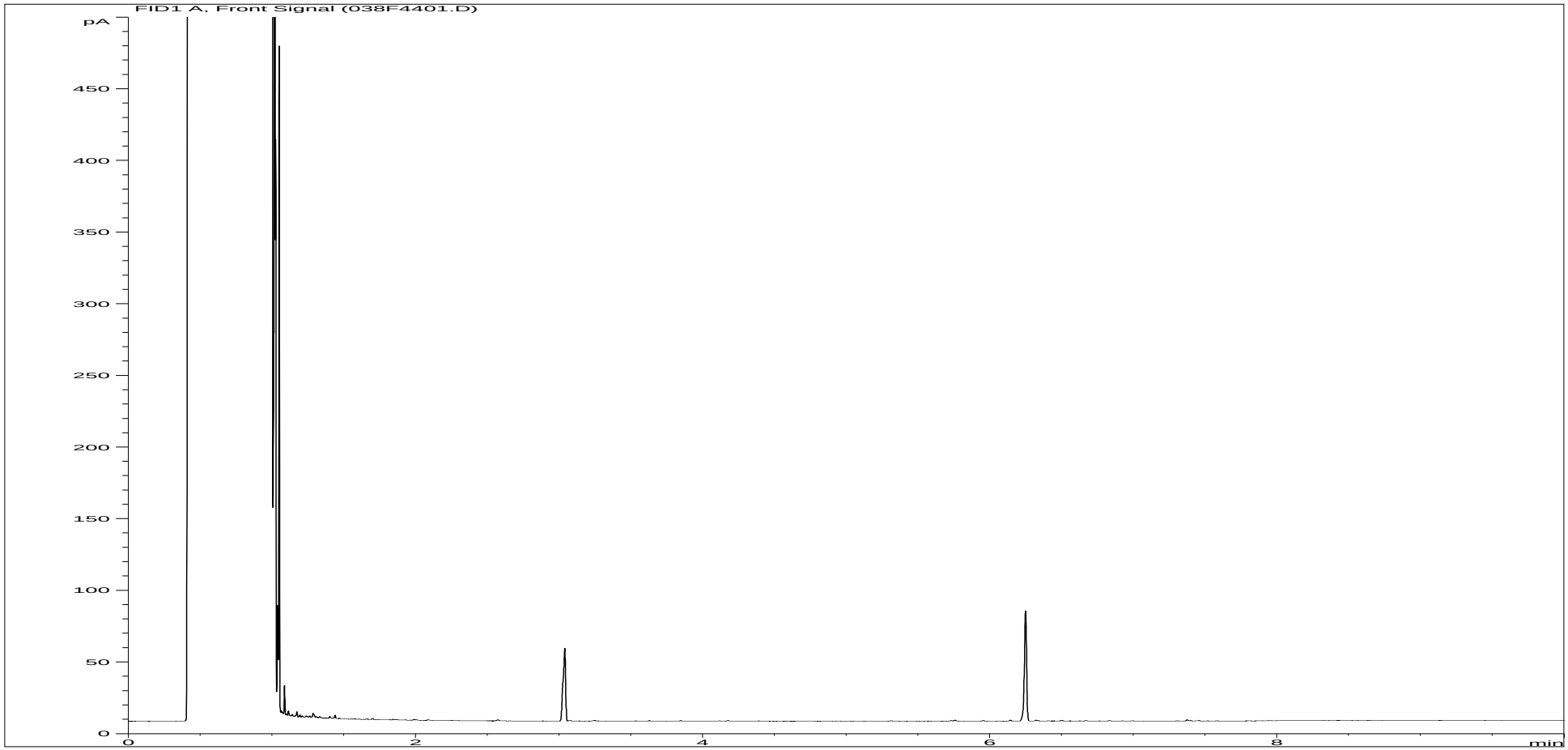
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132644ARO	**Job Number:**	W12_3572
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Aug-11, 16:28:55		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\063B2101.D		

Where individual results are flagged see report notes for status.

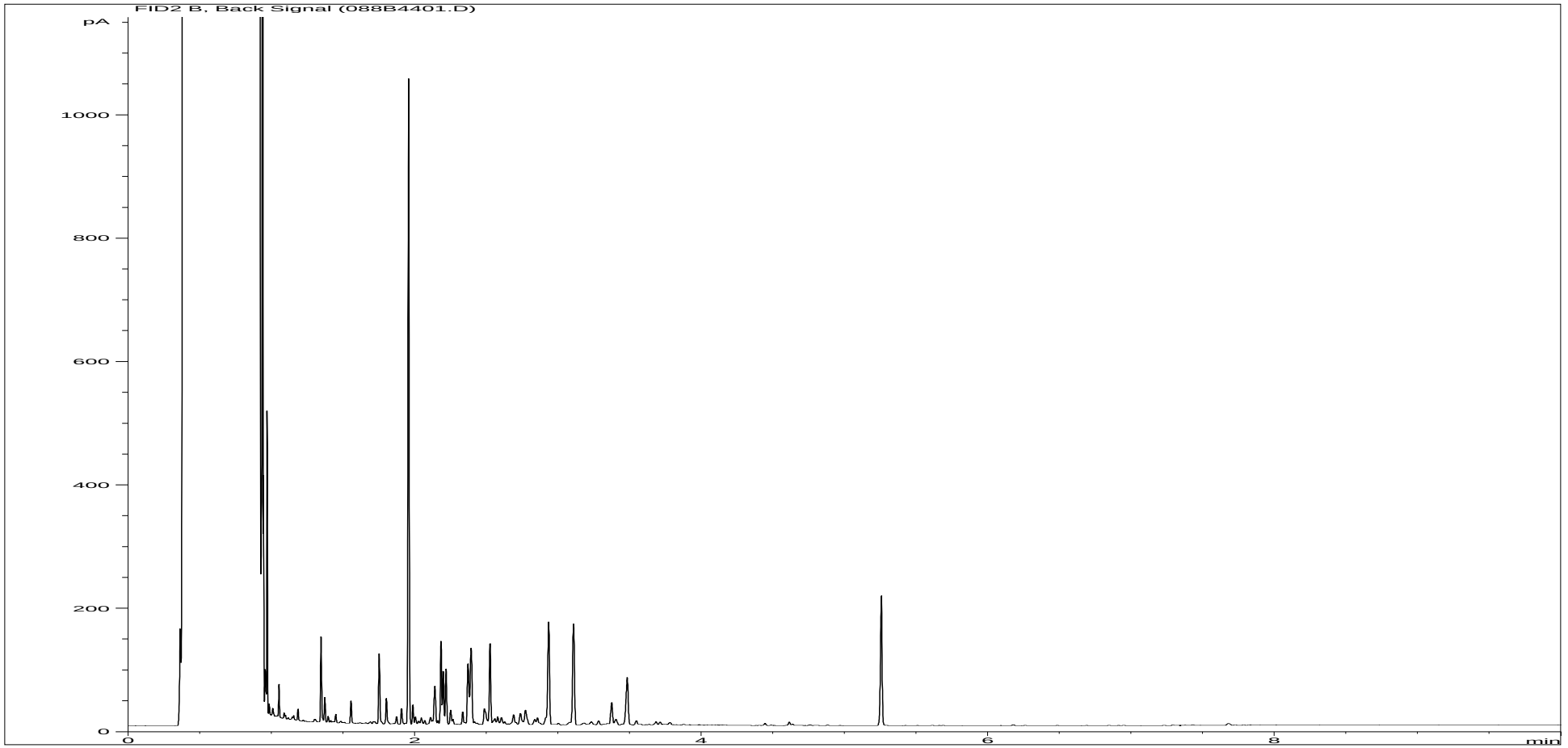
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132645ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	04-Aug-11, 23:30:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\038F4401.D		

Where individual results are flagged see report notes for status.

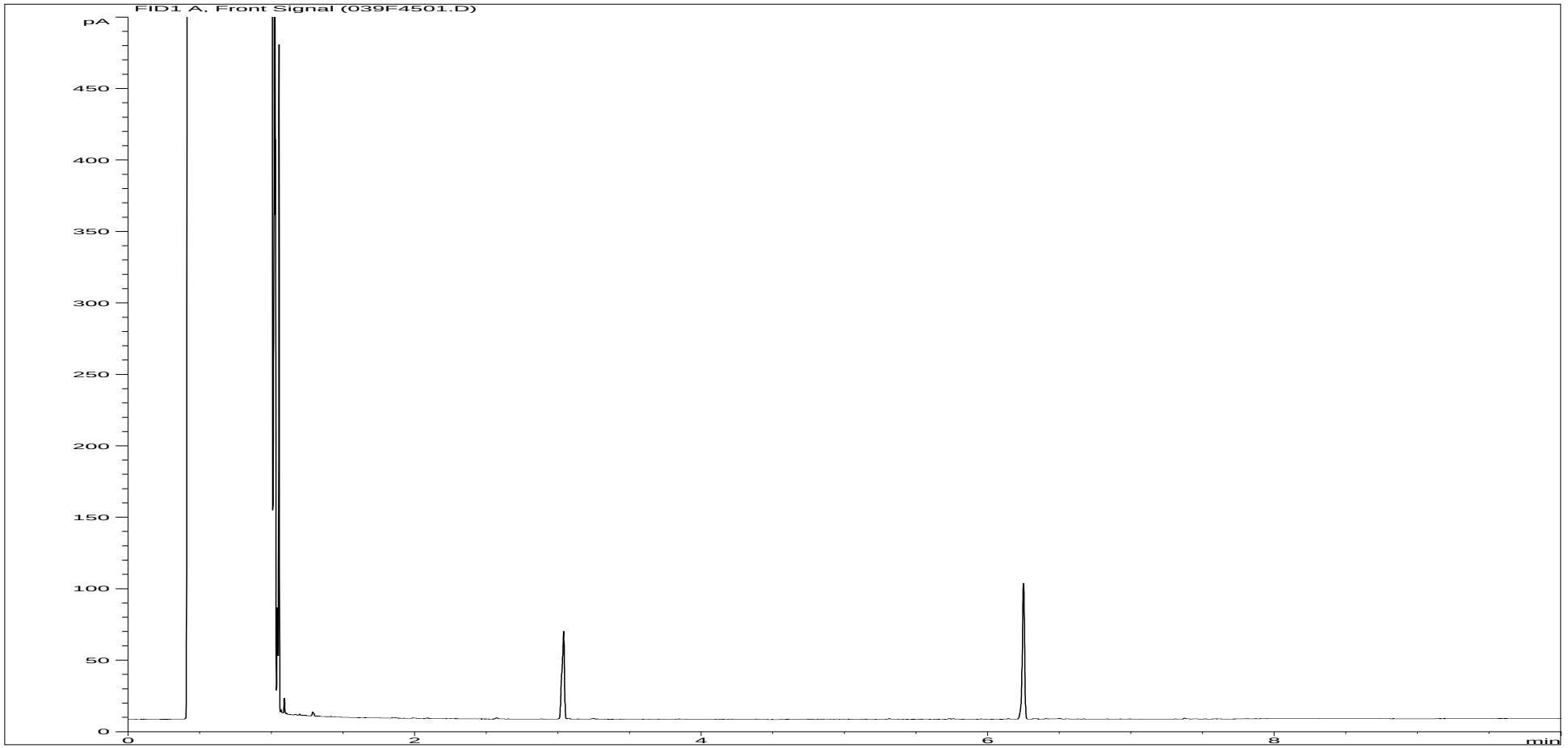
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132645ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	04-Aug-11, 23:30:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\088B4401.D		

Where individual results are flagged see report notes for status.

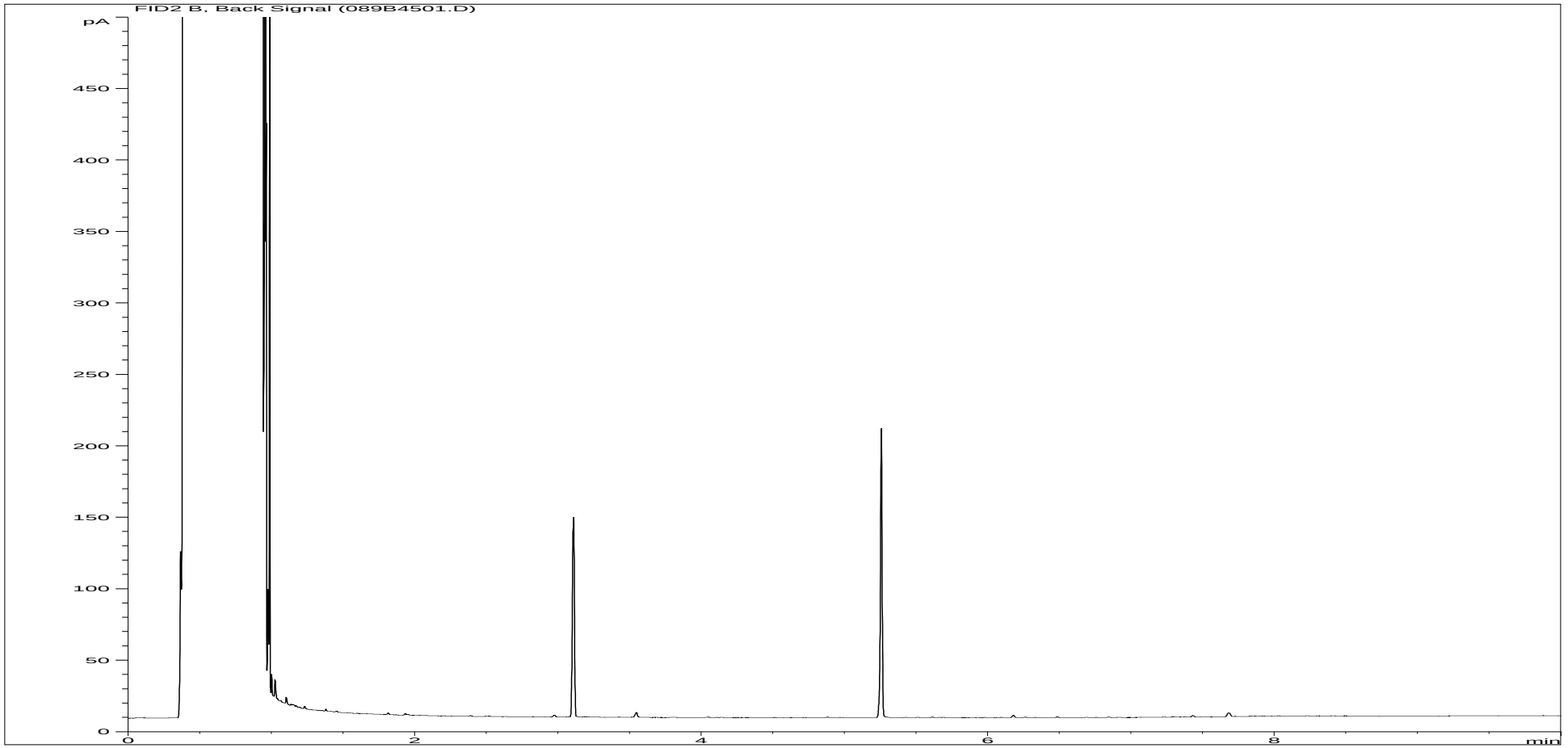
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132646ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	04-Aug-11, 23:48:06		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\039F4501.D		

Where individual results are flagged see report notes for status.

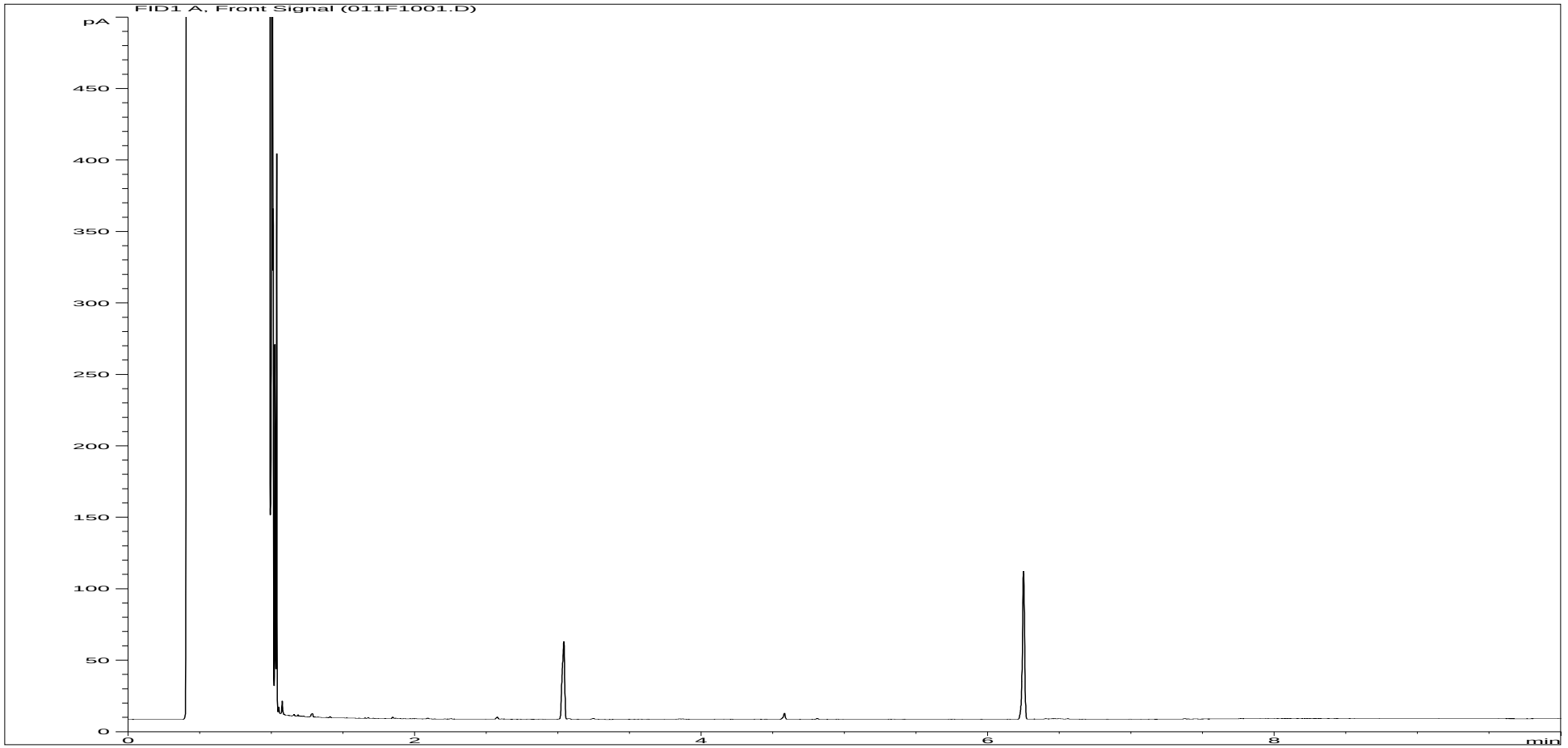
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132646ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	04-Aug-11, 23:48:06		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC15\080411 2011-08-04 08-27-26\089B4501.D		

Where individual results are flagged see report notes for status.

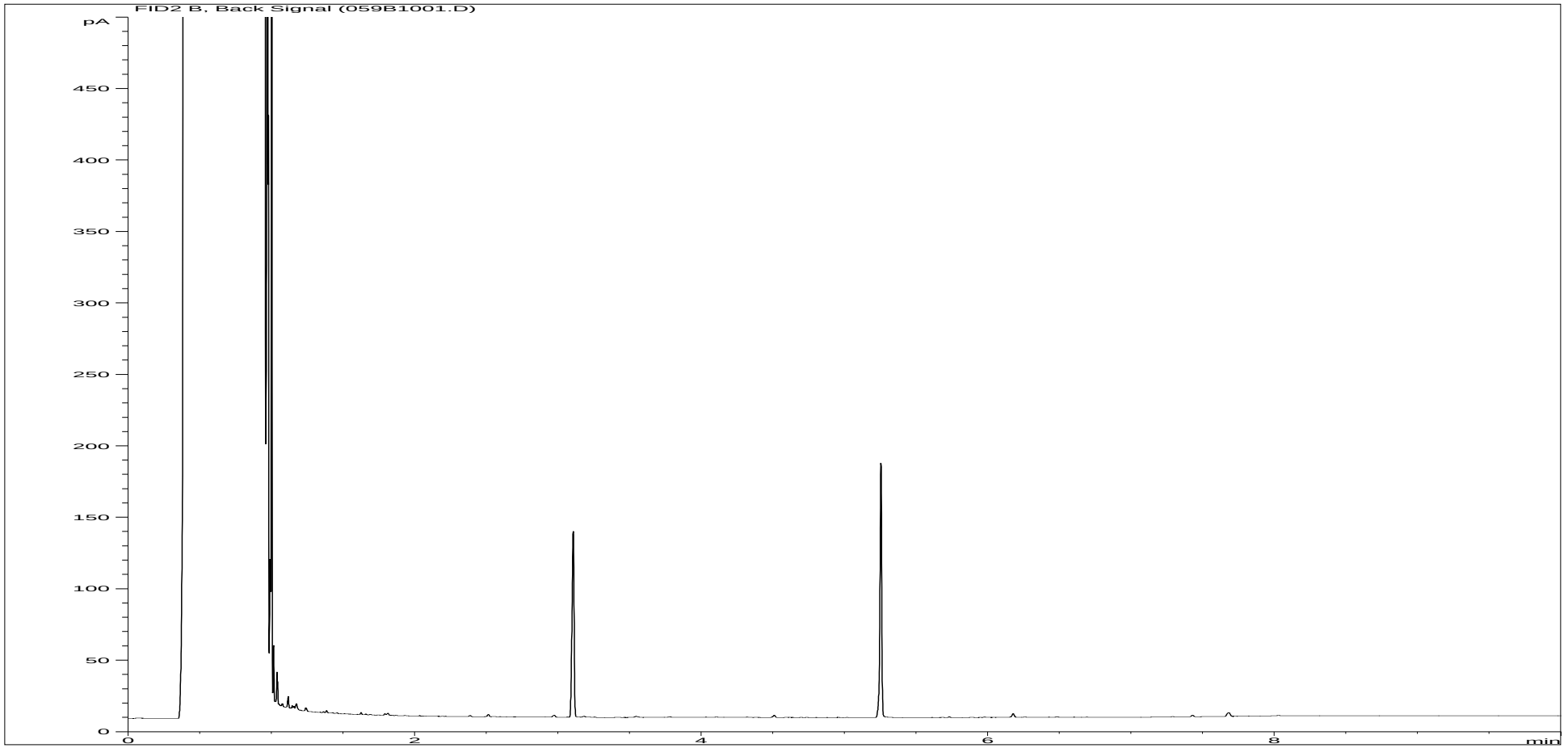
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132647ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank
Acquisition Date/Time:	09-Aug-11, 13:19:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\011F1001.D		

Where individual results are flagged see report notes for status.

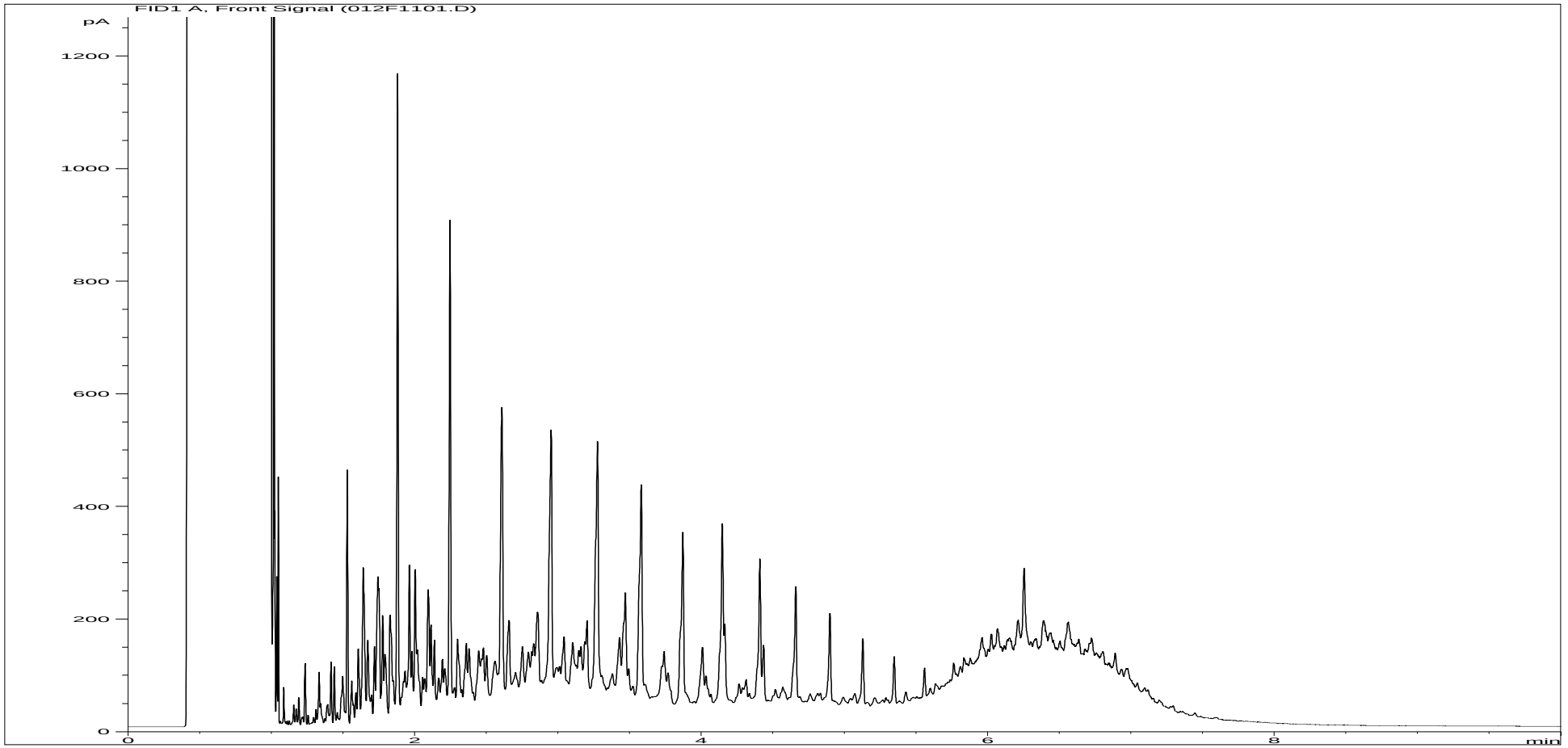
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132647ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank
Acquisition Date/Time:	09-Aug-11, 13:19:30		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\059B1001.D		

Where individual results are flagged see report notes for status.

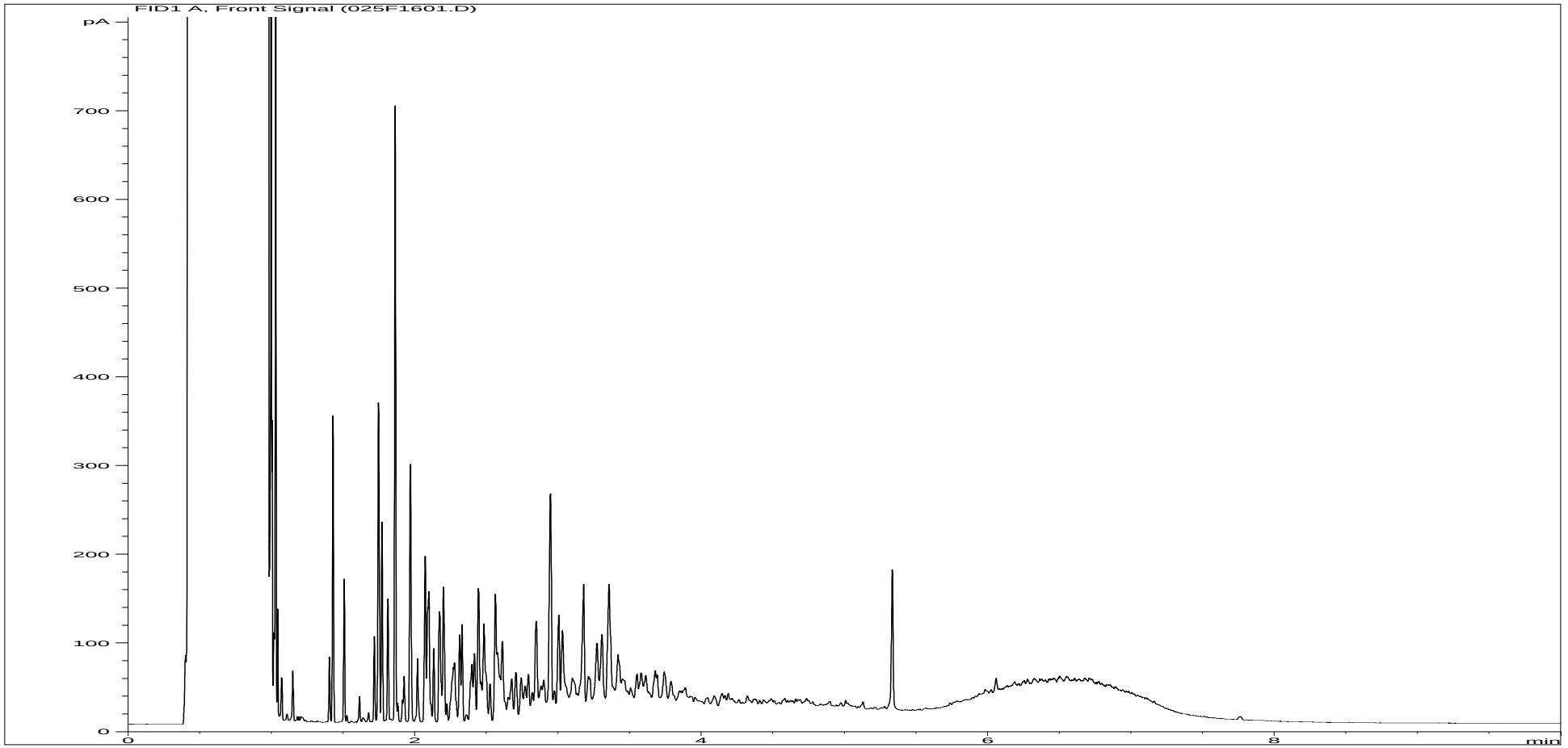
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132648ALI	**Job Number:**	W12_3572
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank Spike
Acquisition Date/Time:	09-Aug-11, 13:36:38		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\012F1101.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132648ARO	**Job Number:**	W12_3572
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123572 Blank Spike
Acquisition Date/Time:	09-Aug-11, 15:02:49		
Datafile:	D:\TES\DATA\Y2011\080911TPH_GC15\080911 2011-08-09 08-32-21\025F1601.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W123572

Consignment No 28176
Date Logged 29-Jul-2011

Report Due 11-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1132641	MW11-13	27/07/11																										
EX/1132642	MW11-16	28/07/11																										
EX/1132643	MW99-104	28/07/11																										
EX/1132644	MW11-2	28/07/11																										
EX/1132645	MW99-106	28/07/11																										
EX/1132646	MW99-102	28/07/11																										
EX/1132647	Report 123572 Blank	27/07/11																										
EX/1132648	Report 123572 Blank Spike	27/07/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123572

Customer Worley Parsons Komex
Site Maelor Works
Report No W123572

Consignment No 28176
Date Logged 29-Jul-2011

Report Due 11-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1132641	MW11-13	27/07/11															
EX/1132642	MW11-16	28/07/11															
EX/1132643	MW99-104	28/07/11															
EX/1132644	MW11-2	28/07/11															
EX/1132645	MW99-106	28/07/11															
EX/1132646	MW99-102	28/07/11															
EX/1132647	Report 123572 Blank	27/07/11															
EX/1132648	Report 123572 Blank Spike	27/07/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/123554 (Ver. 1)
Your Ref: 50065-29

August 10, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/123554 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 29-Jul-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 10-Aug-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 10-Aug-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1132549	MW11-11	27-Jul-11	7.3	934	1524	325	51	158	107	14	50	12	0.003	0.004	<0.0001	Req	0.002	<0.001
1132550	MW11-11A	27-Jul-11	7.3	773	610	281	25	148	104	5	30	16	0.003	0.004	<0.0001	Req	0.003	<0.001
1132551	MW11-12	27-Jul-11	8.2	1140	2318	320	103	96	113	9	66	67	0.002	0.005	<0.0001	Req	0.002	<0.001
1132552	QC Blank		7.09	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1132553	Blank Spike (% Recovery)				100		99	98	97	98	99	101	102	97	96	Req	102	98

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
		Method Codes :	ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
		Method Reporting Limits :	0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
		UKAS Accredited :	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1132549	MW11-11	**27-Jul-11**	<0.002	0.33	0.76	1.09	<0.01	0.001	<0.0001	0.003	0.07	2.6	<0.2	<0.02	<0.02	<0.05	4.6	<0.1
1132550	MW11-11A	**27-Jul-11**	0.004	0.69	0.50	1.19	<0.01	0.002	<0.0001	0.005	0.14	1.4	<0.2	<0.02	<0.02	<0.05	3.8	<0.1
1132551	MW11-12	**27-Jul-11**	<0.002	6.16	1.47	7.63	<0.01	0.004	<0.0001	0.003	0.3	2.1	<0.2	<0.02	<0.02	<0.05	4.4	<0.1
1132552	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1
1132553	Blank Spike (% Recovery)		97	100	100	100	96	97	99	93	99		102	97	99	107	98	95

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1132549	MW11-11	27-Jul-11	Req	0.09	<0.02	4.9	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132550	MW11-11A	27-Jul-11	Req	0.08	<0.02	2.0	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132551	MW11-12	27-Jul-11	Req	1.18	<0.02	3.0	3	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132552	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1132553	Blank Spike (% Recovery)		Req	102			89	84	82	81	246	99	98	94	101	97		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	10-Aug-11
Report Number	**EXR/123554**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11	**Job Number:**	W12_3554
LIMS ID Number:	EX1132549	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	83
Acenaphthene-d10	83
Phenanthrene-d10	82
Chrysene-d12	84
Perylene-d12	79

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	94

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11A	**Job Number:**	W12_3554
LIMS ID Number:	EX1132550	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	81
Acenaphthene-d10	82
Phenanthrene-d10	82
Chrysene-d12	78
Perylene-d12	69

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	83
Terphenyl-d14	90

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-12	**Job Number:**	W12_3554
LIMS ID Number:	EX1132551	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	84
Acenaphthene-d10	84
Phenanthrene-d10	84
Chrysene-d12	82
Perylene-d12	74

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123554 Blank	**Job Number:**	W12_3554
LIMS ID Number:	EX1132552	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	94
Phenanthrene-d10	91
Chrysene-d12	95
Perylene-d12	87

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 123554 Blank Spike	**Job Number:**	W12_3554
LIMS ID Number:	EX1132553	**Date Booked in:**	29-Jul-11
QC Batch Number:	110708	**Date Extracted:**	04-Aug-11
Quantitation File:	Initial Calibration	**Date Analysed:**	04-Aug-11
Directory:	0803PAH.MS4\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.26	94	
Acenaphthylene	208-96-8	4.31	83	
Acenaphthene	83-32-9	4.43	83	
Fluorene	86-73-7	4.81	84	
Phenanthrene	85-01-8	5.65	92	
Anthracene	120-12-7	5.71	86	
Fluoranthene	206-44-0	6.99	89	
Pyrene	129-00-0	7.28	87	
Benzo[a]anthracene	56-55-3	8.96	100	
Chrysene	218-01-9	9.01	92	
Benzo[b]fluoranthene	205-99-2	10.49	90	
Benzo[k]fluoranthene	207-08-9	10.53	83	
Benzo[a]pyrene	50-32-8	10.92	83	
Indeno[1,2,3-cd]pyrene	193-39-5	12.30	68	
Dibenzo[a,h]anthracene	53-70-3	12.34	67	
Benzo[g,h,i]perylene	191-24-2	12.60	80	
Total (USEPA16) PAHs	-	-	85	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	90
Acenaphthene-d10	90
Phenanthrene-d10	92
Chrysene-d12	96
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	99
Terphenyl-d14	110

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_3554
QC Batch Number: 110708
Directory: D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\062B2301.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

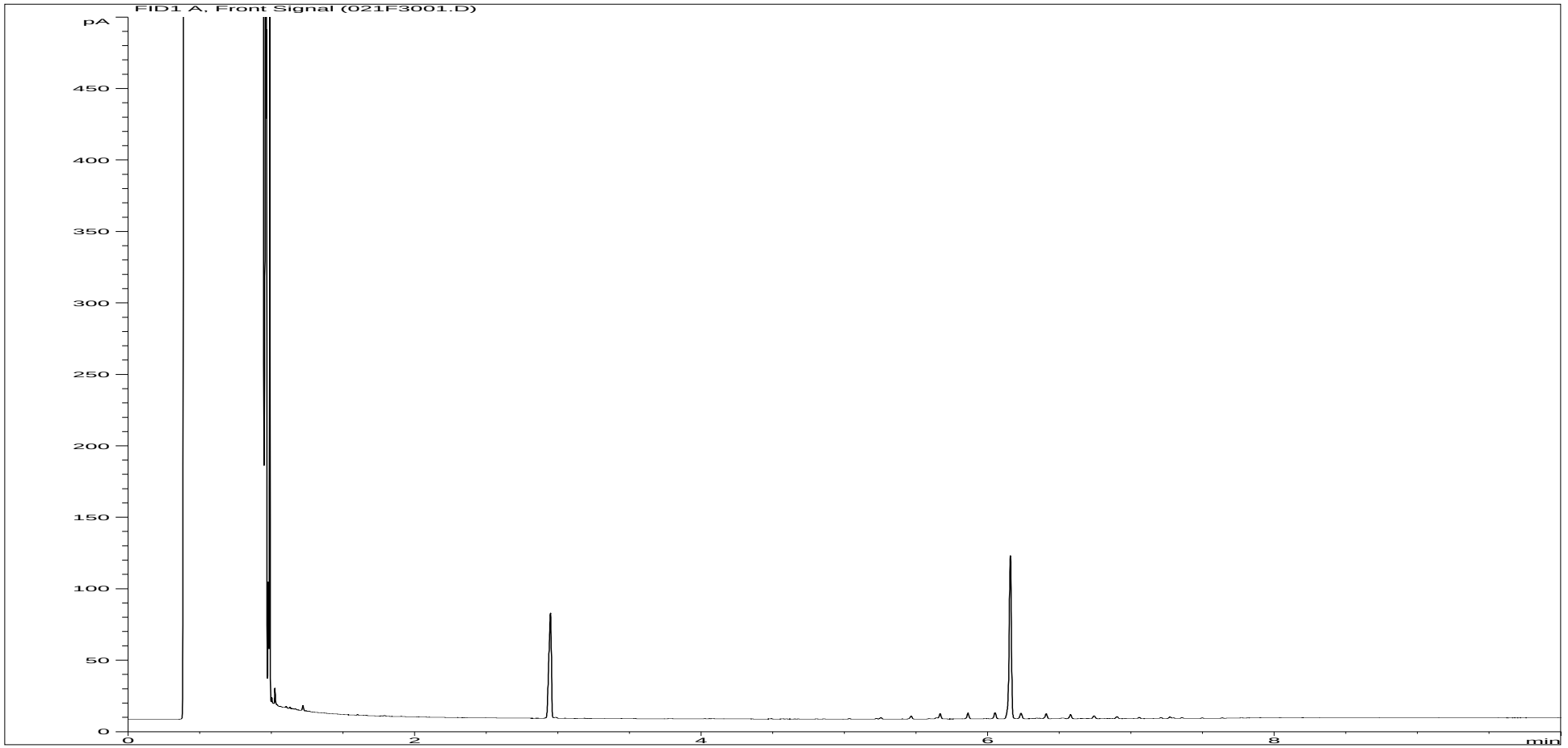
Matrix: Water
Date Booked in 29-Jul-11
Date Extracted 03-Aug-11
Date Analysed 04-Aug-11, 20:22:48

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1132549	MW11-11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132550	MW11-11A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132551	MW11-12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132552	Report 123554 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1132553	Report 123554 Blank Spike	0.699	0.209	1.07	0.34	1.91	0.606	1.12	0.309	2.91	0.756	7.78	2.24

Where individual results are flagged see report notes for status.

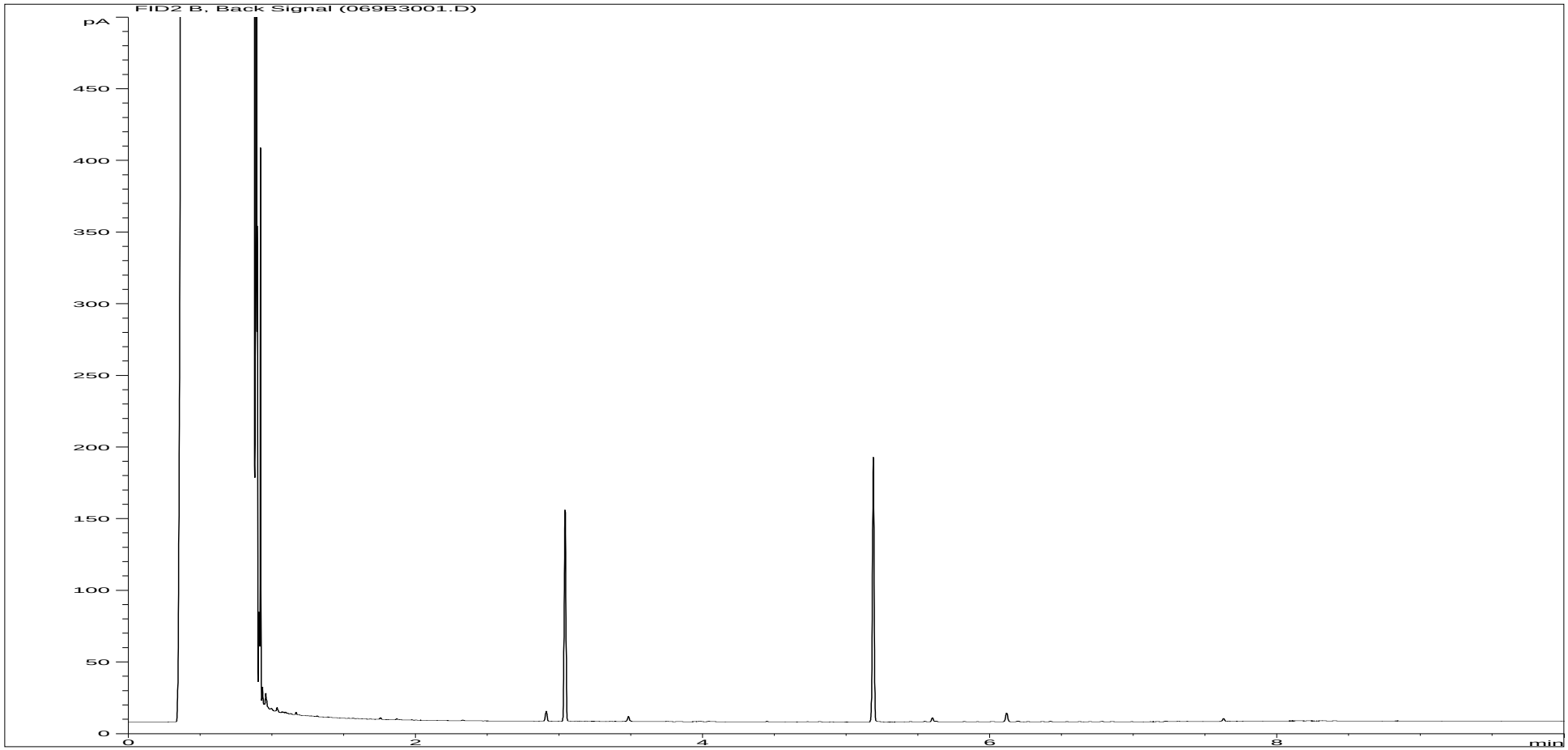
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132549ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	04-Aug-11, 22:23:26		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\021F3001.D		

Where individual results are flagged see report notes for status.

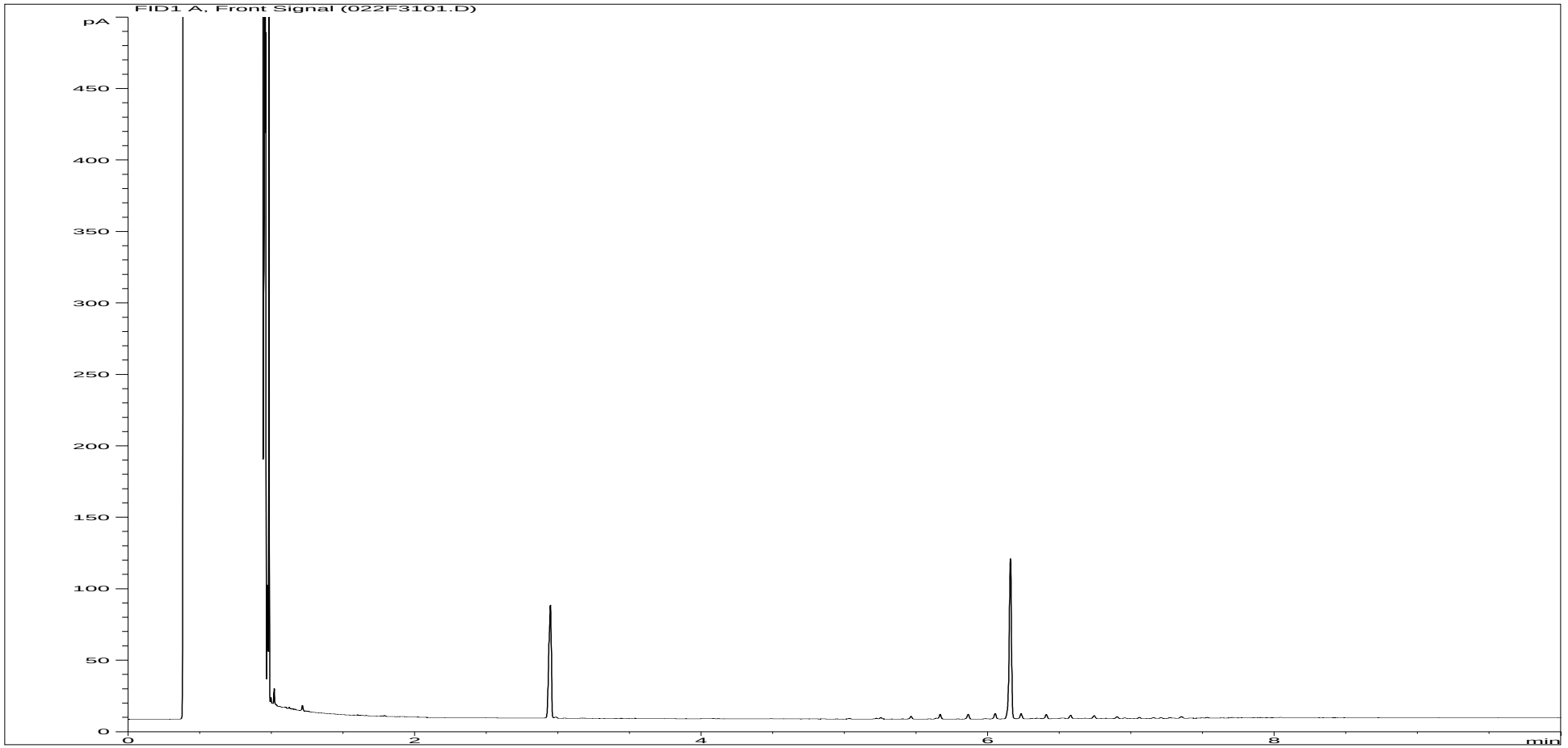
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132549ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	04-Aug-11, 22:23:26		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\069B3001.D		

Where individual results are flagged see report notes for status.

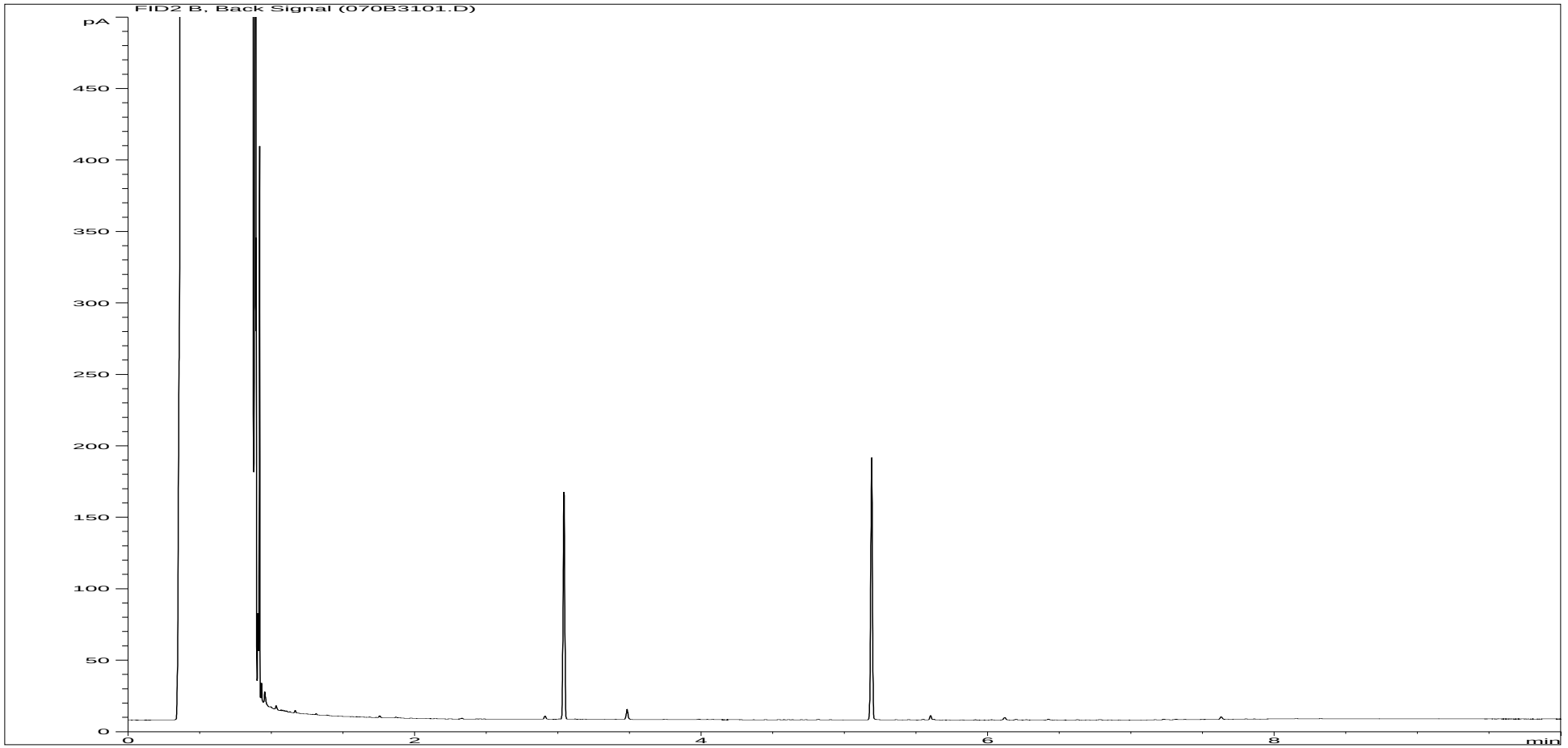
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132550ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11A
Acquisition Date/Time:	04-Aug-11, 22:40:37		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\022F3101.D		

Where individual results are flagged see report notes for status.

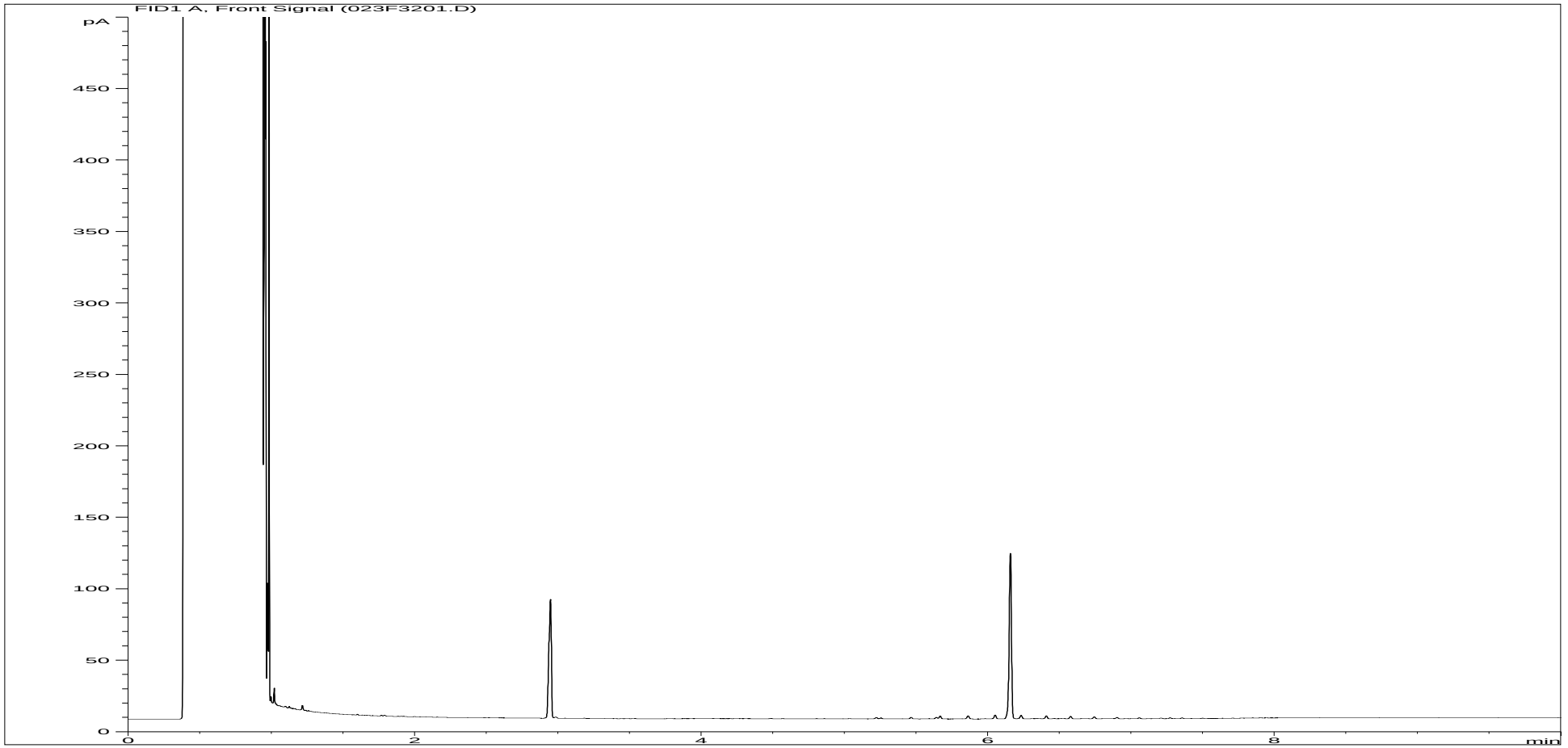
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132550ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11A
Acquisition Date/Time:	04-Aug-11, 22:40:37		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\070B3101.D		

Where individual results are flagged see report notes for status.

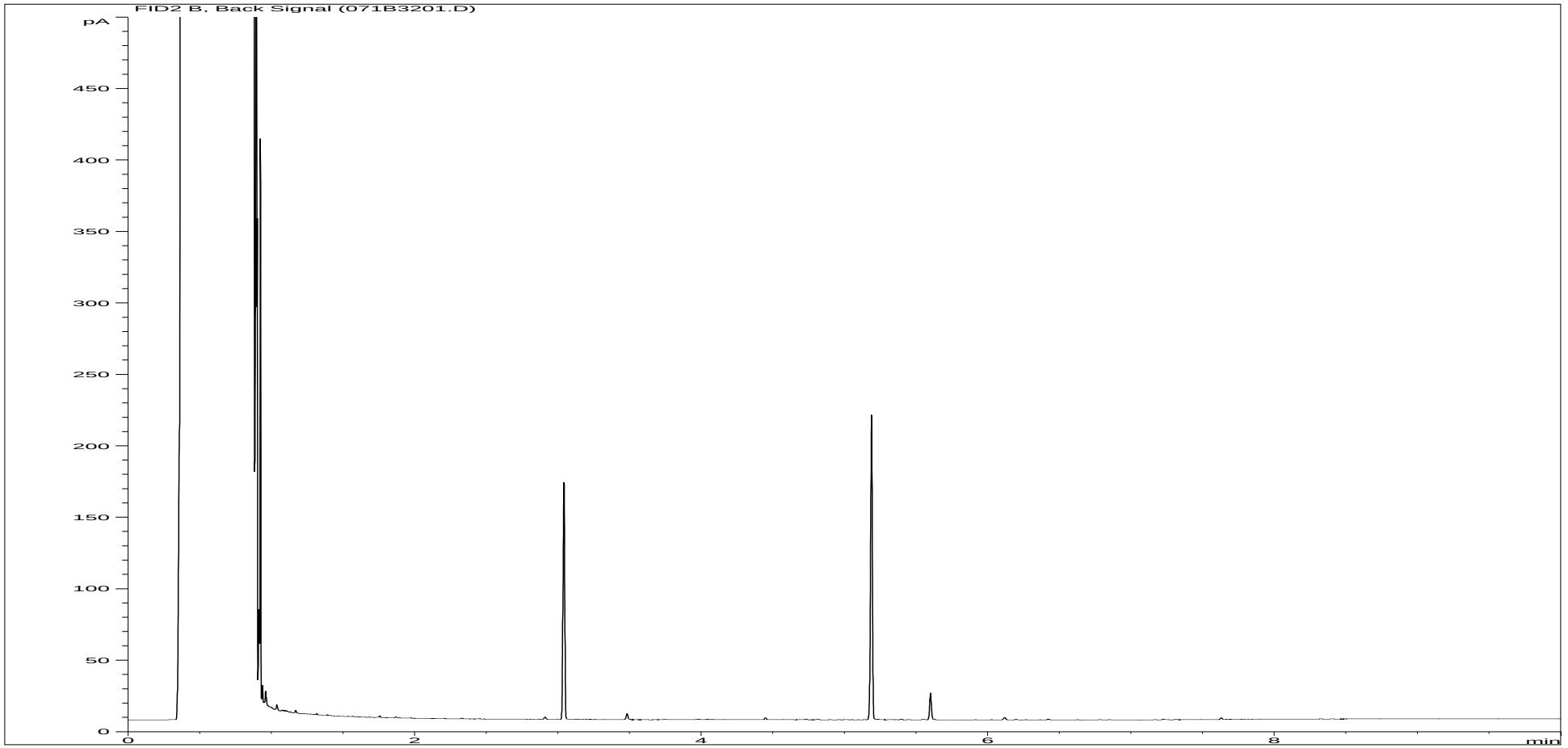
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132551ALI	**Job Number:**	W12_3554
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	04-Aug-11, 22:57:57		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\023F3201.D		

Where individual results are flagged see report notes for status.

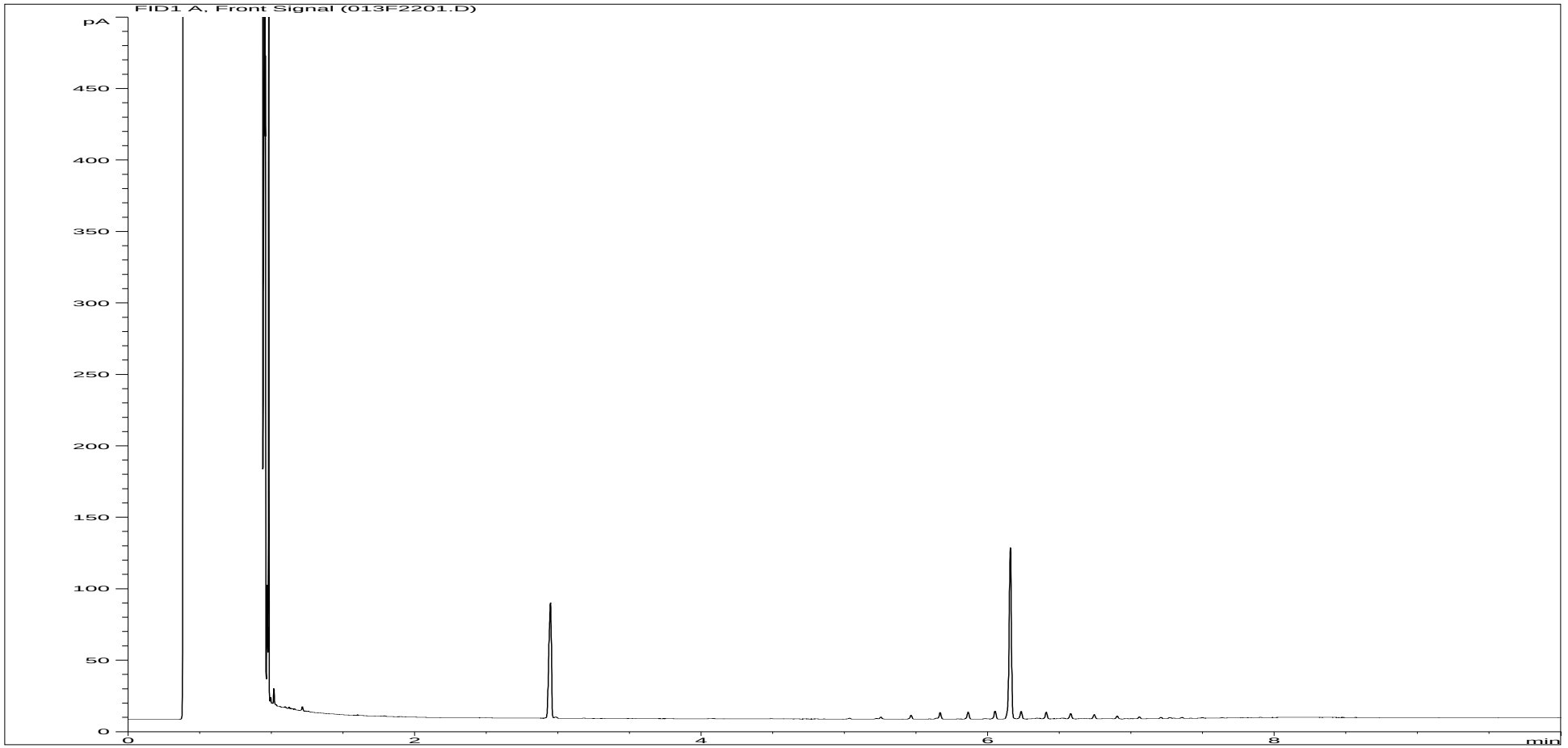
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132551ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	04-Aug-11, 22:57:57		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\071B3201.D		

Where individual results are flagged see report notes for status.

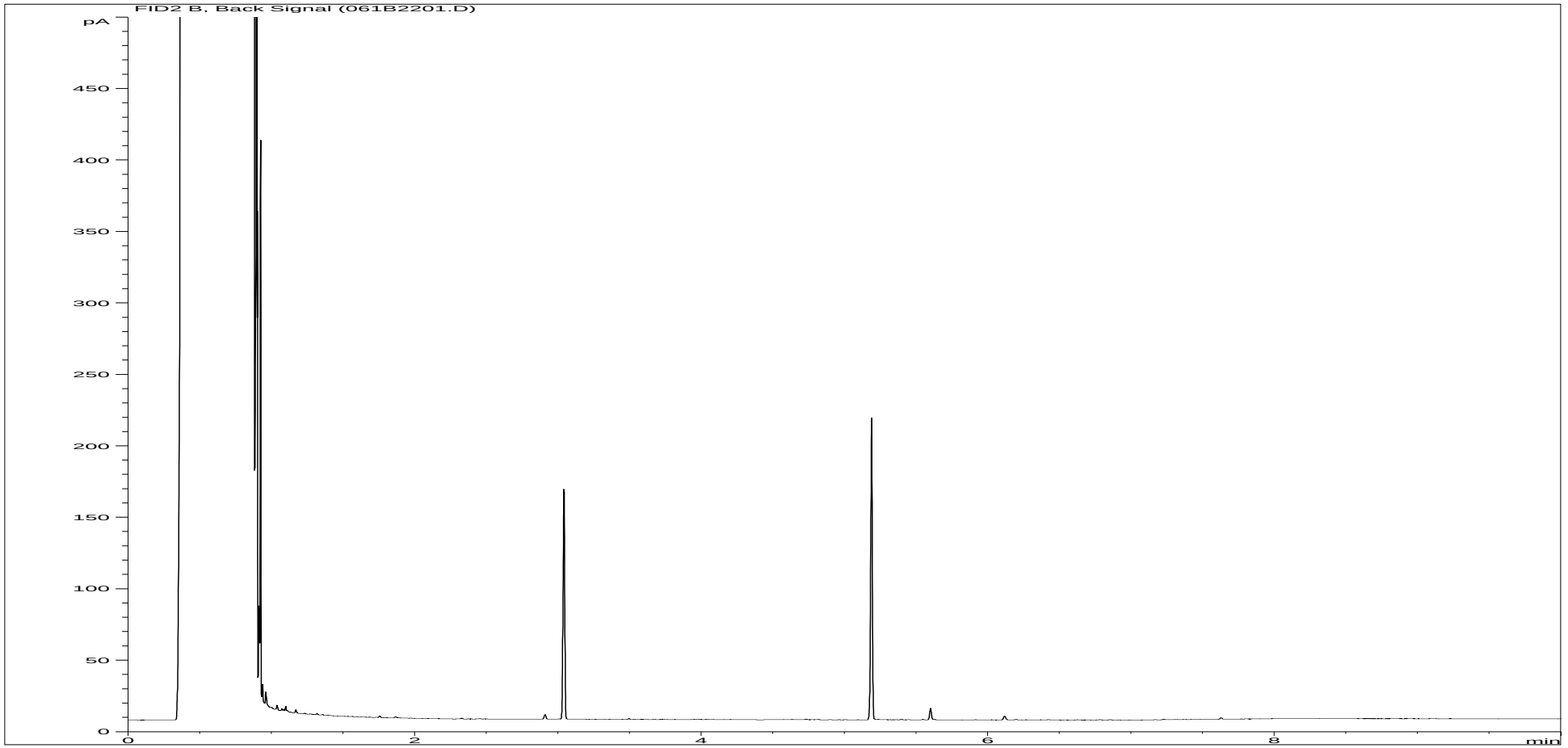
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132552ALI	**Job Number:**	W12_3554
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank
Acquisition Date/Time:	04-Aug-11, 20:05:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\013F2201.D		

Where individual results are flagged see report notes for status.

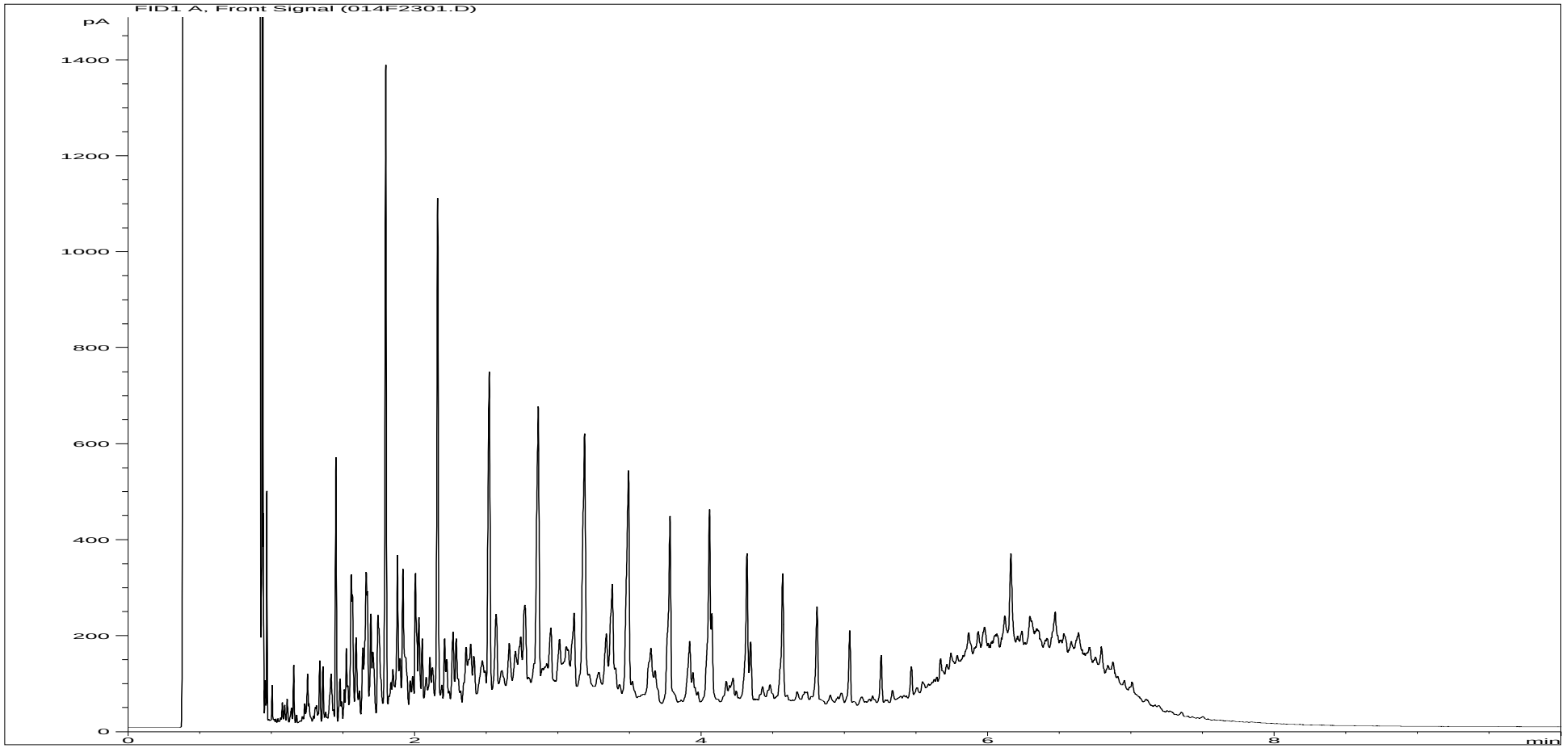
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132552ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank
Acquisition Date/Time:	04-Aug-11, 20:05:38		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\061B2201.D		

Where individual results are flagged see report notes for status.

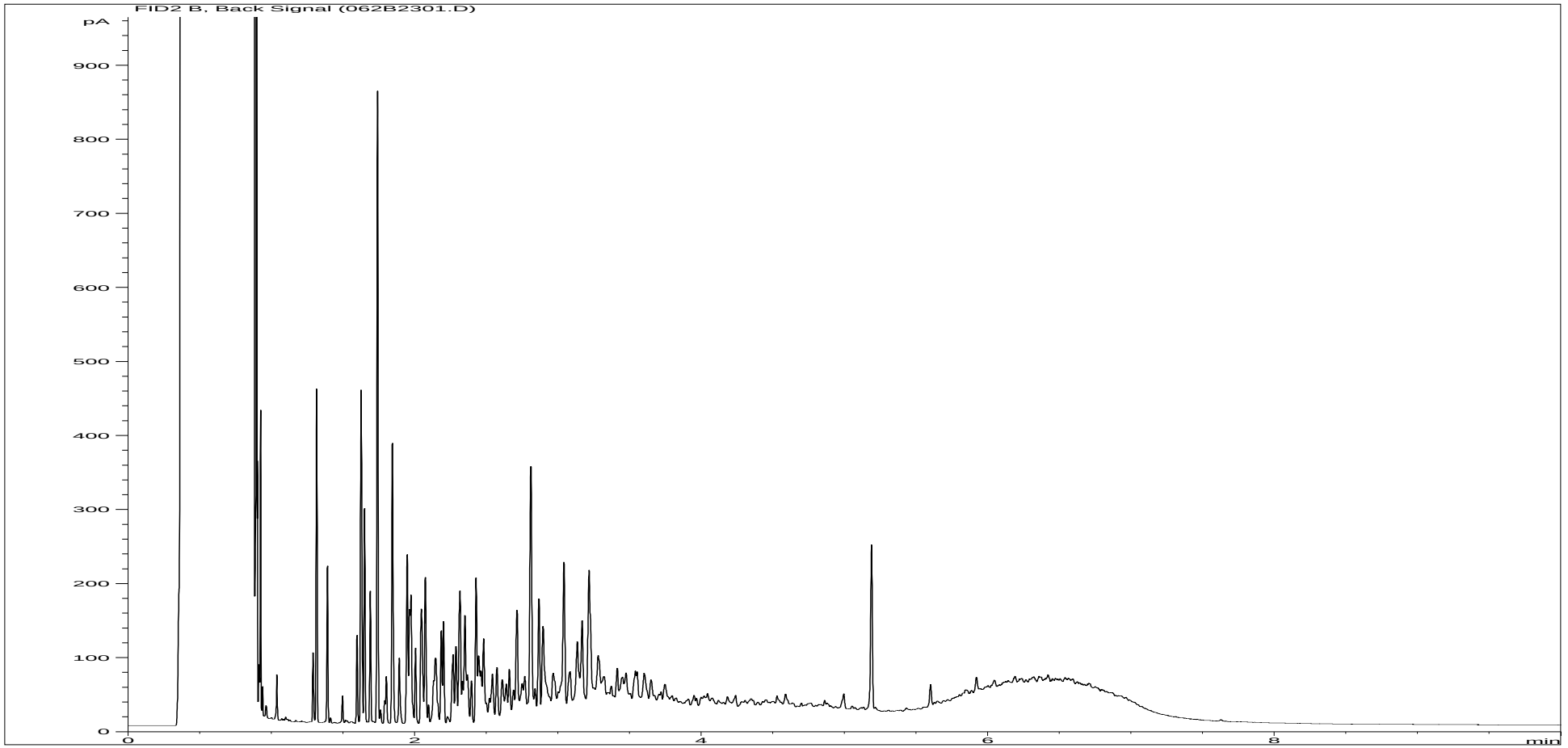
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1132553ALI	**Job Number:**	W12_3554
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank Spike
Acquisition Date/Time:	04-Aug-11, 20:22:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\014F2301.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1132553ARO	**Job Number:**	W12_3554
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 123554 Blank Spike
Acquisition Date/Time:	04-Aug-11, 20:22:48		
Datafile:	D:\TES\DATA\Y2011\080411TPH_GC16\080411 2011-08-04 14-06-42\062B2301.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123554

Customer Worley Parsons Komex
Site Maelor Works
Report No W123554

Consignment No 28164
Date Logged 29-Jul-2011

Report Due 10-Aug-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1132549	MW11-11	27/07/11																										
EX/1132550	MW11-11A	27/07/11																										
EX/1132551	MW11-12	27/07/11																										
EX/1132552	Report 123554 Blank	27/07/11																										
EX/1132553	Report 123554 Blank Spike	27/07/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W123554

Customer Worley Parsons Komex
Site Maelor Works
Report No W123554

Consignment No 28164
Date Logged 29-Jul-2011

Report Due 10-Aug-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1132549	MW11-11	27/07/11															
EX/1132550	MW11-11A	27/07/11															
EX/1132551	MW11-12	27/07/11															
EX/1132552	Report 123554 Blank	27/07/11															
EX/1132553	Report 123554 Blank Spike	27/07/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Environmental Chemistry
Sample Receipt / Deviating Sample Report

To: **Ms N Glynn**

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Phone: 01179 251 304
E-mail: natasha.glynn@worleyparson.com

From: Jane Colbourne
Environmental Chemistry
E.S.G
P.O. Box 100
Burton-on-Trent
Staffordshire
DE15 0XD
2nd September 2011

Your Order No: **305001-50065-29**
Your Reference **305001-50065-29**
Maelor Works

We have registered 8 Water Samples today for the analysis detailed overleaf and have assigned the laboratory identification **W124742**. The expected completion date is **14th September 2011**.

Notes:
Please review the Analytical and Deviating Sample overview on the next page and contact us with any amendments or comments within 24 hours. If we have not received written instruction within this time period, we will proceed as detailed.
Please be advised that the integrity of data for samples/analysis that have been categorised as Deviating may be compromised. The reported data may not be representative of the sample at the time of sampling and this must be taken into consideration when interpreting data.

For any queries relating to this Sample Submission or Project please contact:
Jane Colbourne (Jane.Colbourne@esgl.co.uk)
Phone: 01283 554541 or Fax: 01283 554549

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

Consignment No 28913
Date Logged 02-Sep-2011

Report Due 14-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS			PAHMSW	PHEHPLC	SFAPI
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA
Accredited to ISO17025					✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		✔
EX/1137377	MW11-12	30/08/11																												
EX/1137378	MW99-204	30/08/11																												
EX/1137379	MW11-5	31/08/11																												
EX/1137380	MW11-6	31/08/11																												
EX/1137381	MW5	31/08/11																												
EX/1137382	MW5A	31/08/11																												
EX/1137417	Report 124742 Blank	31/08/11																												
EX/1137418	Report 124742 Blank Spike	31/08/11																												

Note: For analysis where the Report Due is 7 days (PAH, Pesticides, PCB, Phenols, herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.
In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis required
	Analysis dependant upon trigger result - *Note: due date may be affected if triggered*
	No analysis scheduled
^	Analysis Subcontracted

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

ID Number	Description	MethodID				SFAS	TNW	TPHFID-SI	VOCHSA/W	WSLM10	WSLM13	WSLM2	WSLM20.	WSLM3
		Sampled	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✔	✔		✔		✔		✔	✔	✔		✔
EX/1137377	MW11-12	30/08/11												
EX/1137378	MW99-204	30/08/11												
EX/1137379	MW11-5	31/08/11												
EX/1137380	MW11-6	31/08/11												
EX/1137381	MW5	31/08/11												
EX/1137382	MW5A	31/08/11												
EX/1137417	Report 124742 Blank	31/08/11												
EX/1137418	Report 124742 Blank Spike	31/08/11												

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E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis required
	Analysis dependant upon trigger result - *Note: due date may be affected if triggered*
	No analysis scheduled
^	Analysis Subcontracted

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Environmental Chemistry
Sample Receipt / Deviating Sample Report

To: **Ms N Glynn**

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Phone: 01179 251 304
E-mail: natasha.glynn@worleyparson.com

From: Jane Colbourne
Environmental Chemistry
E.S.G
P.O. Box 100
Burton-on-Trent
Staffordshire
DE15 0XD
1st September 2011

Your Order No: **305001-50065-29**
Your Reference **305001-50065-29**
Maelor Works

We have registered 7 Water Samples today for the analysis detailed overleaf and have assigned the laboratory identification **W124728**. The expected completion date is **13th September 2011**.

Notes:
Please review the Analytical and Deviating Sample overview on the next page and contact us with any amendments or comments within 24 hours. If we have not received written instruction within this time period, we will proceed as detailed.
Please be advised that the integrity of data for samples/analysis that have been categorised as Deviating may be compromised. The reported data may not be representative of the sample at the time of sampling and this must be taken into consideration when interpreting data.

For any queries relating to this Sample Submission or Project please contact:
Jane Colbourne (Jane.Colbourne@esgl.co.uk)
Phone: 01283 554541 or Fax: 01283 554549

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS			PAHMSW	PHEHPLC	SFAPI
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA
Accredited to ISO17025					✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		✔
EX/1137319	MW99-202	30/08/11																												
EX/1137320	MW99-102	30/08/11																												
[redacted]	[redacted]	[redacted]																												
EX/1137322	MW99-1	30/08/11																												
EX/1137323	MW99-1A	30/08/11																												
EX/1137334	Report 124728 Blank	30/08/11																												
EX/1137335	Report 124728 Blank Spike	30/08/11																												

Note: For analysis where the Report Due is 7 days (PAH, Pesticides, PCB, Phenols, herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.
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D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis required
	Analysis dependant upon trigger result - *Note: due date may be affected if triggered*
	No analysis scheduled
^	Analysis Subcontracted

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

ID Number	Description	MethodID				SFAS	TNW	TPHFID-SI	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20.	WSLM3
		Sampled	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✔	✔		✔		✔		✔	✔	✔		✔
EX/1137319	MW99-202	30/08/11												
EX/1137320	MW99-102	30/08/11												
[redacted]	[redacted]	[redacted]												
EX/1137322	MW99-1	30/08/11												
EX/1137323	MW99-1A	30/08/11												
EX/1137334	Report 124728 Blank	30/08/11												
EX/1137335	Report 124728 Blank Spike	30/08/11												

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Requested Analysis Key	
	Analysis required
	Analysis dependant upon trigger result - *Note: due date may be affected if triggered*
	No analysis scheduled
^	Analysis Subcontracted

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Our Ref: EXR/124763 (Ver. 1)
Your Ref: 305001-50065-29

September 15, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

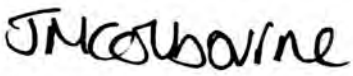
Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics



J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124763 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 5 samples described in this report were logged for analysis by Scientifics on 02-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 9)
Table of TPH (Si) banding (0.01) (Page 10)
GC-FID Chromatograms (Pages 11 to 20)
Analytical and Deviating Sample Overview (Pages 21 to 22)
Table of Method Descriptions (Page 23)
Table of Report Notes (Page 24)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 15-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137461	MW99-110	31-Aug-11	6.9	983	51	177	68	84	8	94	6	0.003	0.003	<0.0001	Req	<0.001	<0.001	0.007
1137462	MW11-8	01-Sep-11	7.0	1090	120	96	11	127	11	47	26	0.003	0.007	<0.0001	Req	<0.001	<0.001	<0.002
1137463	MW11-7	01-Sep-11	7.1	1110	62	93	88	157	8	58	13	0.003	0.006	<0.0001	Req	<0.001	<0.001	<0.002
1137490	QC Blank		7.05	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137491	Blank Spike (% Recovery)				102	102	99	98	99	101	101	101	96	94	Req	100	99	95

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Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137461	MW99-110	31-Aug-11	0.12	0.72	0.84	<0.01	<0.001	<0.0001	<0.001	1.6	0.4	<0.2	<0.02	<0.02	<0.05	2.3	<0.1	Req
1137462	MW11-8	01-Sep-11	<0.01	11.8	14.6	3.36	0.019	<0.0001	<0.001	19.9	<0.2	<0.2	<0.02	<0.02	<0.05	25	2.20	Req
1137463	MW11-7	01-Sep-11	1.81	5.08	6.89	0.02	0.008	<0.0001	0.001	10.1	<0.2	<0.2	<0.02	<0.02	0.11	17	0.29	Req
1137490	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137491	Blank Spike (% Recovery)			95	99	98	95	103	92	101	101	99	101	99	109	108	99	Req

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Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422

Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137461	MW99-110	31-Aug-11	243	4.13	<0.02	6.9	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137462	MW11-8	01-Sep-11	362	4.12	<0.02	0.1	19	105	4	49	98	0.0211	<0.0005	0.0102	<0.1	0.0029		
1137463	MW11-7	01-Sep-11	425	1.63	<0.02	0.9	10	<1	<1	<1	<2	0.0707	0.0195	0.5	<0.1	0.3		
1137490	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137491	Blank Spike (% Recovery)			99			98	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**15-Sep-2011**
Report Number	**EXR/124763**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-110	**Job Number:**	W12_4763
LIMS ID Number:	EX1137461	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.030	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.180	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	98
Phenanthrene-d10	103
Chrysene-d12	99
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	100

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-8	**Job Number:**	W12_4763
LIMS ID Number:	EX1137462	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	525.000	100
Acenaphthylene	208-96-8	4.25	1.660	100
Acenaphthene	83-32-9	4.37	52.100	94
Fluorene	86-73-7	4.74	28.000	100
Phenanthrene	85-01-8	5.57	26.200	100
Anthracene	120-12-7	5.62	8.300	100
Fluoranthene	206-44-0	6.89	4.670	100
Pyrene	129-00-0	7.18	3.880	100
Benzo[a]anthracene	56-55-3	8.85	0.808	100
Chrysene	218-01-9	8.90	0.596	100
Benzo[b]fluoranthene	205-99-2	10.38	0.341	100
Benzo[k]fluoranthene	207-08-9	10.41	0.128	100
Benzo[a]pyrene	50-32-8	10.80	0.340	100
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.106	0
Dibenzo[a,h]anthracene	53-70-3	12.21	0.030	0
Benzo[g,h,i]perylene	191-24-2	12.47	0.098	0
Total (USEPA16) PAHs	-	-	< 652.257	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	130
Acenaphthene-d10	115
Phenanthrene-d10	117
Chrysene-d12	132
Perylene-d12	145

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-7	**Job Number:**	W12_4763
LIMS ID Number:	EX1137463	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	5.340	100
Acenaphthylene	208-96-8	4.25	25.700	100
Acenaphthene	83-32-9	4.37	57.300	90
Fluorene	86-73-7	4.74	30.100	97
Phenanthrene	85-01-8	5.57	11.800	100
Anthracene	120-12-7	5.62	8.860	100
Fluoranthene	206-44-0	6.89	4.600	100
Pyrene	129-00-0	7.17	3.570	100
Benzo[a]anthracene	56-55-3	8.85	0.284	100
Chrysene	218-01-9	8.90	0.217	100
Benzo[b]fluoranthene	205-99-2	10.38	0.063	M
Benzo[k]fluoranthene	207-08-9	10.41	0.028	M
Benzo[a]pyrene	50-32-8	10.80	0.056	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.015	M
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	12.47	0.016	M
Total (USEPA16) PAHs	-	-	< 147.959	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	81
Acenaphthene-d10	121
Phenanthrene-d10	122
Chrysene-d12	132
Perylene-d12	141

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	64
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124763 Blank	**Job Number:**	W12_4763
LIMS ID Number:	EX1137490	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	102
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124763 Blank Spike	**Job Number:**	W12_4763
LIMS ID Number:	EX1137491	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.20	83	M
Acenaphthylene	208-96-8	4.25	79	M
Acenaphthene	83-32-9	4.37	81	M
Fluorene	86-73-7	4.74	82	M
Phenanthrene	85-01-8	5.57	88	M
Anthracene	120-12-7	5.62	84	M
Fluoranthene	206-44-0	6.89	90	M
Pyrene	129-00-0	7.18	88	M
Benzo[a]anthracene	56-55-3	8.85	103	M
Chrysene	218-01-9	8.90	87	M
Benzo[b]fluoranthene	205-99-2	10.38	90	M
Benzo[k]fluoranthene	207-08-9	10.42	89	M
Benzo[a]pyrene	50-32-8	10.80	81	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.19	83	M
Dibenzo[a,h]anthracene	53-70-3	12.22	80	M
Benzo[g,h,i]perylene	191-24-2	12.47	84	M
Total (USEPA16) PAHs	-	-	1371	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	105
Chrysene-d12	110
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4763
QC Batch Number: 110805
Directory: D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

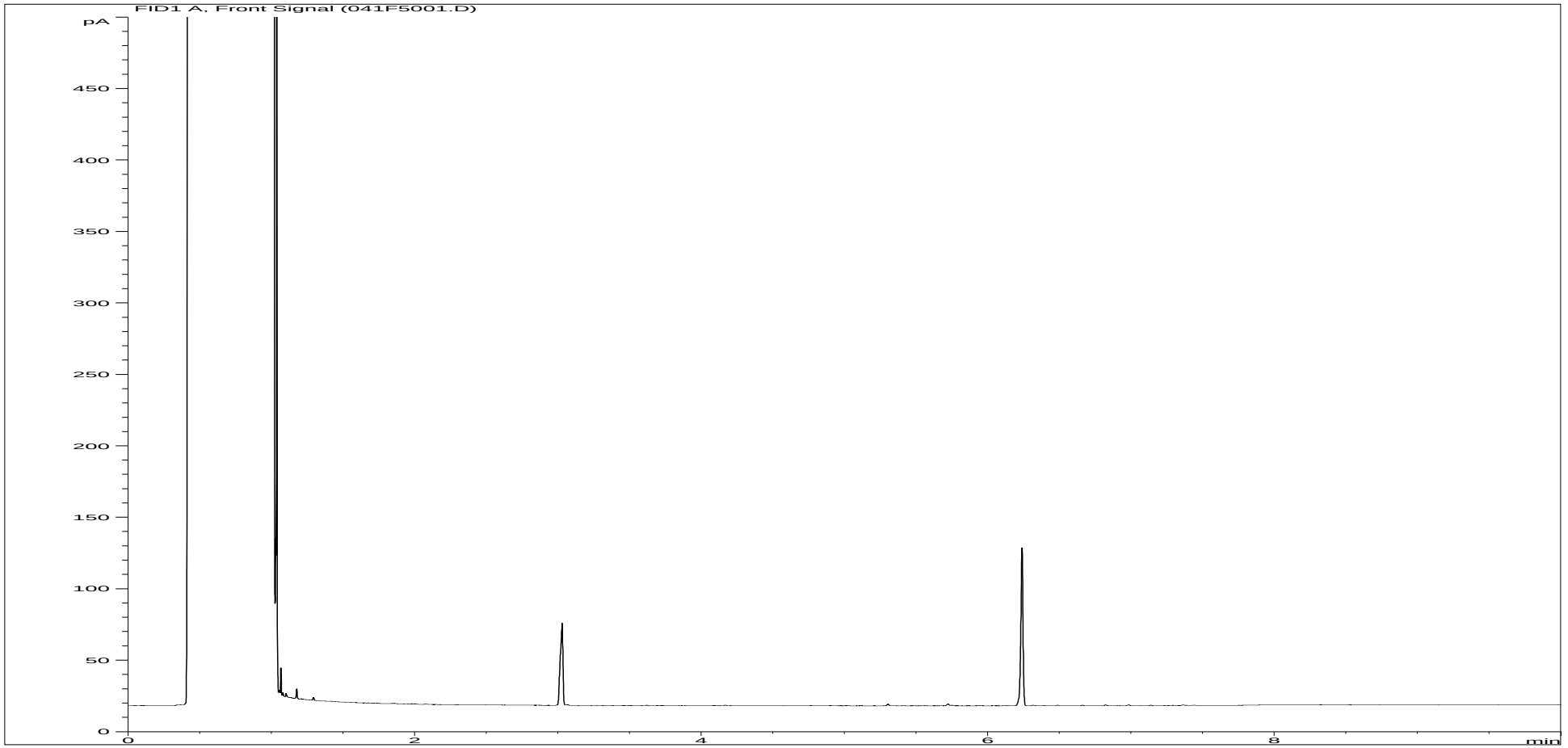
Matrix: Water
Date Booked ir 02-Sep-11
Date Extracted 08-Sep-11
Date Analysed 09-Sep-11, 19:03:52

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137461	MW99-110	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137462	MW11-8	0.014	0.357	0.019	1.13	0.064	0.683	0.084	0.225	0.115	0.09	0.307	2.49
EX1137463	MW11-7	<0.01	0.297	<0.01	0.572	<0.01	0.869	<0.01	0.182	<0.01	0.034	0.01	1.96
EX1137490	Report 124763 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137491	Report 124763 Blank Spike	0.594	0.207	0.91	0.328	1.83	0.615	1.13	0.32	2.95	0.746	7.46	2.23

Where individual results are flagged see report notes for status.

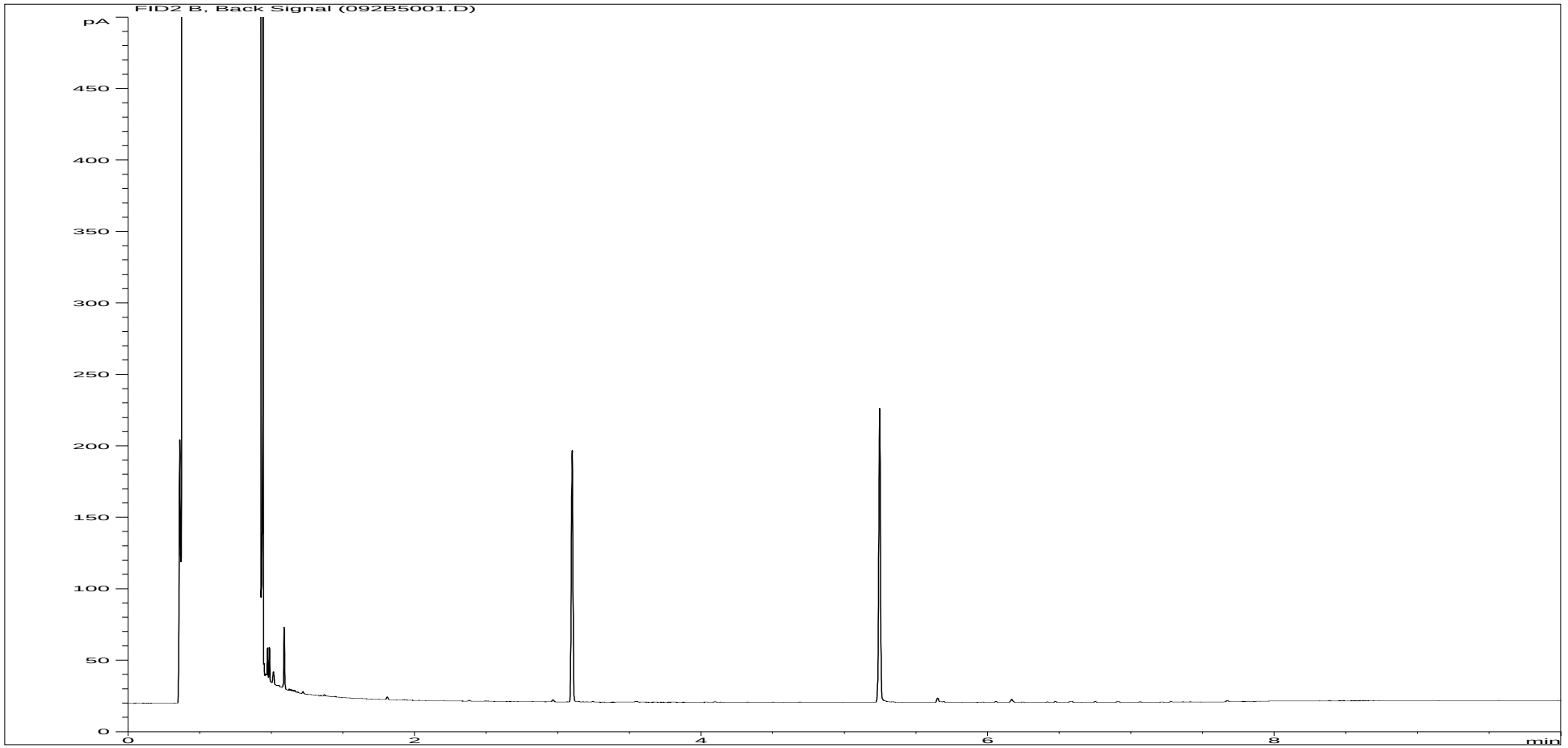
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137461ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	09-Sep-11, 22:47:35		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\041F5001.D		

Where individual results are flagged see report notes for status.

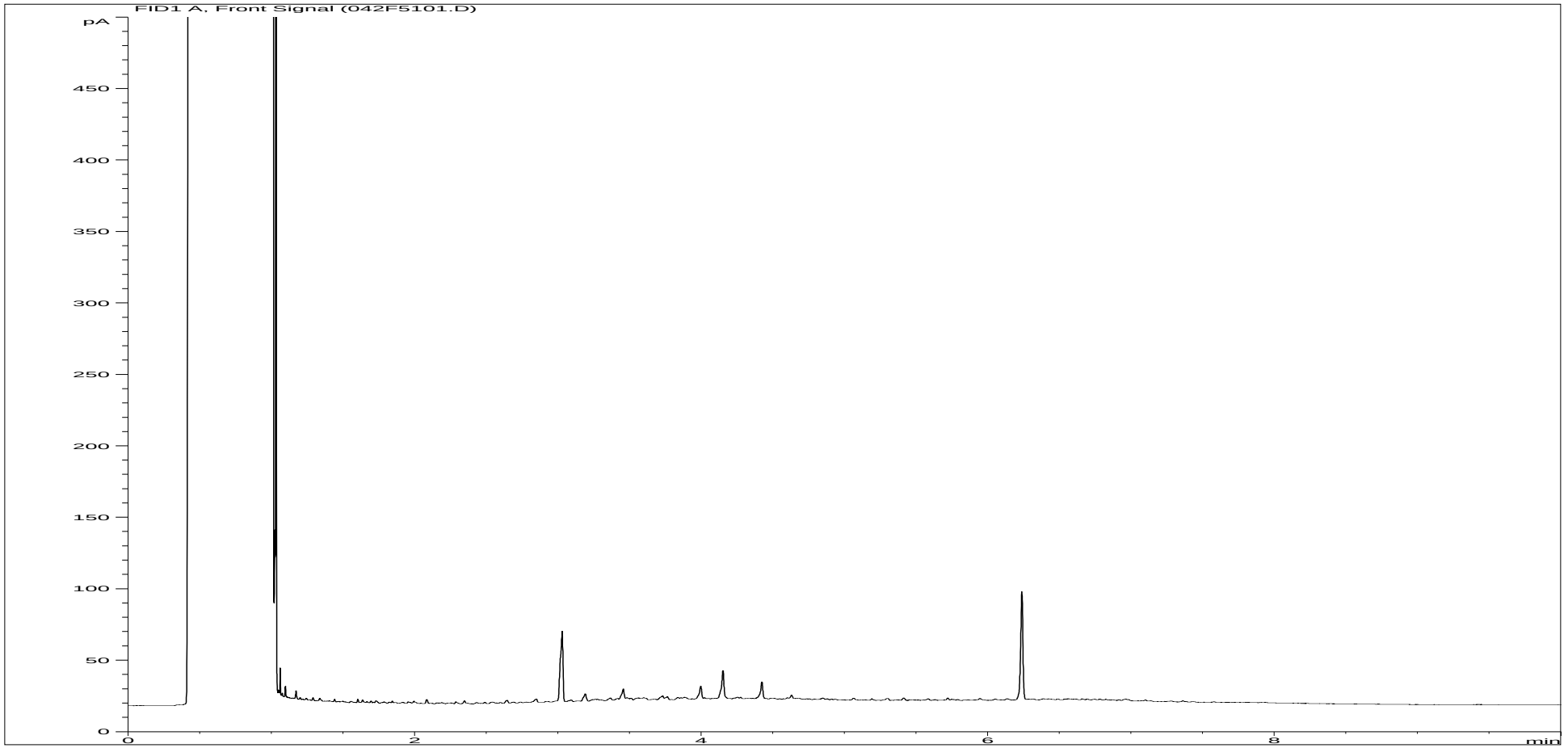
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137461ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-110
Acquisition Date/Time:	09-Sep-11, 22:47:35		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\092B5001.D		

Where individual results are flagged see report notes for status.

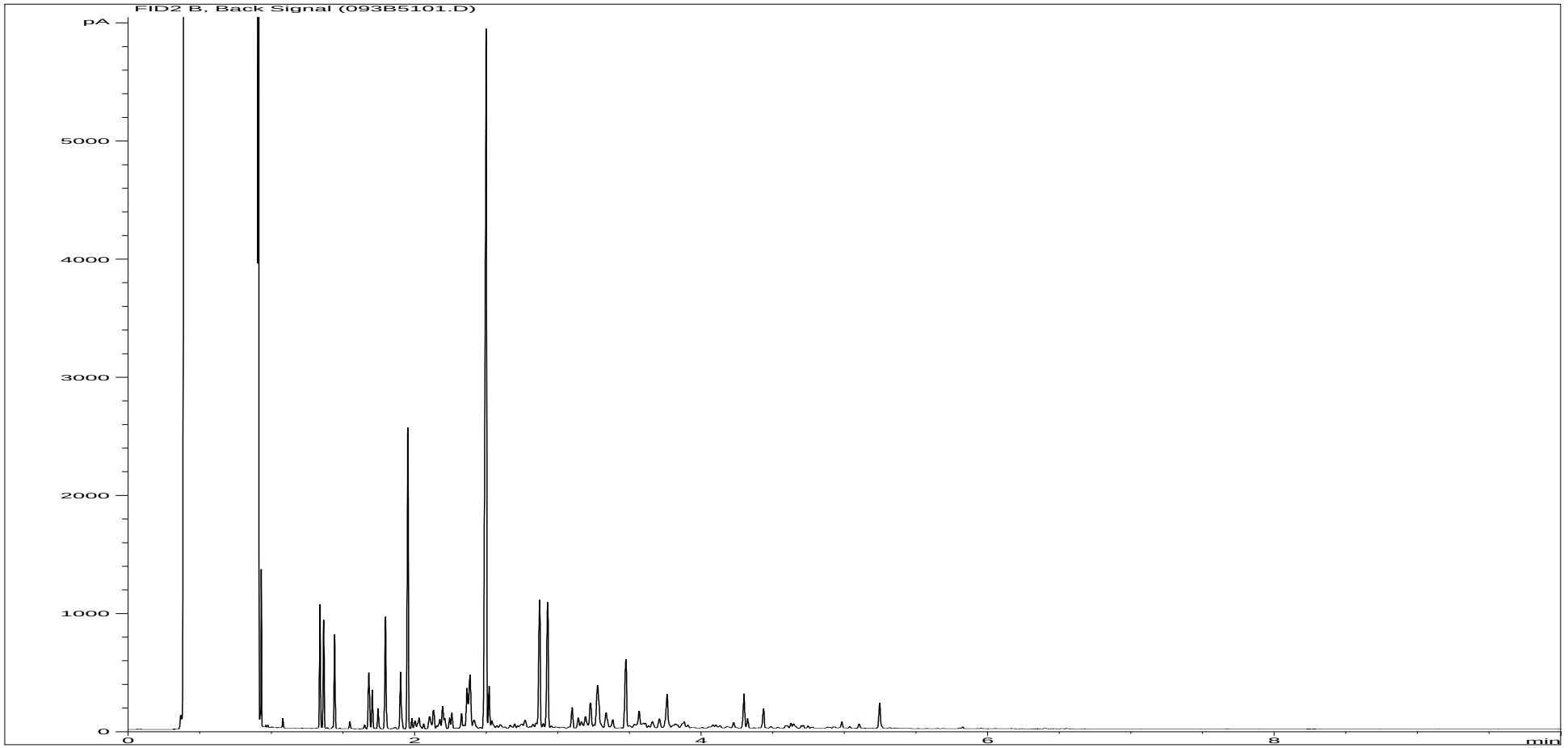
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137462ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	09-Sep-11, 23:04:45		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\042F5101.D		

Where individual results are flagged see report notes for status.

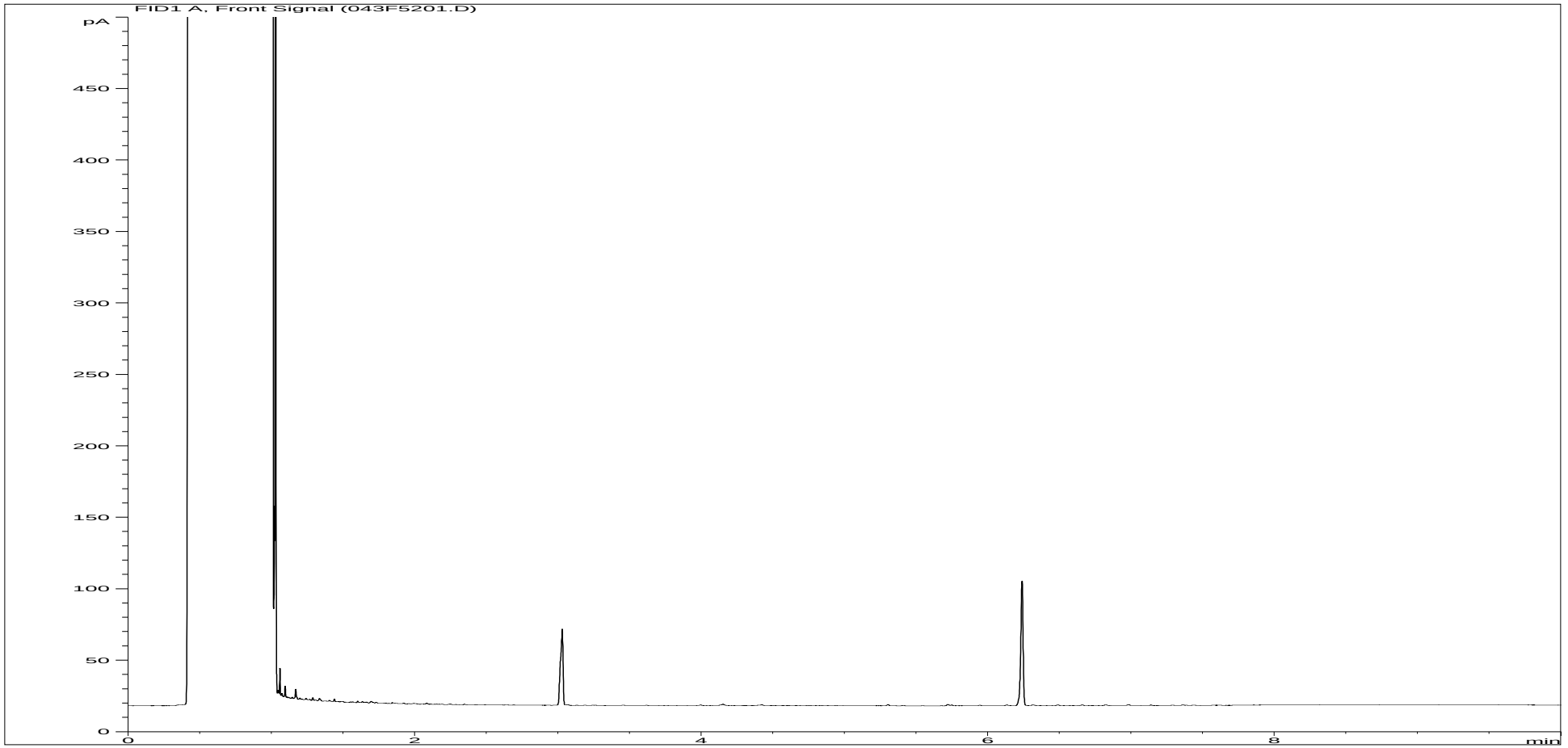
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137462ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-8
Acquisition Date/Time:	09-Sep-11, 23:04:45		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\093B5101.D		

Where individual results are flagged see report notes for status.

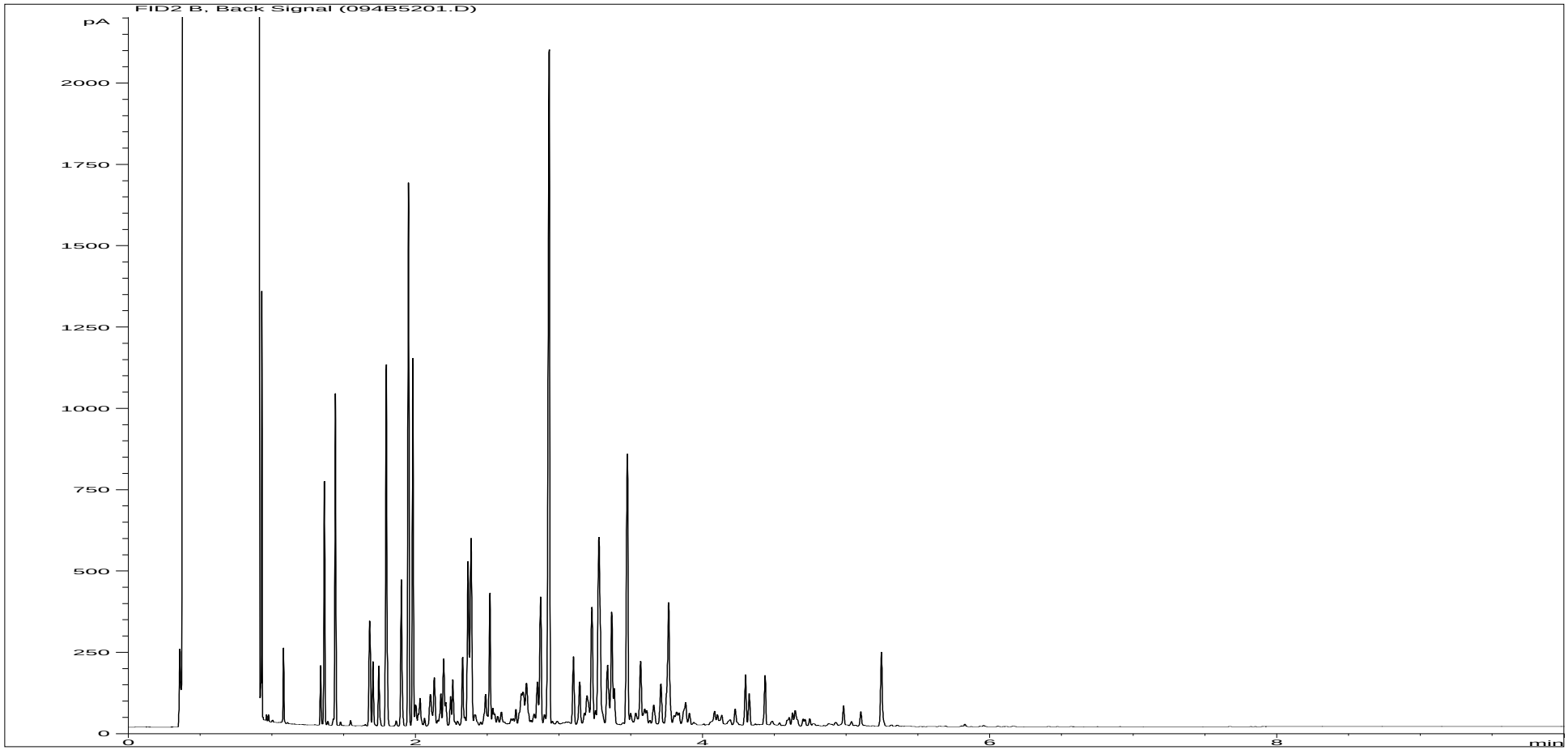
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137463ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	09-Sep-11, 23:21:48		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\043F5201.D		

Where individual results are flagged see report notes for status.

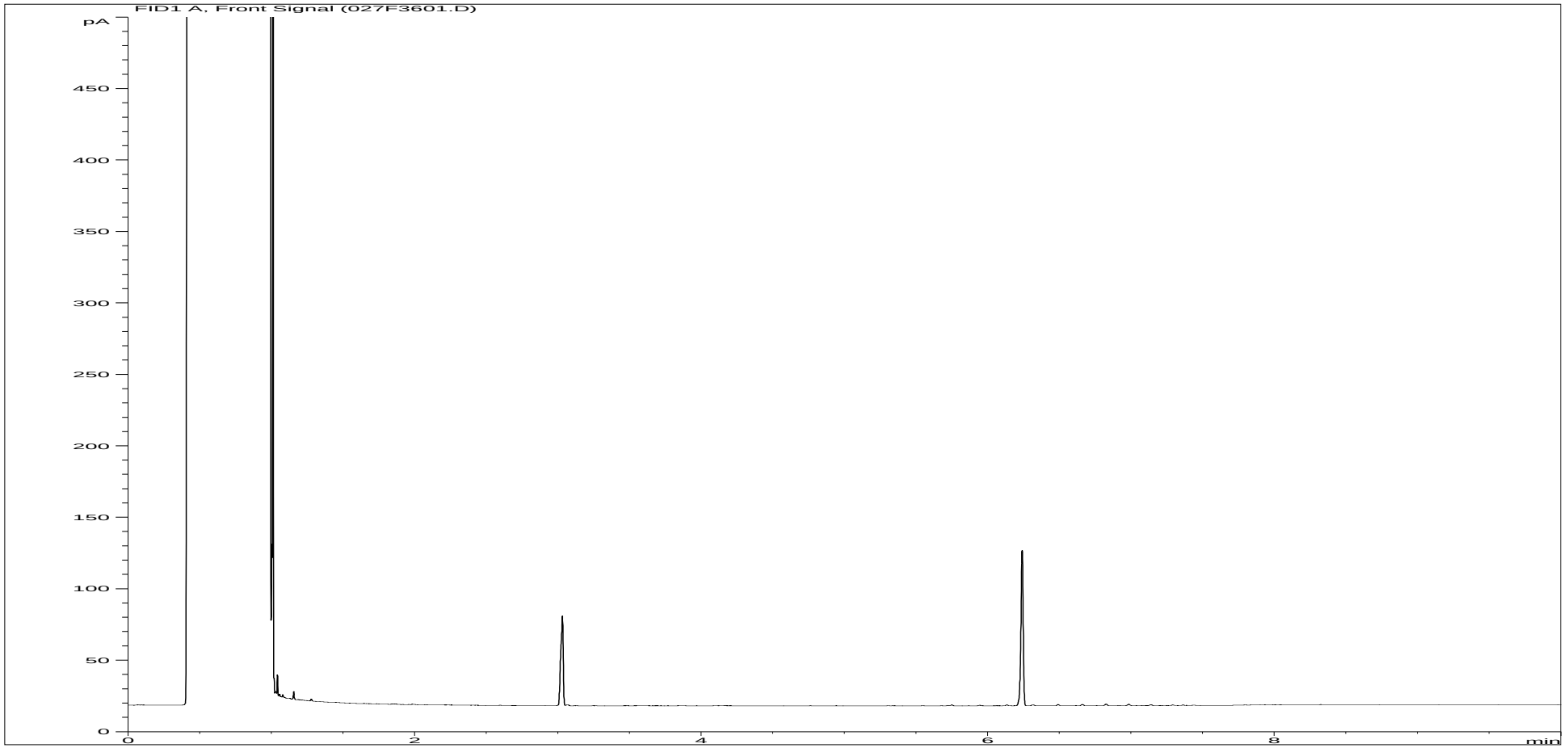
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137463ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-7
Acquisition Date/Time:	09-Sep-11, 23:21:48		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\094B5201.D		

Where individual results are flagged see report notes for status.

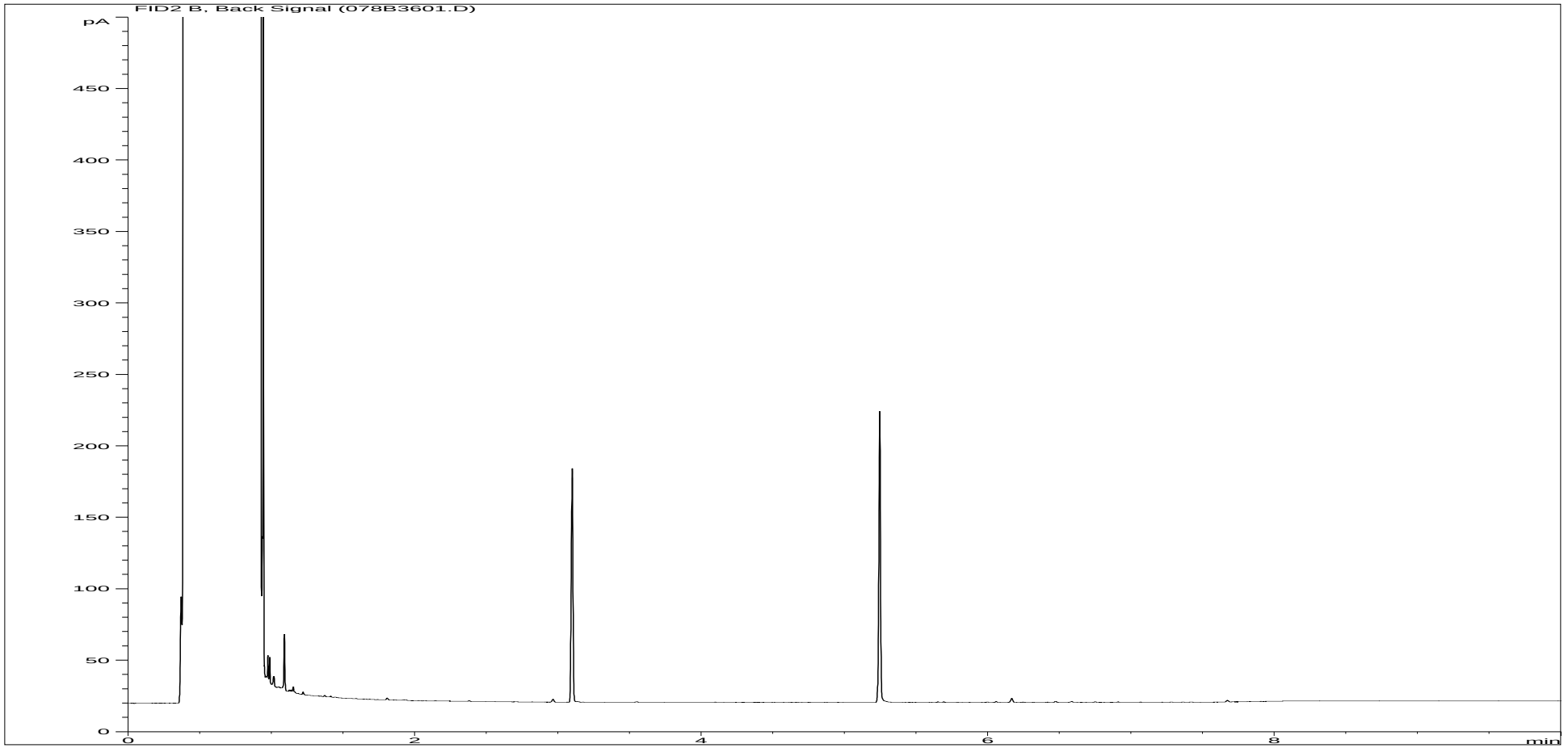
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137490ALI	**Job Number:**	W12_4763
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\027F3601.D		

Where individual results are flagged see report notes for status.

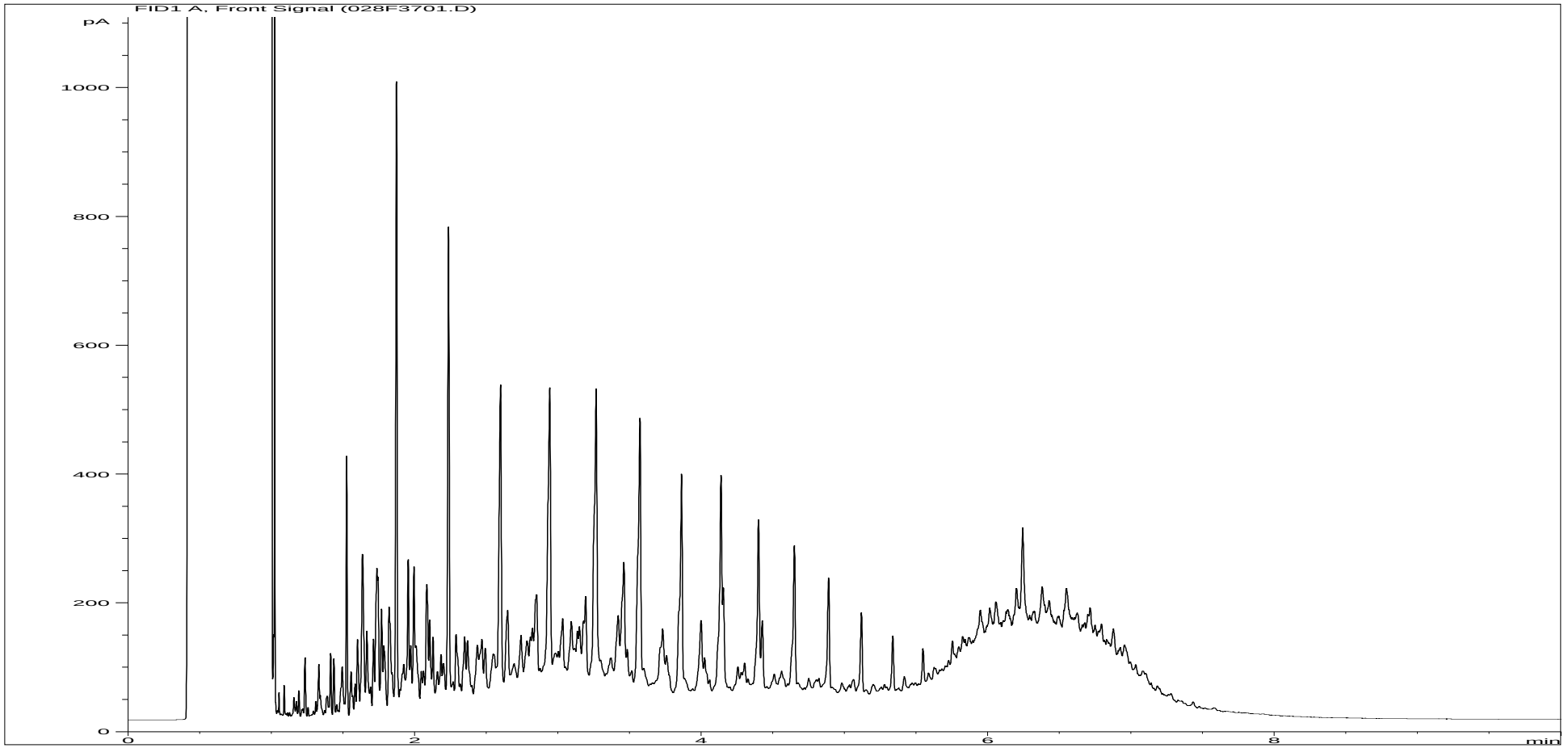
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137490ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\078B3601.D		

Where individual results are flagged see report notes for status.

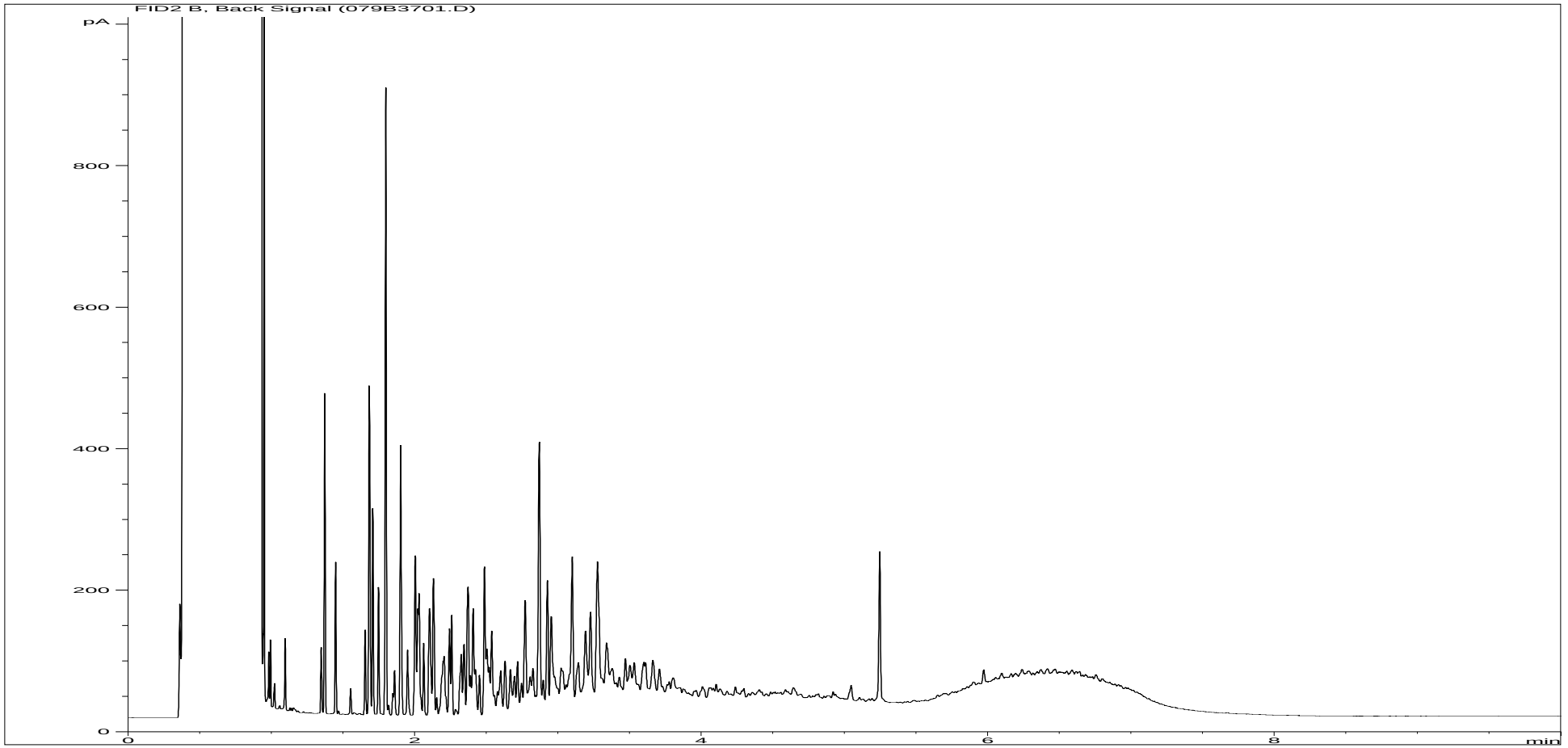
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137491ALI	**Job Number:**	W12_4763
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\028F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137491ARO	**Job Number:**	W12_4763
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124763 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124763

Customer Worley Parsons Komex
Site Maelor Works
Report No W124763

Consignment No 28928
Date Logged 02-Sep-2011

Report Due 15-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137461	MW99-110	31/08/11																										
EX/1137462	MW11-8	01/09/11																										
EX/1137463	MW11-7	01/09/11																										
EX/1137490	Report 124763 Blank	31/08/11																										
EX/1137491	Report 124763 Blank Spike	31/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124763

Customer Worley Parsons Komex
Site Maelor Works
Report No W124763

Consignment No 28928
Date Logged 02-Sep-2011

Report Due 15-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137461	MW99-110	31/08/11															
EX/1137462	MW11-8	01/09/11															
EX/1137463	MW11-7	01/09/11															
EX/1137490	Report 124763 Blank	31/08/11															
EX/1137491	Report 124763 Blank Spike	31/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124742 (Ver. 1)
Your Ref: 305001-50065-29

September 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124742 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 8 samples described in this report were logged for analysis by Scientifics on 02-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 12)
Table of TPH (Si) banding (0.01) (Page 13)
GC-FID Chromatograms (Pages 14 to 29)
Analytical and Deviating Sample Overview (Pages 30 to 31)
Table of Method Descriptions (Page 32)
Table of Report Notes (Page 33)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137377	MW11-12	30-Aug-11	7.5	1000	378	103	99	93	7	62	61	0.001	0.003	<0.0001	Req	0.002	<0.001	<0.002
1137378	MW99-204	30-Aug-11	7.2	309	14	14	45	47	3	9	8	<0.001	0.001	<0.0001	Req	0.001	<0.001	<0.002
1137379	MW11-5	31-Aug-11	6.6	394	17	42	16	54	3	26	3	0.003	0.002	0.0001	Req	0.001	<0.001	<0.002
1137380	MW11-6	31-Aug-11	11.7	1400	150	63	180	143	<1	35	57	0.012	<0.001	<0.0001	Req	0.004	0.004	<0.002
1137381	MW5	31-Aug-11	8.9	2610	524	206	1220	602	24	60	31	0.003	<0.001	<0.0001	Req	0.004	<0.001	<0.002
1137382	MW5A	31-Aug-11	6.7	396	18	43	16	52	3	25	3	0.003	0.002	0.0001	Req	0.001	<0.001	<0.002
1137417	QC Blank		7.05	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137418	Blank Spike (% Recovery)				100	100	99	98	99	101	101	101	96	94	Req	100	99	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137377	MW11-12	30-Aug-11	7.1	2.10	9.20	<0.01	0.003	<0.0001	0.003	0.09	2.0	<0.2	<0.02	<0.02	0.10	5.0	<0.1	Req
1137378	MW99-204	30-Aug-11	2.44	0.43	2.87	<0.01	<0.001	<0.0001	0.003	0.08	0.2	<0.2	<0.02	<0.02	0.26	2.5	<0.1	Req
1137379	MW11-5	31-Aug-11	7.89	2.61	10.5	<0.01	0.002	<0.0001	<0.001	0.13	<0.2	<0.2	<0.02	<0.02	<0.05	3.6	<0.1	Req
1137380	MW11-6	31-Aug-11	0.16	1.69	1.85	<0.01	0.007	<0.0001	0.005	22.2	<0.2	0.4	<0.02	0.04	0.92	23	0.14	Req
1137381	MW5	31-Aug-11	0.85	0.76	1.61	<0.01	0.004	<0.0001	0.005	11.5	<0.2	0.6	0.03	0.19	<0.05	5.9	<0.1	Req
1137382	MW5A	31-Aug-11	8.04	2.16	10.2	<0.01	0.001	<0.0001	<0.001	0.14	<0.2	<0.2	<0.02	<0.02	<0.05	3.6	<0.1	Req
1137417	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	Req
1137418	Blank Spike (% Recovery)			98	98	98	95	103	92	102		99	101	99	109	98	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137377	MW11-12	30-Aug-11	261	0.846	<0.02	5.4	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137378	MW99-204	30-Aug-11	130	0.232	<0.02	6.8	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137379	MW11-5	31-Aug-11	147	0.856	<0.02	5.3	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137380	MW11-6	31-Aug-11	361	0.077	<0.04	0.6	28	60	12	3	18	1.5	1.3	0.5	<0.1	0.0623		
1137381	MW5	31-Aug-11	1602	0.180	0.16	4.2	12	2	3	<1	7	0.5	0.5	0.2	<0.1	0.0020		
1137382	MW5A	31-Aug-11	142	0.860	<0.02	4.9	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137417	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137418	Blank Spike (% Recovery)			99			86	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124742**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-12	**Job Number:**	W12_4742
LIMS ID Number:	EX1137377	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.023	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.37	0.068	M
Fluorene	86-73-7	4.74	0.038	M
Phenanthrene	85-01-8	5.57	0.045	M
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	6.90	0.012	M
Pyrene	129-00-0	7.18	0.011	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.297	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	97
Acenaphthene-d10	99
Phenanthrene-d10	103
Chrysene-d12	109
Perylene-d12	121

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	96

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-204	**Job Number:**	W12_4742
LIMS ID Number:	EX1137378	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.011	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.011	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.162	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	100
Phenanthrene-d10	103
Chrysene-d12	102
Perylene-d12	109

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	96

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-5	**Job Number:**	W12_4742
LIMS ID Number:	EX1137379	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.018	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.168	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	99
Phenanthrene-d10	101
Chrysene-d12	96
Perylene-d12	101

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	75
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-6	**Job Number:**	W12_4742
LIMS ID Number:	EX1137380	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	395.000	100
Acenaphthylene	208-96-8	4.25	803.000	100
Acenaphthene	83-32-9	4.37	3.740	95
Fluorene	86-73-7	4.74	13.100	99
Phenanthrene	85-01-8	5.57	14.100	100
Anthracene	120-12-7	5.62	3.270	100
Fluoranthene	206-44-0	6.89	3.440	100
Pyrene	129-00-0	7.18	2.330	100
Benzo[a]anthracene	56-55-3	8.85	0.368	100
Chrysene	218-01-9	8.90	0.245	100
Benzo[b]fluoranthene	205-99-2	10.38	0.141	M
Benzo[k]fluoranthene	207-08-9	10.41	0.056	M
Benzo[a]pyrene	50-32-8	10.80	0.109	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.18	0.040	M
Dibenzo[a,h]anthracene	53-70-3	12.22	0.010	M
Benzo[g,h,i]perylene	191-24-2	12.47	0.028	M
Total (USEPA16) PAHs	-	-	< 1238.977	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	127
Acenaphthene-d10	110
Phenanthrene-d10	119
Chrysene-d12	133
Perylene-d12	147

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	68
Terphenyl-d14	87

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5	**Job Number:**	W12_4742
LIMS ID Number:	EX1137381	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.211	100
Acenaphthylene	208-96-8	4.25	2.670	100
Acenaphthene	83-32-9	4.36	0.309	70
Fluorene	86-73-7	4.74	1.090	97
Phenanthrene	85-01-8	5.57	0.863	100
Anthracene	120-12-7	5.62	0.318	100
Fluoranthene	206-44-0	6.89	0.348	100
Pyrene	129-00-0	7.17	0.242	M
Benzo[a]anthracene	56-55-3	8.85	0.057	M
Chrysene	218-01-9	8.90	0.041	M
Benzo[b]fluoranthene	205-99-2	10.38	0.019	M
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	10.80	0.016	M
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 6.224	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	103
Phenanthrene-d10	109
Chrysene-d12	112
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	66
Terphenyl-d14	87

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW5A	**Job Number:**	W12_4742
LIMS ID Number:	EX1137382	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.20	0.027	M
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.18	0.017	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.184	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	100
Acenaphthene-d10	100
Phenanthrene-d10	108
Chrysene-d12	115
Perylene-d12	122

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	99

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124742 Blank	**Job Number:**	W12_4742
LIMS ID Number:	EX1137417	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	98
Acenaphthene-d10	95
Phenanthrene-d10	97
Chrysene-d12	102
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124742 Blank Spike	**Job Number:**	W12_4742
LIMS ID Number:	EX1137418	**Date Booked in:**	02-Sep-11
QC Batch Number:	110805	**Date Extracted:**	08-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	09-Sep-11
Directory:	0906PAHMS4	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.20	83	M
Acenaphthylene	208-96-8	4.25	79	M
Acenaphthene	83-32-9	4.37	81	M
Fluorene	86-73-7	4.74	82	M
Phenanthrene	85-01-8	5.57	88	M
Anthracene	120-12-7	5.62	84	M
Fluoranthene	206-44-0	6.89	90	M
Pyrene	129-00-0	7.18	88	M
Benzo[a]anthracene	56-55-3	8.85	103	M
Chrysene	218-01-9	8.90	87	M
Benzo[b]fluoranthene	205-99-2	10.38	90	M
Benzo[k]fluoranthene	207-08-9	10.42	89	M
Benzo[a]pyrene	50-32-8	10.80	81	M
Indeno[1,2,3-cd]pyrene	193-39-5	12.19	83	M
Dibenzo[a,h]anthracene	53-70-3	12.22	80	M
Benzo[g,h,i]perylene	191-24-2	12.47	84	M
Total (USEPA16) PAHs	-	-	1371	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	102
Phenanthrene-d10	105
Chrysene-d12	110
Perylene-d12	115

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4742
QC Batch Number: 110805
Directory: D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

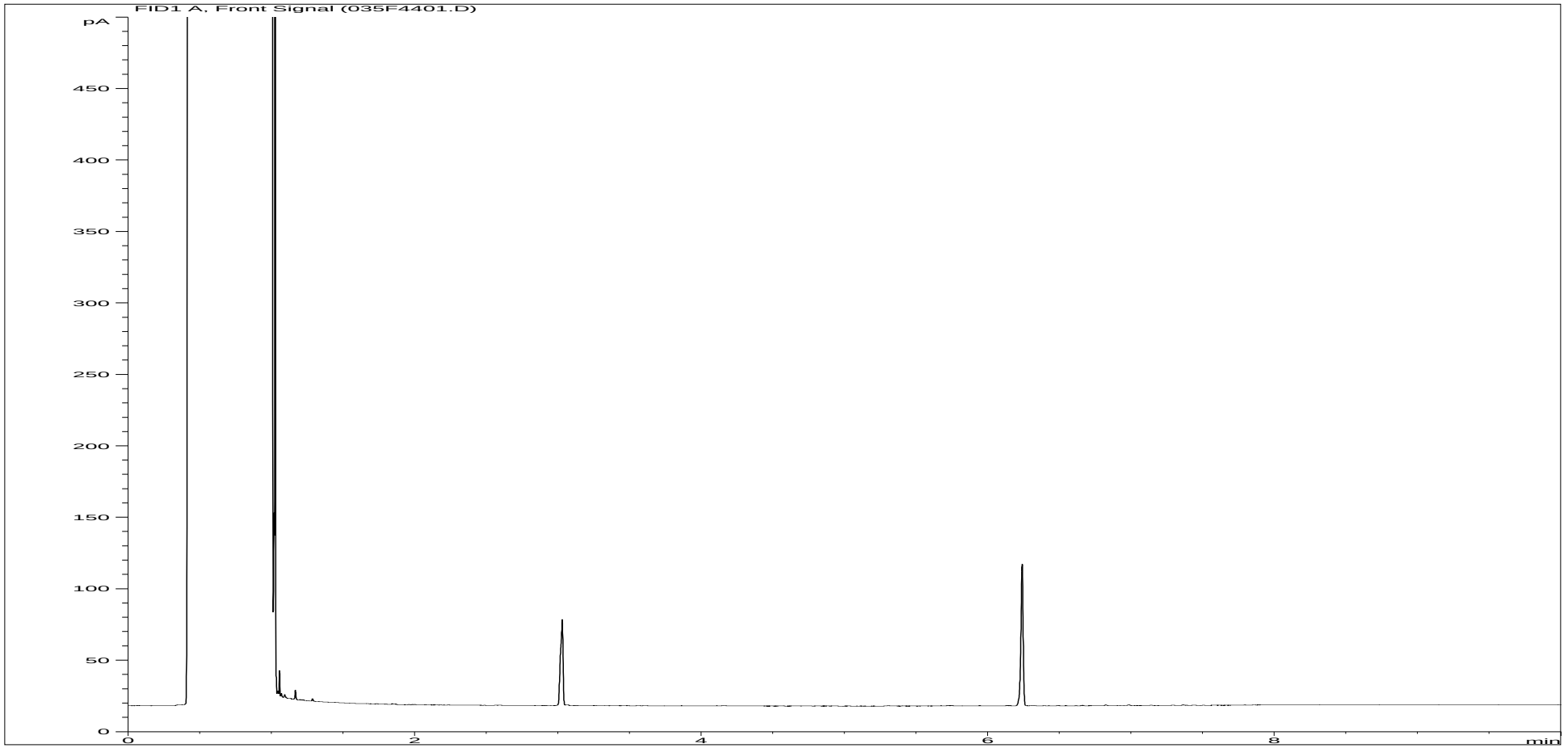
Matrix: Water
Date Booked in 02-Sep-11
Date Extracted 08-Sep-11
Date Analysed 09-Sep-11, 19:03:52

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137377	MW11-12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137378	MW99-204	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137379	MW11-5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137380	MW11-6	<0.01	0.062	<0.01	0.532	<0.01	0.229	<0.01	0.072	0.038	0.016	0.048	0.91
EX1137381	MW5	<0.01	0.015	<0.01	0.011	<0.01	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	0.056
EX1137382	MW5A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137417	Report 124742 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137418	Report 124742 Blank Spike	0.594	0.207	0.91	0.328	1.83	0.615	1.13	0.32	2.95	0.746	7.46	2.23

Where individual results are flagged see report notes for status.

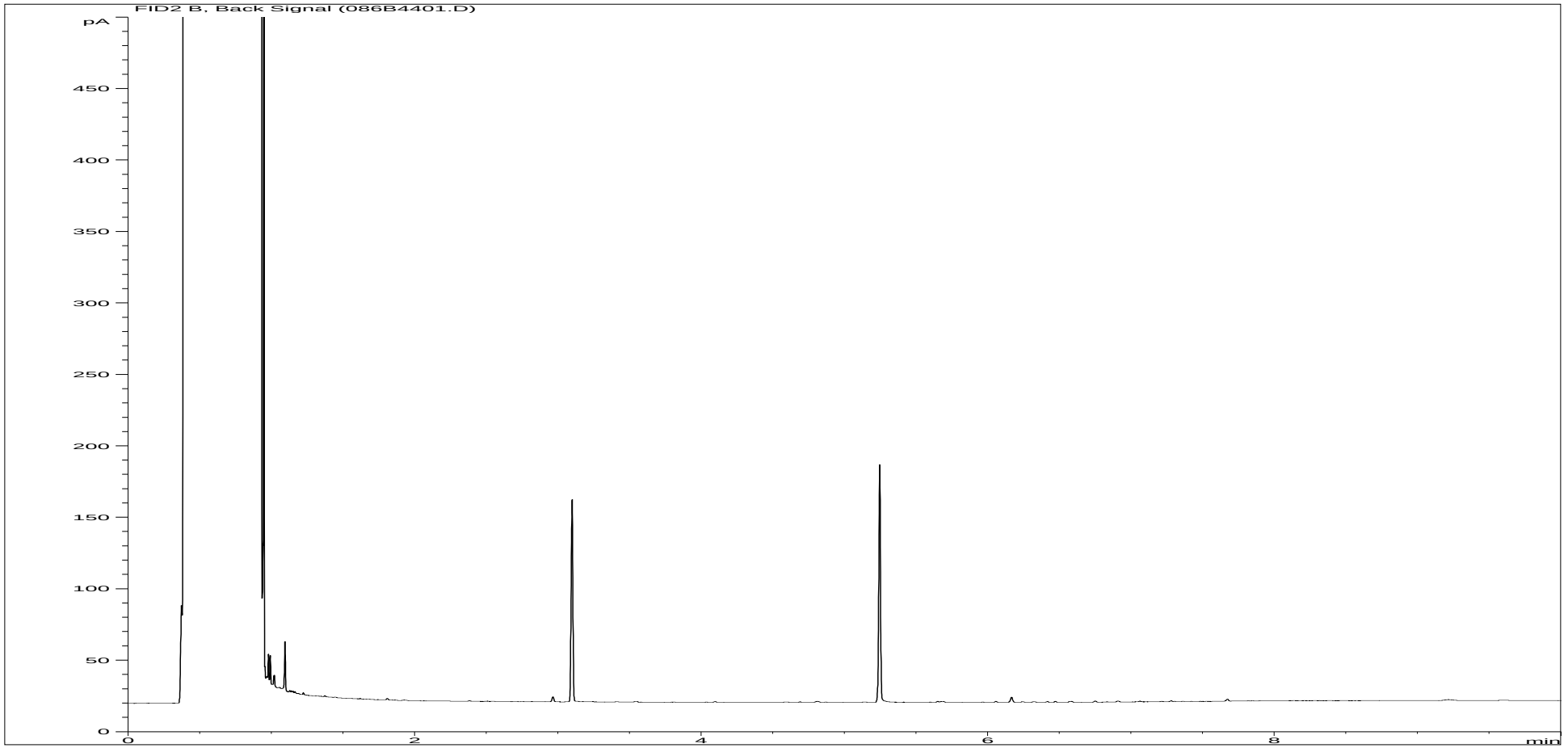
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137377ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	09-Sep-11, 21:04:29		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\035F4401.D		

Where individual results are flagged see report notes for status.

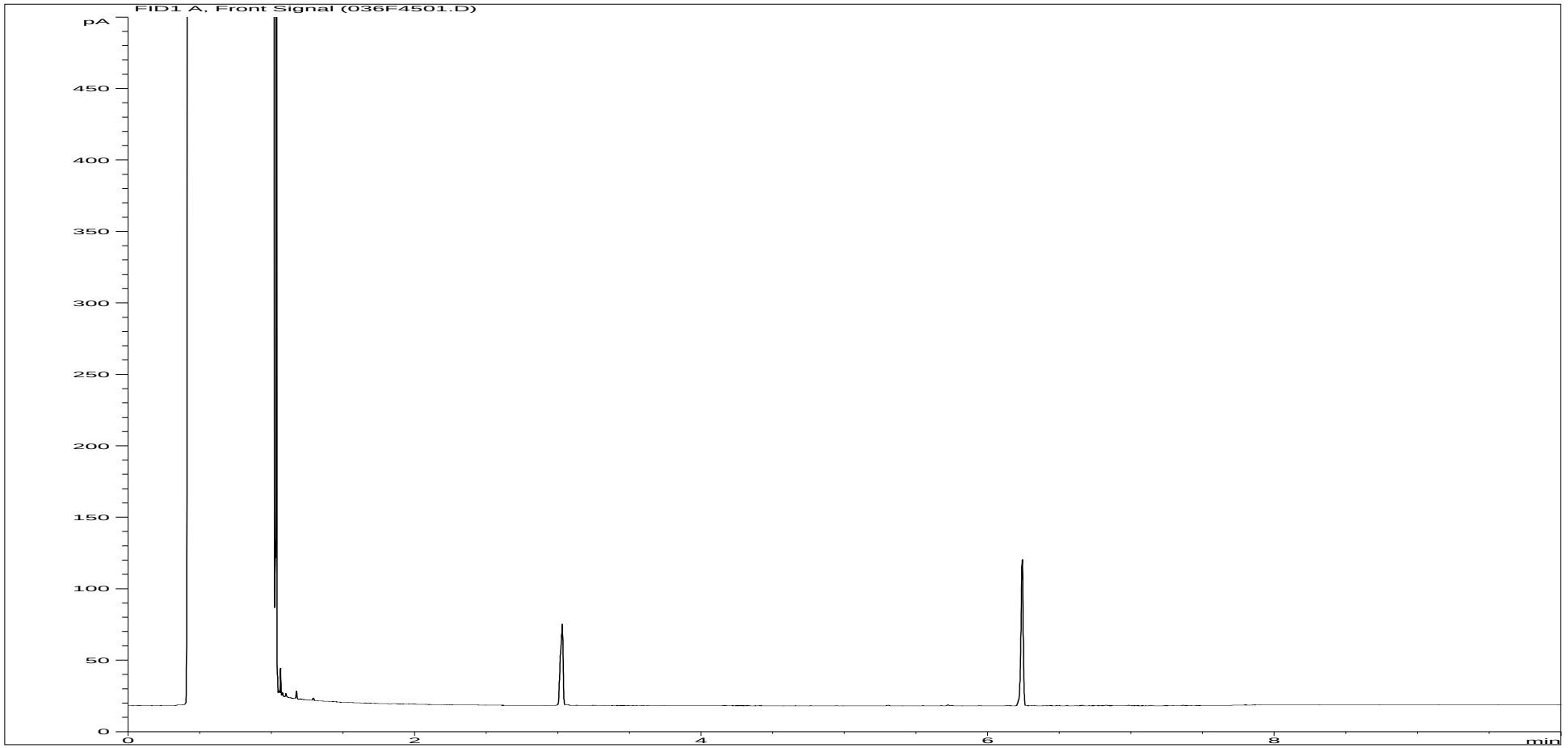
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137377ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-12
Acquisition Date/Time:	09-Sep-11, 21:04:29		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\086B4401.D		

Where individual results are flagged see report notes for status.

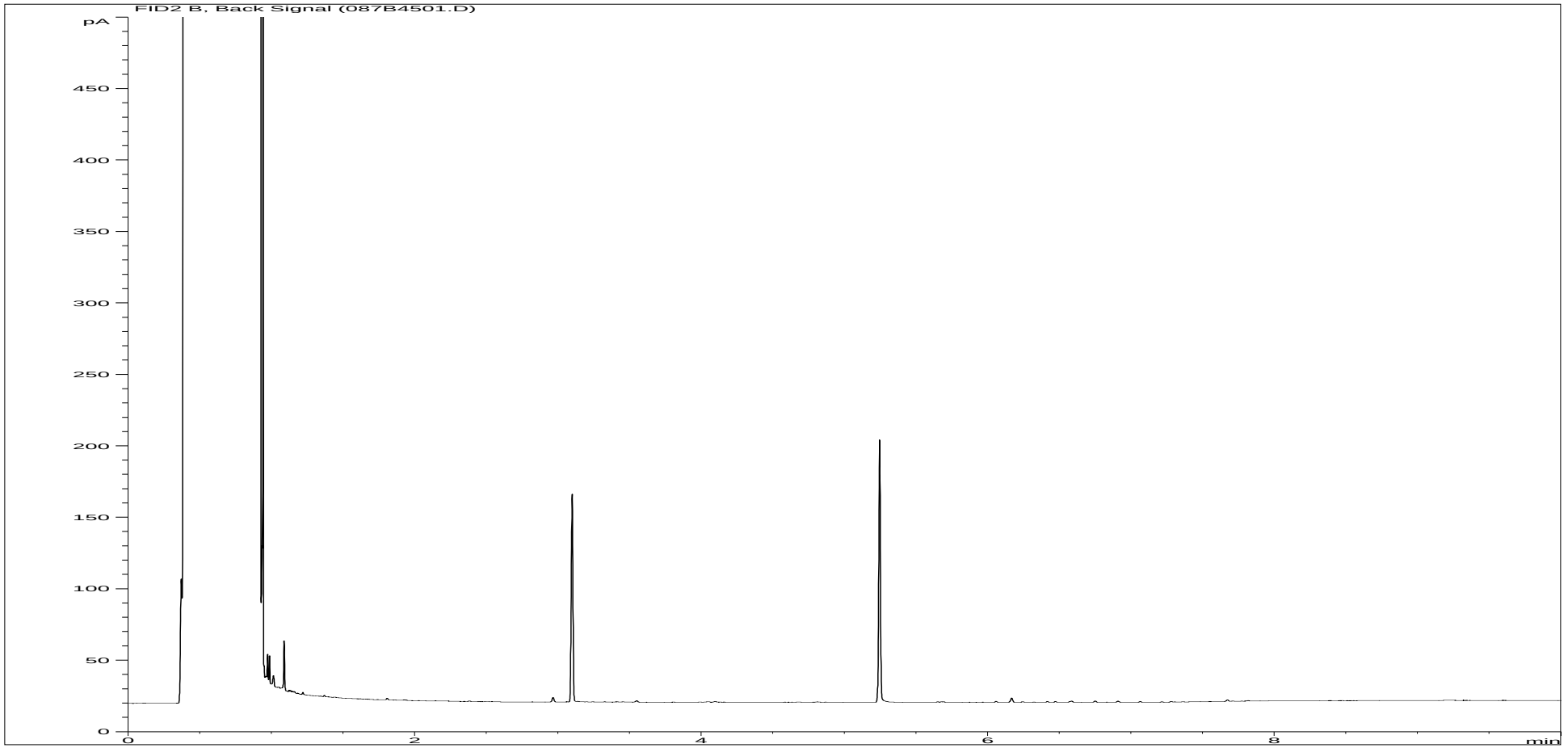
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137378ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	09-Sep-11, 21:21:50		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\036F4501.D		

Where individual results are flagged see report notes for status.

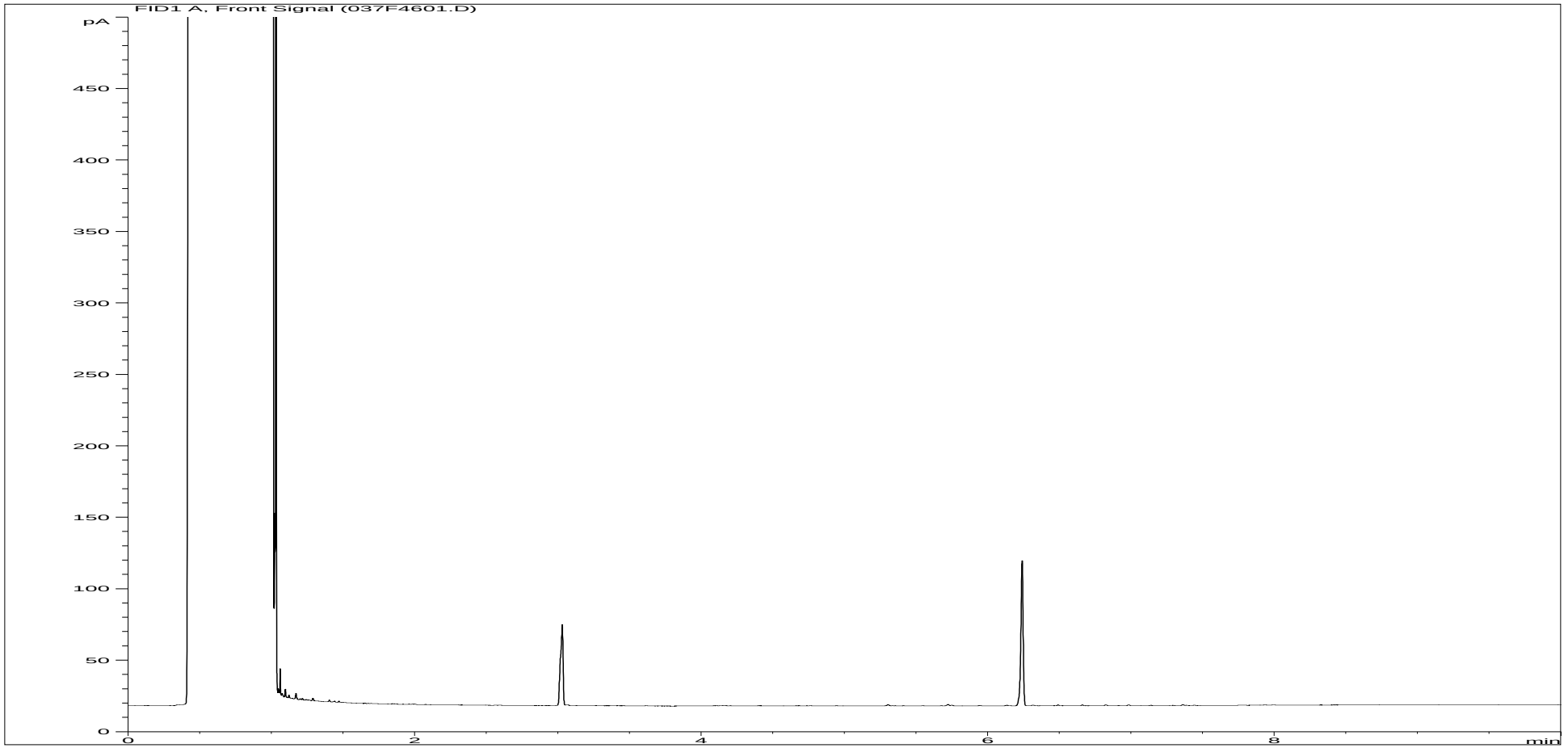
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137378ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-204
Acquisition Date/Time:	09-Sep-11, 21:21:50		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\087B4501.D		

Where individual results are flagged see report notes for status.

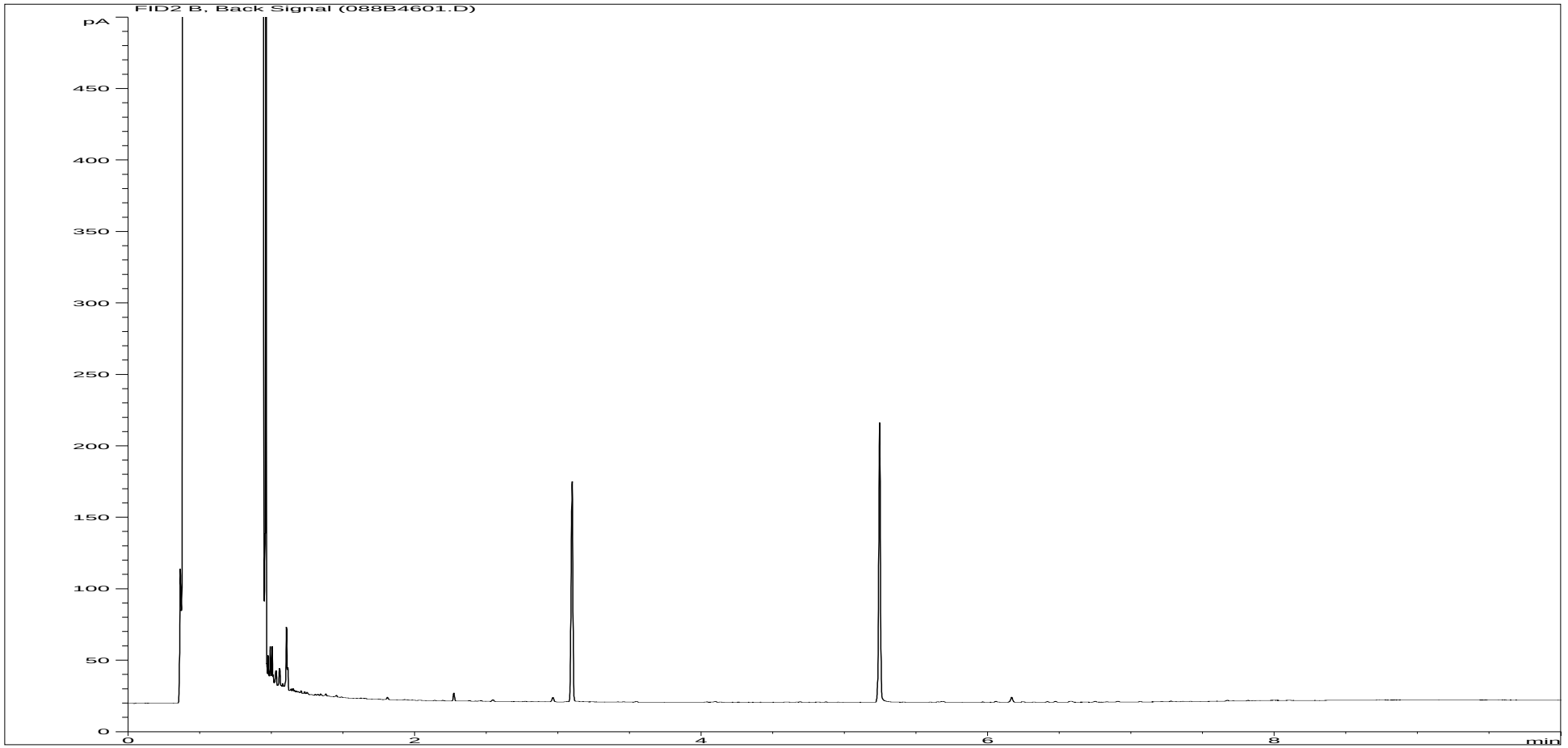
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137379ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	09-Sep-11, 21:38:59		
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Where individual results are flagged see report notes for status.

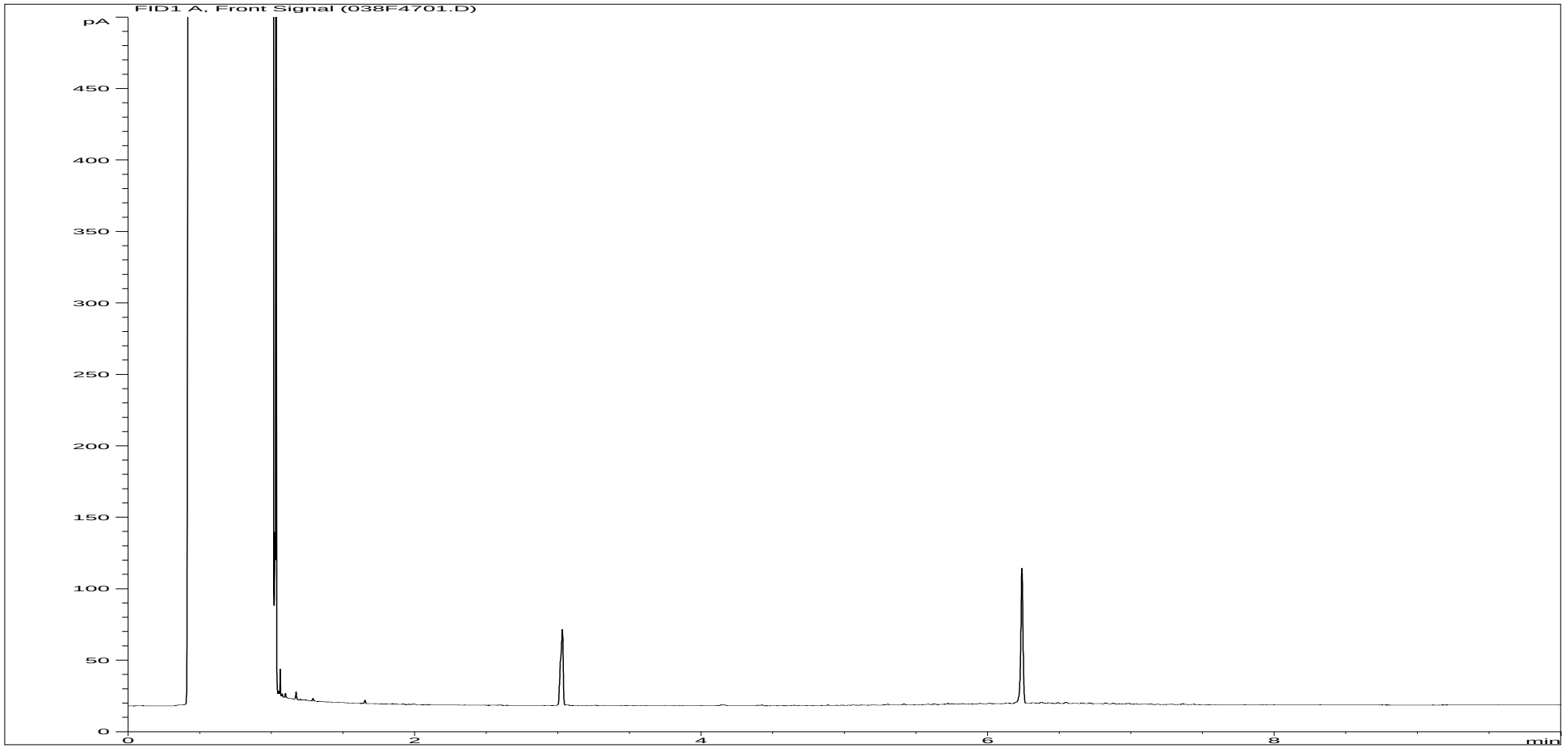
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137379ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-5
Acquisition Date/Time:	09-Sep-11, 21:38:59		
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Where individual results are flagged see report notes for status.

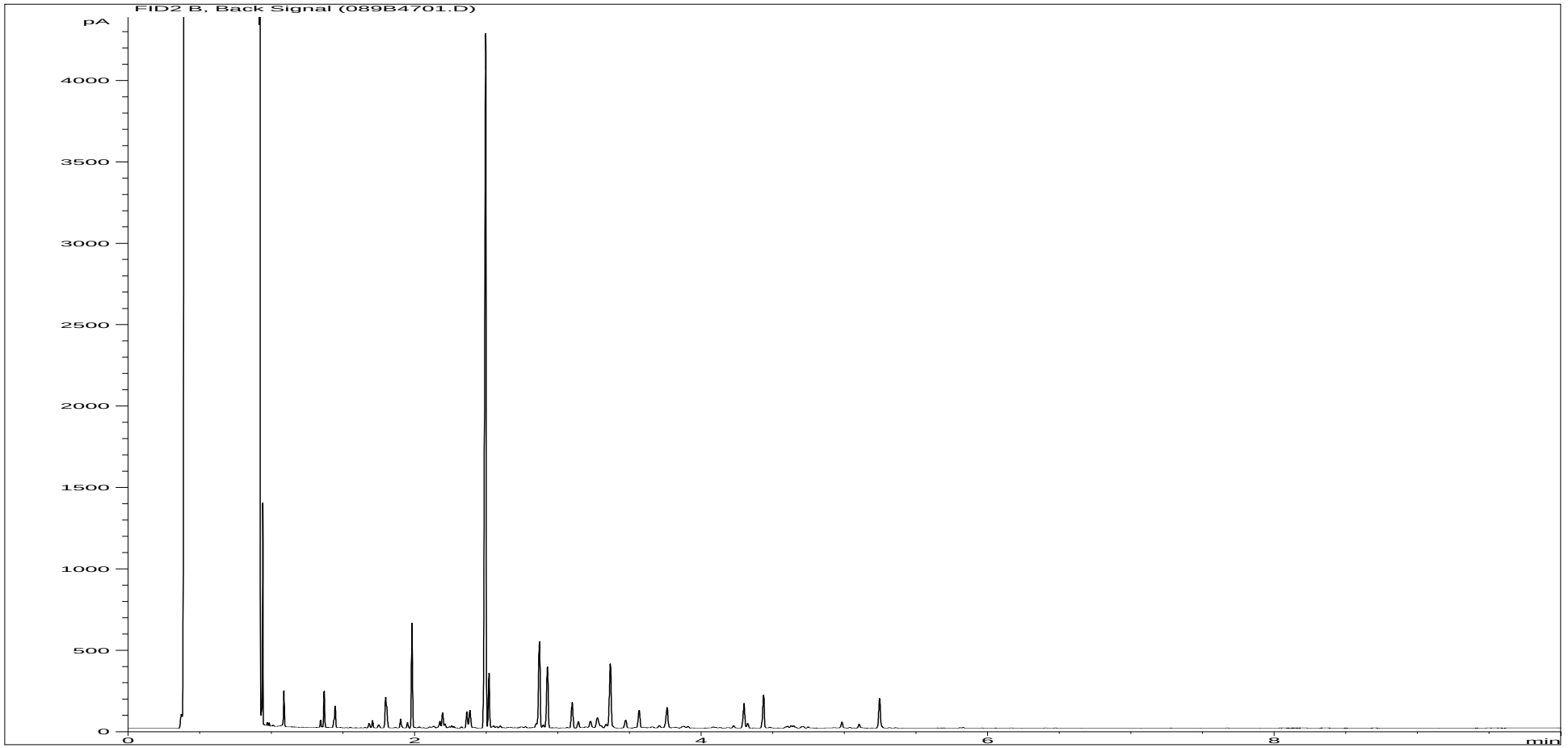
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137380ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	09-Sep-11, 21:56:05		
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Where individual results are flagged see report notes for status.

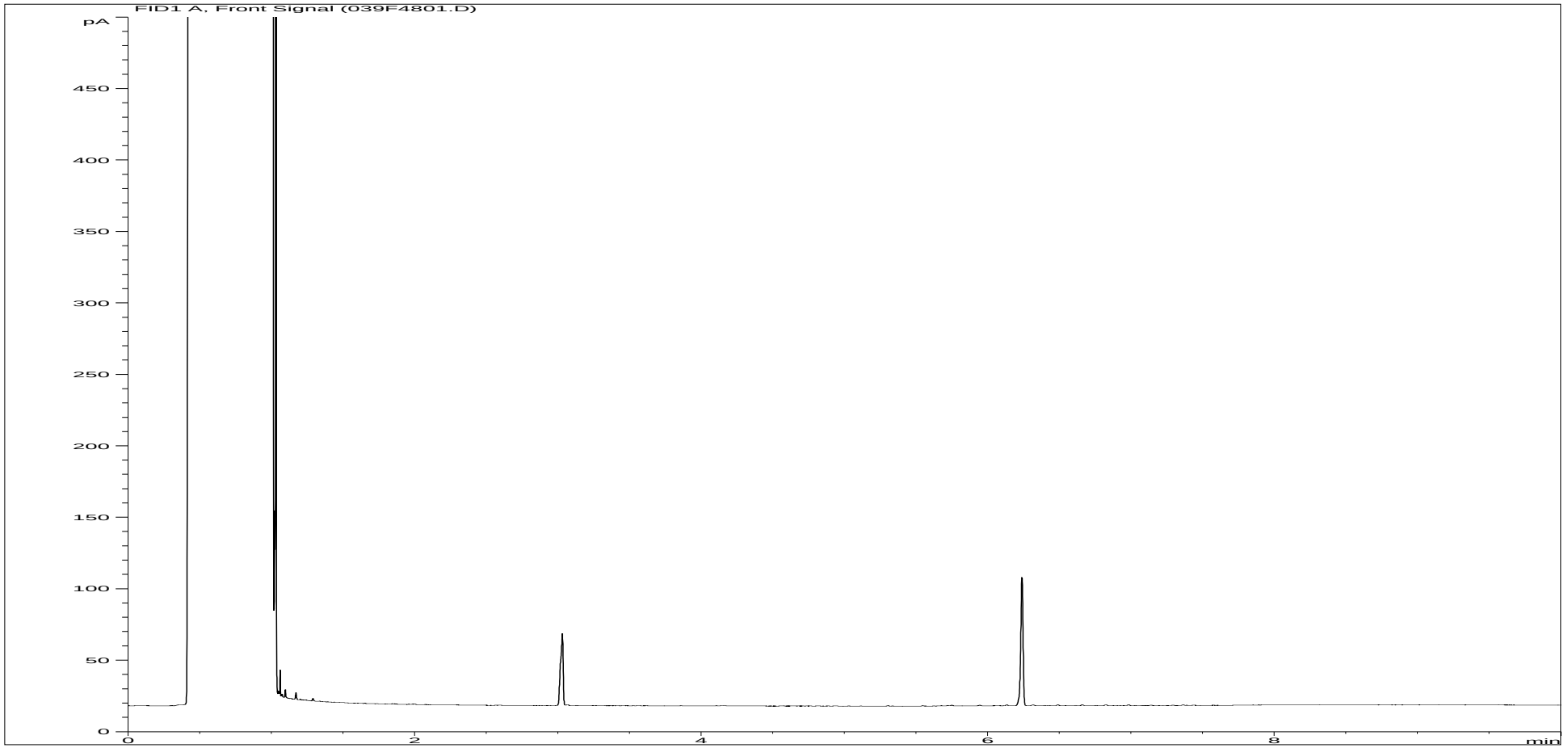
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137380ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-6
Acquisition Date/Time:	09-Sep-11, 21:56:05		
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Where individual results are flagged see report notes for status.

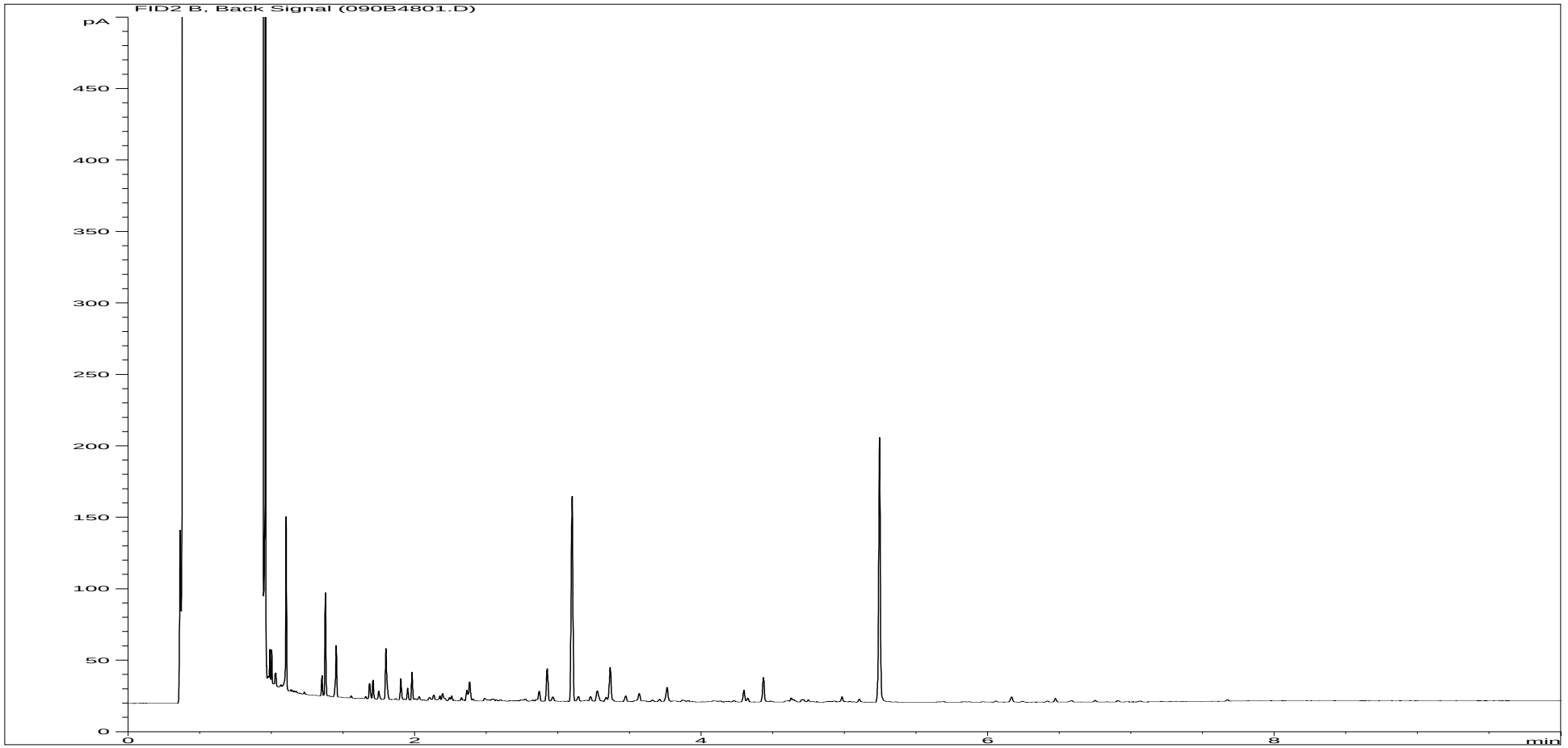
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137381ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	09-Sep-11, 22:13:11		
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Where individual results are flagged see report notes for status.

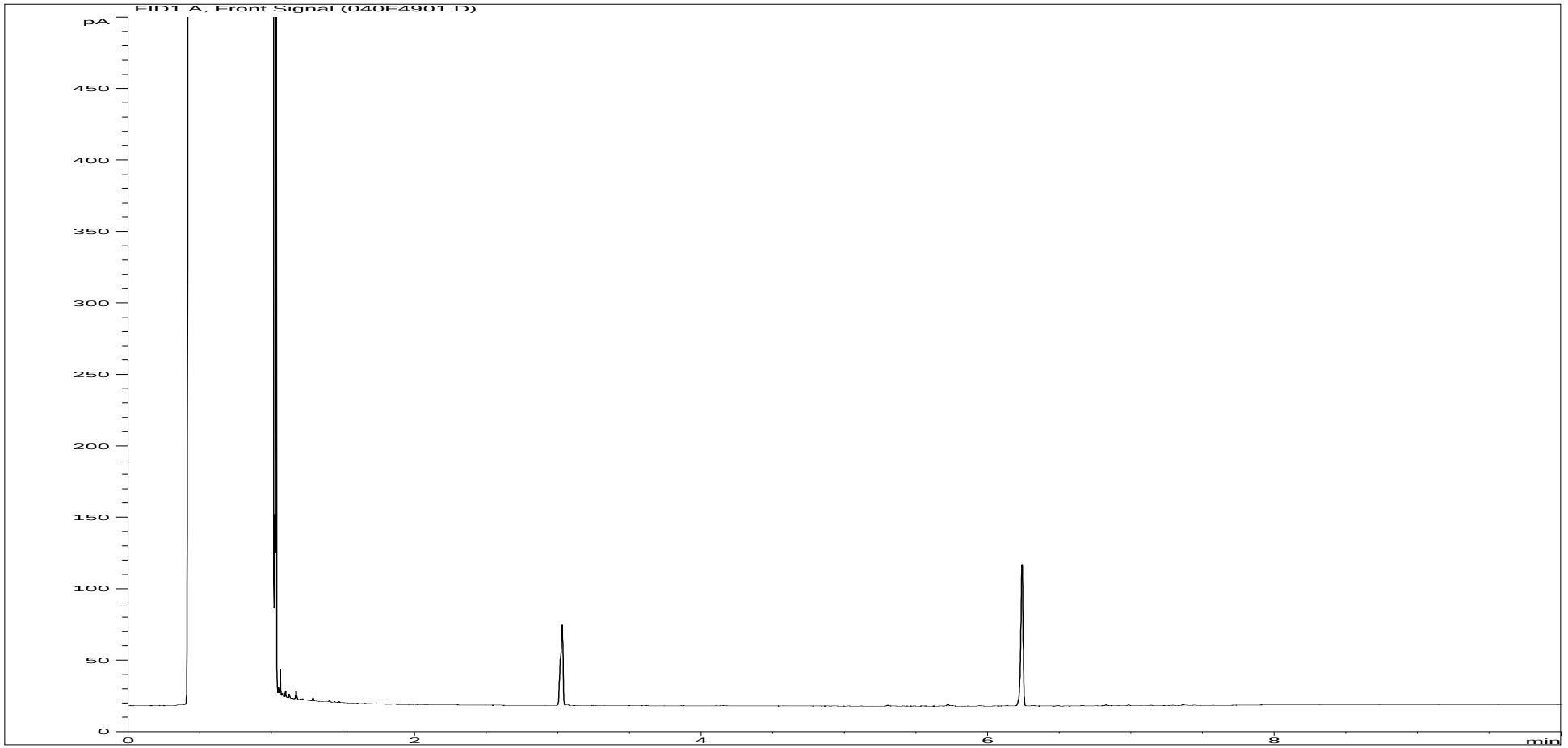
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137381ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5
Acquisition Date/Time:	09-Sep-11, 22:13:11		
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Where individual results are flagged see report notes for status.

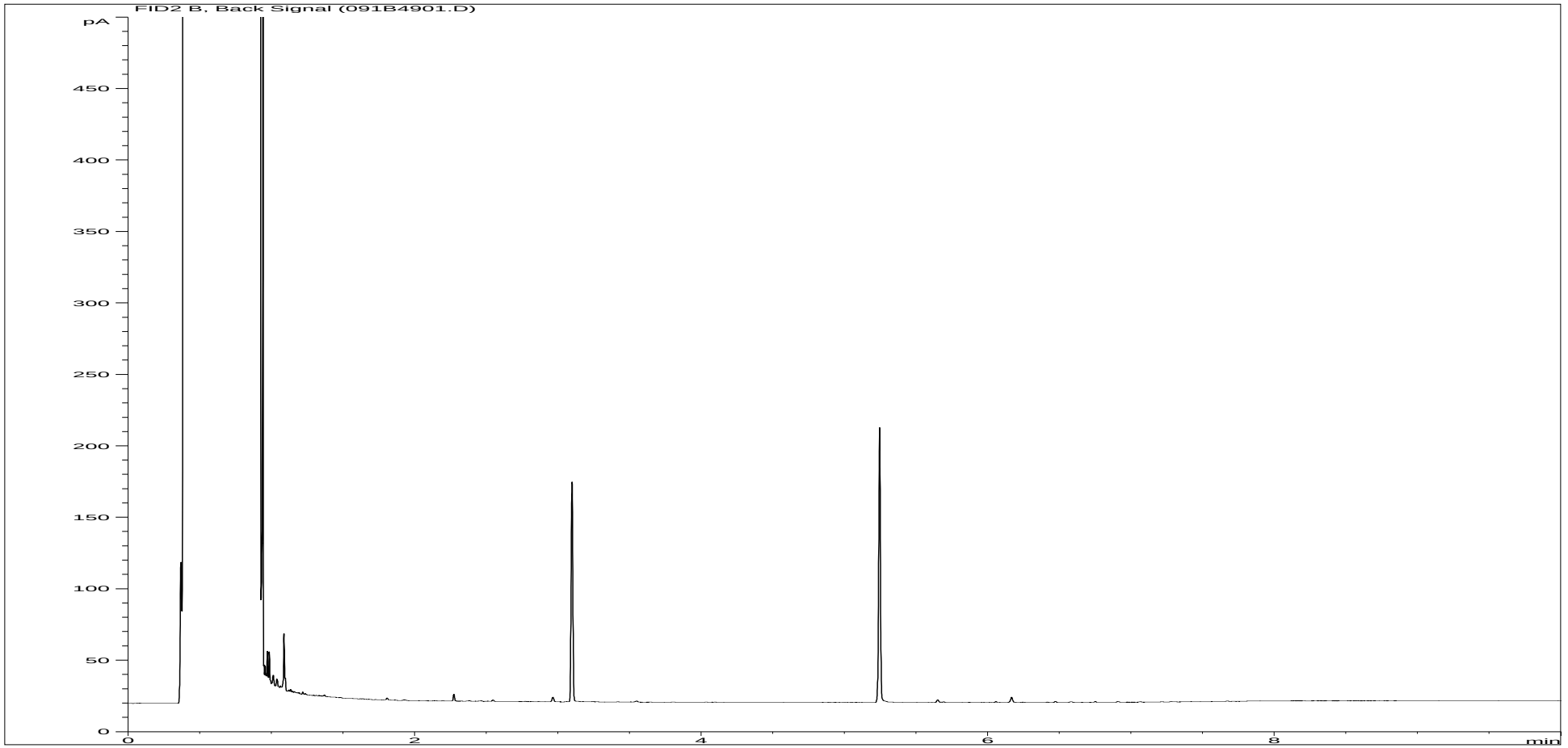
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137382ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5A
Acquisition Date/Time:	09-Sep-11, 22:30:31		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\040F4901.D		

Where individual results are flagged see report notes for status.

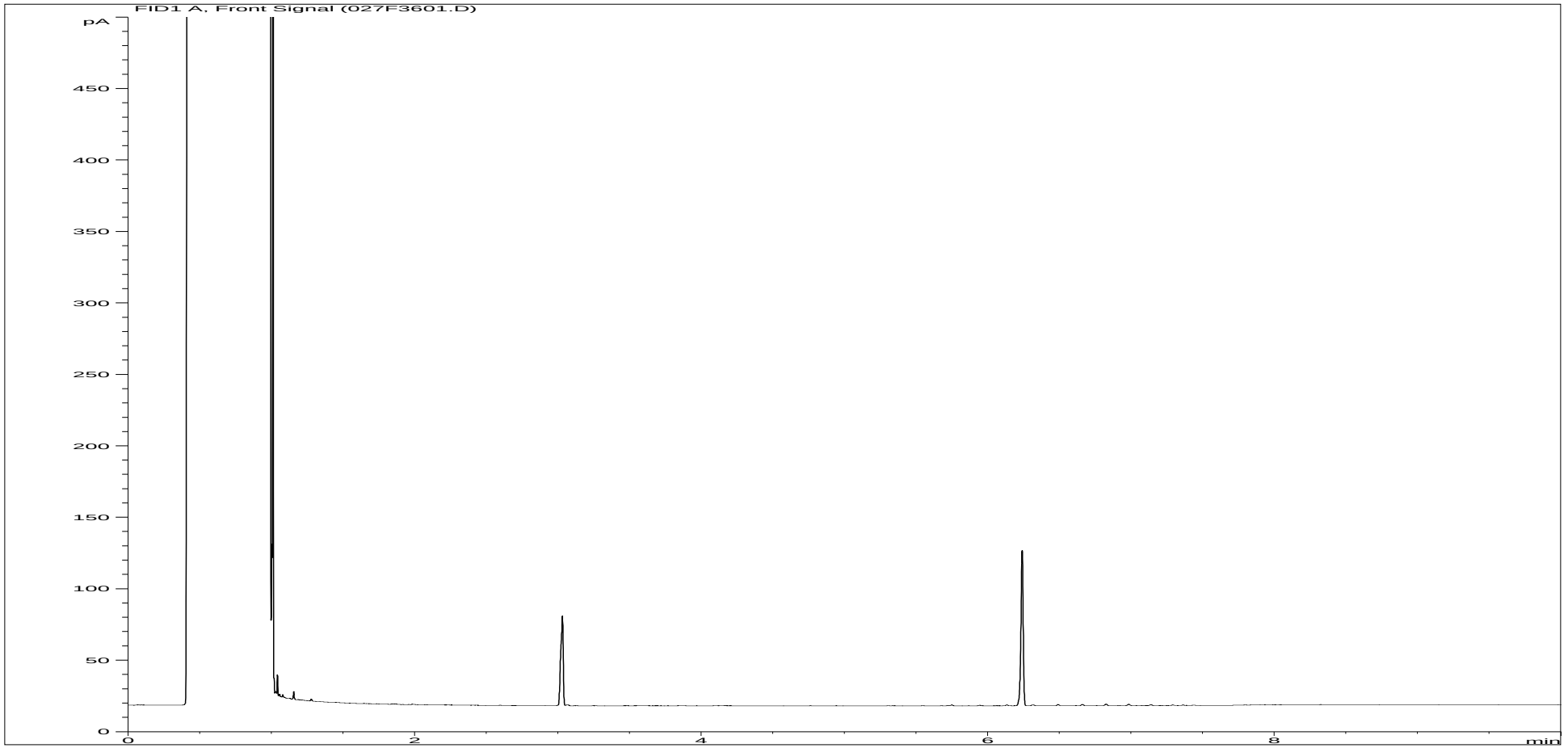
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137382ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW5A
Acquisition Date/Time:	09-Sep-11, 22:30:31		
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Where individual results are flagged see report notes for status.

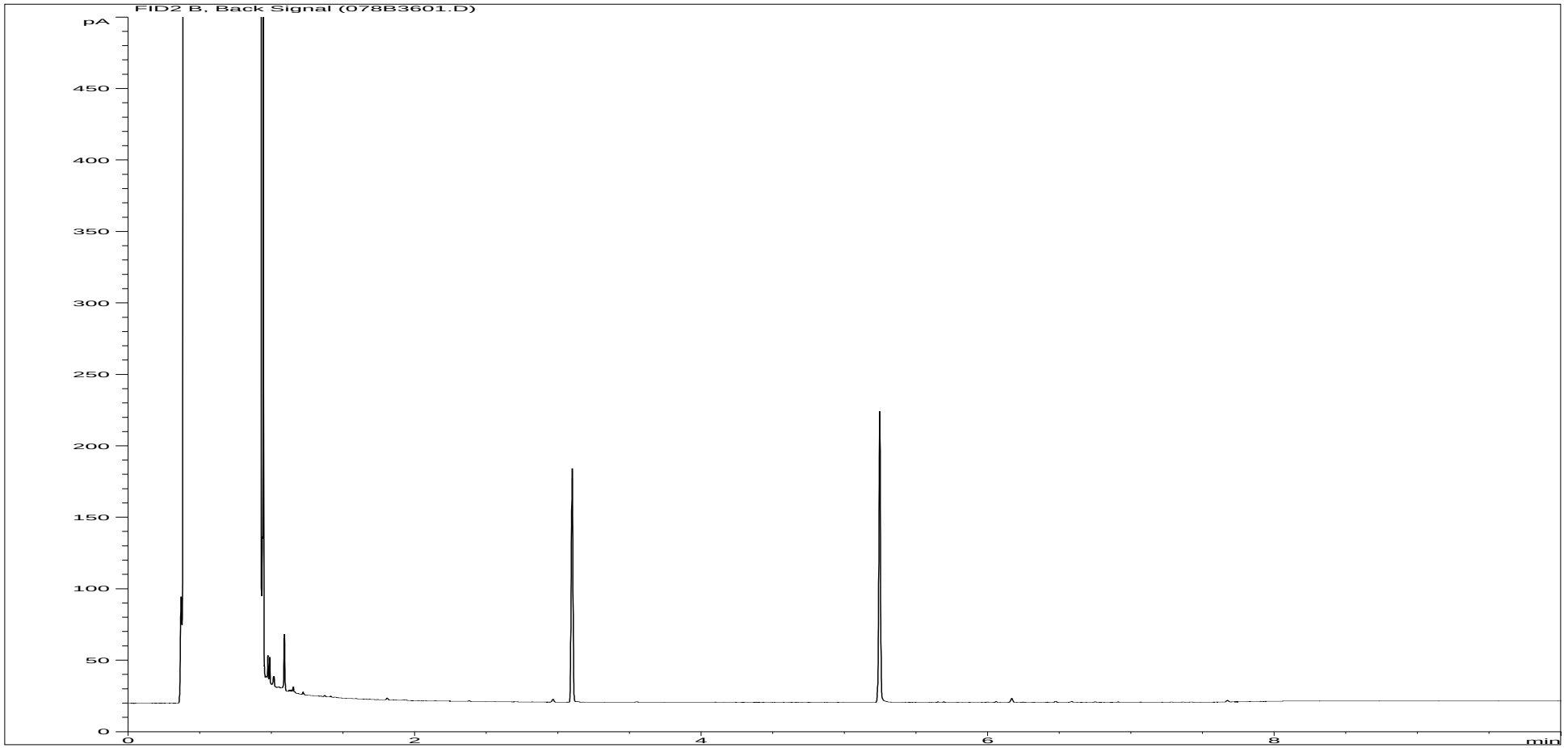
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137417ALI	**Job Number:**	W12_4742
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\027F3601.D		

Where individual results are flagged see report notes for status.

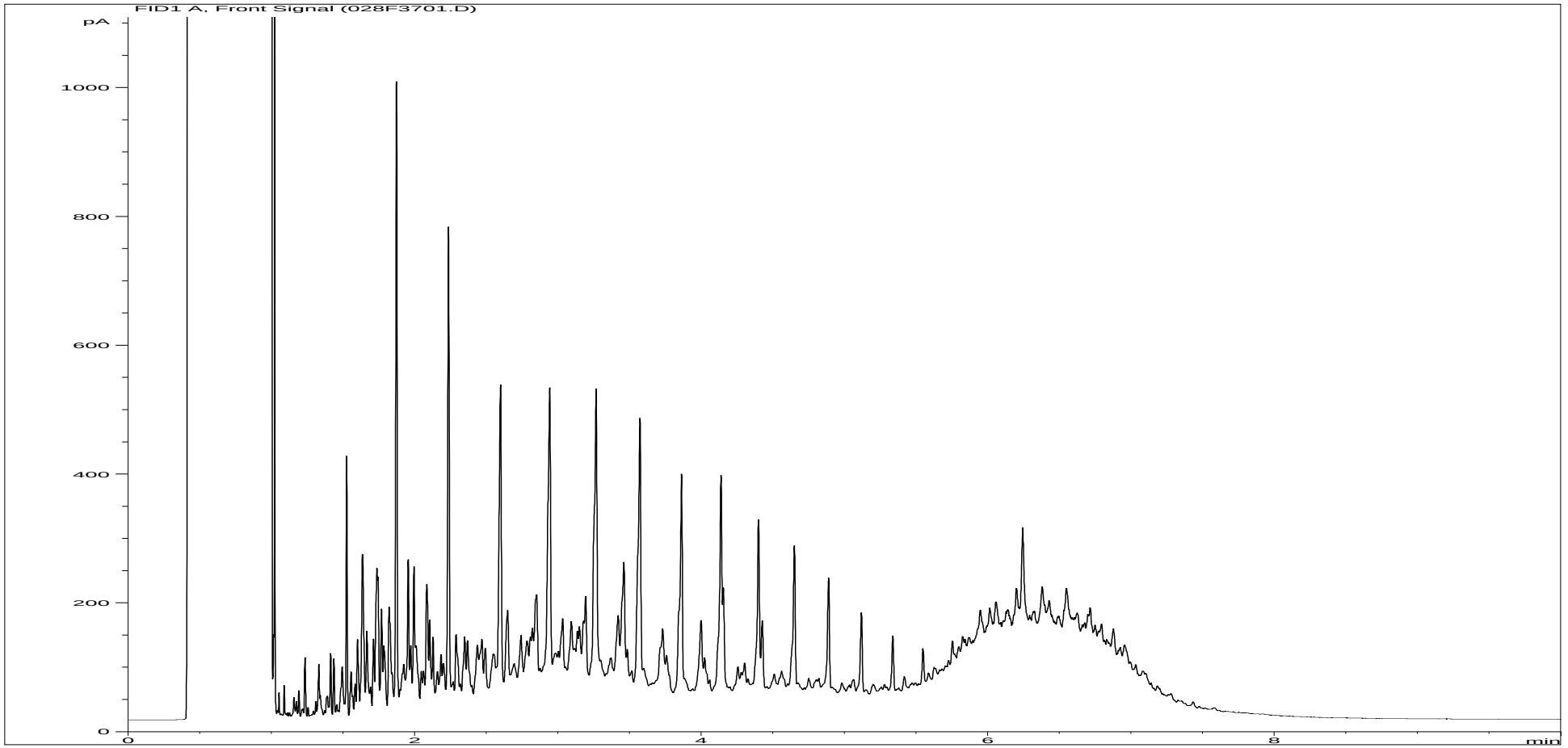
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137417ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank
Acquisition Date/Time:	09-Sep-11, 18:46:25		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\078B3601.D		

Where individual results are flagged see report notes for status.

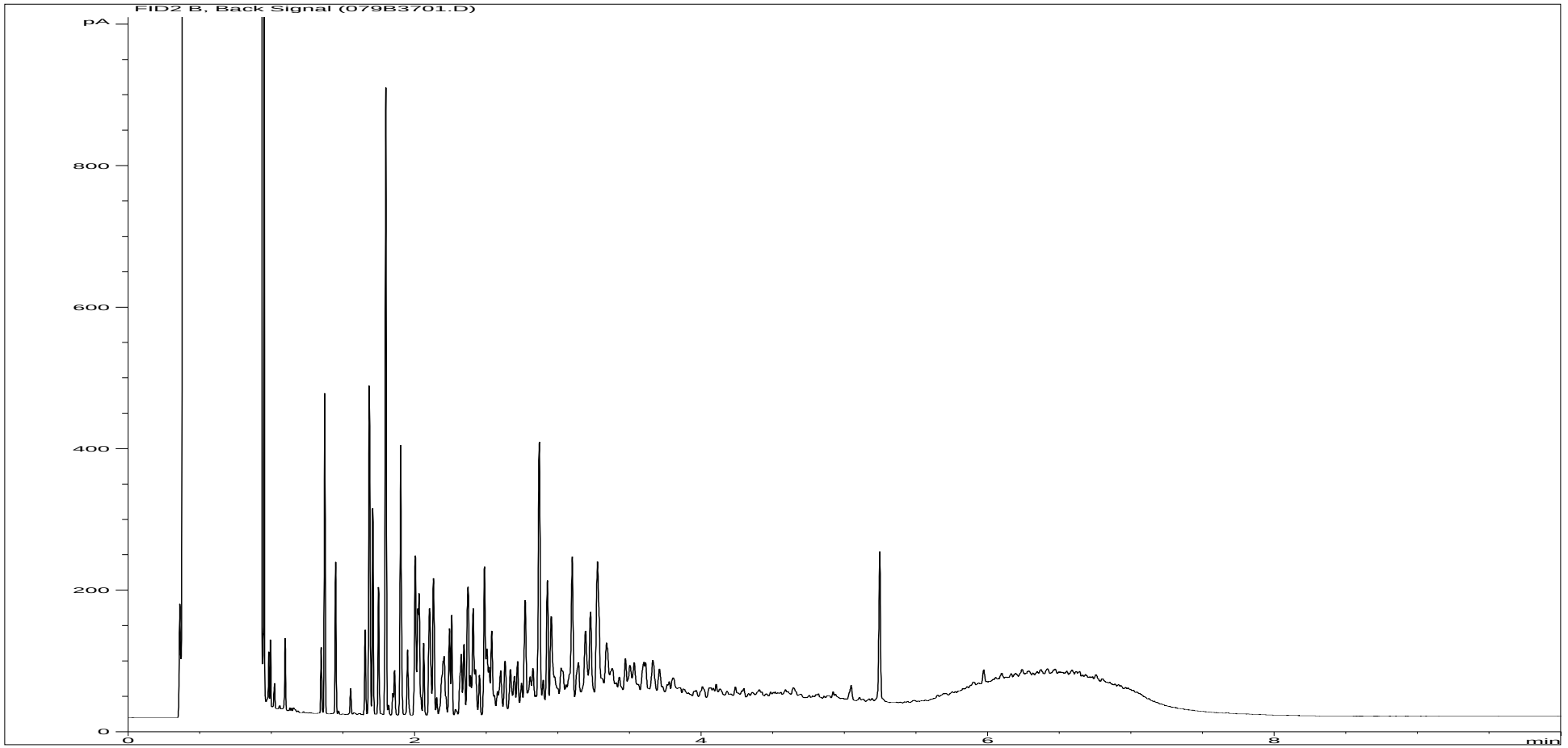
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137418ALI	**Job Number:**	W12_4742
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\028F3701.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137418ARO	**Job Number:**	W12_4742
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124742 Blank Spike
Acquisition Date/Time:	09-Sep-11, 19:03:52		
Datafile:	D:\TES\DATA\Y2011\090911TPH_GC15\090911 2011-09-09 08-41-47\079B3701.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

Consignment No 28913
Date Logged 02-Sep-2011

Report Due 14-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137377	MW11-12	30/08/11																									
EX/1137378	MW99-204	30/08/11																									
EX/1137379	MW11-5	31/08/11																									
EX/1137380	MW11-6	31/08/11																									
EX/1137381	MW5	31/08/11																									
EX/1137382	MW5A	31/08/11																									
EX/1137417	Report 124742 Blank	31/08/11																									
EX/1137418	Report 124742 Blank Spike	31/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124742

Customer Worley Parsons Komex
Site Maelor Works
Report No W124742

Consignment No 28913
Date Logged 02-Sep-2011

Report Due 14-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137377	MW11-12	30/08/11															
EX/1137378	MW99-204	30/08/11															
EX/1137379	MW11-5	31/08/11															
EX/1137380	MW11-6	31/08/11															
EX/1137381	MW5	31/08/11															
EX/1137382	MW5A	31/08/11															
EX/1137417	Report 124742 Blank	31/08/11															
EX/1137418	Report 124742 Blank Spike	31/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124728 (Ver. 2)
Your Ref: 305001-50065-29

September 16, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124728 (Ver. 2)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 01-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 16-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 16-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137320	MW99-102	30-Aug-11	6.9	831	22	364	62	132	16	19	3	0.001	0.007	<0.0001	Req	<0.001	<0.001	0.003
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	7.4	876	98	59	137	94	37	48	2	0.001	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137323	MW11-1A	30-Aug-11	7.4	831	52	57	138	91	34	47	2	0.002	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137334	QC Blank		7.02	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137335	Blank Spike (% Recovery)				102	101	98	96	98	99	101	100	95	94	Req	100	97	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137320	MW99-102	30-Aug-11	0.81	5.90	6.71	<0.01	<0.001	<0.0001	<0.001	17.3	<0.2	<0.2	<0.02	<0.02	<0.05	5.9	<0.1	Req
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	1.14	0.98	2.12	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.9	<0.1	Req
1137323	MW11-1A	30-Aug-11	1.15	0.98	2.13	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	3.0	<0.1	Req
1137334	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137335	Blank Spike (% Recovery)			99	96	96	96	102	94	101		99	100	97	107	109	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137320	MW99-102	**30-Aug-11**	395	5.19	<0.02	4.8	21	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1137322	MW11-1	**30-Aug-11**	387	0.09	<0.02	8.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137323	MW11-1A	**30-Aug-11**	367	0.10	<0.02	7.5	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137334	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137335	Blank Spike (% Recovery)			96			86	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_4728
LIMS ID Number:	EX1137320	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.042	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.018	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	109
Phenanthrene-d10	116
Chrysene-d12	125
Perylene-d12	128

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1	**Job Number:**	W12_4728
LIMS ID Number:	EX1137322	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	108
Phenanthrene-d10	113
Chrysene-d12	116
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-1A	**Job Number:**	W12_4728
LIMS ID Number:	EX1137323	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	126
Perylene-d12	134

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank	**Job Number:**	W12_4728
LIMS ID Number:	EX1137334	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	107
Phenanthrene-d10	110
Chrysene-d12	110
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank Spike	**Job Number:**	W12_4728
LIMS ID Number:	EX1137335	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	90	96
Acenaphthylene	208-96-8	4.49	80	97
Acenaphthene	83-32-9	4.61	83	100
Fluorene	86-73-7	5.01	84	99
Phenanthrene	85-01-8	5.89	87	100
Anthracene	120-12-7	5.94	80	100
Fluoranthene	206-44-0	7.26	80	94
Pyrene	129-00-0	7.56	76	95
Benzo[a]anthracene	56-55-3	9.26	102	96
Chrysene	218-01-9	9.31	87	99
Benzo[b]fluoranthene	205-99-2	10.80	87	97
Benzo[k]fluoranthene	207-08-9	10.83	84	97
Benzo[a]pyrene	50-32-8	11.23	82	95
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	72	76
Dibenzo[a,h]anthracene	53-70-3	12.65	68	80
Benzo[g,h,i]perylene	191-24-2	12.94	76	82
Total (USEPA16) PAHs	-	-	1316	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	124
Perylene-d12	130

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4728
QC Batch Number: 110800
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

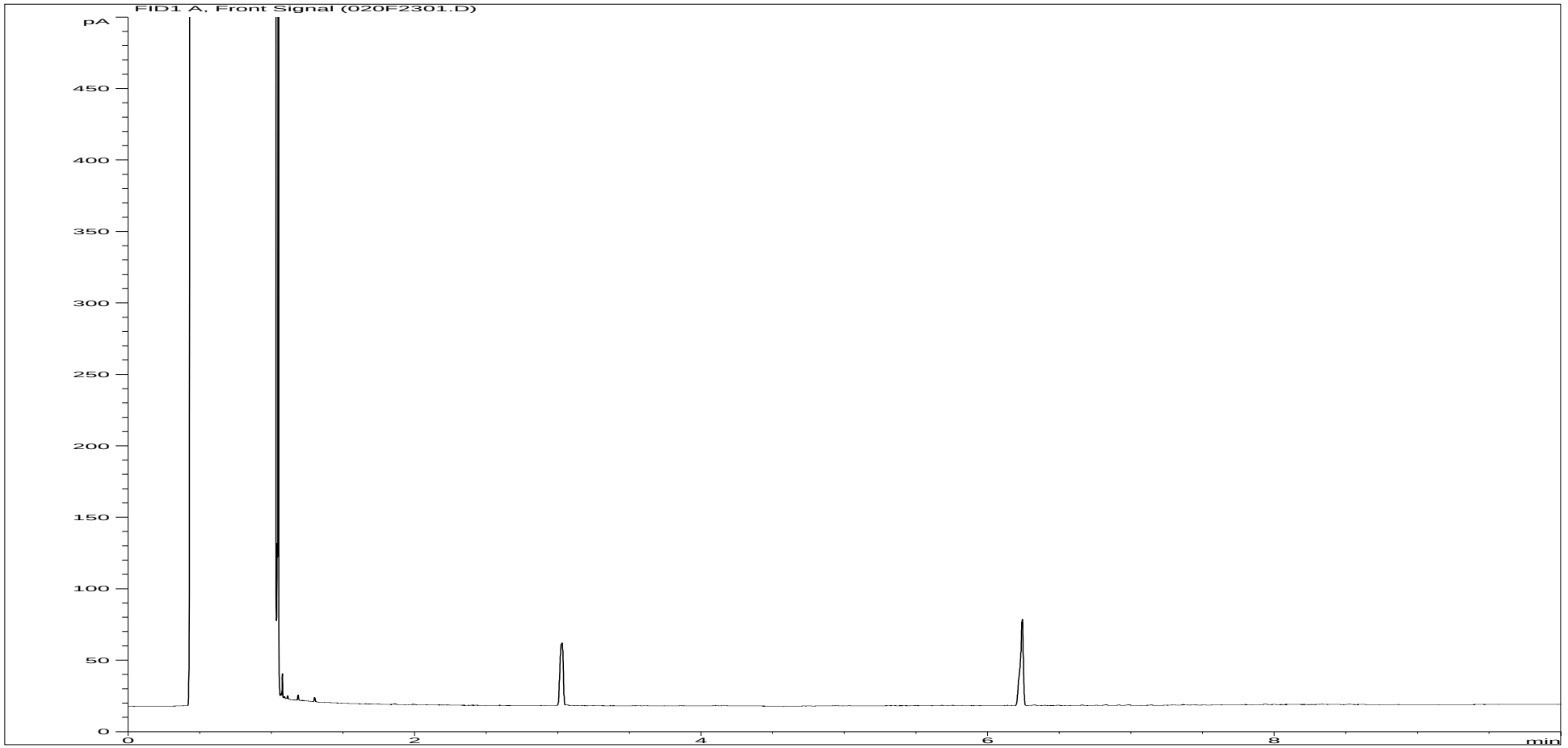
Matrix: Water
Date Booked ir 01-Sep-11
Date Extracted 07-Sep-11
Date Analysed 08-Sep-11, 11:30:51

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137320	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1137322	MW11-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137323	MW11-1A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01
EX1137334	Report 124728 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137335	Report 124728 Blank Spik	0.634	0.21	1	0.347	1.75	0.616	1	0.302	2.65	0.716	7.09	2.21

Where individual results are flagged see report notes for status.

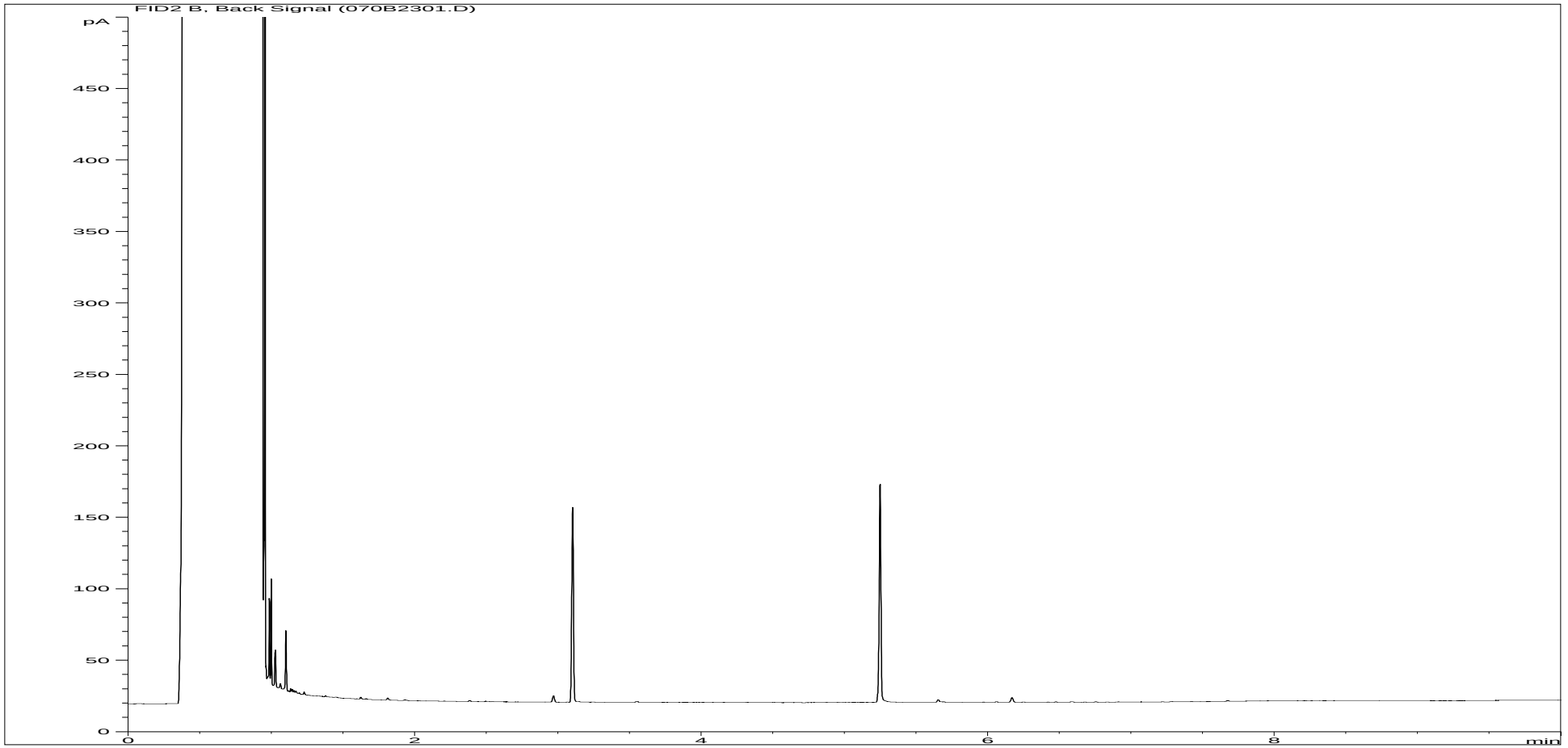
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137320ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\020F2301.D		

Where individual results are flagged see report notes for status.

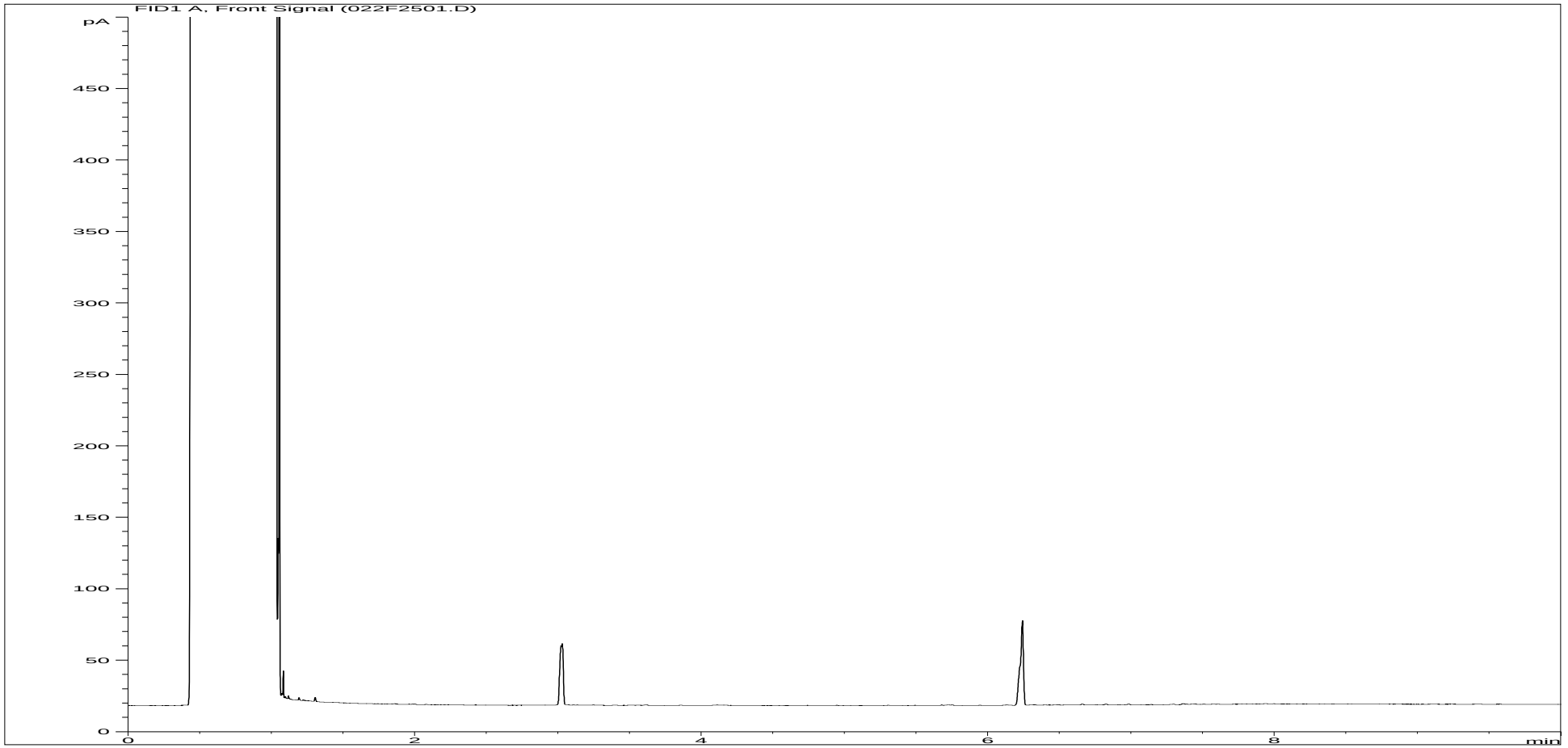
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137320ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\070B2301.D		

Where individual results are flagged see report notes for status.

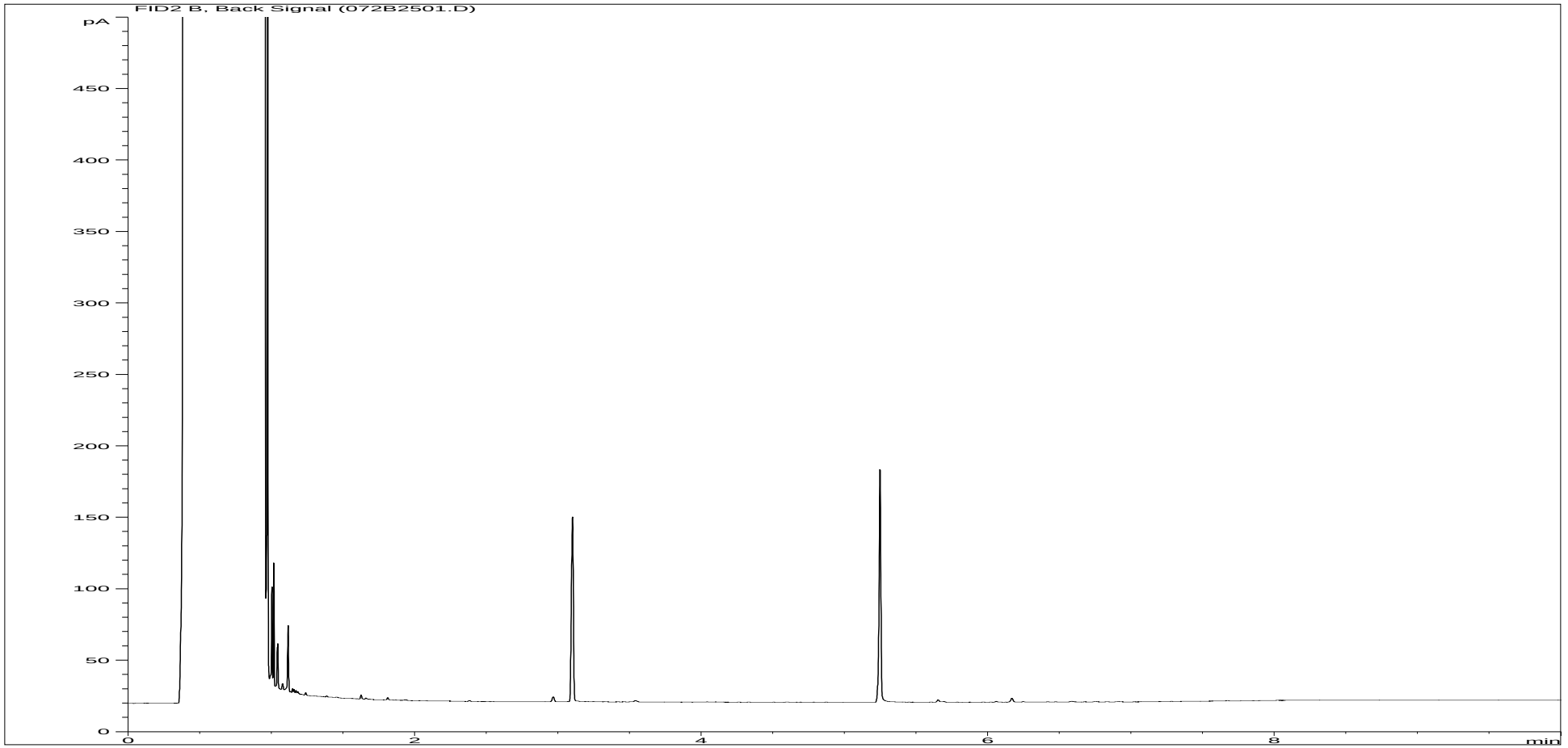
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137322ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\022F2501.D		

Where individual results are flagged see report notes for status.

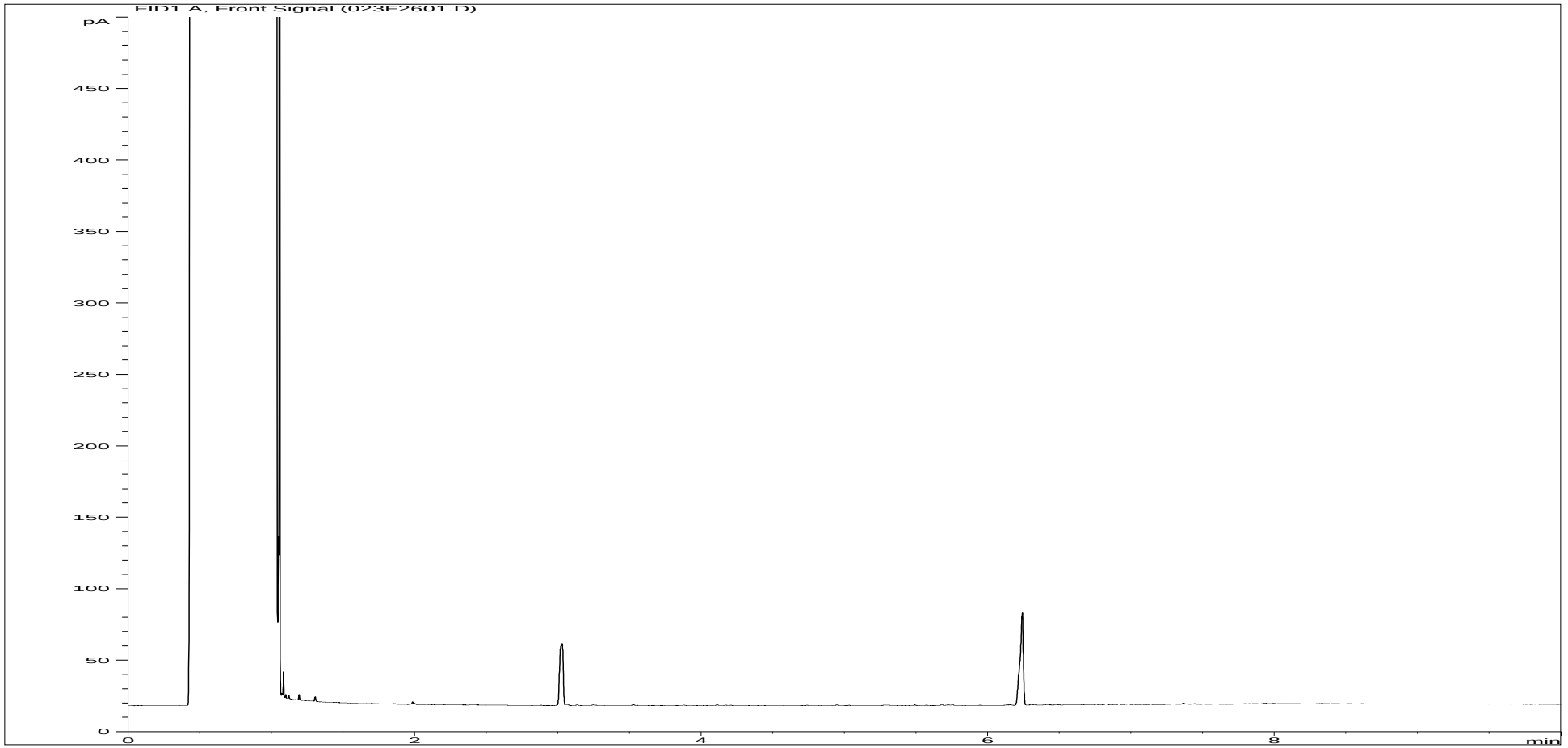
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137322ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\072B2501.D		

Where individual results are flagged see report notes for status.

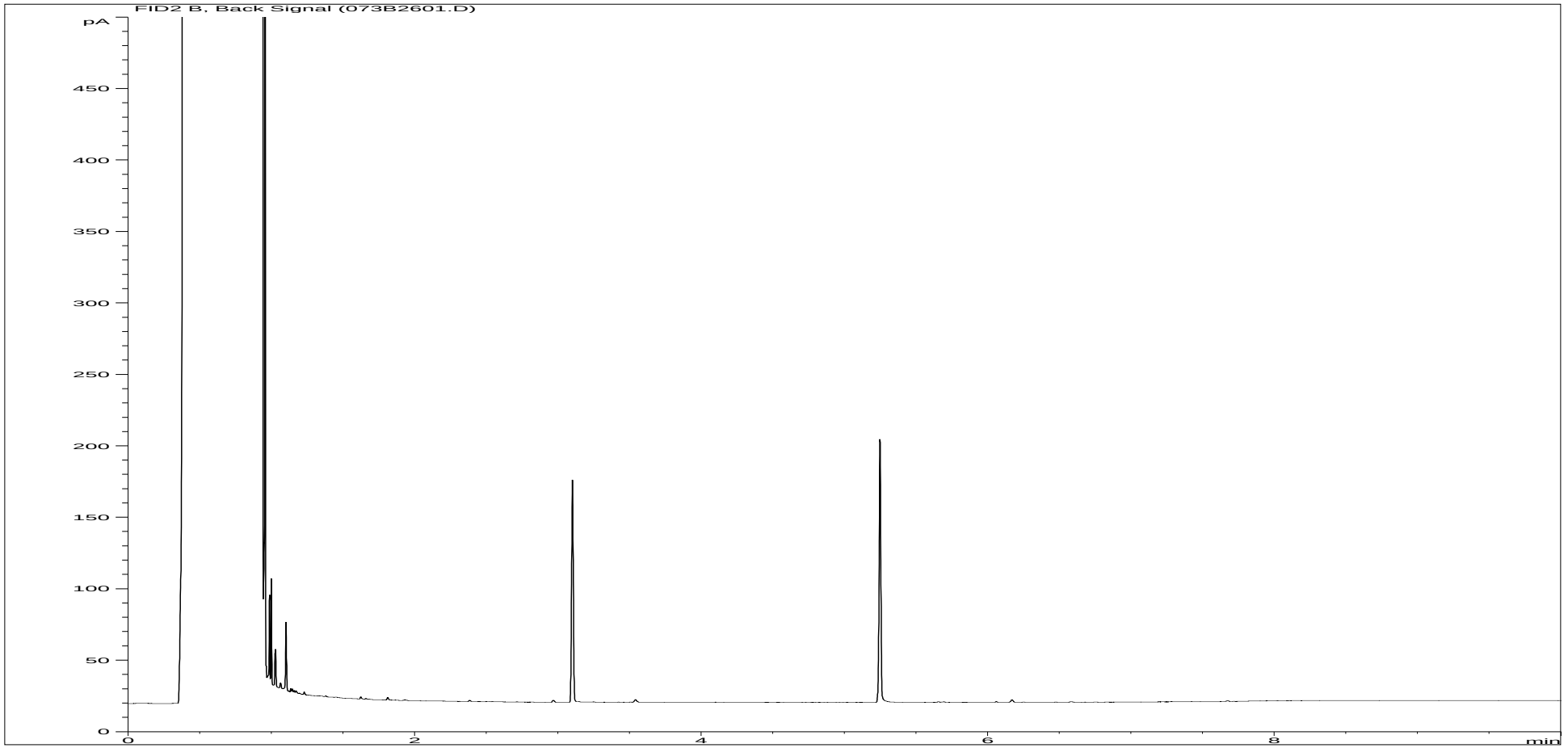
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137323ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\023F2601.D		

Where individual results are flagged see report notes for status.

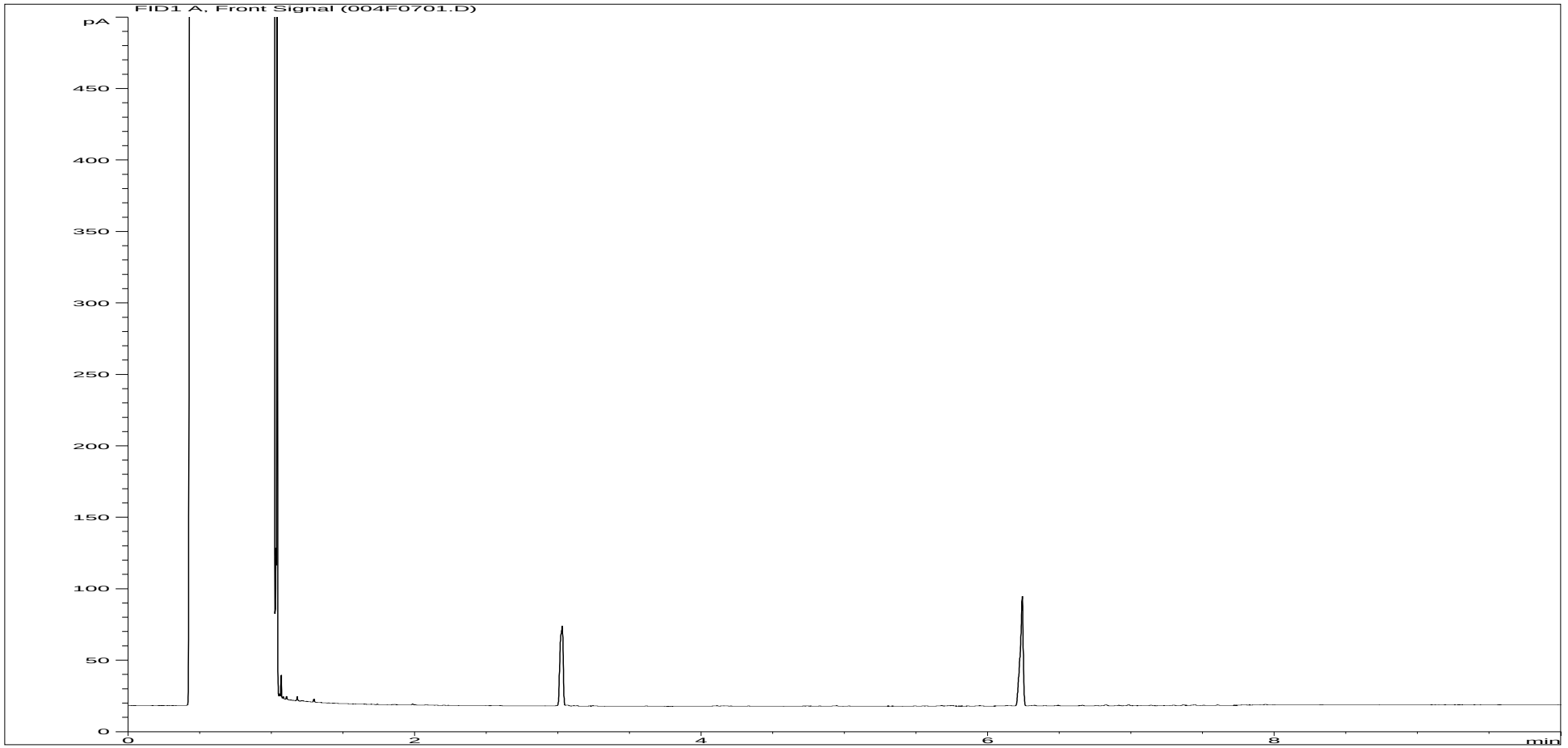
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137323ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\073B2601.D		

Where individual results are flagged see report notes for status.

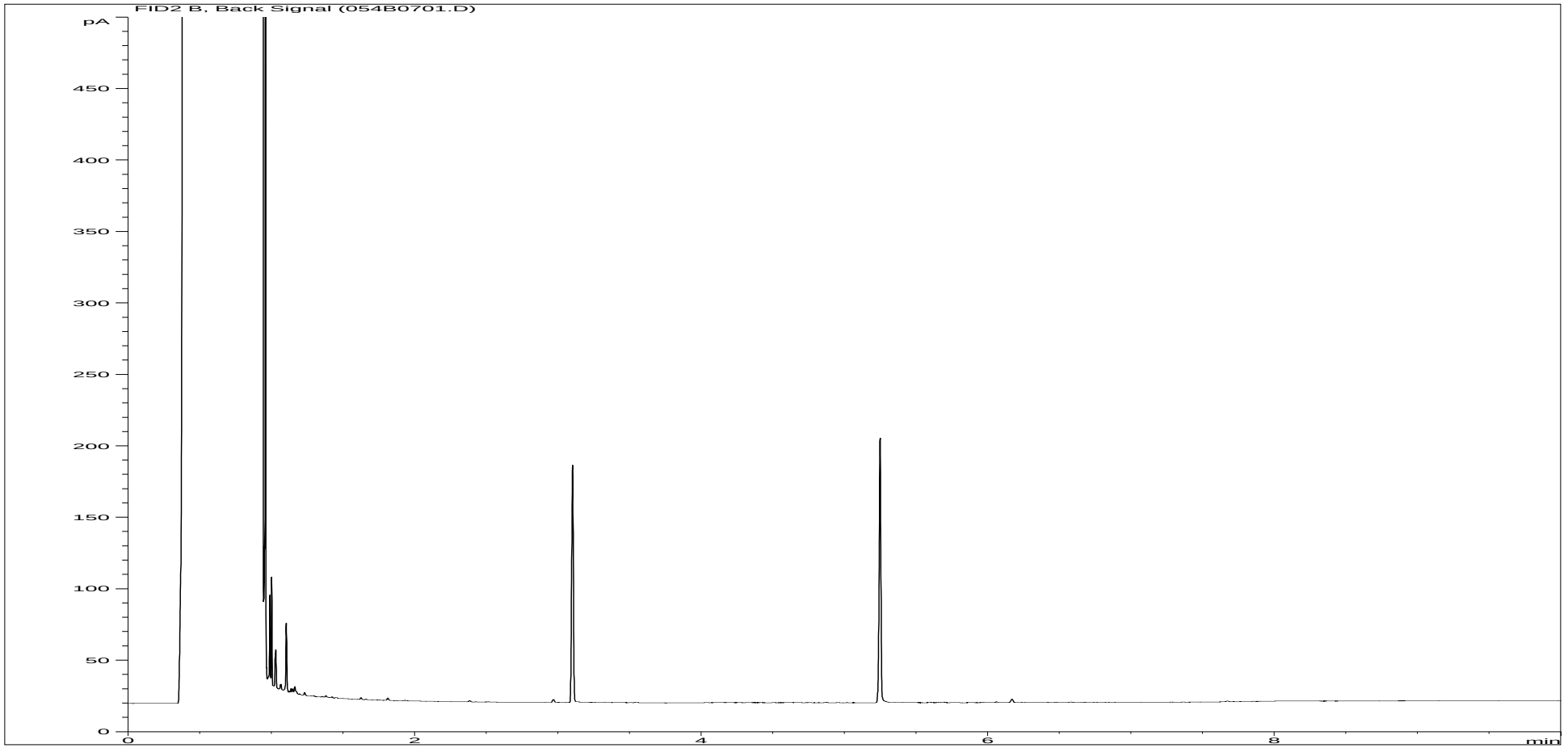
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137334ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\004F0701.D		

Where individual results are flagged see report notes for status.

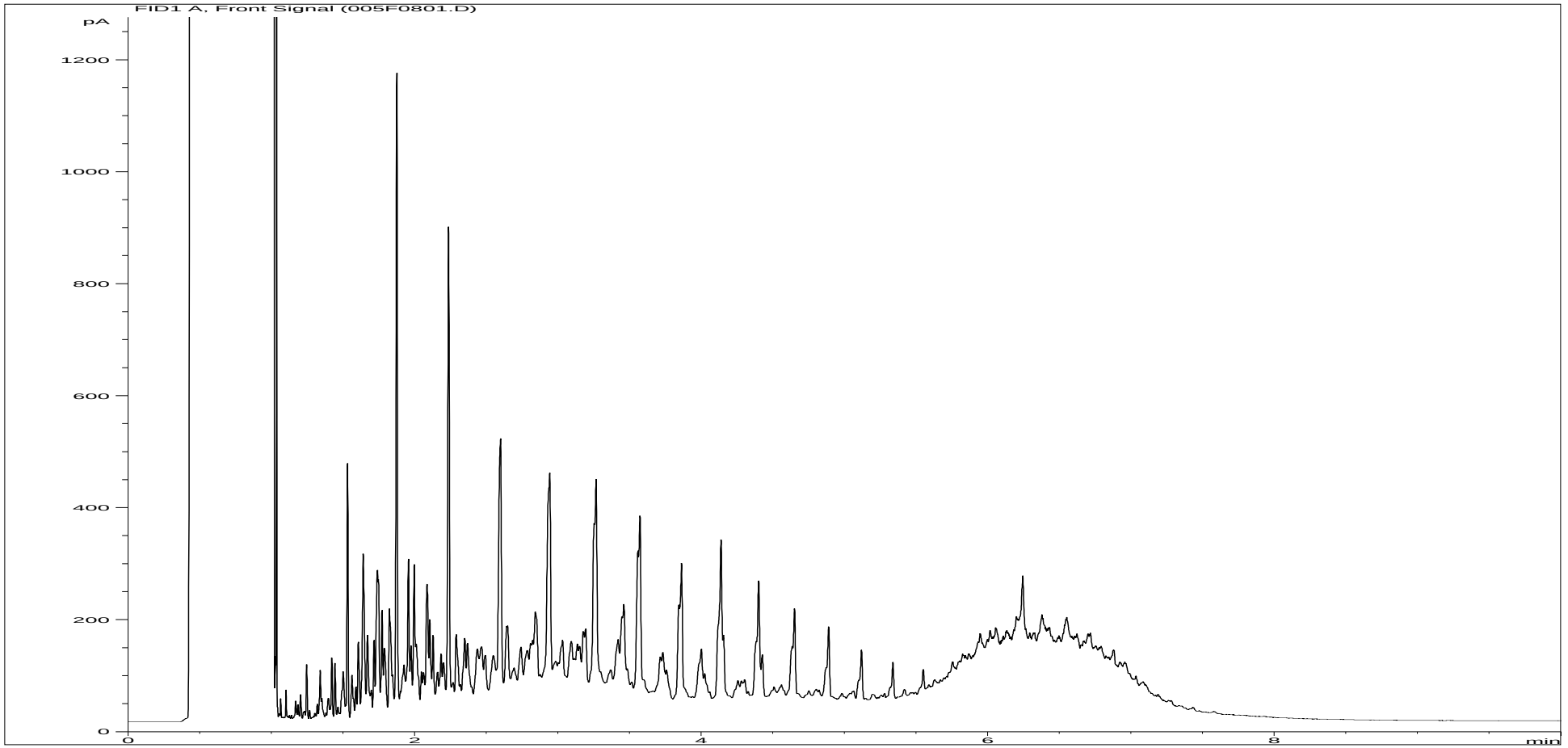
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137334ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\054B0701.D		

Where individual results are flagged see report notes for status.

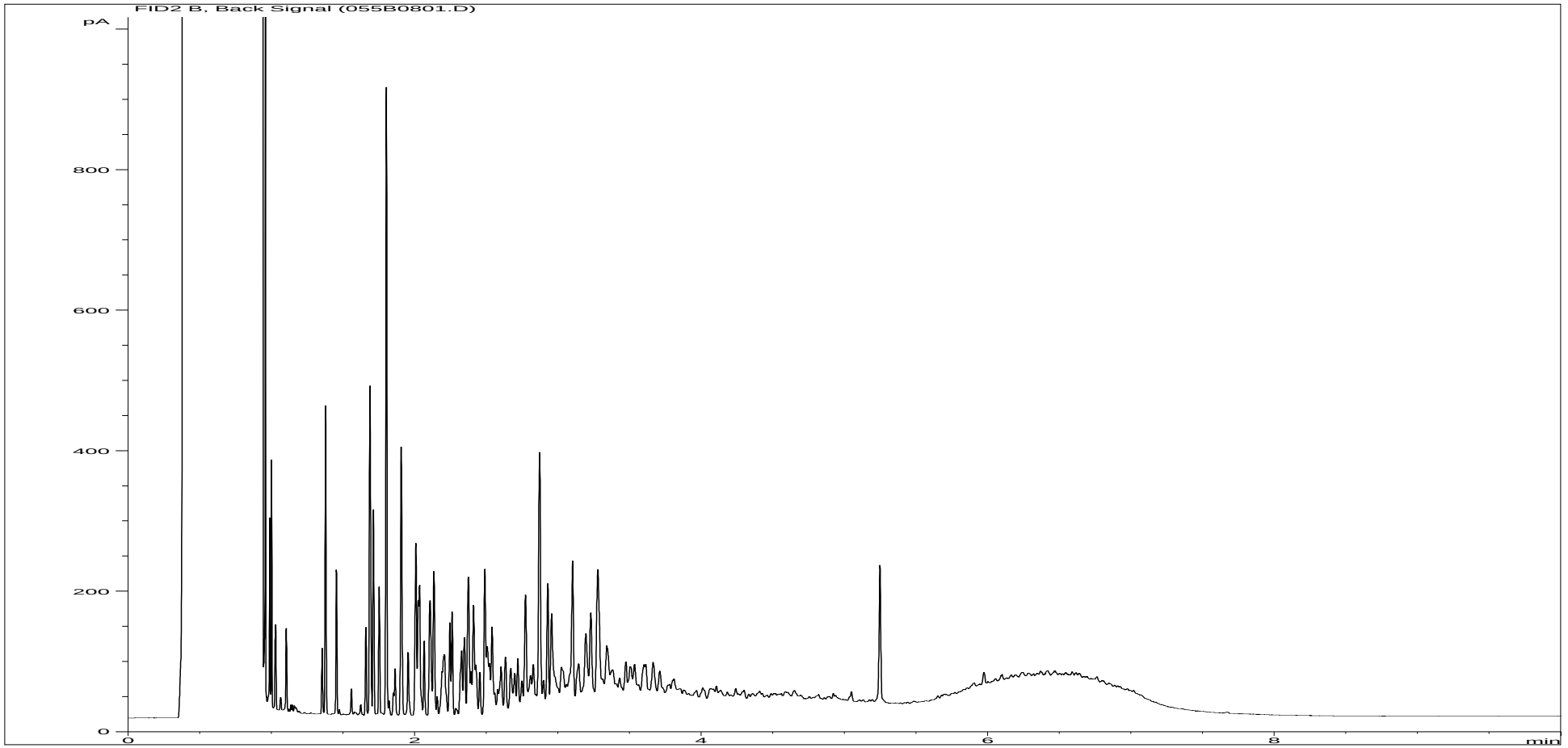
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137335ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\005F0801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137335ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137320	MW99-102	30/08/11																									
[redacted]	[redacted]	[redacted]																									
EX/1137322	MW11-1	30/08/11																									
EX/1137323	MW11-1A	30/08/11																									
EX/1137334	Report 124728 Blank	30/08/11																									
EX/1137335	Report 124728 Blank Spike	30/08/11																									

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137320	MW99-102	30/08/11															
[redacted]	[redacted]	[redacted]															
EX/1137322	MW11-1	30/08/11															
EX/1137323	MW11-1A	30/08/11															
EX/1137334	Report 124728 Blank	30/08/11															
EX/1137335	Report 124728 Blank Spike	30/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Phenols by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124728 (Ver. 1)
Your Ref: 305001-50065-29

September 14, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124728 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 01-Sep-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 14-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 14-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :			pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137320	MW99-102	30-Aug-11	6.9	831	22	364	62	132	16	19	3	0.001	0.007	<0.0001	Req	<0.001	<0.001	0.003
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	7.4	876	98	59	137	94	37	48	2	0.001	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137323	MW11-1A	30-Aug-11	7.4	831	52	57	138	91	34	47	2	0.002	0.004	<0.0001	Req	0.002	<0.001	<0.002
1137334	QC Blank		7.02	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137335	Blank Spike (% Recovery)				102	101	98	96	98	99	101	100	95	94	Req	100	97	95

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137320	MW99-102	30-Aug-11	0.81	5.90	6.71	<0.01	<0.001	<0.0001	<0.001	17.3	<0.2	<0.2	<0.02	<0.02	<0.05	5.9	<0.1	Req
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1137322	MW11-1	30-Aug-11	1.14	0.98	2.12	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	2.9	<0.1	Req
1137323	MW11-1A	30-Aug-11	1.15	0.98	2.13	<0.01	0.001	<0.0001	0.001	0.02	<0.2	<0.2	<0.02	<0.02	<0.05	3.0	<0.1	Req
1137334	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.5	<0.1	Req
1137335	Blank Spike (% Recovery)			99	96	96	96	102	94	101		99	100	97	107	109	99	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137320	MW99-102	**30-Aug-11**	395	5.19	<0.02	4.8	21	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1137322	MW11-1	**30-Aug-11**	387	0.09	<0.02	8.0	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137323	MW11-1A	**30-Aug-11**	367	0.10	<0.02	7.5	<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137334	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137335	Blank Spike (% Recovery)			96			86	108	94	99	298	100	103	96	104	113		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**14-Sep-2011**
Report Number	**EXR/124728**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-102	**Job Number:**	W12_4728
LIMS ID Number:	EX1137320	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.042	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.018	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	109
Phenanthrene-d10	116
Chrysene-d12	125
Perylene-d12	128

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	89

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-1	**Job Number:**	W12_4728
LIMS ID Number:	EX1137322	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	108
Phenanthrene-d10	113
Chrysene-d12	116
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-1A	**Job Number:**	W12_4728
LIMS ID Number:	EX1137323	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	08-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	126
Perylene-d12	134

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	72
Terphenyl-d14	93

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank	**Job Number:**	W12_4728
LIMS ID Number:	EX1137334	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	109
Acenaphthene-d10	107
Phenanthrene-d10	110
Chrysene-d12	110
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	92

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124728 Blank Spike	**Job Number:**	W12_4728
LIMS ID Number:	EX1137335	**Date Booked in:**	01-Sep-11
QC Batch Number:	110800	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	07-Sep-11
Directory:	906PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	90	96
Acenaphthylene	208-96-8	4.49	80	97
Acenaphthene	83-32-9	4.61	83	100
Fluorene	86-73-7	5.01	84	99
Phenanthrene	85-01-8	5.89	87	100
Anthracene	120-12-7	5.94	80	100
Fluoranthene	206-44-0	7.26	80	94
Pyrene	129-00-0	7.56	76	95
Benzo[a]anthracene	56-55-3	9.26	102	96
Chrysene	218-01-9	9.31	87	99
Benzo[b]fluoranthene	205-99-2	10.80	87	97
Benzo[k]fluoranthene	207-08-9	10.83	84	97
Benzo[a]pyrene	50-32-8	11.23	82	95
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	72	76
Dibenzo[a,h]anthracene	53-70-3	12.65	68	80
Benzo[g,h,i]perylene	191-24-2	12.94	76	82
Total (USEPA16) PAHs	-	-	1316	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	115
Chrysene-d12	124
Perylene-d12	130

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4728
QC Batch Number: 110800
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

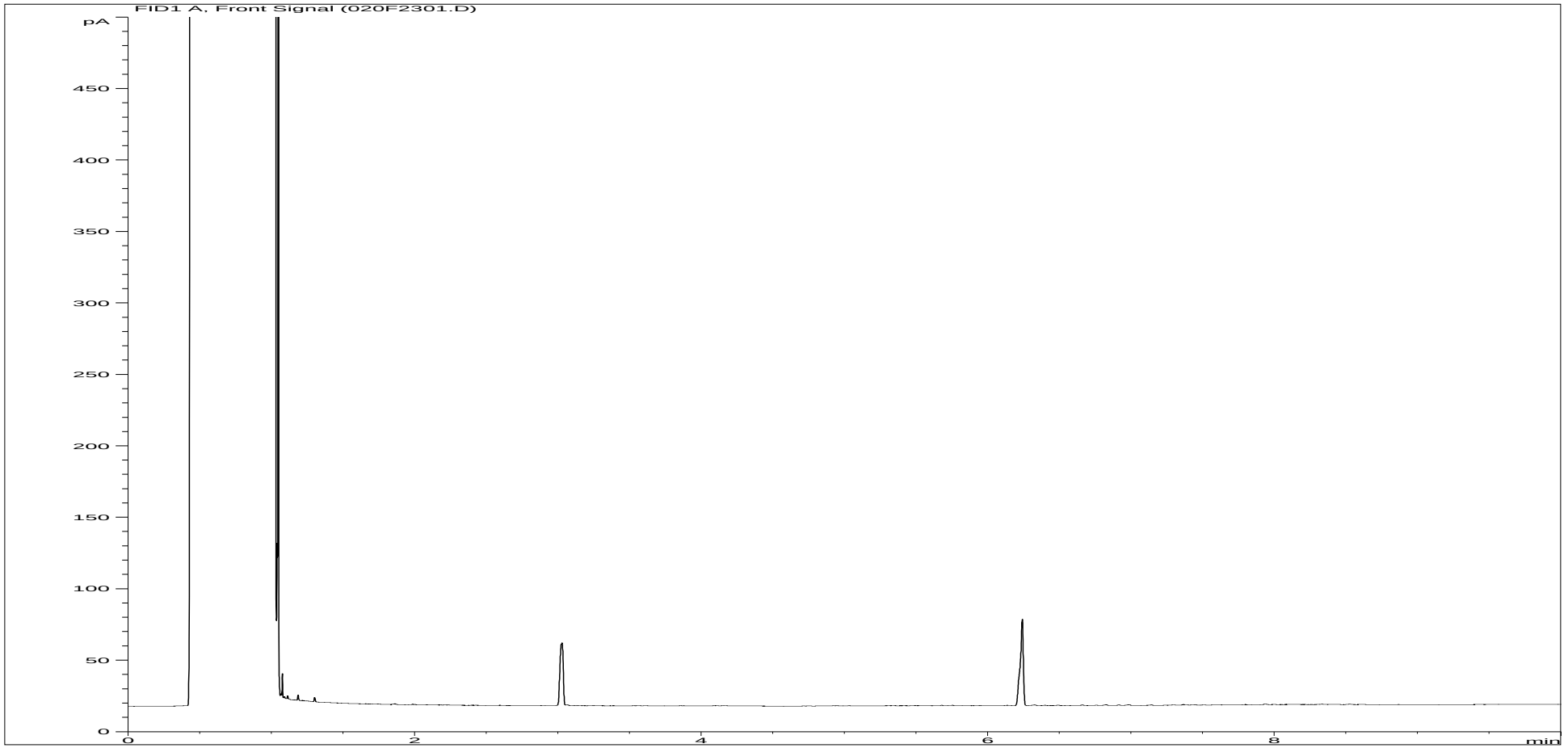
Matrix: Water
Date Booked in 01-Sep-11
Date Extracted 07-Sep-11
Date Analysed 08-Sep-11, 11:30:51

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137320	MW99-102	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1137322	MW99-1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137323	MW99-1A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01
EX1137334	Report 124728 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137335	Report 124728 Blank Spike	0.634	0.21	1	0.347	1.75	0.616	1	0.302	2.65	0.716	7.09	2.21

Where individual results are flagged see report notes for status.

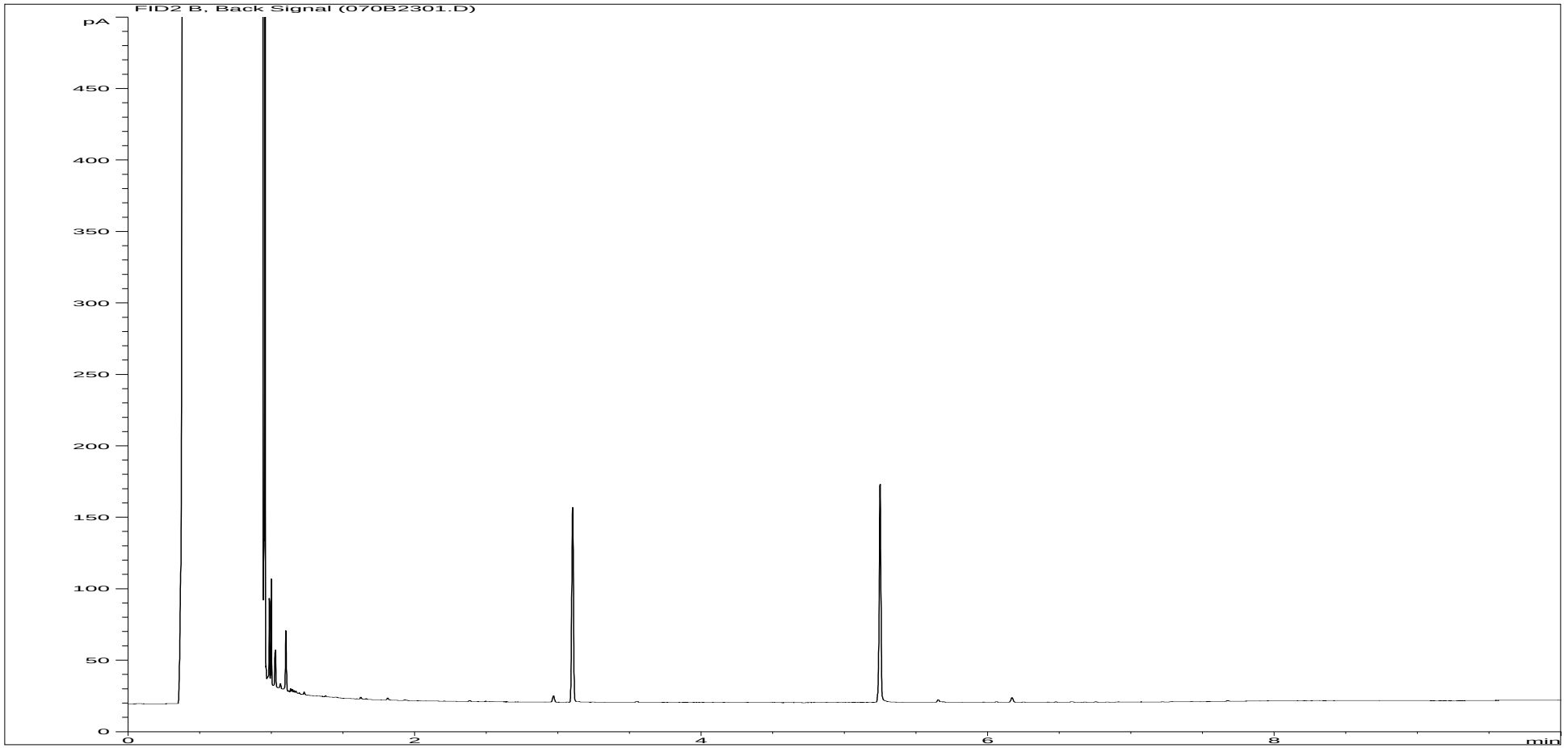
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137320ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\020F2301.D		

Where individual results are flagged see report notes for status.

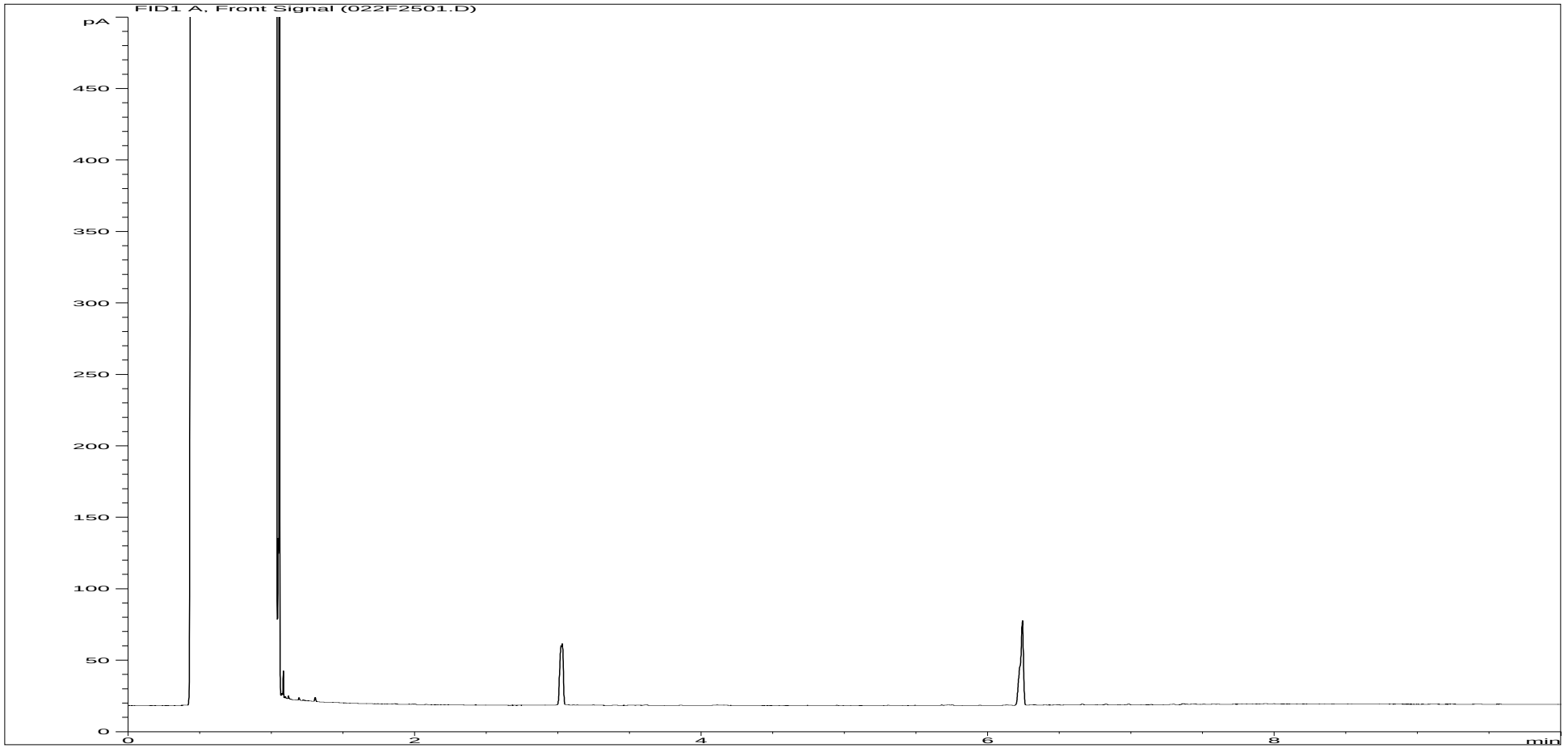
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137320ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-102
Acquisition Date/Time:	08-Sep-11, 16:42:16		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\070B2301.D		

Where individual results are flagged see report notes for status.

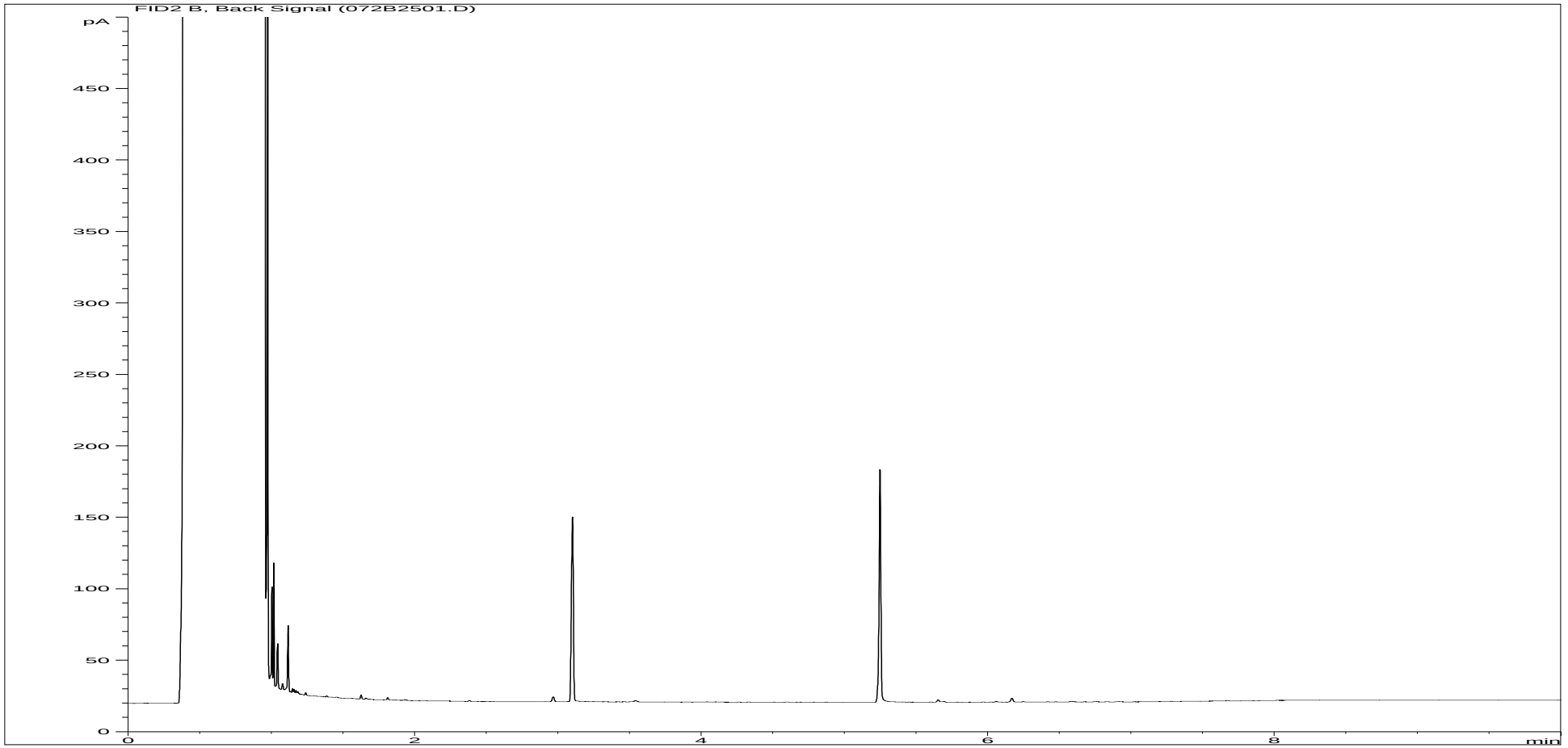
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137322ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\022F2501.D		

Where individual results are flagged see report notes for status.

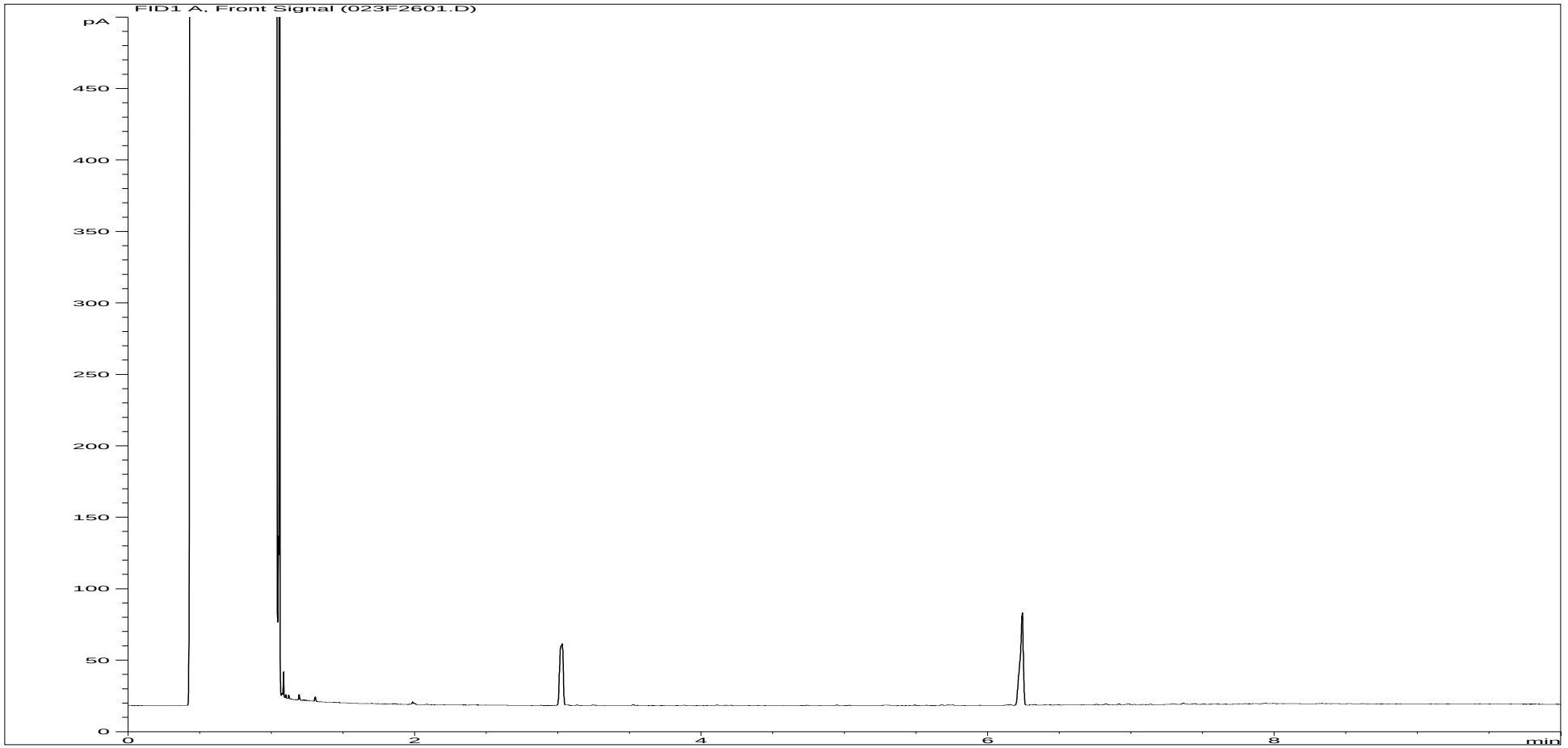
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137322ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1
Acquisition Date/Time:	08-Sep-11, 17:16:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\072B2501.D		

Where individual results are flagged see report notes for status.

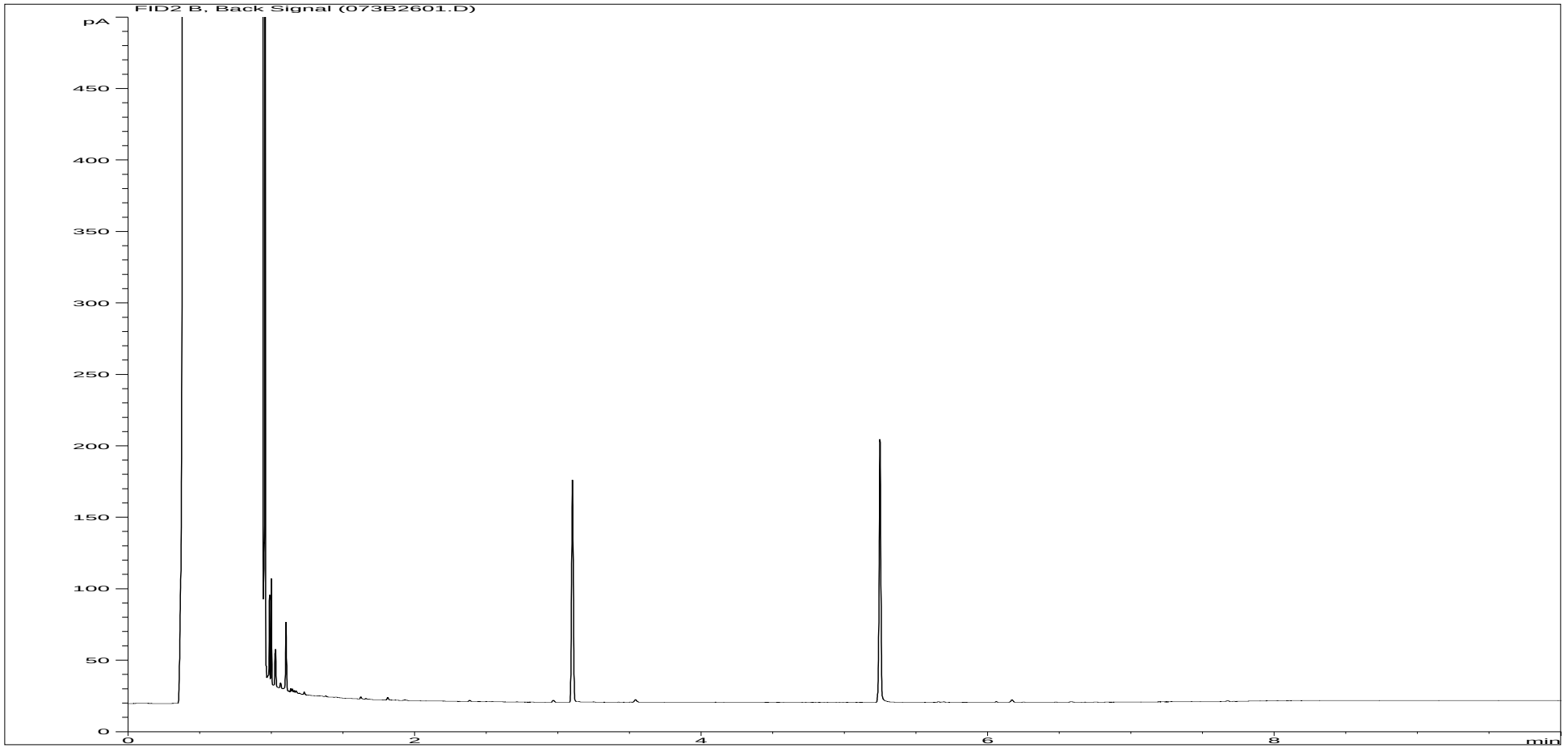
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137323ALI	**Job Number:**	W12_4728
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\023F2601.D		

Where individual results are flagged see report notes for status.

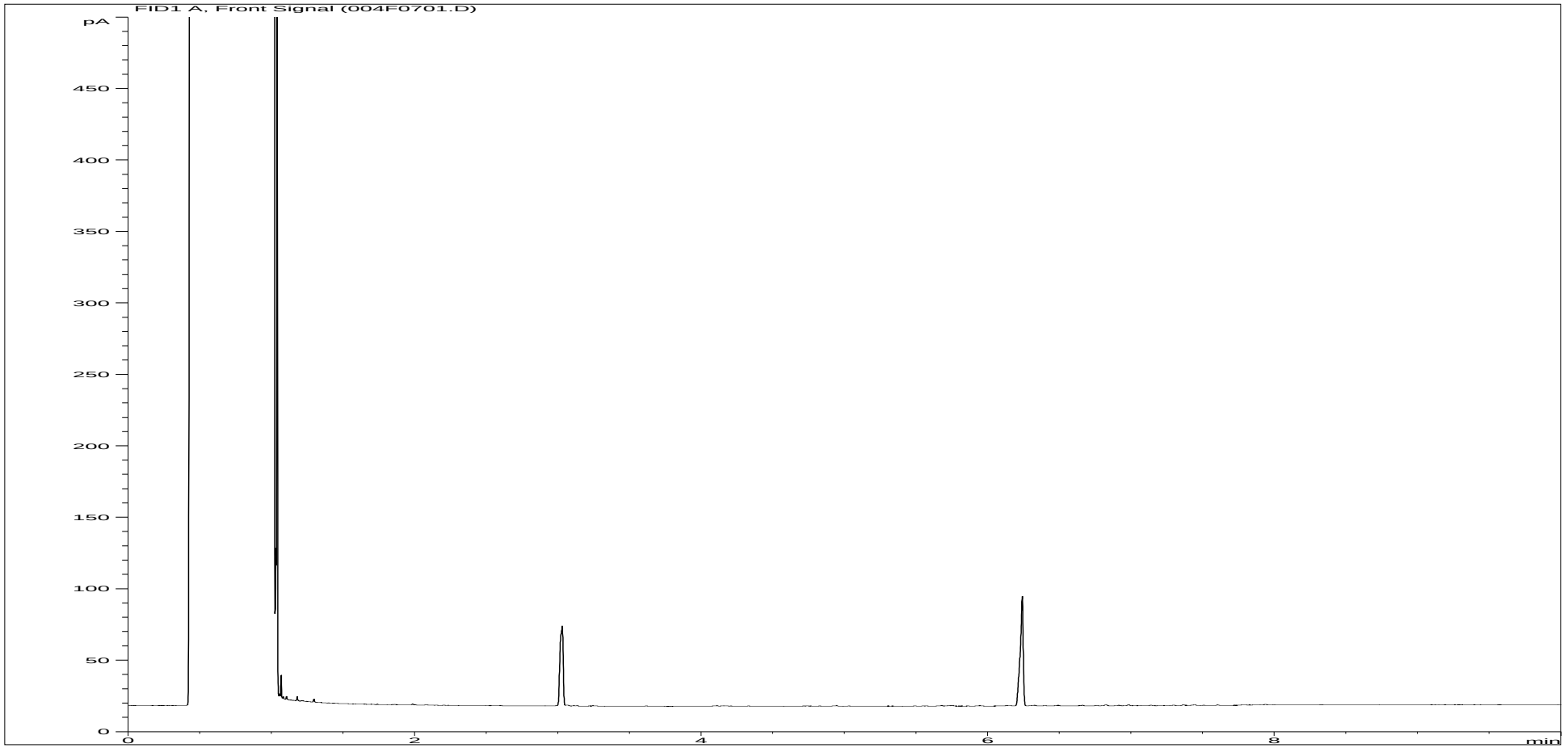
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137323ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-1A
Acquisition Date/Time:	08-Sep-11, 17:34:06		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\073B2601.D		

Where individual results are flagged see report notes for status.

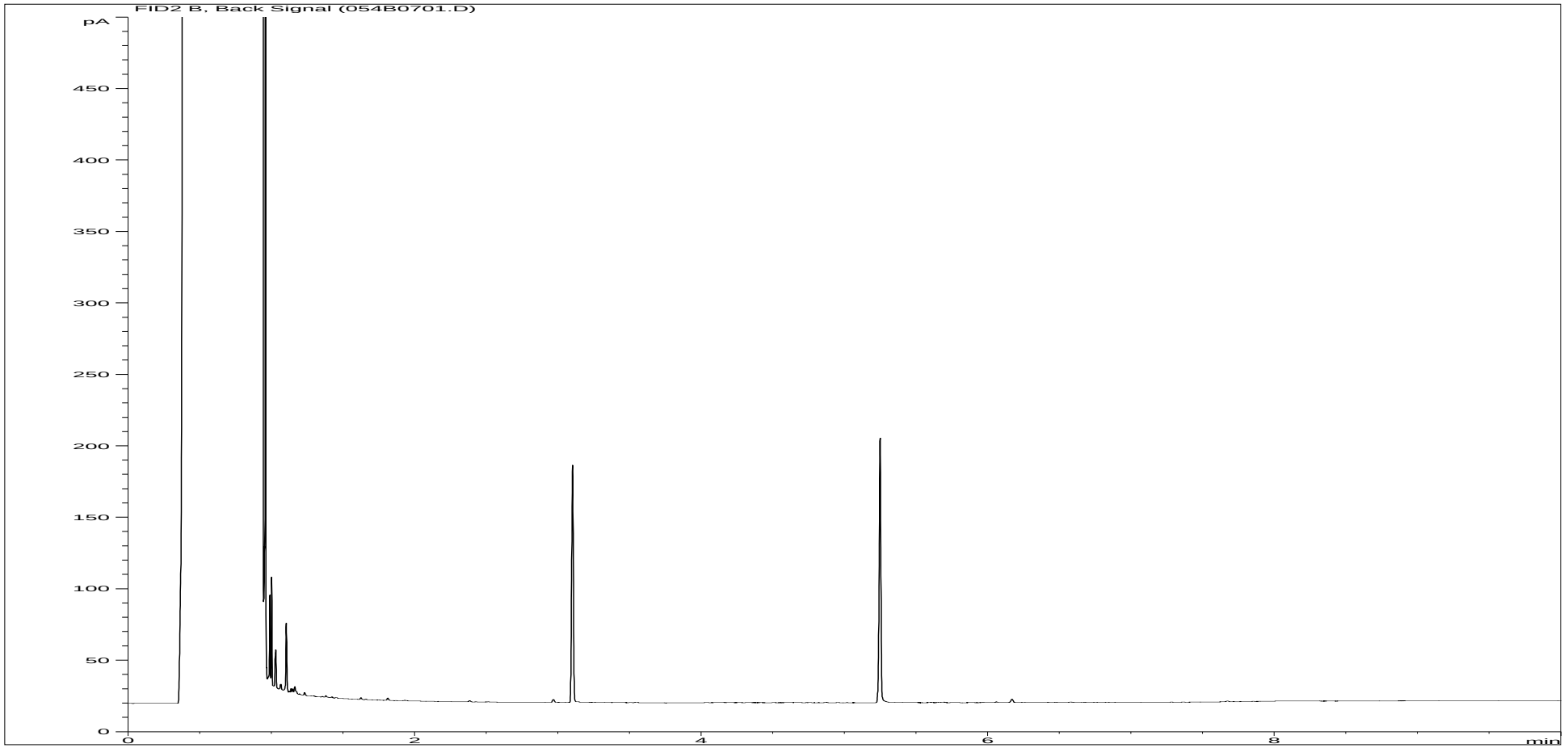
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137334ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\004F0701.D		

Where individual results are flagged see report notes for status.

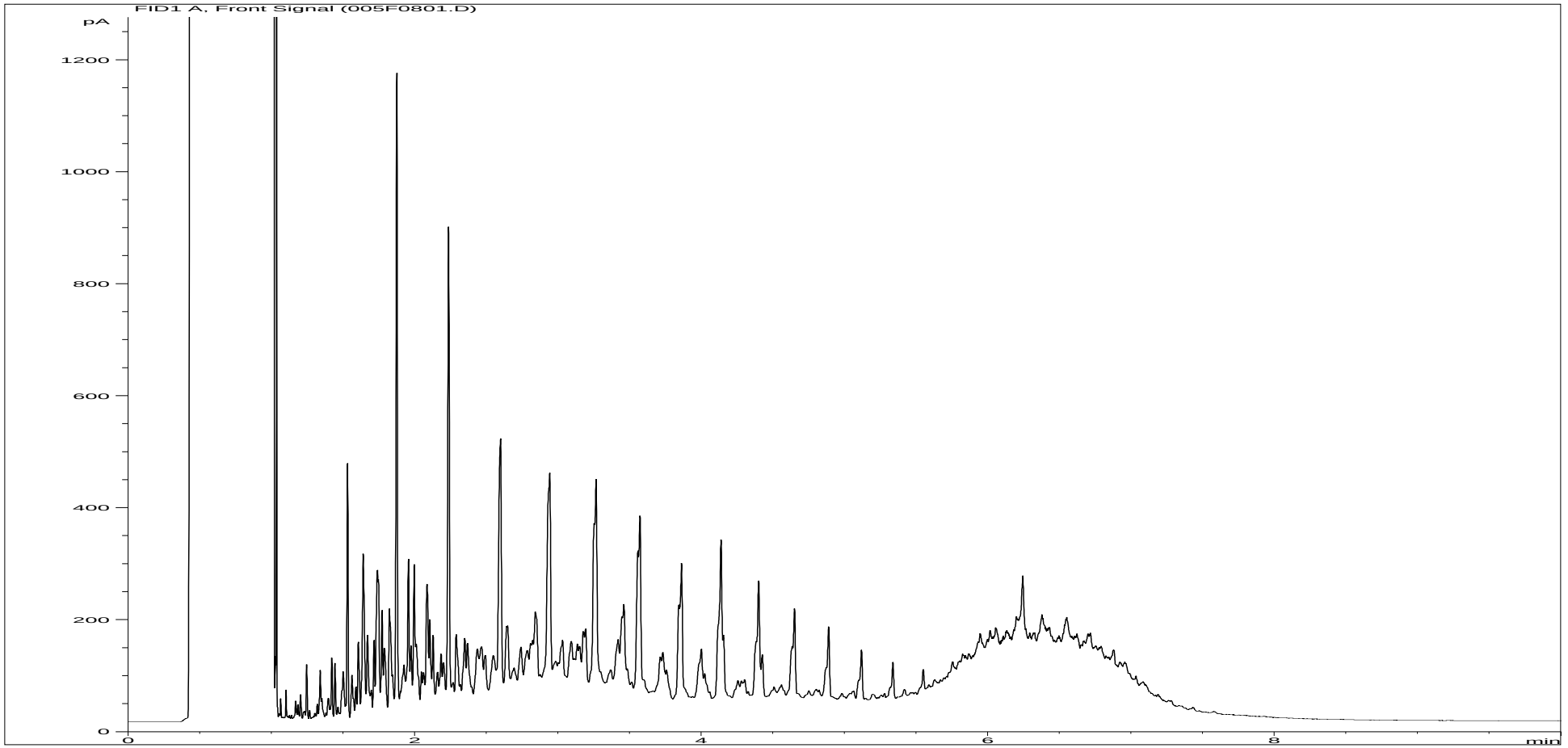
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137334ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank
Acquisition Date/Time:	08-Sep-11, 11:13:39		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\054B0701.D		

Where individual results are flagged see report notes for status.

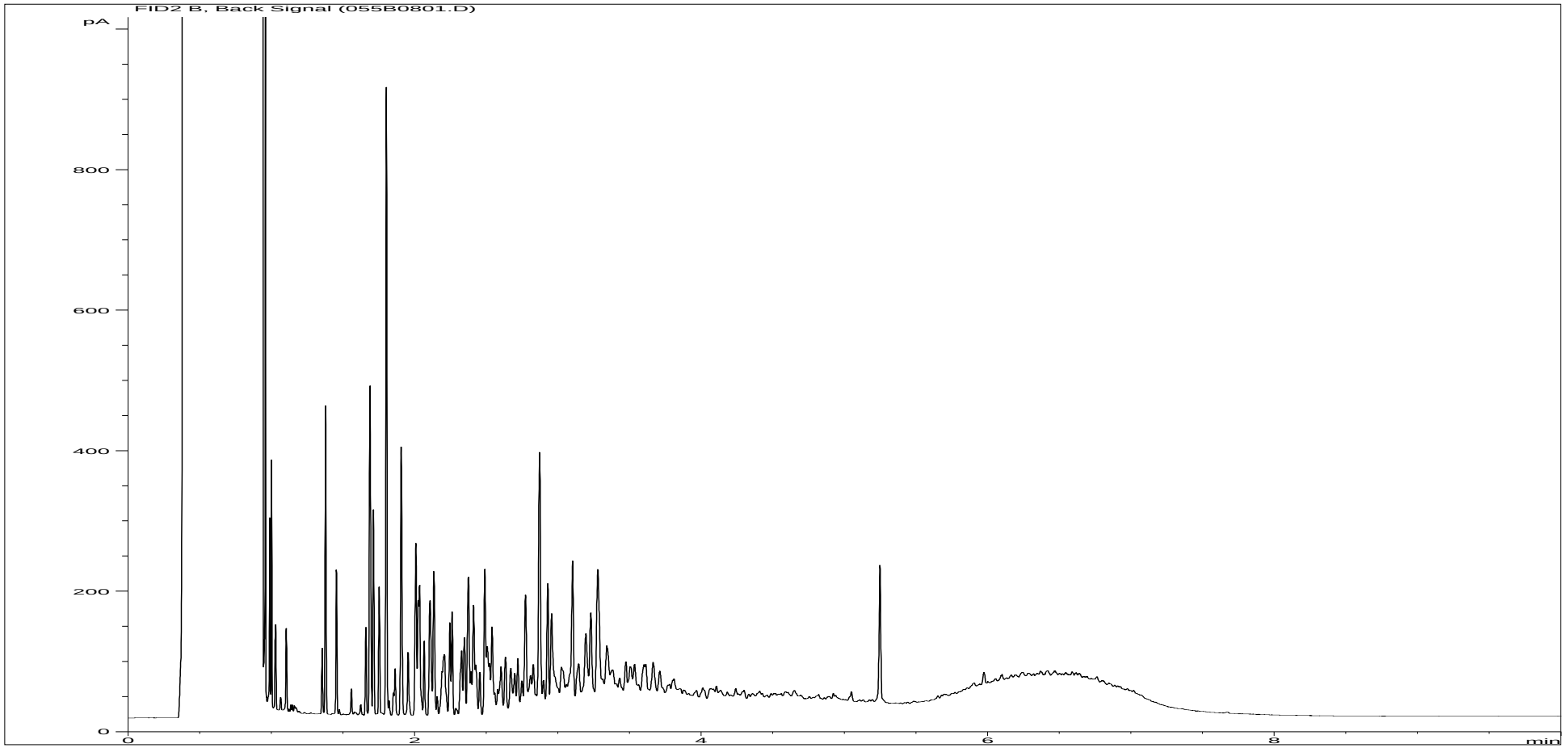
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137335ALI	**Job Number:**	W12_4728
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\005F0801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137335ARO	**Job Number:**	W12_4728
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124728 Blank Spike
Acquisition Date/Time:	08-Sep-11, 11:30:51		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\055B0801.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW									ICPPWW13	ICPWATVAR							KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137320	MW99-102	30/08/11																										
[redacted]	[redacted]	[redacted]																										
EX/1137322	MW99-1	30/08/11																										
EX/1137323	MW99-1A	30/08/11																										
EX/1137334	Report 124728 Blank	30/08/11																										
EX/1137335	Report 124728 Blank Spike	30/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124728

Customer Worley Parsons Komex
Site Maelor Works
Report No W124728

Consignment No 28890
Date Logged 01-Sep-2011

Report Due 13-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137320	MW99-102	30/08/11															
[redacted]	[redacted]	[redacted]															
EX/1137322	MW99-1	30/08/11															
EX/1137323	MW99-1A	30/08/11															
EX/1137334	Report 124728 Blank	30/08/11															
EX/1137335	Report 124728 Blank Spike	30/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124670 (Ver. 1)
Your Ref: 305001-50065-29

September 13, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
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Ms N Glynn
Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

Water Sample Analysis - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124670 (Ver. 1)

Worley Parsons
3-8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 7 samples described in this report were logged for analysis by Scientifics on 31-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 13-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
Table of TPH (Si) banding (0.01) (Page 12)
GC-FID Chromatograms (Pages 13 to 26)
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Table of Method Descriptions (Page 29)
Table of Report Notes (Page 30)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 13-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

		Units :	pH units	uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l	mg/l
		Method Codes :	WSLM3	WSLM2	WSLM10	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW	ICPMSW
		Method Reporting Limits :		100	5	1	3	1	1	1	1	0.001	0.001	0.0001	0.01	0.001	0.001	0.002
		UKAS Accredited :	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Zinc as Zn (Dissolved)**
1137072	MW99-202	28-Aug-11	2.9	4740	753	19	3210	468	195	28	<1	0.158	0.187	0.0029	Req	0.329	<0.001	4.052
1137073	MW11-16	28-Aug-11	6.7	1810	56	20	229	323	32	26	4	0.009	0.004	<0.0001	Req	0.002	<0.001	0.009
1137074	MW99-104	28-Aug-11	6.9	1660	305	21	313	181	24	23	7	0.003	0.003	<0.0001	Req	<0.001	<0.001	0.006
1137075	MW11-2	28-Aug-11	7.4	3670	382	124	1630	509	56	315	35	0.007	0.002	<0.0001	Req	0.007	<0.001	0.006
1137076	MW99-106	28-Aug-11	7.4	2360	56	39	242	147	24	13	5	0.002	0.004	<0.0001	Req	<0.001	<0.001	0.004
1137123	QC Blank		7.07	<100	<5	<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001	<0.002
1137124	Blank Spike (% Recovery)				101	103	99	97	98	100	100	100	100	100	Req	99	97	99

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.1	0.02	0.02	0.05	0.1	0.1	0.01
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number EXI	**Client Sample Description**	**Sample Date**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**	**TPH GC (AA)**
1137072	MW99-202	28-Aug-11	117	215	332	108	<0.001	<0.0001	<0.001	13.0	<0.2	<0.2	<0.02	<0.02	<0.05	11	<0.1	Req
1137073	MW11-16	28-Aug-11	0.21	3.50	3.71	0.22	0.002	<0.0001	0.001	2.0	<0.2	<0.2	0.02	0.26	<0.05	25	<0.1	Req
1137074	MW99-104	28-Aug-11	9.0	35.2	44.2	0.18	0.002	<0.0001	0.001	63.9	<0.2	8.1	0.05	0.59	<0.05	16	<0.1	Req
1137075	MW11-2	28-Aug-11	4.15	3.21	7.36	2.05	0.012	<0.0001	0.002	9.9	<0.2	1.5	0.63	5.63	<0.05	54	<0.1	Req
1137076	MW99-106	28-Aug-11	0.44	4.63	5.07	0.08	0.005	<0.0001	0.002	161	<0.2	<0.2	0.05	0.31	0.37	23	0.31	Req
1137123	QC Blank		<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.1	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1	Req
1137124	Blank Spike (% Recovery)		99	99	99	96	100	102	100	98	98	99	101	104	109	98	103	Req

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			Calc_HD	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			7	0.01	0.02	0.1	1	1	1	1	2	0.1	0.1	0.1	0.1	0.1		
UKAS Accredited :			No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No		
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Total Hardness as CaCO3**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1137072	MW99-202	28-Aug-11	1973	17.9	<0.02	8.6	15	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137073	MW11-16	28-Aug-11	939	37.2	0.24	6.2	4	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137074	MW99-104	28-Aug-11	551	6.43	0.54	3.7	67	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137075	MW11-2	28-Aug-11	1503	2.83	5.00	5.2	16	<1	<1	<1	<2	0.0091	<0.0005	<0.0005	<0.1	<0.0005		
1137076	MW99-106	28-Aug-11	466	8.50	0.26	1.7	156	<1	<1	<1	4	0.1809	0.1578	0.0308	<0.1	0.0366		
1137123	QC Blank			<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1137124	Blank Spike (% Recovery)			98			96	84	81	82	249	85	98	104	109	105		

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Client Name **Worley Parsons**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	**13-Sep-2011**
Report Number	**EXR/124670**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-202	**Job Number:**	W12_4670
LIMS ID Number:	EX1137072	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	7.56	0.059	96
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	10.79	0.012	73
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.211	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	102
Phenanthrene-d10	115
Chrysene-d12	114
Perylene-d12	114

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	80
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-16	**Job Number:**	W12_4670
LIMS ID Number:	EX1137073	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	104
Acenaphthene-d10	101
Phenanthrene-d10	112
Chrysene-d12	108
Perylene-d12	106

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	86
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-104	**Job Number:**	W12_4670
LIMS ID Number:	EX1137074	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.031	90
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	5.01	0.014	93
Phenanthrene	85-01-8	5.88	0.018	84
Anthracene	120-12-7	5.94	0.014	M
Fluoranthene	206-44-0	7.26	0.050	78
Pyrene	129-00-0	7.55	0.038	69
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.265	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	104
Phenanthrene-d10	117
Chrysene-d12	114
Perylene-d12	112

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-2	**Job Number:**	W12_4670
LIMS ID Number:	EX1137075	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	4.49	0.021	82
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.048	97
Anthracene	120-12-7	5.94	0.048	98
Fluoranthene	206-44-0	7.26	0.117	98
Pyrene	129-00-0	7.55	0.100	74
Benzo[a]anthracene	56-55-3	9.25	0.081	88
Chrysene	218-01-9	9.30	0.076	69
Benzo[b]fluoranthene	205-99-2	10.79	0.158	99
Benzo[k]fluoranthene	207-08-9	10.83	0.050	99
Benzo[a]pyrene	50-32-8	11.22	0.128	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	0.074	73
Dibenzo[a,h]anthracene	53-70-3	12.64	0.014	55
Benzo[g,h,i]perylene	191-24-2	12.93	0.065	73
Total (USEPA16) PAHs	-	-	< 1.010	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	107
Phenanthrene-d10	124
Chrysene-d12	134
Perylene-d12	144

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	77
Terphenyl-d14	98

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-106	**Job Number:**	W12_4670
LIMS ID Number:	EX1137076	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	1.920	91
Acenaphthylene	208-96-8	4.49	4.930	99
Acenaphthene	83-32-9	4.61	8.830	99
Fluorene	86-73-7	5.01	0.143	36
Phenanthrene	85-01-8	5.88	0.059	93
Anthracene	120-12-7	5.94	0.012	94
Fluoranthene	206-44-0	7.26	0.019	65
Pyrene	129-00-0	7.55	0.015	M
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 16.008	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	103
Acenaphthene-d10	116
Phenanthrene-d10	133
Chrysene-d12	134
Perylene-d12	136

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	97

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124670 Blank	**Job Number:**	W12_4670
LIMS ID Number:	EX1137123	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	110
Acenaphthene-d10	110
Phenanthrene-d10	121
Chrysene-d12	122
Perylene-d12	119

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	84
Terphenyl-d14	104

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124670 Blank Spike	**Job Number:**	W12_4670
LIMS ID Number:	EX1137124	**Date Booked in:**	31-Aug-11
QC Batch Number:	110808	**Date Extracted:**	07-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	12-Sep-11
Directory:	912PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	100	94
Acenaphthylene	208-96-8	4.49	96	98
Acenaphthene	83-32-9	4.61	96	98
Fluorene	86-73-7	5.01	102	97
Phenanthrene	85-01-8	5.89	100	99
Anthracene	120-12-7	5.94	94	98
Fluoranthene	206-44-0	7.26	91	79
Pyrene	129-00-0	7.56	87	79
Benzo[a]anthracene	56-55-3	9.26	115	96
Chrysene	218-01-9	9.31	108	99
Benzo[b]fluoranthene	205-99-2	10.79	108	98
Benzo[k]fluoranthene	207-08-9	10.83	101	99
Benzo[a]pyrene	50-32-8	11.22	99	98
Indeno[1,2,3-cd]pyrene	193-39-5	12.61	81	88
Dibenzo[a,h]anthracene	53-70-3	12.65	79	86
Benzo[g,h,i]perylene	191-24-2	12.93	90	92
Total (USEPA16) PAHs	-	-	1546	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	100
Phenanthrene-d10	112
Chrysene-d12	107
Perylene-d12	108

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	93
Terphenyl-d14	102

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4670
QC Batch Number: 110801
Directory: D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\091B5501.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

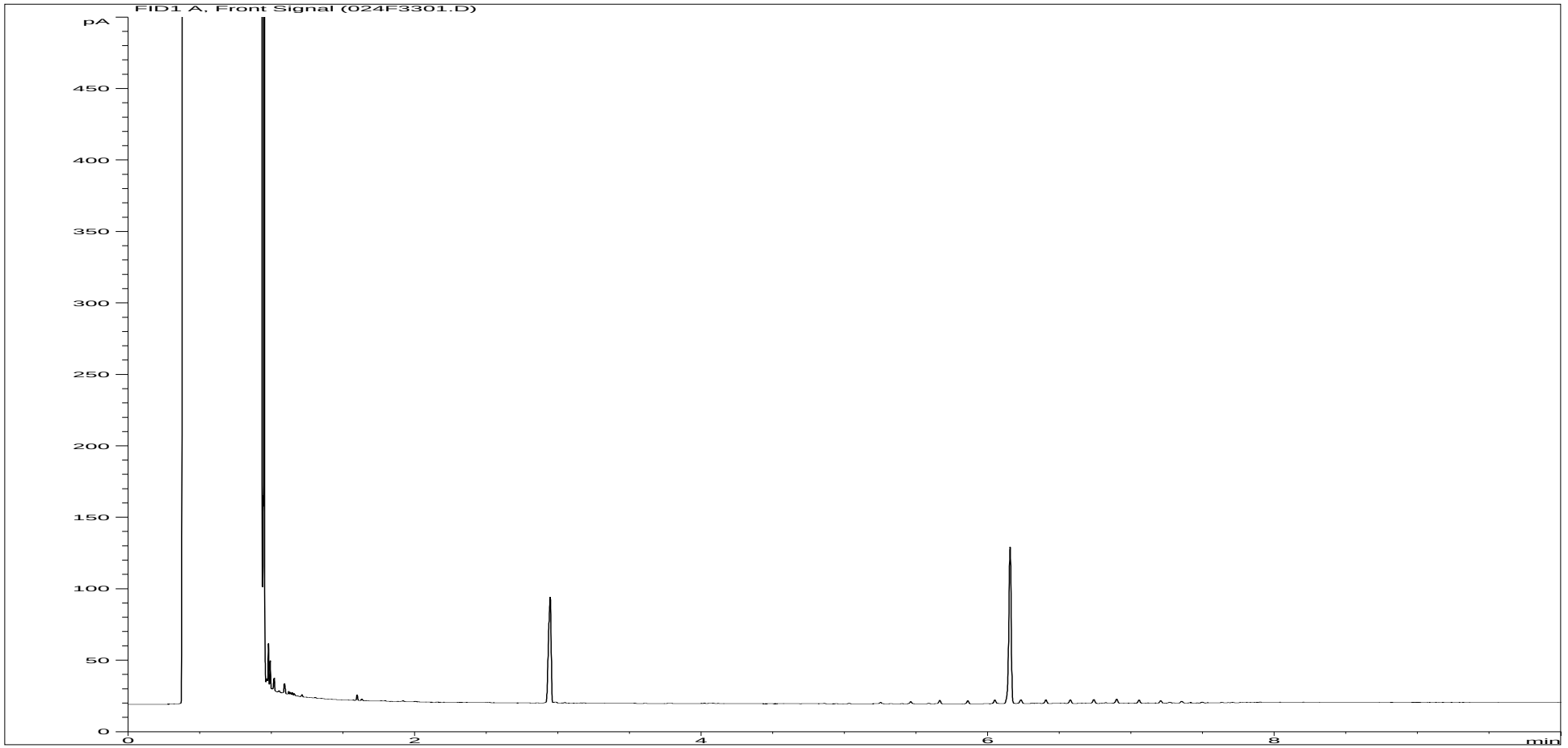
Matrix: Water
Date Booked ir 31-Aug-11
Date Extracted 07-Sep-11
Date Analysed:09-Sep-11, 01:51:49

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1137072	MW99-202	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.014	<0.01	0.019	0.028
EX1137073	MW11-16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137074	MW99-104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137075	MW11-2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01
EX1137076	MW99-106	<0.01	0.037	<0.01	0.202	<0.01	0.073	<0.01	0.013	<0.01	0.012	<0.01	0.339
EX1137123	Report 124670 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1137124	Report 124670 Blank Spike	0.601	0.194	0.96	0.324	1.67	0.573	0.96	0.293	2.56	0.688	6.8	2.1

Where individual results are flagged see report notes for status.

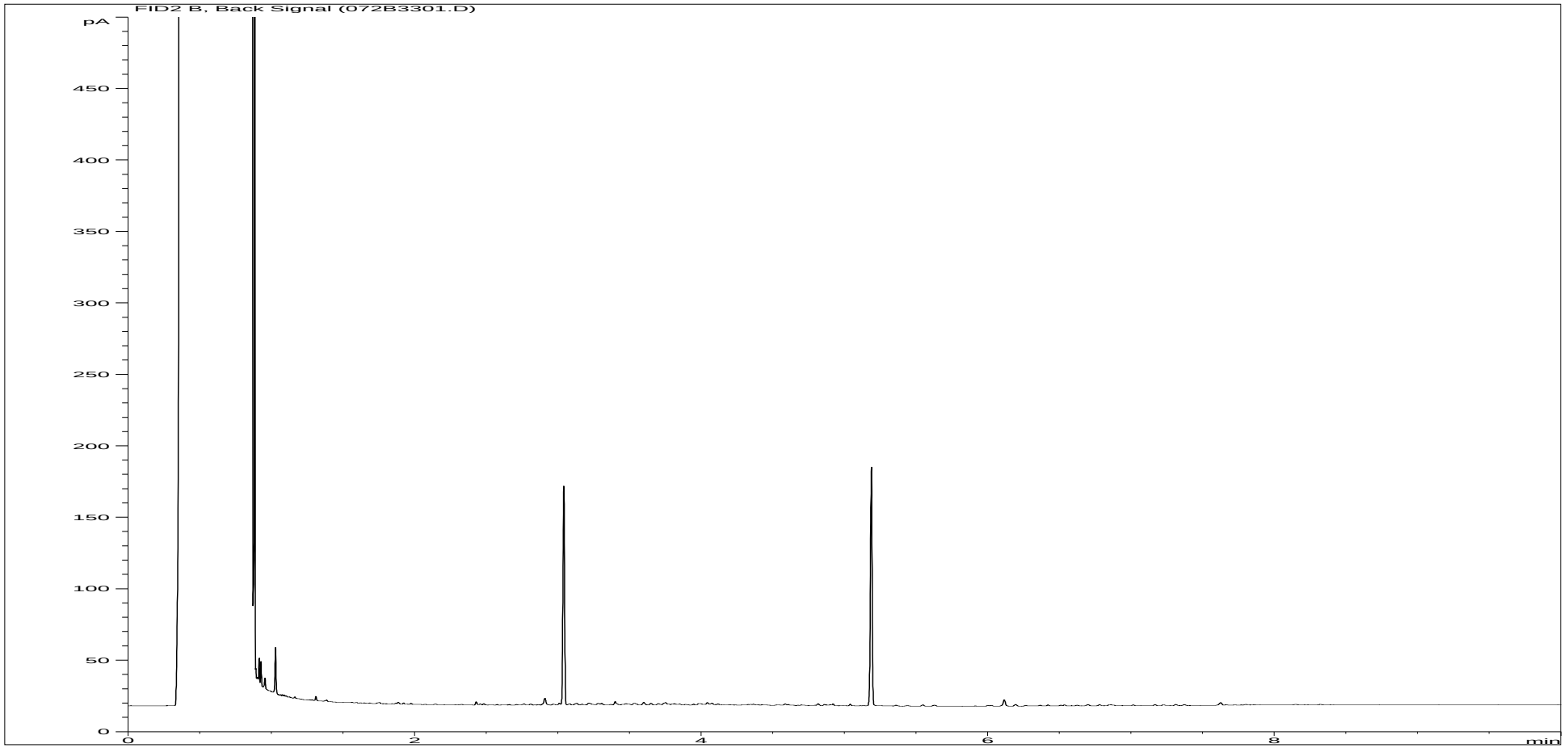
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137072ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	06-Sep-11, 22:44:14		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\024F3301.D		

Where individual results are flagged see report notes for status.

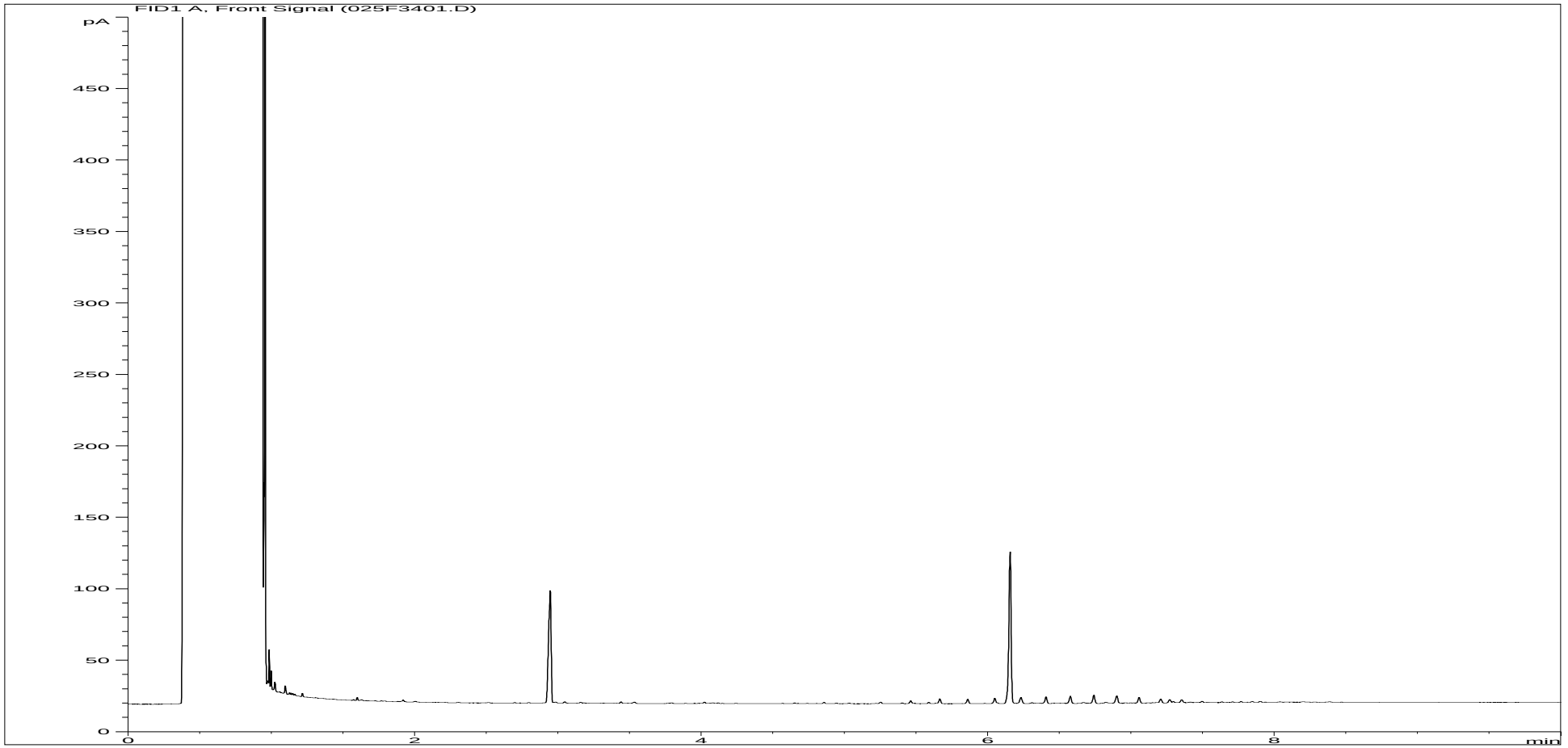
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137072ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-202
Acquisition Date/Time:	06-Sep-11, 22:44:14		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\072B3301.D		

Where individual results are flagged see report notes for status.

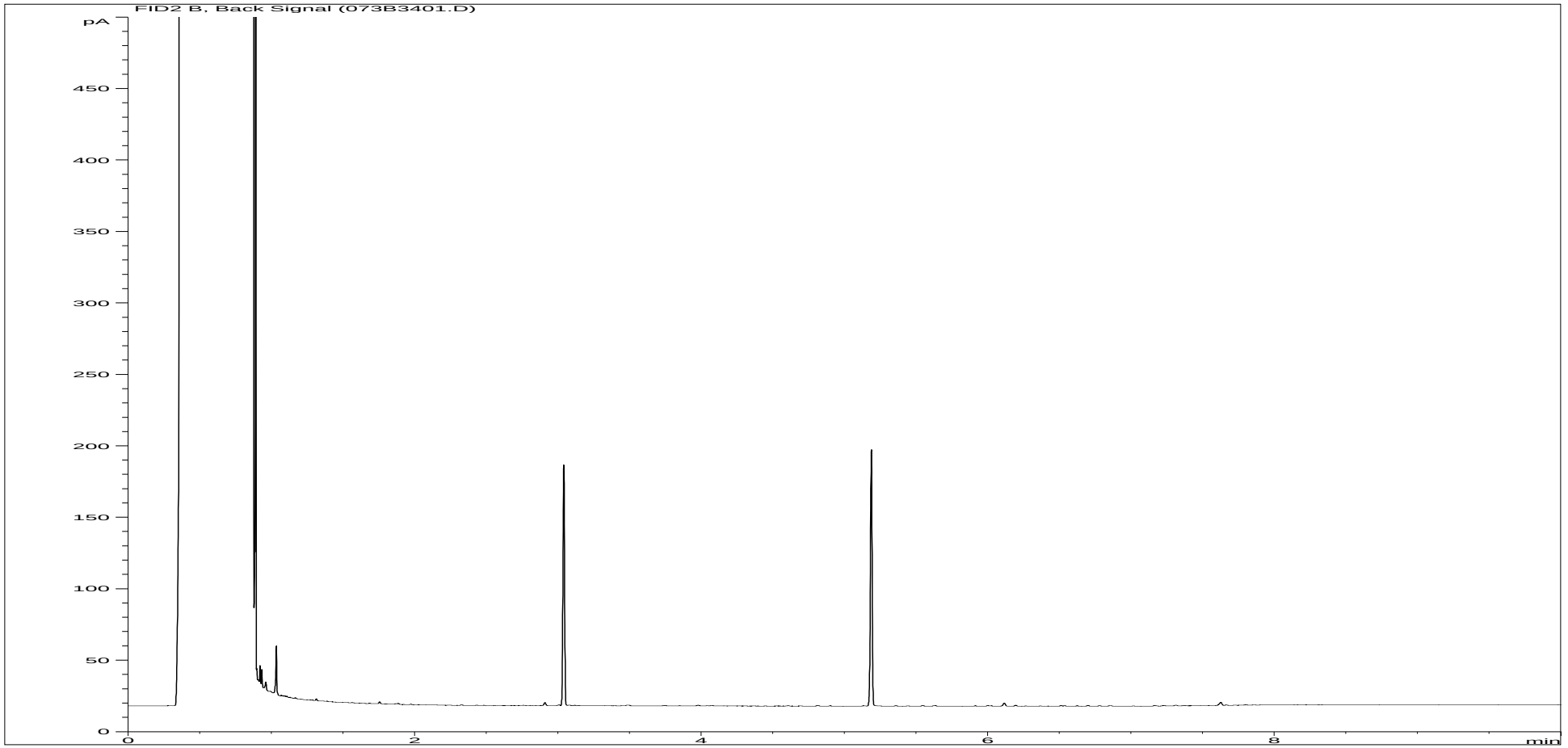
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137073ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	06-Sep-11, 23:01:25		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\025F3401.D		

Where individual results are flagged see report notes for status.

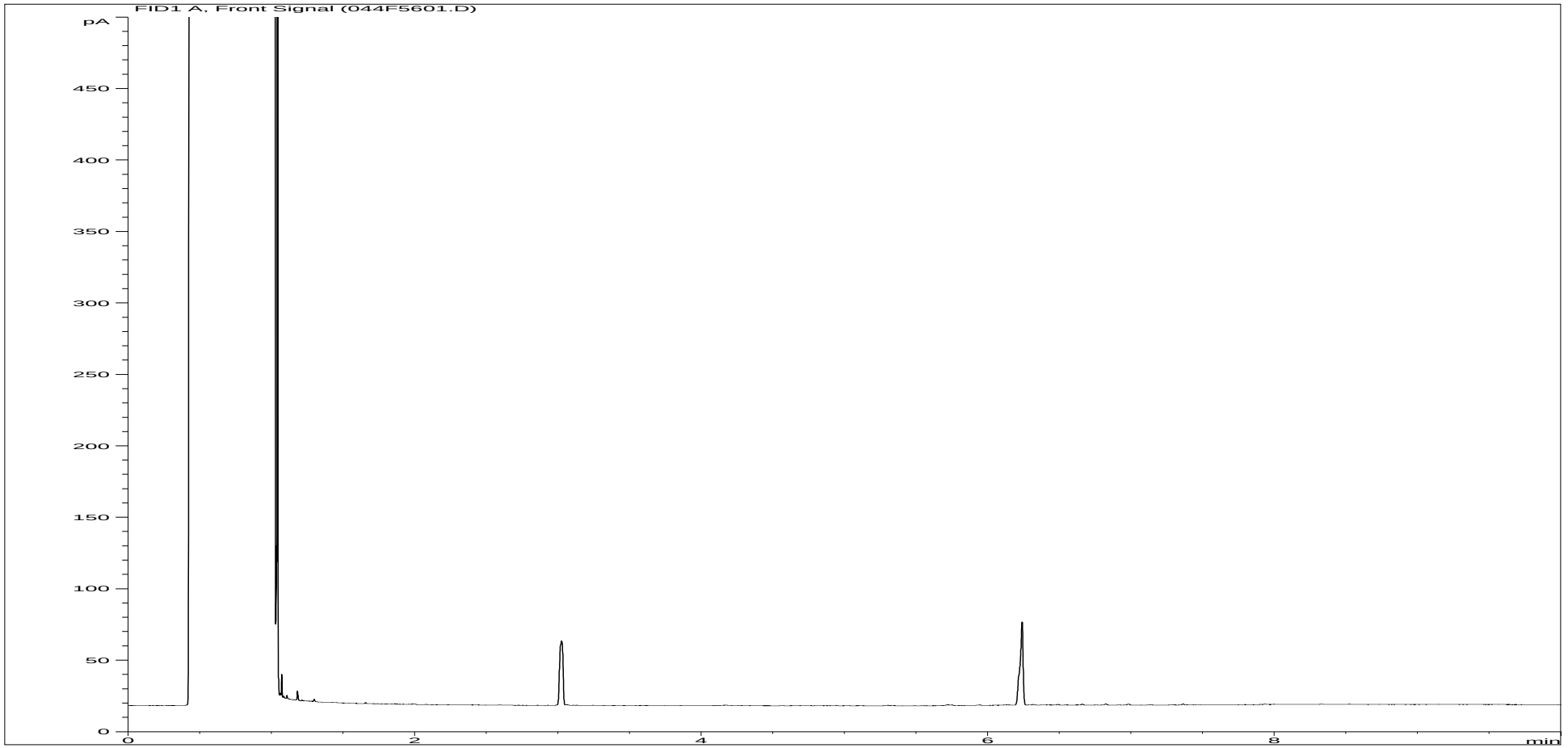
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137073ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-16
Acquisition Date/Time:	06-Sep-11, 23:01:25		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC16\090611 2011-09-06 13-34-06\073B3401.D		

Where individual results are flagged see report notes for status.

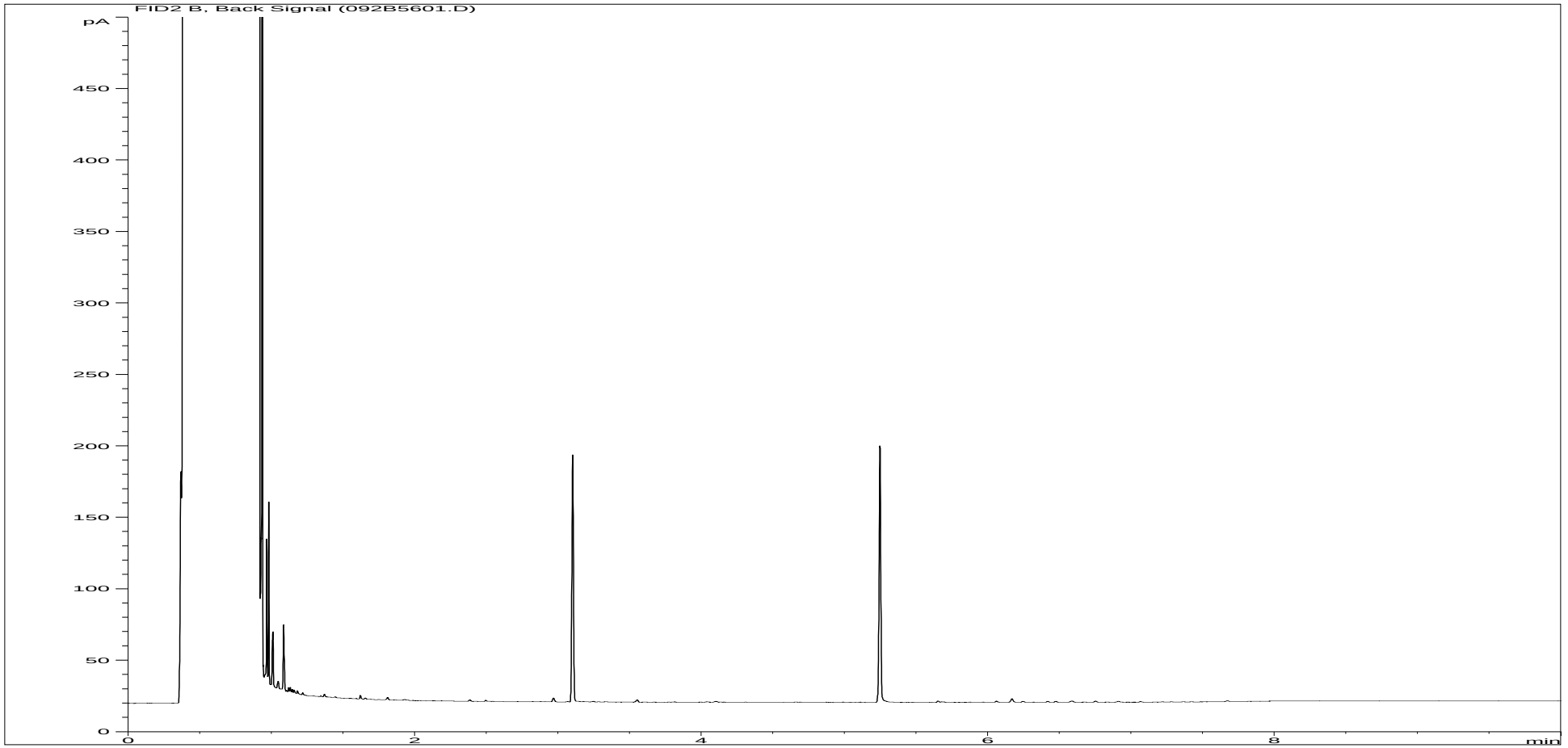
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137074ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	09-Sep-11, 02:09:12		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\044F5601.D		

Where individual results are flagged see report notes for status.

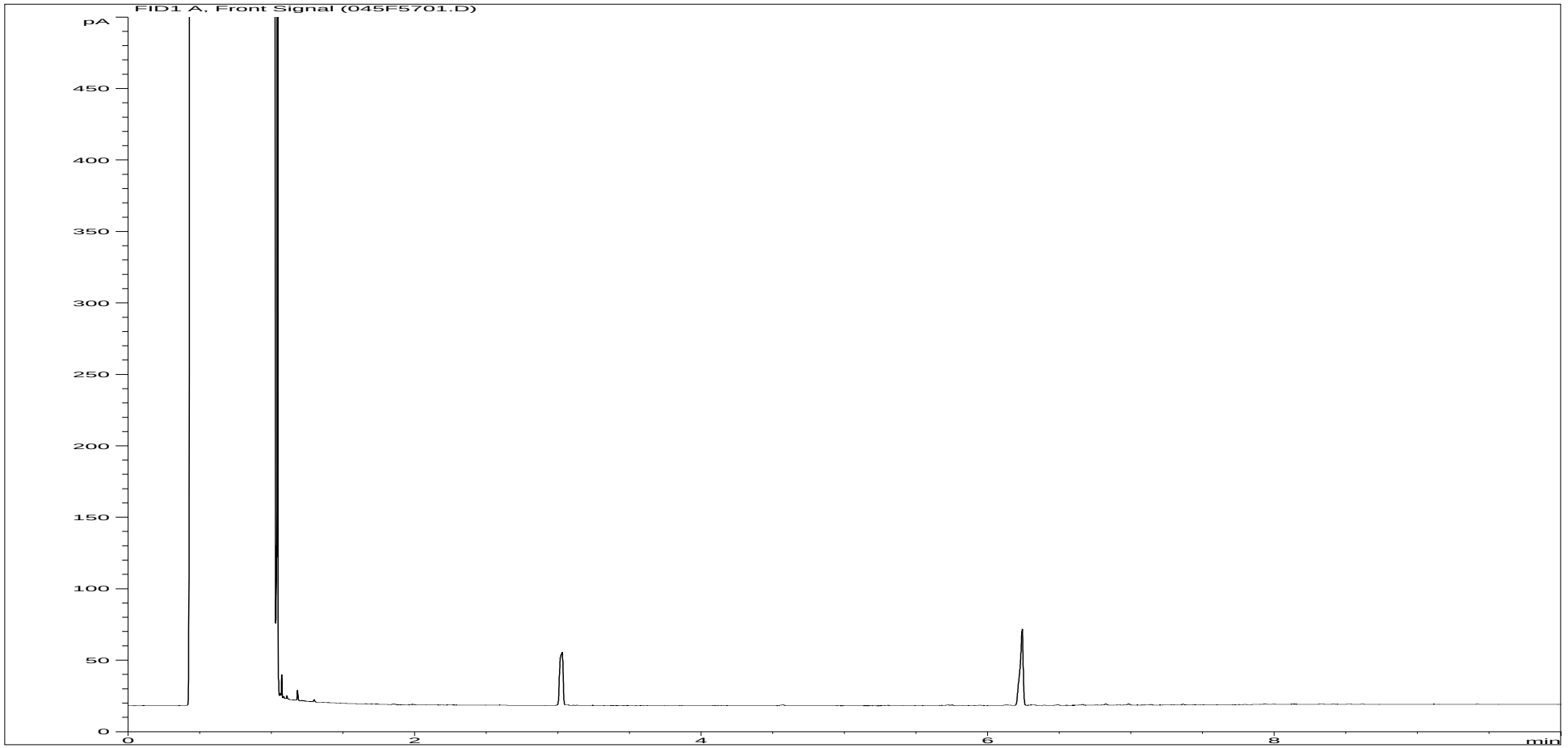
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137074ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-104
Acquisition Date/Time:	09-Sep-11, 02:09:12		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\092B5601.D		

Where individual results are flagged see report notes for status.

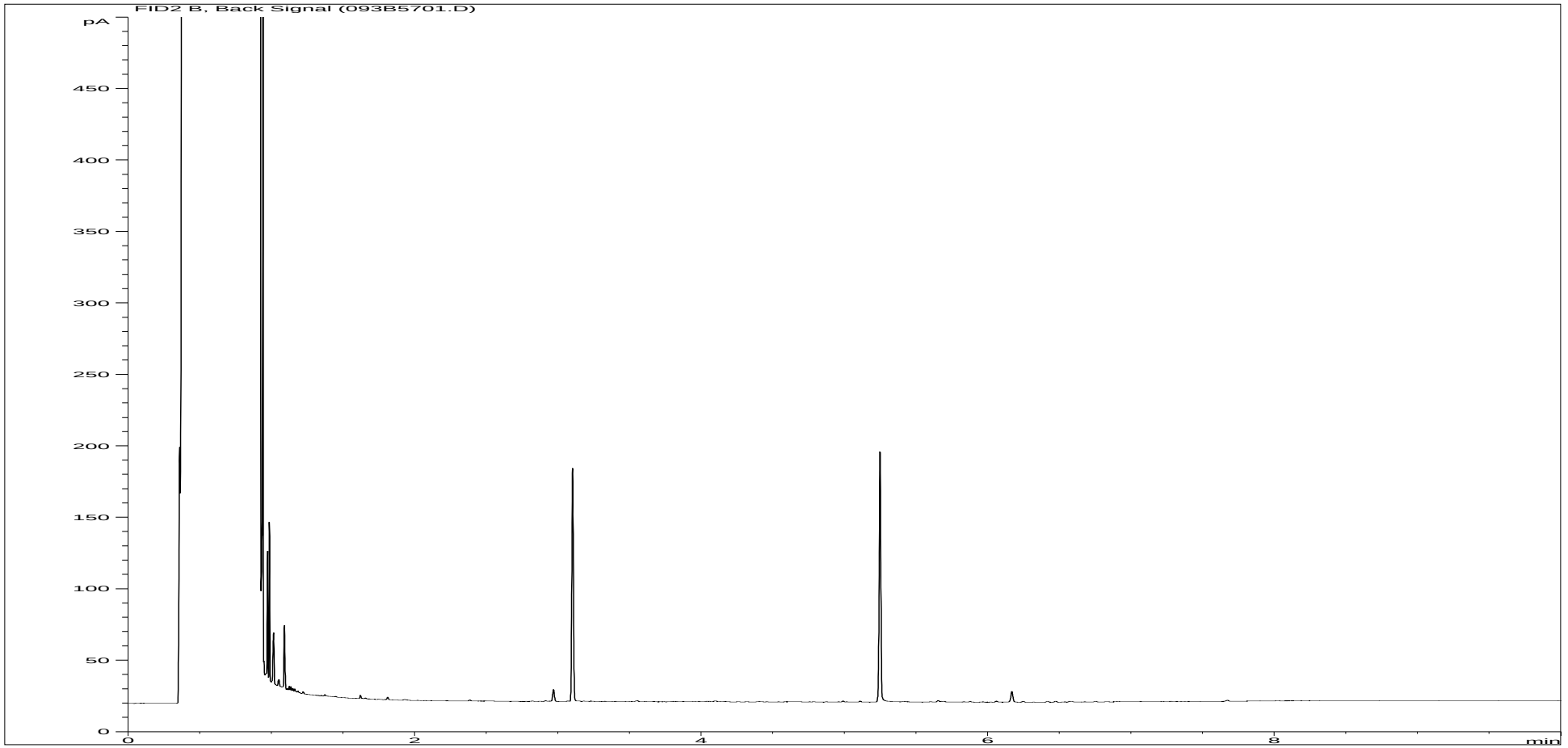
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137075ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Sep-11, 02:26:24		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\045F5701.D		

Where individual results are flagged see report notes for status.

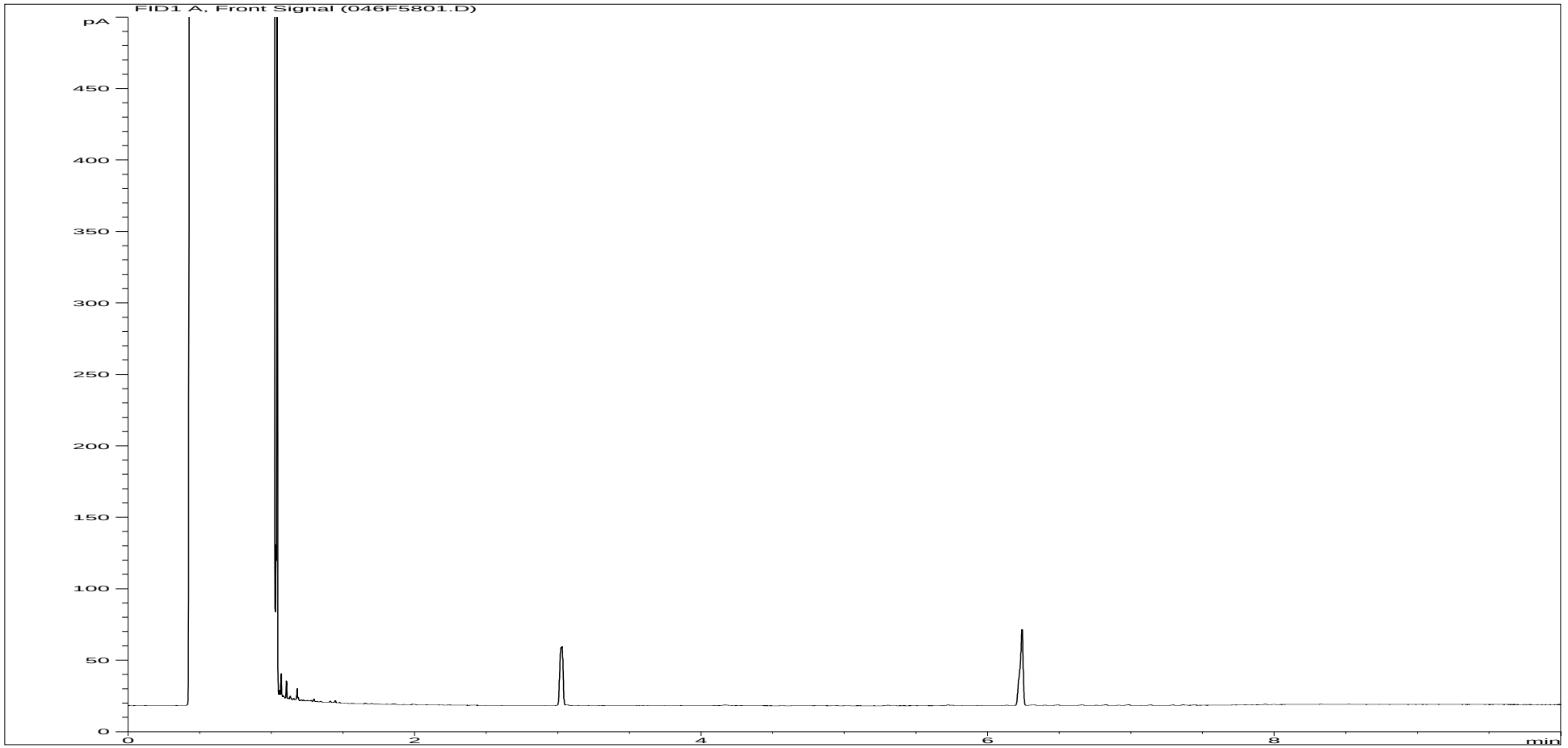
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137075ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-2
Acquisition Date/Time:	09-Sep-11, 02:26:24		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\093B5701.D		

Where individual results are flagged see report notes for status.

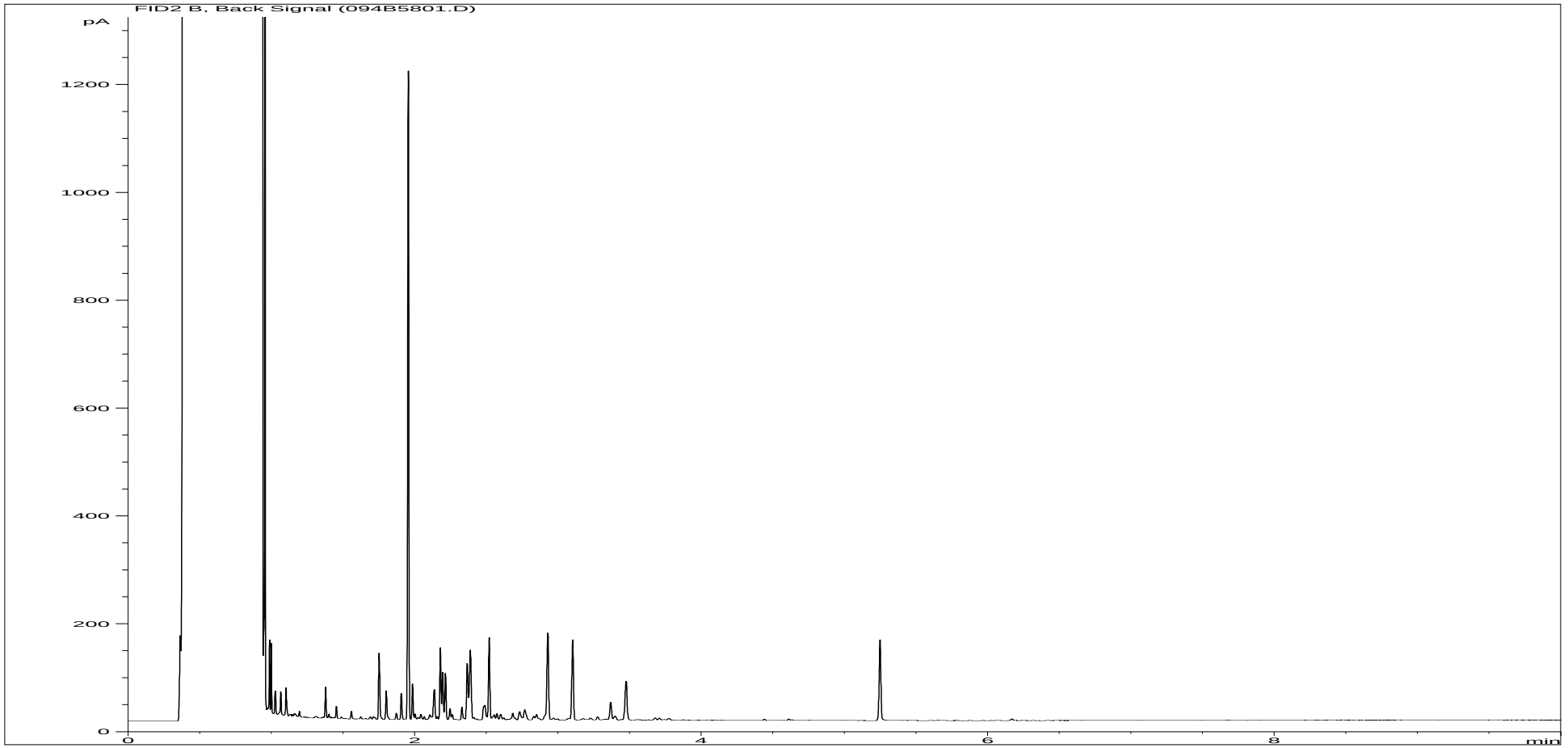
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137076ALI	**Job Number:**	W12_4670
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	09-Sep-11, 02:43:34		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\046F5801.D		

Where individual results are flagged see report notes for status.

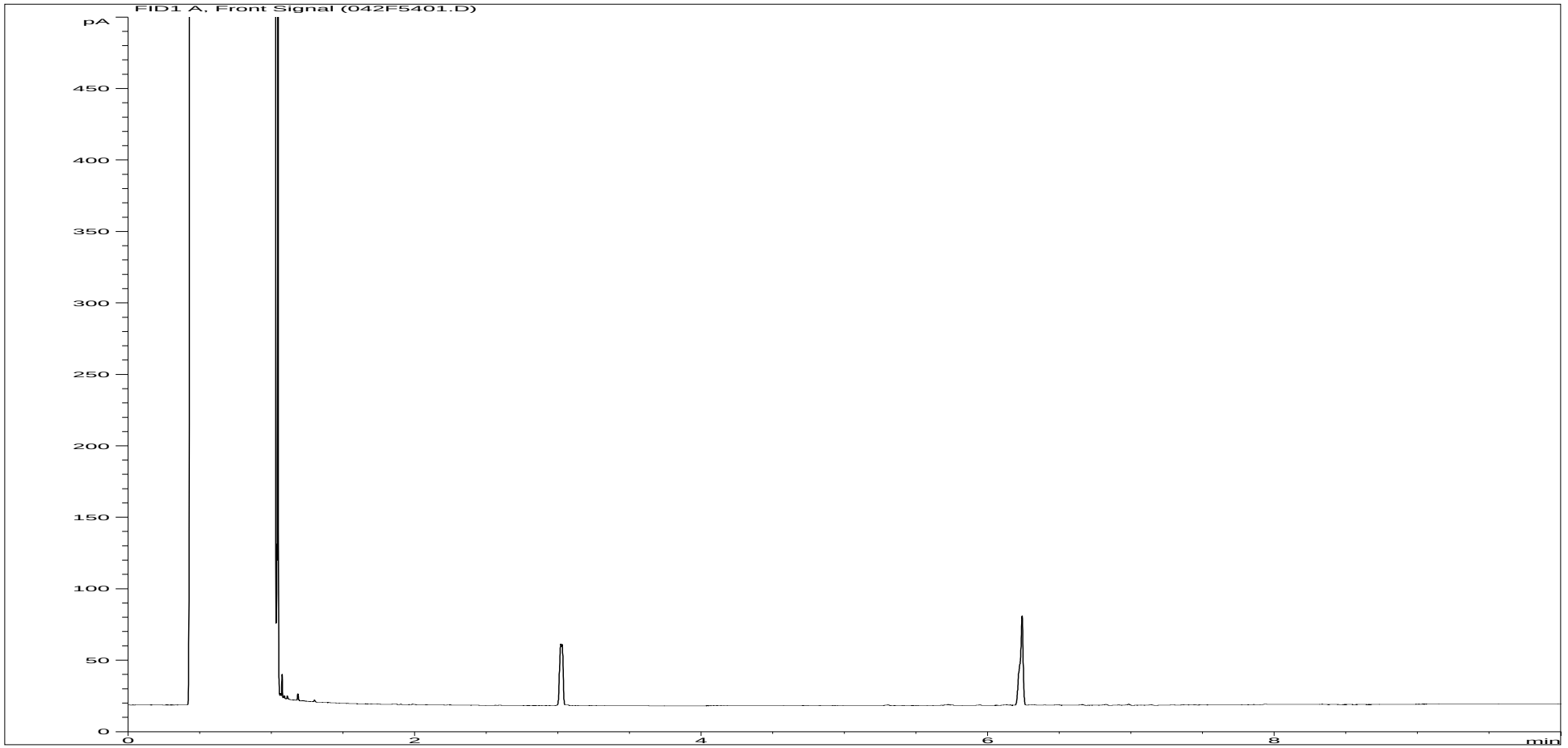
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137076ARO	**Job Number:**	W12_4670
Multiplier:	0.016	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-106
Acquisition Date/Time:	09-Sep-11, 02:43:34		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\094B5801.D		

Where individual results are flagged see report notes for status.

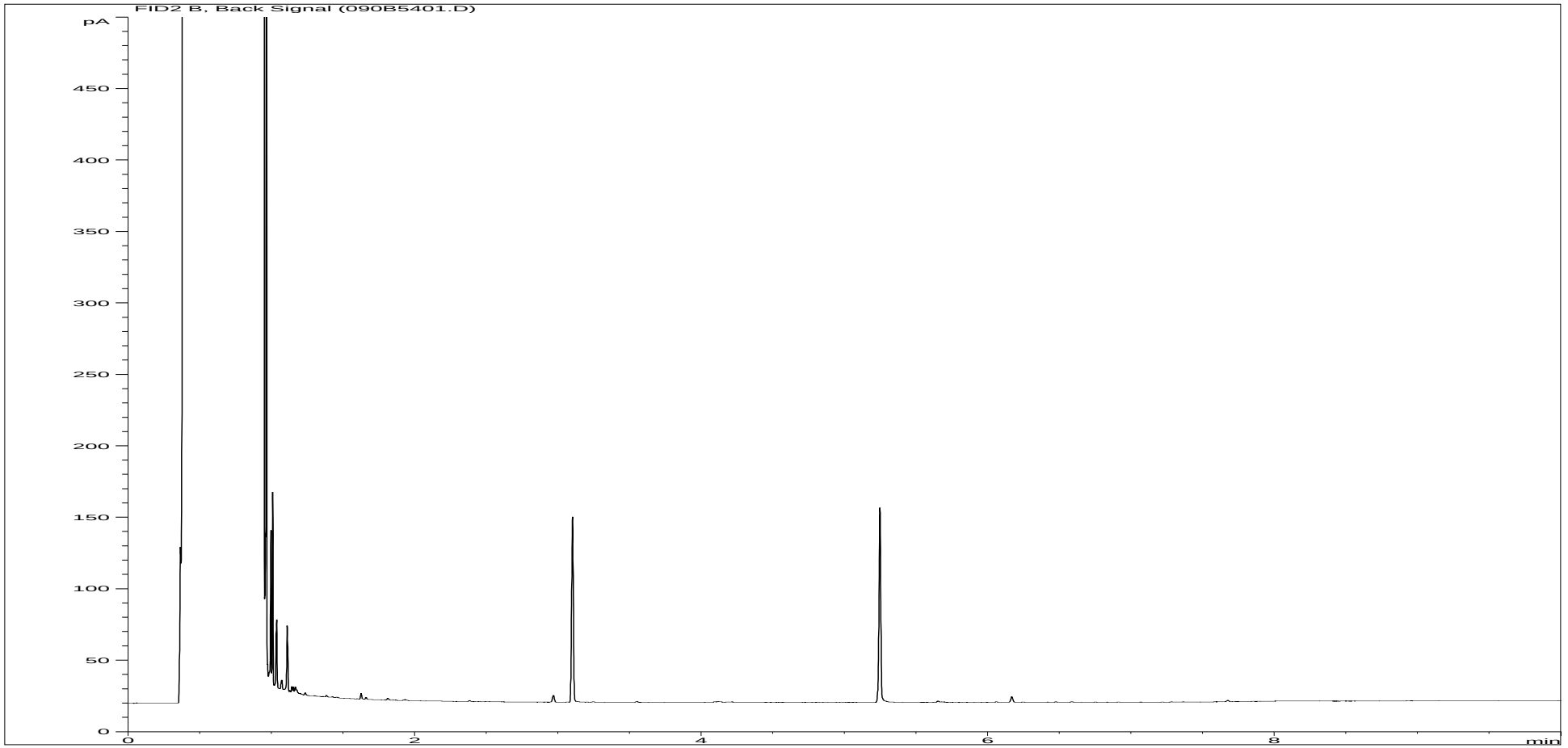
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137123ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank
Acquisition Date/Time:	09-Sep-11, 01:34:36		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\042F5401.D		

Where individual results are flagged see report notes for status.

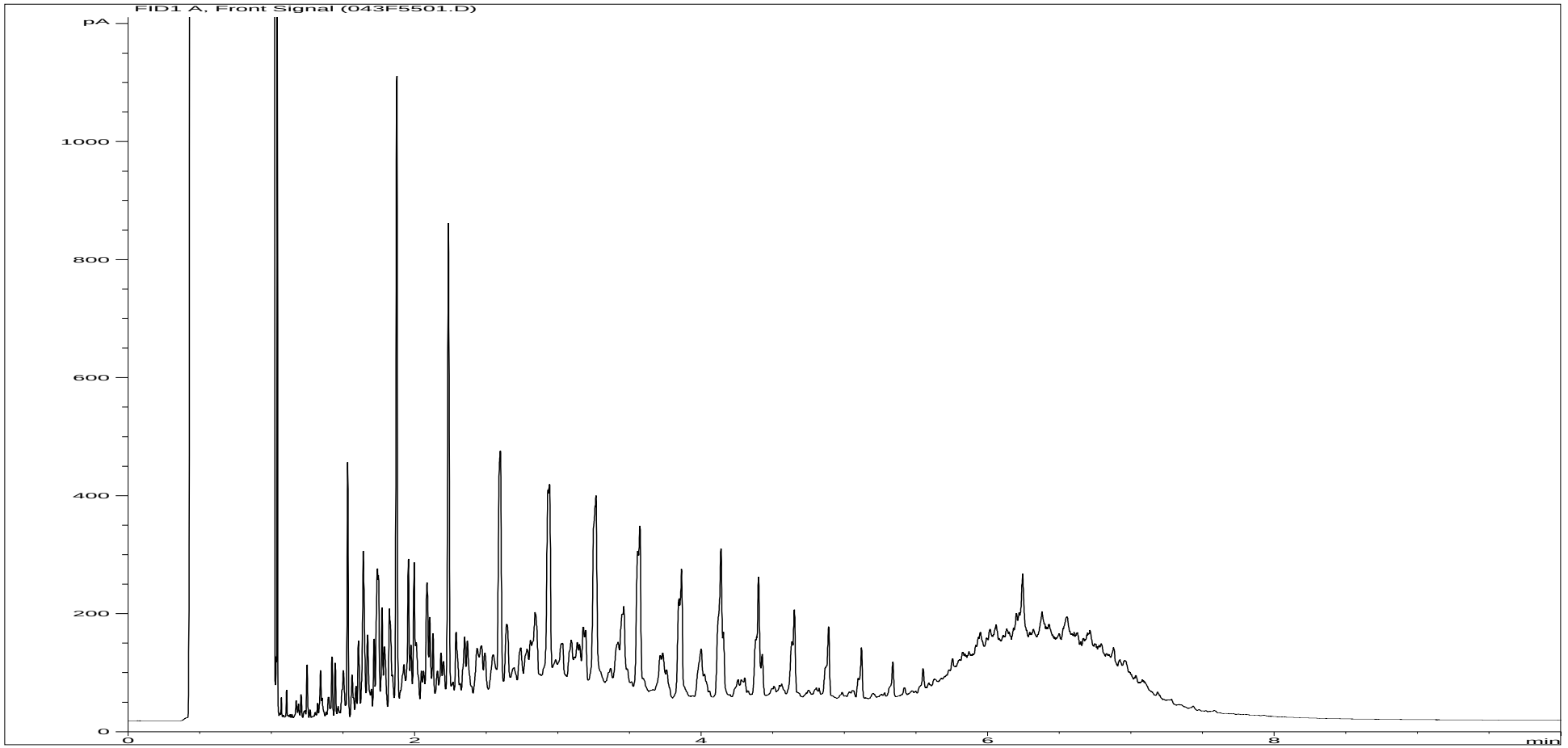
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137123ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank
Acquisition Date/Time:	09-Sep-11, 01:34:36		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\090B5401.D		

Where individual results are flagged see report notes for status.

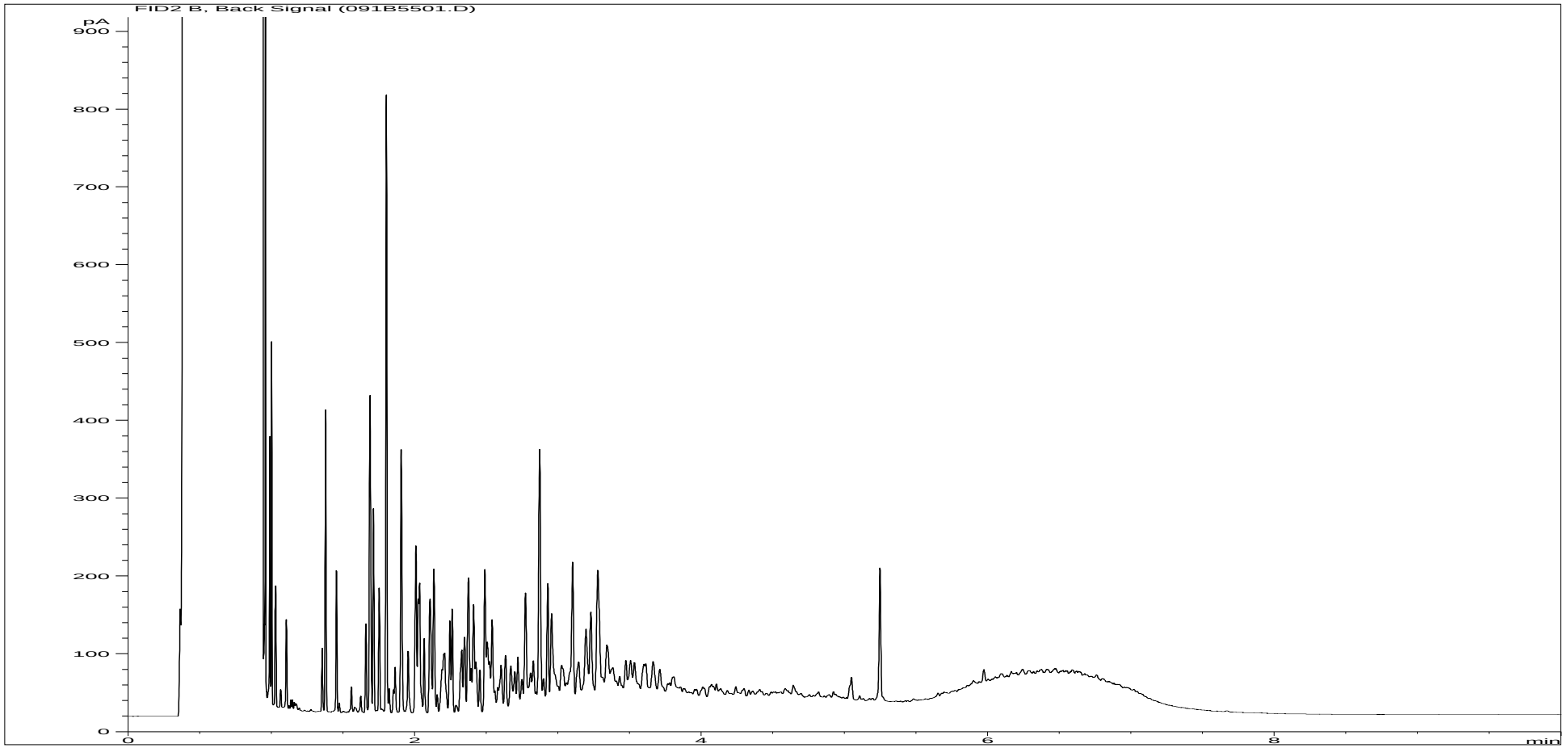
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1137124ALI	**Job Number:**	W12_4670
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank Spike
Acquisition Date/Time:	09-Sep-11, 01:51:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\043F5501.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1137124ARO	**Job Number:**	W12_4670
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124670 Blank Spike
Acquisition Date/Time:	09-Sep-11, 01:51:49		
Datafile:	D:\TES\DATA\Y2011\090811TPH_GC15\090811 2011-09-08 09-29-14\091B5501.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124670

Customer Worley Parsons Komex
Site Maelor Works
Report No W124670

Consignment No 28837
Date Logged 31-Aug-2011

Report Due 12-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1137072	MW99-202	28/08/11																										
EX/1137073	MW11-16	28/08/11																										
EX/1137074	MW99-104	28/08/11																										
EX/1137075	MW11-2	28/08/11																										
EX/1137076	MW99-106	28/08/11																										
EX/1137123	Report 124670 Blank	28/08/11																										
EX/1137124	Report 124670 Blank Spike	28/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124670

Customer Worley Parsons Komex
Site Maelor Works
Report No W124670

Consignment No 28837
Date Logged 31-Aug-2011

Report Due 12-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
Accredited to ISO17025			✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1137072	MW99-202	28/08/11															
EX/1137073	MW11-16	28/08/11															
EX/1137074	MW99-104	28/08/11															
EX/1137075	MW11-2	28/08/11															
EX/1137076	MW99-106	28/08/11															
EX/1137123	Report 124670 Blank	28/08/11															
EX/1137124	Report 124670 Blank Spike	28/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis
Unless stated otherwise results are expressed as mg/l
Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124580 (Ver. 1)
Your Ref: 305001-50065-29

September 9, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124580 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 7 samples described in this report were logged for analysis by Scientifics on 26-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 11)
Table of TPH (Si) banding (0.01) (Page 12)
GC-FID Chromatograms (Pages 13 to 26)
Analytical and Deviating Sample Overview (Pages 27 to 28)
Table of Method Descriptions (Page 29)
Table of Report Notes (Page 30)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 09-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1136675	MW11-13	24-Aug-11	7.0	678	1661	255	20	31	89	8	40	7	0.002	0.002	0.0001	Req	<0.001	<0.001
1136676	MW99-107	25-Aug-11	7.0	741	50	352	18	4	111	18	12	2	<0.001	0.002	<0.0001	Req	<0.001	<0.001
1136677	MW11-4	25-Aug-11	6.9	1030	517	323	78	12	111	11	28	4	0.001	0.003	<0.0001	Req	<0.001	<0.001
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1136680	QC Blank		7.04	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136681	Blank Spike (% Recovery)				100		102	99	97	98	99	101	102	97	97	Req	102	101

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
Method Reporting Limits :			0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1136675	MW11-13	**24-Aug-11**	<0.002	2.62	3.58	6.20	<0.01	0.002	<0.0001	<0.001	0.4	<0.2	<0.2	<0.02	0.11	<0.05	3.5	<0.1
1136676	MW99-107	**25-Aug-11**	<0.002	0.30	13.2	13.5	<0.01	0.002	<0.0001	<0.001	3.9	<0.2	<0.2	<0.02	<0.02	0.22	13	<0.1
1136677	MW11-4	**25-Aug-11**	<0.002	<0.01	46.0	45.2	3.81	0.002	<0.0001	<0.001	32.0	<0.2	<0.2	<0.02	0.04	0.14	19	2.72
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1136680	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1
1136681	Blank Spike (% Recovery)		99	100	99	100	96	98	100	97	101		100	102	99	107	94	104

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

Where individual results are flagged see report notes for status.

		Units :	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
		Method Codes :	TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
		Method Reporting Limits :	0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
		UKAS Accredited :	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1136675	MW11-13	**24-Aug-11**	Req	0.97	0.11	5.4	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136676	MW99-107	**25-Aug-11**	Req	4.31	<0.02	1.6	5	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136677	MW11-4	**25-Aug-11**	Req	5.73	0.04	1.5	16	2981	2	120	472	0.115	0.0523	0.128	<0.1	0.0370		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1136680	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136681	Blank Spike (% Recovery)		Req	98			96	105	101	102	313	93	101	99	94	109		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	09-Sep-11
Report Number	**EXR/124580**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-13	**Job Number:**	W12_4580
LIMS ID Number:	EX1136675	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	111
Phenanthrene-d10	104
Chrysene-d12	108
Perylene-d12	99

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	86

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW99-107	**Job Number:**	W12_4580
LIMS ID Number:	EX1136676	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	36.500	100
Acenaphthylene	208-96-8	4.38	0.074	M
Acenaphthene	83-32-9	4.51	0.479	95
Fluorene	86-73-7	4.89	0.182	97
Phenanthrene	85-01-8	5.75	0.102	93
Anthracene	120-12-7	5.80	0.016	93
Fluoranthene	206-44-0	7.11	0.011	98
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 37.454	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	111
Acenaphthene-d10	116
Phenanthrene-d10	112
Chrysene-d12	112
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	81
Terphenyl-d14	88

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-4	**Job Number:**	W12_4580
LIMS ID Number:	EX1136677	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	06-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

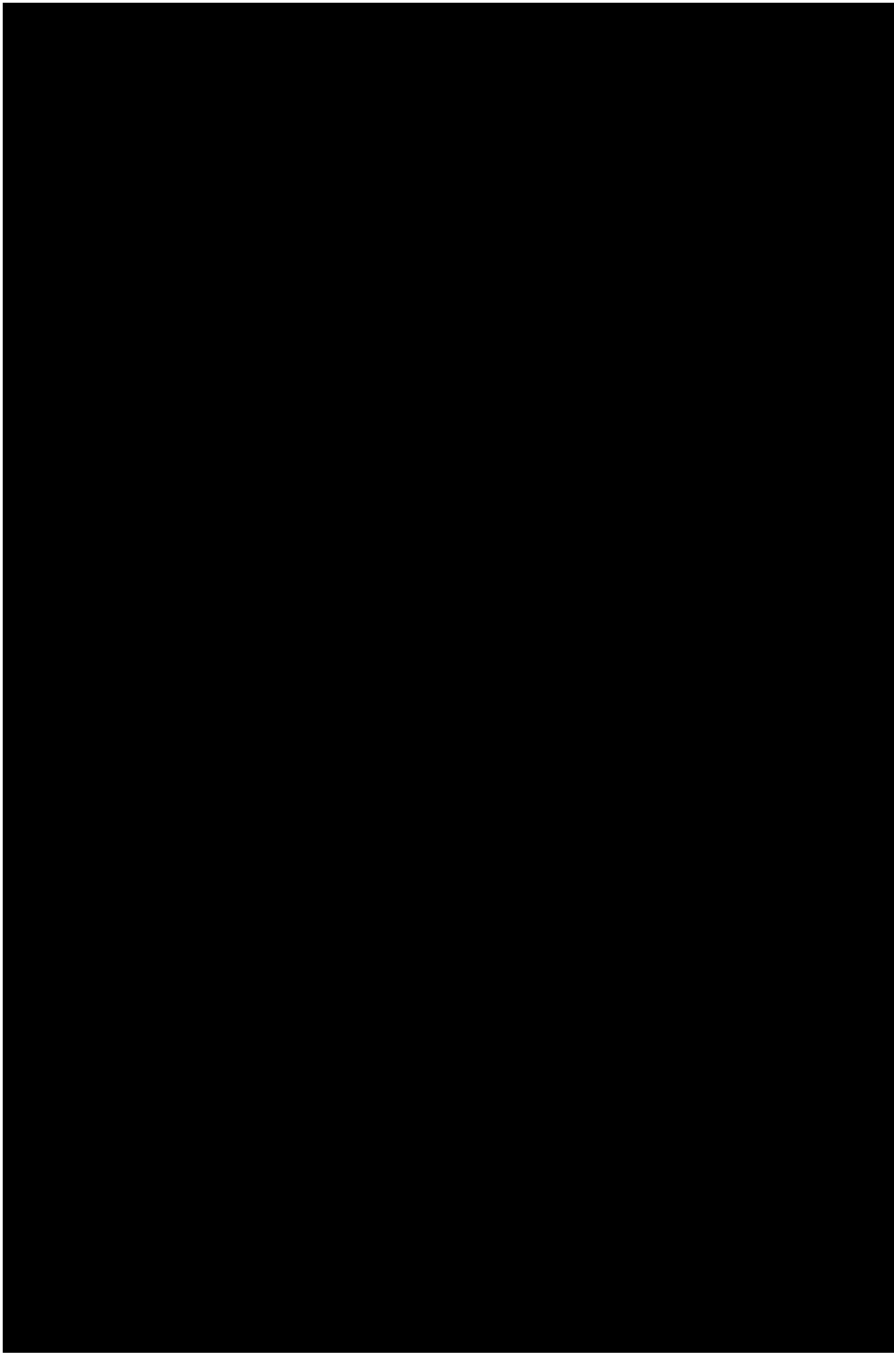
Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.33	234.000	100
Acenaphthylene	208-96-8	4.38	0.116	87
Acenaphthene	83-32-9	4.51	0.336	97
Fluorene	86-73-7	4.89	0.069	90
Phenanthrene	85-01-8	5.75	0.121	92
Anthracene	120-12-7	5.80	0.022	92
Fluoranthene	206-44-0	7.11	0.043	98
Pyrene	129-00-0	7.40	0.035	98
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 234.822	-

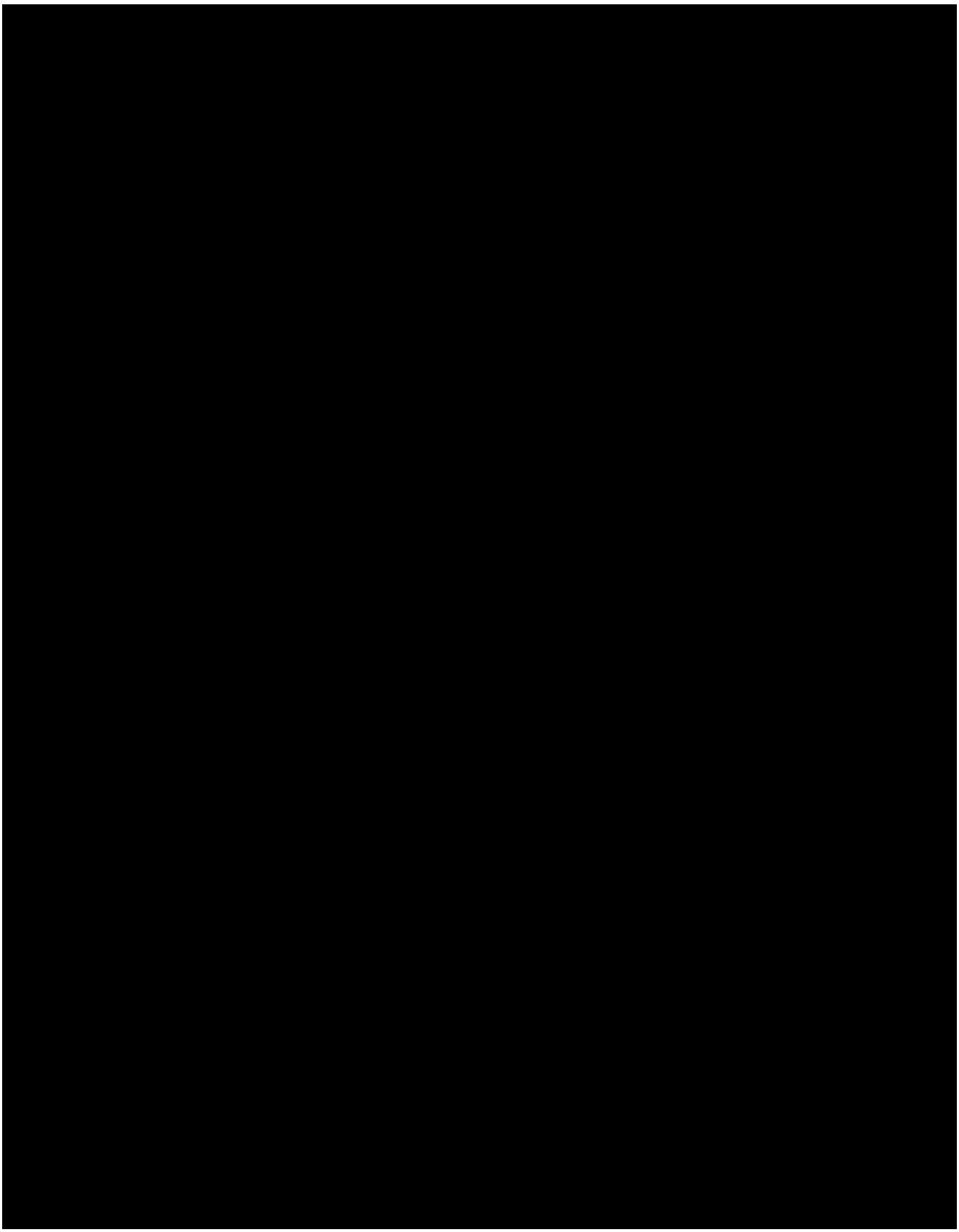
"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	118
Phenanthrene-d10	113
Chrysene-d12	113
Perylene-d12	105

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	79
Terphenyl-d14	83

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.





The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124580 Blank	**Job Number:**	W12_4580
LIMS ID Number:	EX1136680	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	99
Acenaphthene-d10	107
Phenanthrene-d10	99
Chrysene-d12	97
Perylene-d12	86

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	96
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124580 Blank Spike	**Job Number:**	W12_4580
LIMS ID Number:	EX1136681	**Date Booked in:**	26-Aug-11
QC Batch Number:	110790	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	906PAH.MS17\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.33	89	100
Acenaphthylene	208-96-8	4.39	79	100
Acenaphthene	83-32-9	4.51	79	98
Fluorene	86-73-7	4.90	82	100
Phenanthrene	85-01-8	5.76	96	100
Anthracene	120-12-7	5.81	83	99
Fluoranthene	206-44-0	7.12	79	98
Pyrene	129-00-0	7.41	72	98
Benzo[a]anthracene	56-55-3	9.10	94	97
Chrysene	218-01-9	9.15	90	99
Benzo[b]fluoranthene	205-99-2	10.62	92	99
Benzo[k]fluoranthene	207-08-9	10.66	84	99
Benzo[a]pyrene	50-32-8	11.05	82	99
Indeno[1,2,3-cd]pyrene	193-39-5	12.42	80	100
Dibenzo[a,h]anthracene	53-70-3	12.46	78	100
Benzo[g,h,i]perylene	191-24-2	12.73	90	78
Total (USEPA16) PAHs	-	-	1351	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	108
Acenaphthene-d10	119
Phenanthrene-d10	115
Chrysene-d12	109
Perylene-d12	95

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	87
Terphenyl-d14	88

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4580
QC Batch Number: 110790
Directory: D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\094B5301.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

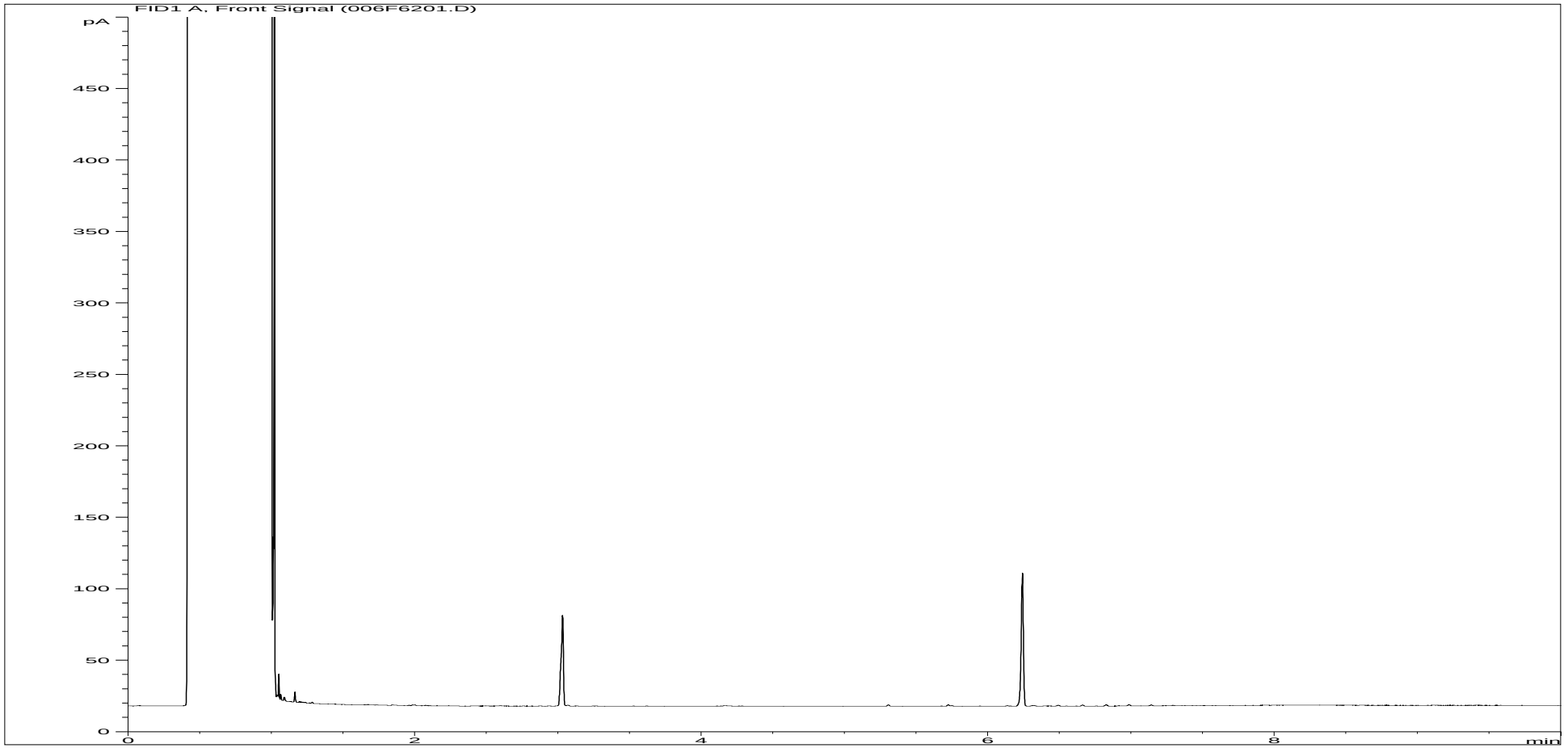
Matrix: Water
Date Booked in 26-Aug-11
Date Extracted 05-Sep-11
Date Analysed 06-Sep-11, 23:14:54

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1136675	MW11-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136676	MW99-107	<0.01	0.024	<0.01	0.12	<0.01	0.028	<0.01	<0.01	<0.01	<0.01	<0.01	0.182
EX1136677	MW11-4	<0.01	0.413	<0.01	0.558	<0.01	0.027	<0.01	<0.01	<0.01	<0.01	0.014	1.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1136680	Report 124580 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136681	Report 124580 Blank Spik	0.598	0.207	0.93	0.328	1.64	0.575	0.96	0.299	2.55	0.712	6.73	2.14

Where individual results are flagged see report notes for status.

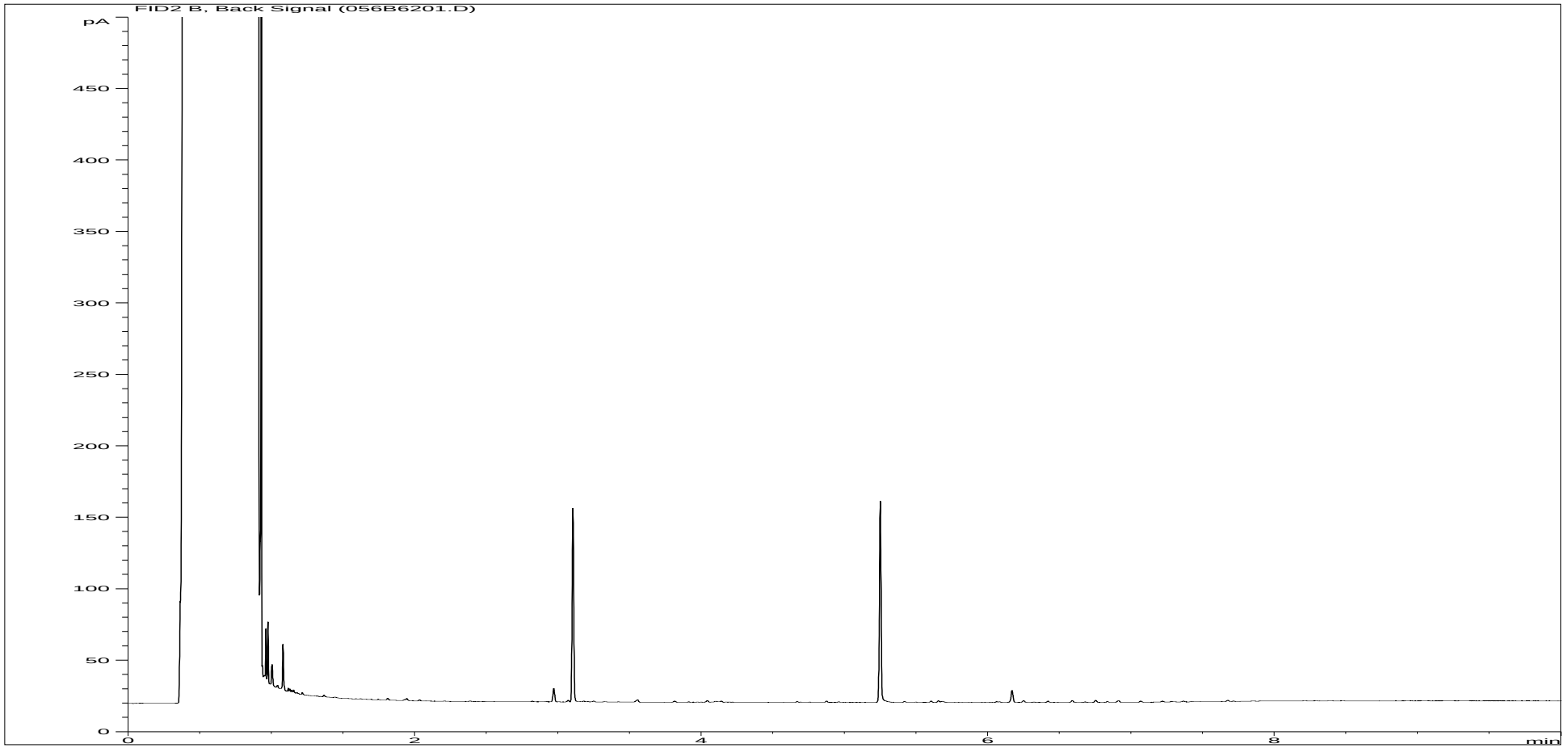
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136675ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	07-Sep-11, 01:49:52		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\006F6201.D		

Where individual results are flagged see report notes for status.

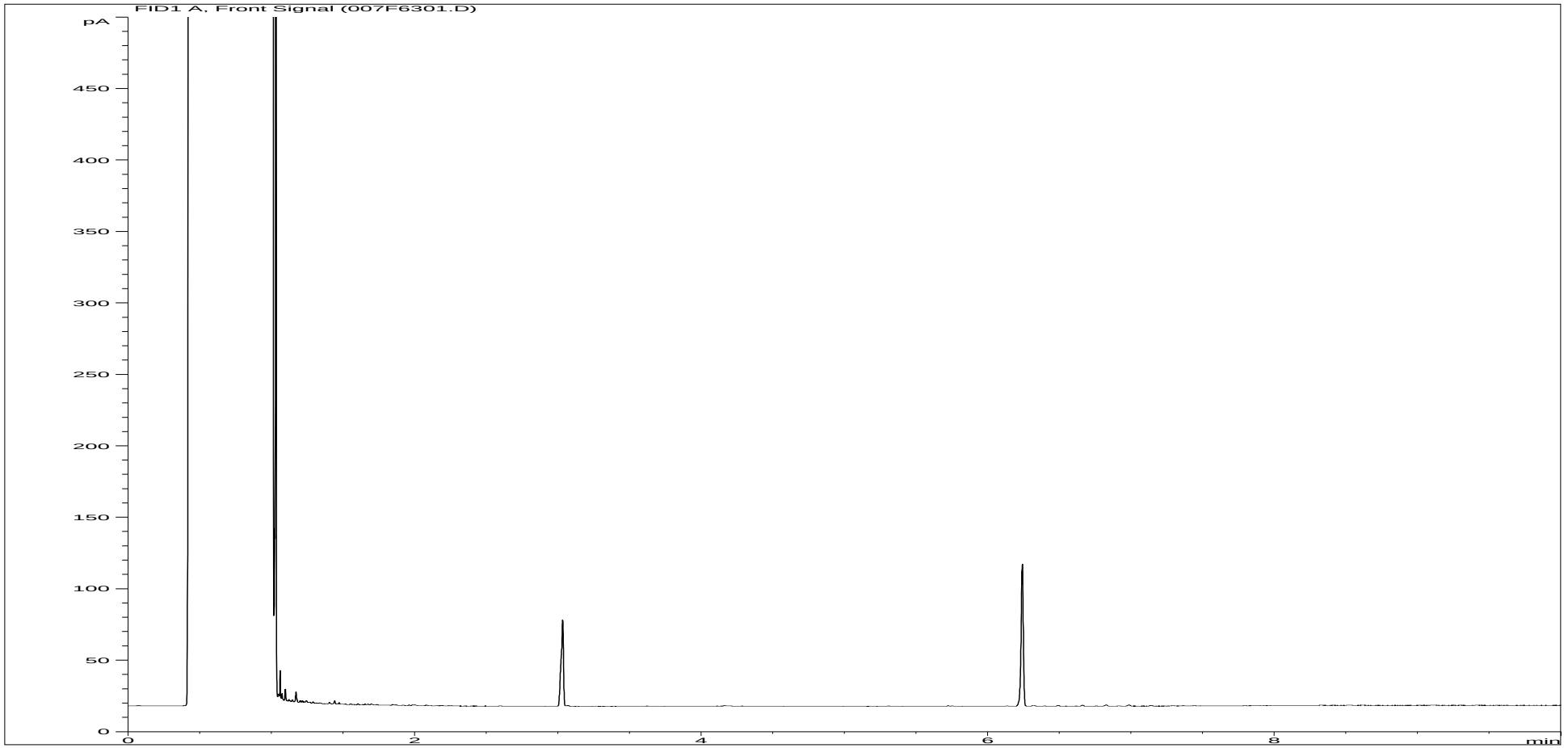
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136675ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-13
Acquisition Date/Time:	07-Sep-11, 01:49:52		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\056B6201.D		

Where individual results are flagged see report notes for status.

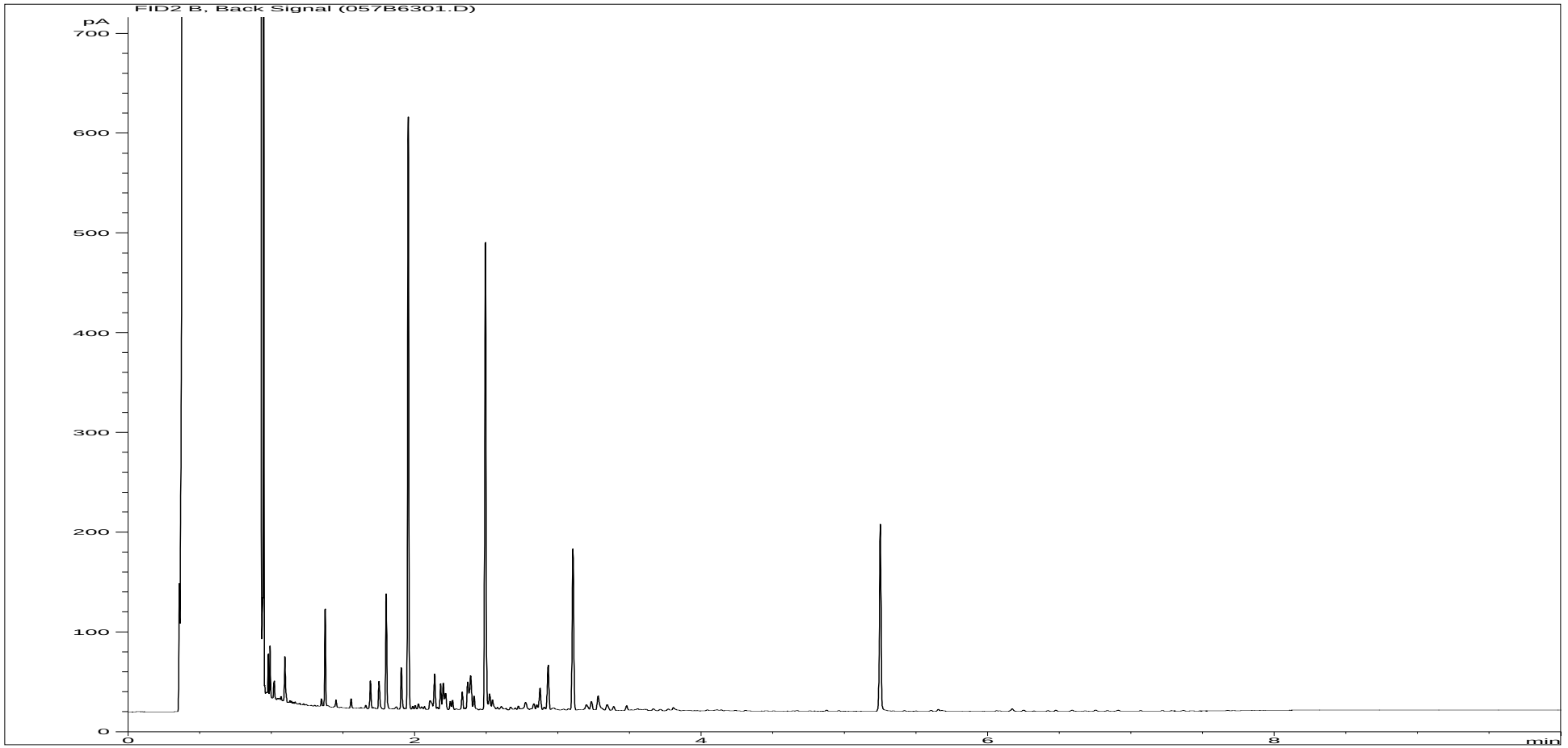
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136676ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	07-Sep-11, 02:06:59		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\007F6301.D		

Where individual results are flagged see report notes for status.

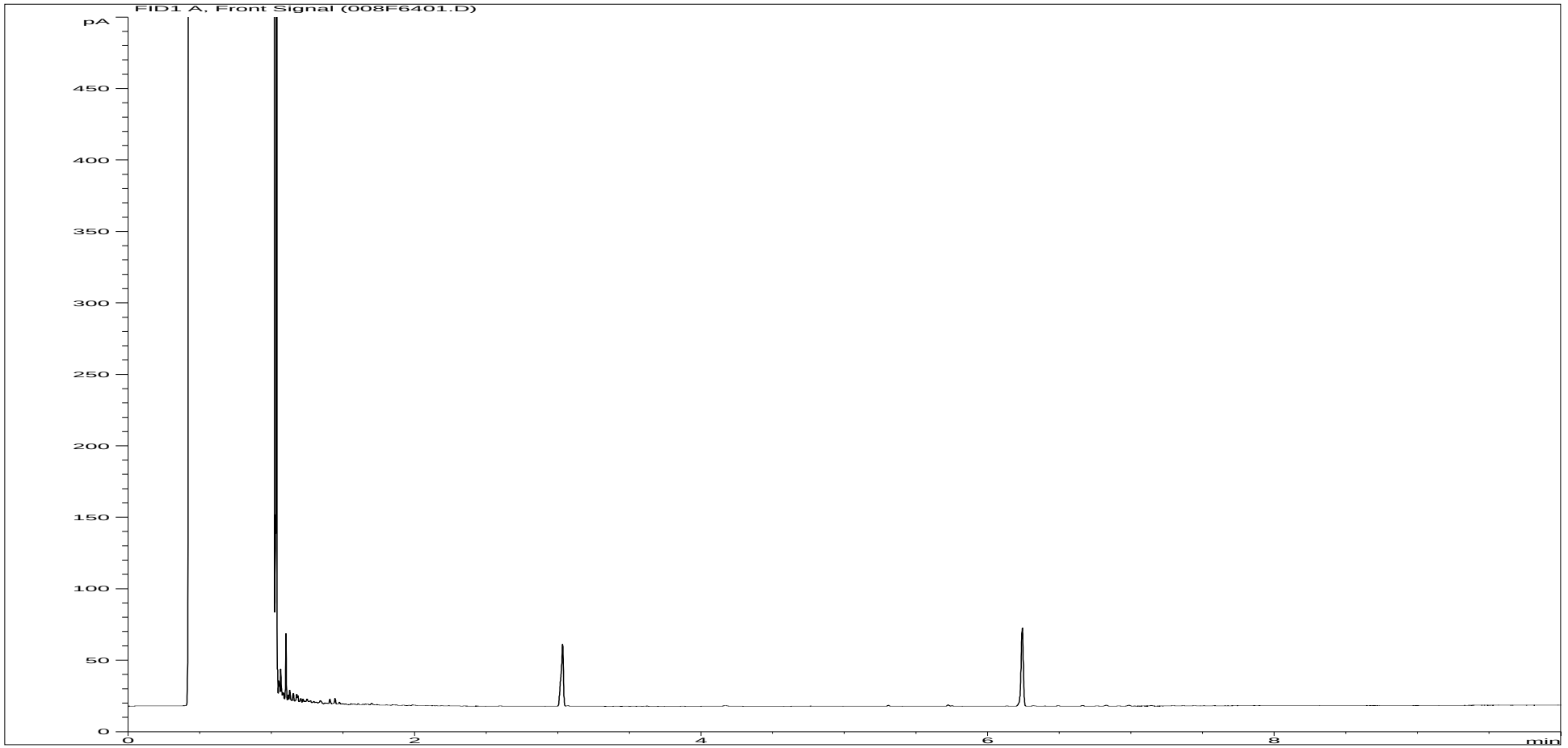
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136676ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW99-107
Acquisition Date/Time:	07-Sep-11, 02:06:59		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\057B6301.D		

Where individual results are flagged see report notes for status.

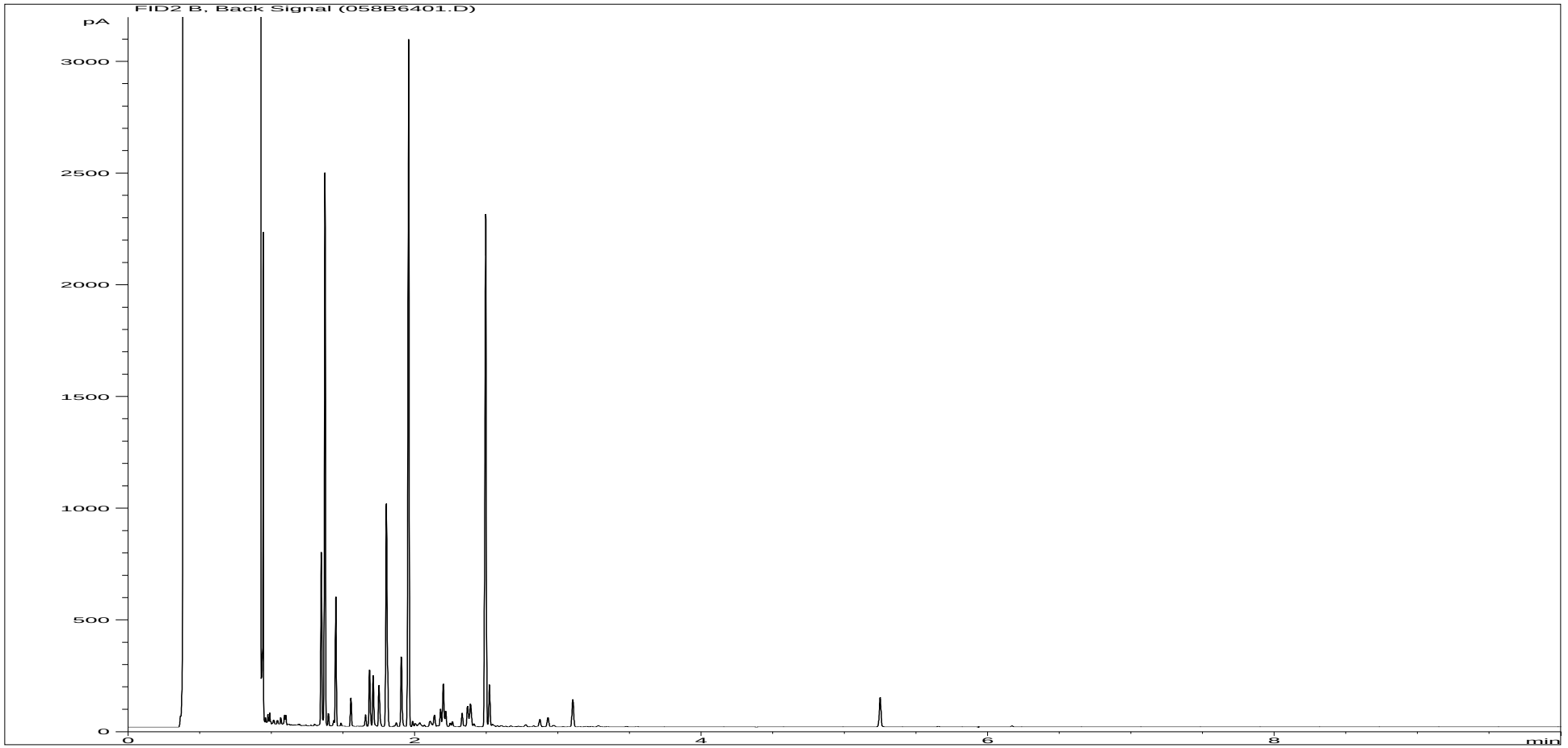
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136677ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	07-Sep-11, 02:24:09		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\008F6401.D		

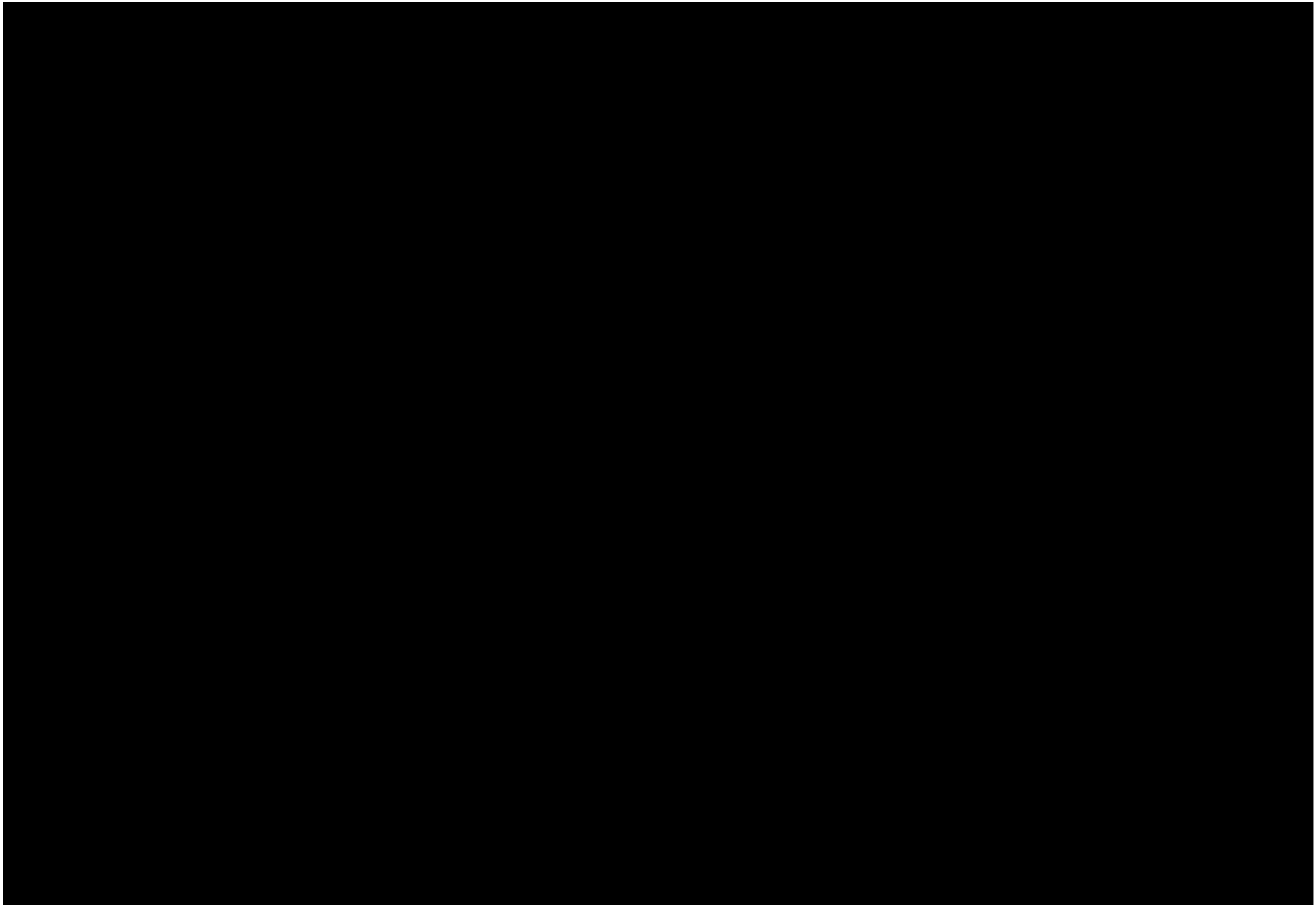
Where individual results are flagged see report notes for status.

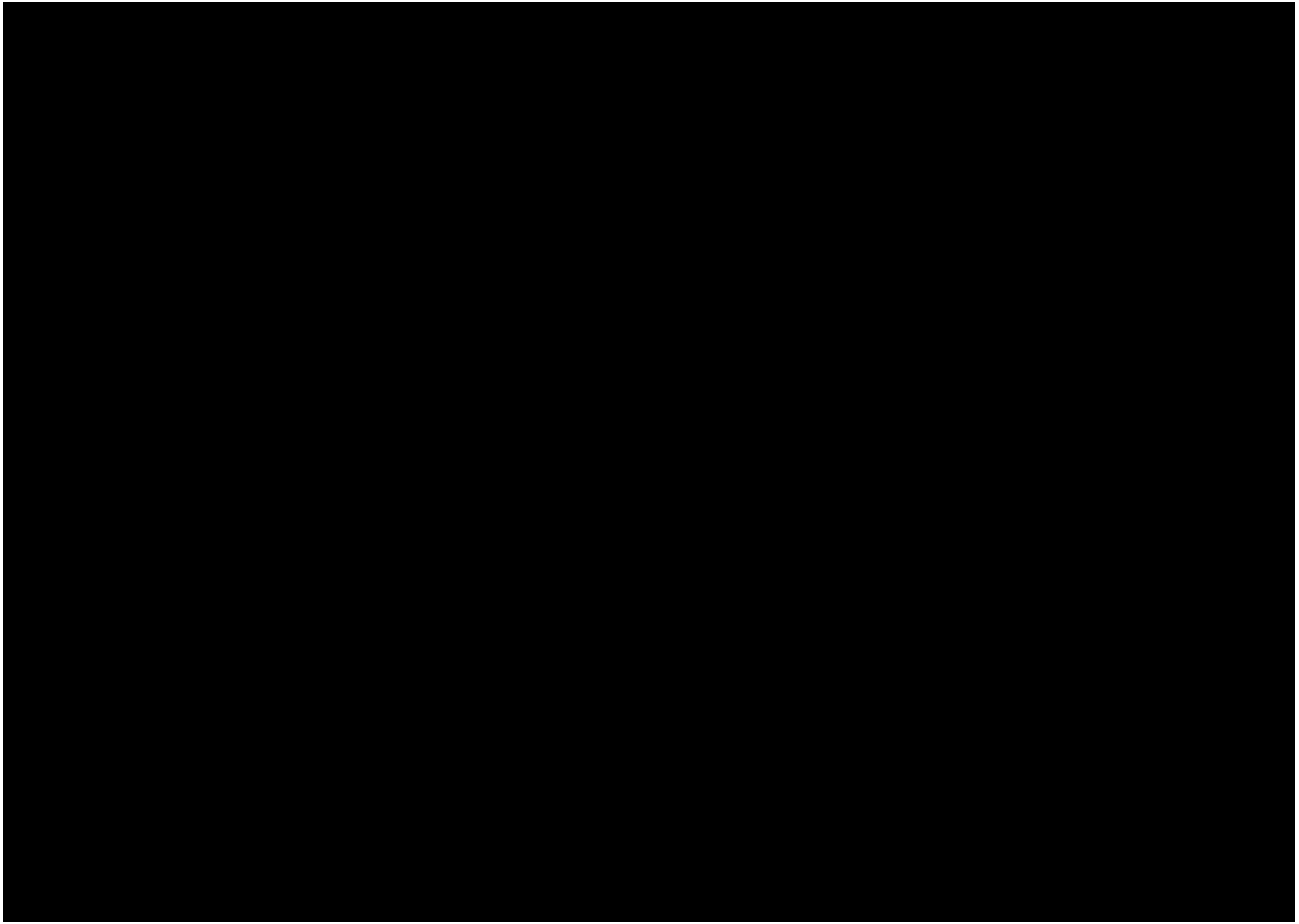
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.

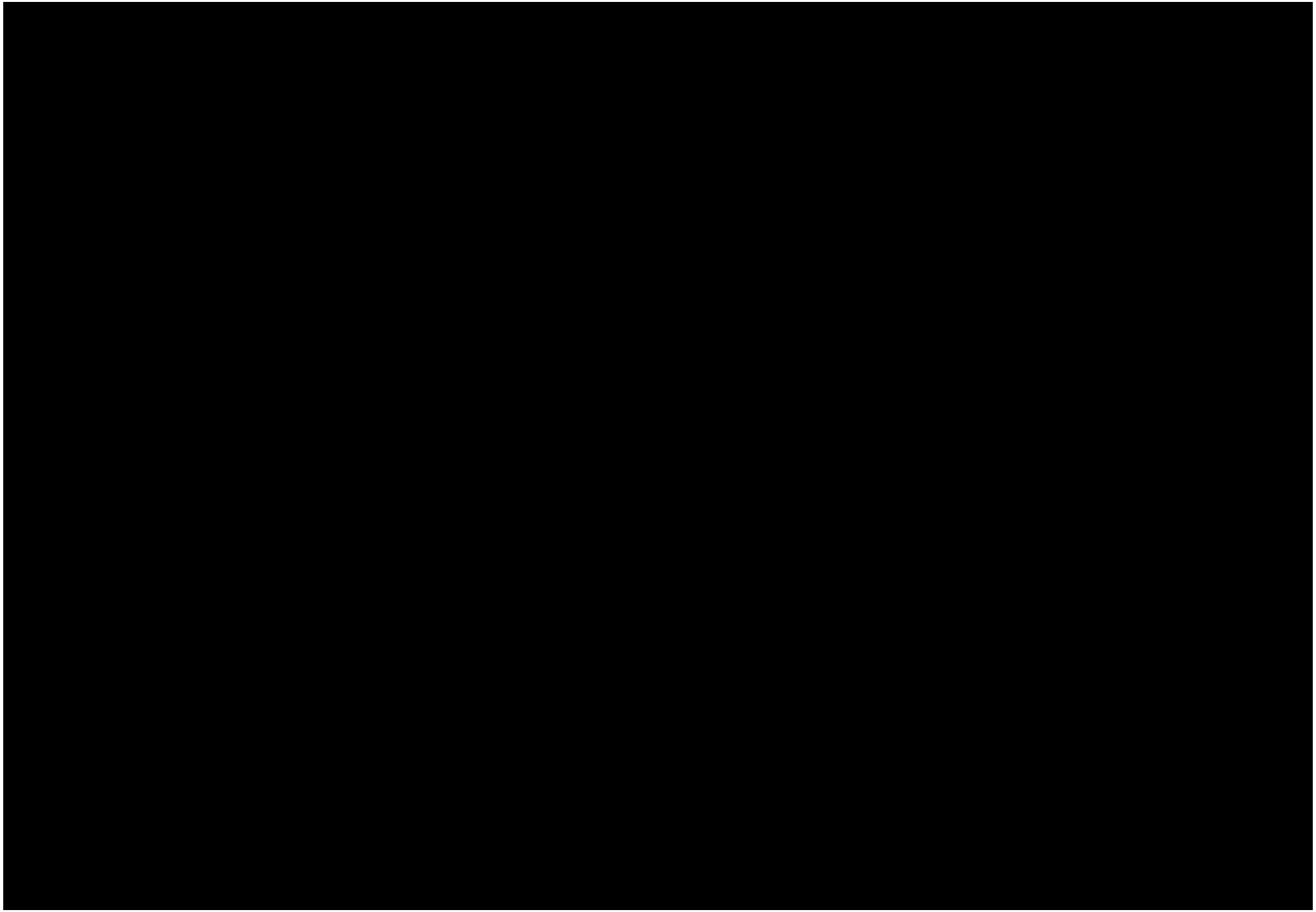


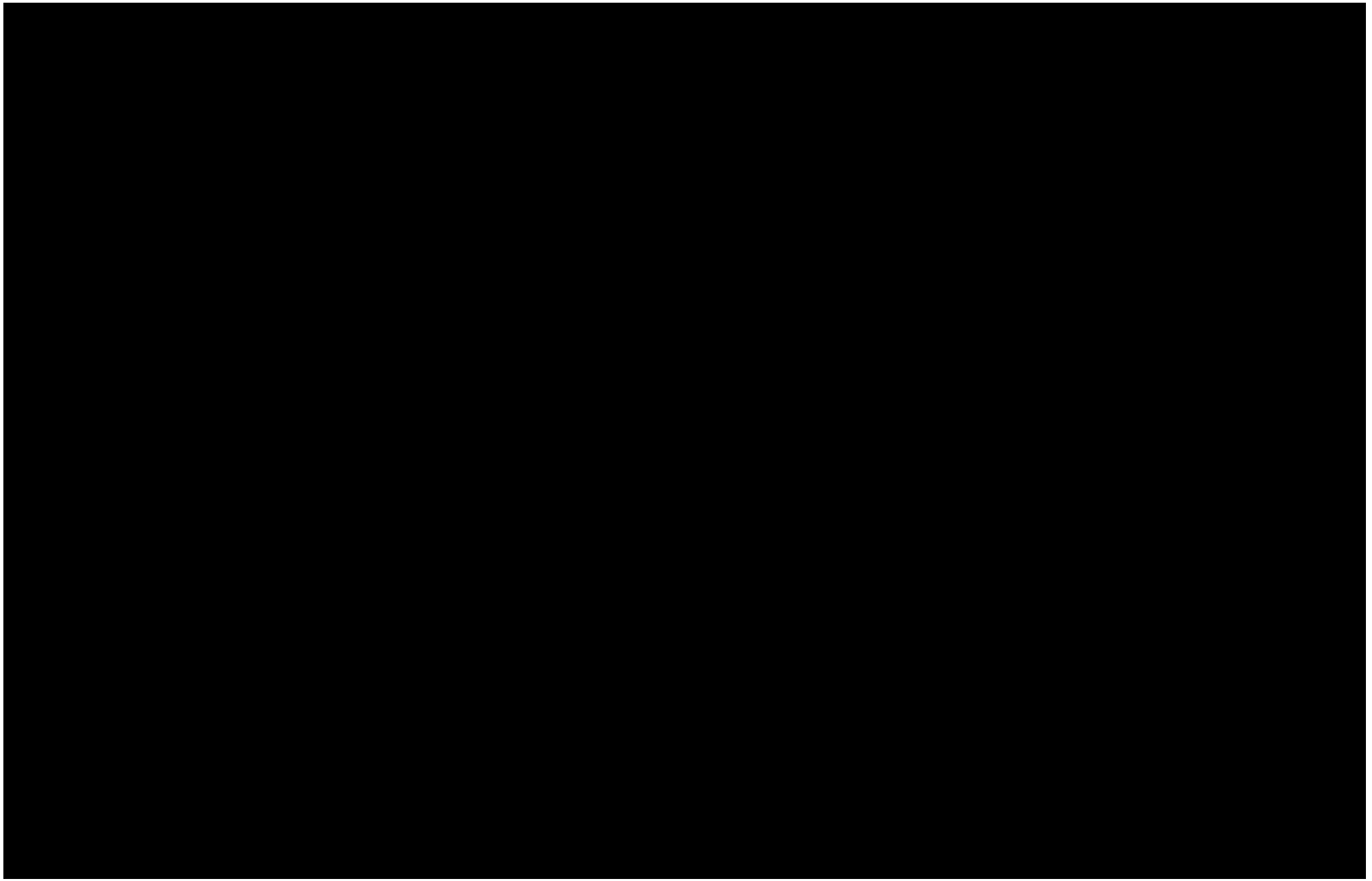
Sample ID:	EX1136677ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-4
Acquisition Date/Time:	07-Sep-11, 02:24:09		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\058B6401.D		

Where individual results are flagged see report notes for status.

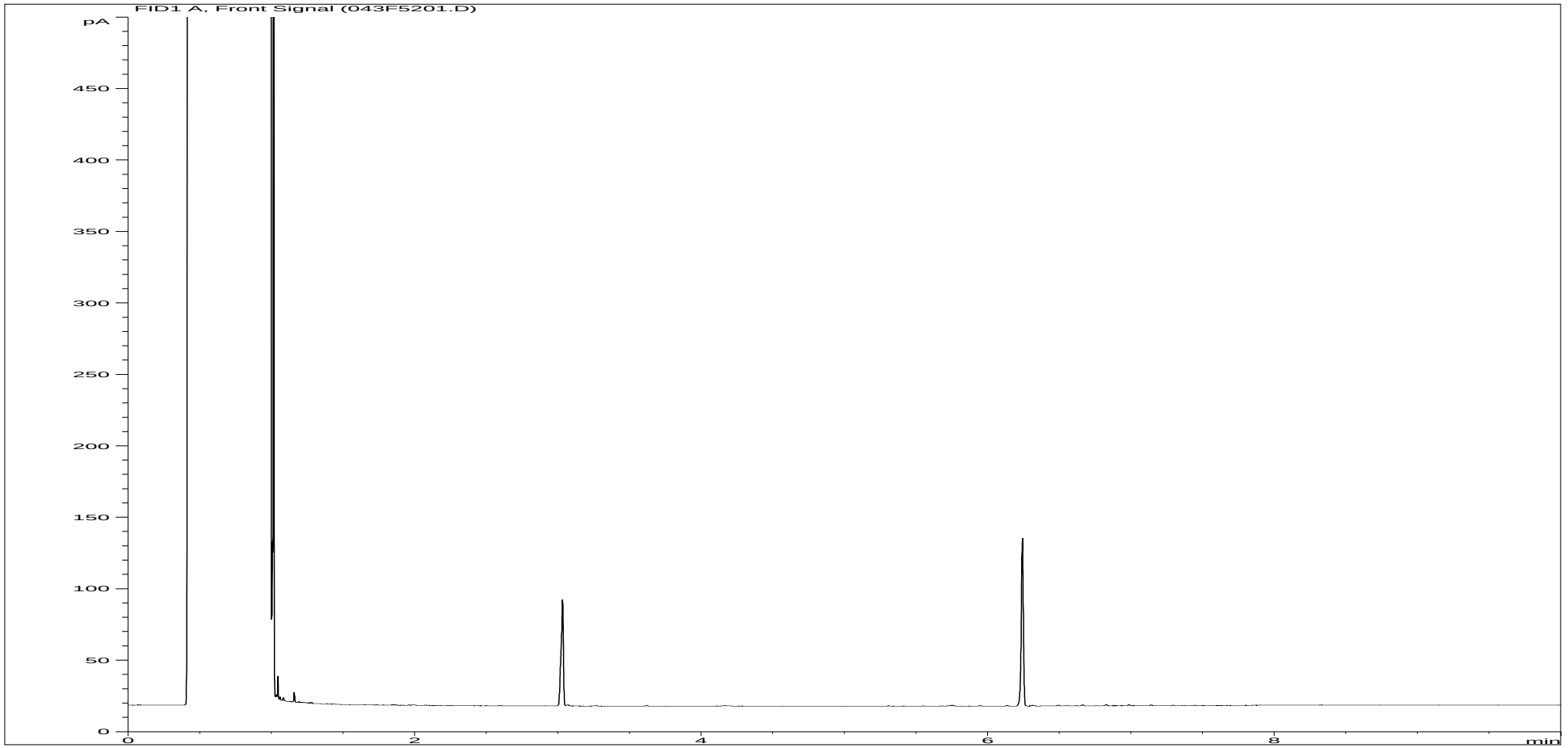








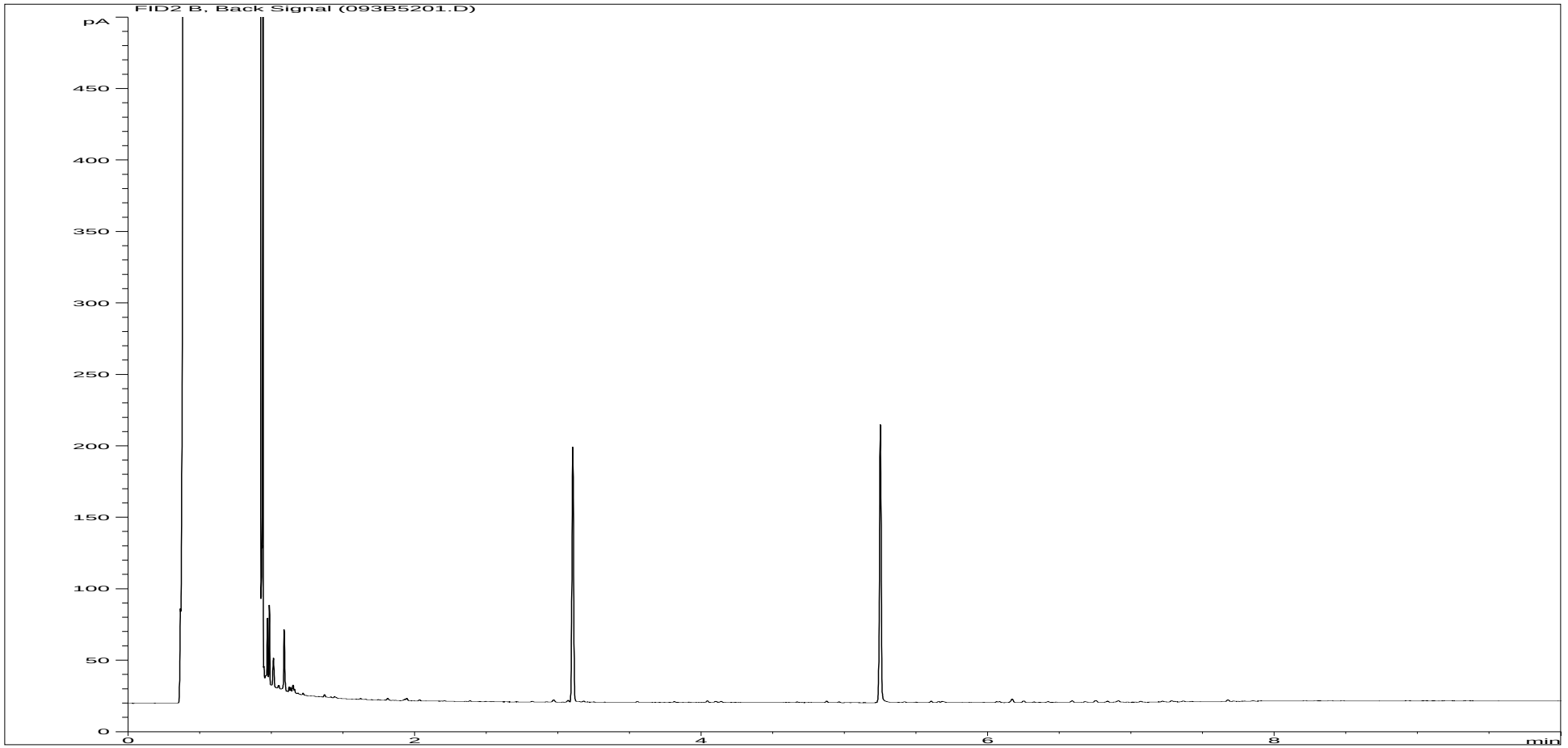
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136680ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank
Acquisition Date/Time:	06-Sep-11, 22:57:31		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\043F5201.D		

Where individual results are flagged see report notes for status.

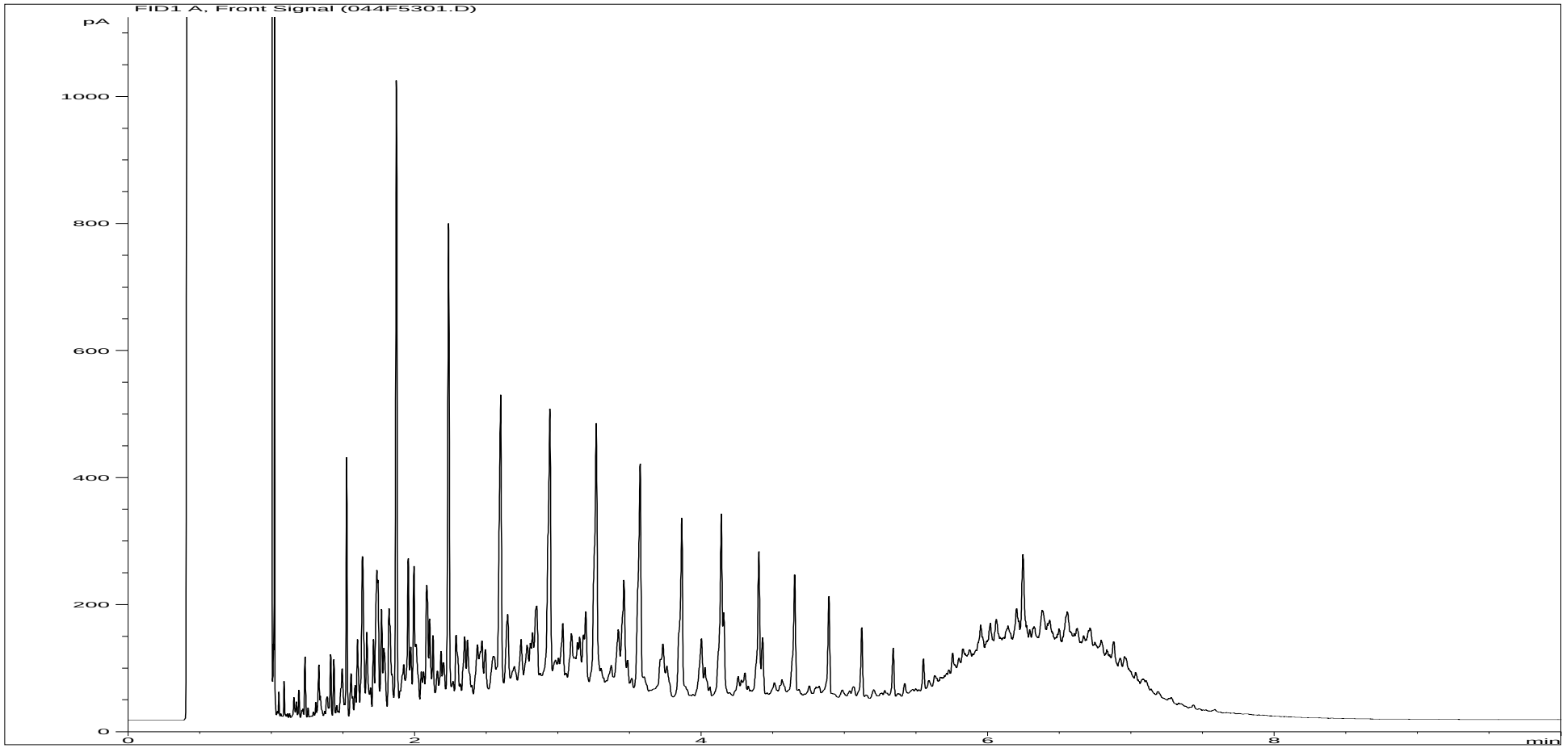
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136680ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank
Acquisition Date/Time:	06-Sep-11, 22:57:31		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\093B5201.D		

Where individual results are flagged see report notes for status.

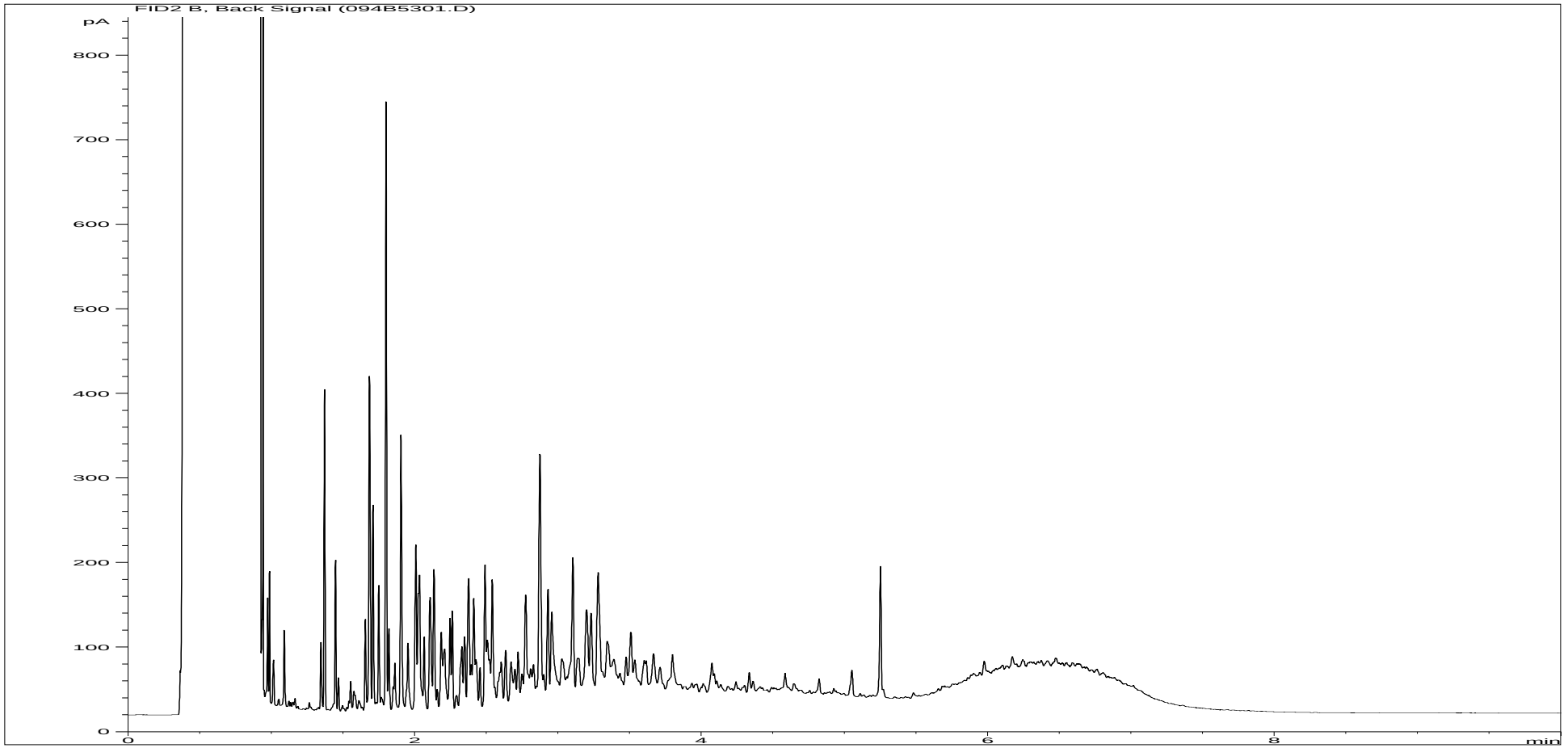
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136681ALI	**Job Number:**	W12_4580
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank Spike
Acquisition Date/Time:	06-Sep-11, 23:14:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\044F5301.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136681ARO	**Job Number:**	W12_4580
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124580 Blank Spike
Acquisition Date/Time:	06-Sep-11, 23:14:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\094B5301.D		

Where individual results are flagged see report notes for status.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124580

Customer Worley Parsons Komex
Site Maelor Works
Report No W124580

Consignment No 28810
Date Logged 26-Aug-2011

Report Due 09-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1136675	MW11-13	24/08/11																										
EX/1136676	MW99-107	25/08/11																										
EX/1136677	MW11-4	25/08/11																										
[redacted]	[redacted]	[redacted]																										
[redacted]	[redacted]	[redacted]																										
EX/1136680	Report 124580 Blank	24/08/11																										
EX/1136681	Report 124580 Blank Spike	24/08/11																										

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124580

Customer Worley Parsons Komex
Site Maelor Works
Report No W124580

Consignment No 28810
Date Logged 26-Aug-2011

Report Due 09-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1136675	MW11-13	24/08/11															
EX/1136676	MW99-107	25/08/11															
EX/1136677	MW11-4	25/08/11															
[redacted]	[redacted]	[redacted]															
[redacted]	[redacted]	[redacted]															
EX/1136680	Report 124580 Blank	24/08/11															
EX/1136681	Report 124580 Blank Spike	24/08/11															

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
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E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.

Our Ref: EXR/124560 (Ver. 1)
Your Ref: 305001-50065-29

September 8, 2011

Scientifics
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Ms N Glynn
Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

For the attention of Ms N Glynn

Dear Ms Glynn

WATER SAMPLE ANALYSIS - Maelor Works

Samples from the above site have been analysed in accordance with the schedule supplied.
The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that from 1 January 2003 our policy for the retention of paper based laboratory records and analysis reports will be 6 years.

The work was carried out in accordance with Environmental Scientifics Group Ltd (Scientifics) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for Scientifics

J Colbourne
Project Co-ordinator
01283 554547

TEST REPORT
WATER SAMPLE ANALYSIS

1252

Report No. EXR/124560 (Ver. 1)

Worley Parsons Komex
3 - 8 Redcliffe Parade West
Bristol
BS1 6SP

Site: Maelor Works

The 6 samples described in this report were logged for analysis by Scientifics on 25-Aug-2011. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 08-Sep-2011

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited
Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by Scientifics.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 4)
Table of PAH (MS-SIM) (10) Results (Pages 5 to 10)
Table of TPH (Si) banding (0.01) (Page 11)
GC-FID Chromatograms (Pages 12 to 23)
Analytical and Deviating Sample Overview (Pages 24 to 25)
Table of Method Descriptions (Page 26)
Table of Report Notes (Page 27)

On behalf of
Scientifics :
Andrew Timms Operations Manager

Date of Issue: 08-Sep-2011

Tests marked '^' have been subcontracted to another laboratory.

Scientifics accepts no responsibility for any sampling not carried out by our personnel.

Units :				uS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
Method Codes :			WSLM3	WSLM2	WSLM10	Calc_HD	KONENS	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	PAHMSW	ICPMSW	ICPMSW
Method Reporting Limits :				100	5		1	3.0	1.0	1.0	1.0	1.0	0.001	0.001	0.0001	0.01	0.001	0.001
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**pH units**	**Conductivity uS/cm @ 25C**	**Suspended Solids**	**Total Hardness as CaCO3**	**Chloride as Cl w**	**Total Sulphur as SO4 (Dissolved) a**	**Calcium as Ca (Dissolved) a**	**Magnesium as Mg (Dissolved) a**	**Sodium as Na (Dissolved) a**	**Potassium as K (Dissolved) a**	**Nickel as Ni (Dissolved)**	**Chromium as Cr (Dissolved)**	**Cadmium as Cd (Dissolved)**	**PAH MS-SIM (16)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**
1136560	MW11-10	**23-Aug-11**	11.7	760	41	198	25	50	79	<1	26	19	0.006	<0.001	<0.0001	Req	<0.001	<0.001
1136561	MW3	**23-Aug-11**	8.0	513	15	228	23	28	78	8	9	5	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136562	MW11-11	**24-Aug-11**	7.4	732	98	274	24	64	103	4	25	16	0.003	0.001	0.0001	Req	0.003	<0.001
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1136564	QC Blank		7.03	<100	<5		<1	<3	<1	<1	<1	<1	<0.001	<0.001	<0.0001	Req	<0.001	<0.001
1136565	Blank Spike (% Recovery)				98		102	97	94	97	99	99	99	96	100	Req	99	100

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			ICPMSW	KONEFE	KONEFE	KONEFE	ICPWATVAR	ICPMSW	ICPMSW	ICPMSW	KONENS	KONENS	SFAPI	SFAPI	SFAPI	SFAS	WSLM13	GROHSA
Method Reporting Limits :			0.002	0.01	0.01	0.01	0.01	0.001	0.0001	0.001	0.01	0.2	0.2	0.02	0.02	0.05	0.1	0.1
UKAS Accredited :			yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**Zinc as Zn (Dissolved)**	**Ferric Iron as Fe(3+)**	**Ferrous Iron as Fe(2+)**	**Iron as Fe:(Total)**	**Iron as Fe (Dissolved) a**	**Arsenic as As (Dissolved)**	**Mercury as Hg (Dissolved)**	**Selenium as Se (Dissolved)**	**Ammoniacal Nitrogen as N**	**Nitrate as N**	**Thiocyanate as SCN**	**Cyanide (Free) as CN**	**Cyanide (Total) as CN**	**Sulphide as S**	**Total Organic Carbon**	**GRO-HSA**
1136560	MW11-10	**23-Aug-11**	<0.002	0.01	0.07	0.08	<0.01	0.044	0.0001	<0.001	1.5	<0.2	<0.2	<0.02	0.03	<0.05	4.8	<0.1
1136561	MW3	**23-Aug-11**	0.003	0.52	0.45	0.97	<0.01	<0.001	<0.0001	0.001	0.04	1.8	<0.2	<0.02	0.03	<0.05	2.5	<0.1
1136562	MW11-11	**24-Aug-11**	<0.002	0.52	0.26	0.78	<0.01	0.005	0.0001	0.001	4.1	1.7	<0.2	<0.02	0.03	<0.05	8.7	<0.1
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1136564	QC Blank		<0.002	<0.01	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.001	<0.01	<0.2	<0.2	<0.02	<0.02	<0.05	<0.1	<0.1
1136565	Blank Spike (% Recovery)		99	99	98	99	96	99	98	97	100	100	99	101	104	109	96	101

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l		
Method Codes :			TPHFID-Si	ICPPWW13	SFAPI	WSLM20.	TNW	VOCHSAW	VOCHSAW	VOCHSAW	VOCHSAW	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC	PHEHPLC		
Method Reporting Limits :			0.01	0.01	0.1	0.1	1	1	1	1	2	0.0005	0.0005	0.0005	0.0005	0.0005		
UKAS Accredited :			yes	no	no	no	no	yes	yes	yes	yes	no	no	no	no	no		
Laboratory ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH GC (AA)**	**Manganese (II) as Mn**	**Complex Cyanide as CN**	**Dissolved Oxygen**	**Total Nitrogen as N**	**Benzene**	**Toluene**	**Ethyl Benzene**	**Xylenes**	**Phenol**	**Cresols**	**Dimethylphenols**	**Naphthols**	**Trimethylphenols**		
1136560	MW11-10	**23-Aug-11**	Req	0.02	<0.03	6.1	3	<1	<1	<1	<2	0.0015	0.0012	<0.0005	<0.1	<0.0005		
1136561	MW3	**23-Aug-11**	Req	1.64	<0.03	6.7	2	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136562	MW11-11	**24-Aug-11**	Req	0.2	<0.03	1.2	6	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		
1136564	QC Blank		Req	<0.01	<0.02		<1	<1	<1	<1	<2	<0.0005	<0.0005	<0.0005	<0.1	<0.0005		
1136565	Blank Spike (% Recovery)		Req	96			95	102	100	102	313	91	90	105	94	99		

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Client Name **Worley Parsons Komex**

Contact Ms N Glynn

Maelor Works

Water Sample Analysis

Date Printed	08-Sep-11
Report Number	**EXR/124560**
Table Number	**1**

Where individual results are flagged see report notes for status.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-10	**Job Number:**	W12_4560
LIMS ID Number:	EX1136560	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.147	94
Acenaphthylene	208-96-8	4.50	0.037	99
Acenaphthene	83-32-9	4.62	0.140	96
Fluorene	86-73-7	5.01	0.053	95
Phenanthrene	85-01-8	5.89	0.052	97
Anthracene	120-12-7	5.95	0.041	96
Fluoranthene	206-44-0	7.27	0.326	98
Pyrene	129-00-0	7.56	0.250	97
Benzo[a]anthracene	56-55-3	9.27	0.036	94
Chrysene	218-01-9	9.31	0.039	97
Benzo[b]fluoranthene	205-99-2	10.80	0.011	65
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 1.182	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	100
Phenanthrene-d10	107
Chrysene-d12	114
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	95

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW3	**Job Number:**	W12_4560
LIMS ID Number:	EX1136561	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.027	93
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.177	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	101
Acenaphthene-d10	99
Phenanthrene-d10	105
Chrysene-d12	109
Perylene-d12	103

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	71
Terphenyl-d14	91

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	MW11-11	**Job Number:**	W12_4560
LIMS ID Number:	EX1136562	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

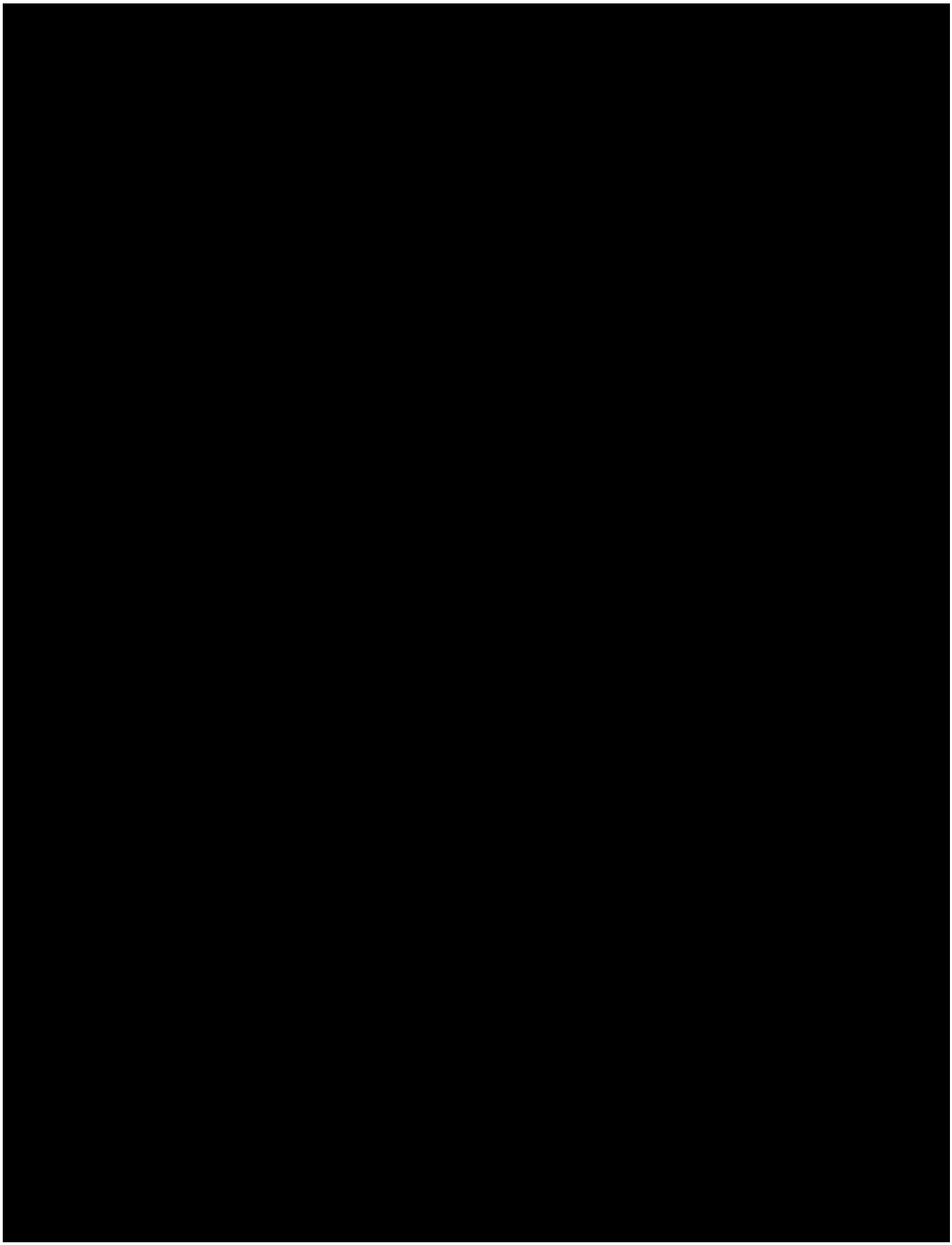
Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	3.43	0.044	94
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	4.62	0.010	85
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	5.89	0.016	96
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.200	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	104
Phenanthrene-d10	113
Chrysene-d12	121
Perylene-d12	117

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	74
Terphenyl-d14	94

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.



The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124560 Blank	**Job Number:**	W12_4560
LIMS ID Number:	EX1136564	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	06-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration ug/l	% Fit
Naphthalene	91-20-3	-	< 0.010	-
Acenaphthylene	208-96-8	-	< 0.010	-
Acenaphthene	83-32-9	-	< 0.010	-
Fluorene	86-73-7	-	< 0.010	-
Phenanthrene	85-01-8	-	< 0.010	-
Anthracene	120-12-7	-	< 0.010	-
Fluoranthene	206-44-0	-	< 0.010	-
Pyrene	129-00-0	-	< 0.010	-
Benzo[a]anthracene	56-55-3	-	< 0.010	-
Chrysene	218-01-9	-	< 0.010	-
Benzo[b]fluoranthene	205-99-2	-	< 0.010	-
Benzo[k]fluoranthene	207-08-9	-	< 0.010	-
Benzo[a]pyrene	50-32-8	-	< 0.010	-
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.010	-
Dibenzo[a,h]anthracene	53-70-3	-	< 0.010	-
Benzo[g,h,i]perylene	191-24-2	-	< 0.010	-
Total (USEPA16) PAHs	-	-	< 0.160	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	74
Acenaphthene-d10	76
Phenanthrene-d10	82
Chrysene-d12	91
Perylene-d12	88

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	82
Terphenyl-d14	101

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

Polycyclic Aromatic Hydrocarbons
GC/MS (SIM)

Customer and Site Details:	Worley Parsons Komex: Maelor Works		
Sample Details:	Report 124560 Blank Spike	**Job Number:**	W12_4560
LIMS ID Number:	EX1136565	**Date Booked in:**	25-Aug-11
QC Batch Number:	110789	**Date Extracted:**	05-Sep-11
Quantitation File:	Initial Calibration	**Date Analysed:**	05-Sep-11
Directory:	905PAH.MS10\	**Matrix:**	Water
Dilution:	1000.0	**Ext Method:**	Sep. Funnel

UKAS accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Recovery %	% Fit
Naphthalene	91-20-3	3.43	94	97
Acenaphthylene	208-96-8	4.49	81	99
Acenaphthene	83-32-9	4.62	85	97
Fluorene	86-73-7	5.02	94	98
Phenanthrene	85-01-8	5.89	94	99
Anthracene	120-12-7	5.95	88	98
Fluoranthene	206-44-0	7.27	84	96
Pyrene	129-00-0	7.56	80	77
Benzo[a]anthracene	56-55-3	9.27	109	98
Chrysene	218-01-9	9.32	95	99
Benzo[b]fluoranthene	205-99-2	10.80	101	97
Benzo[k]fluoranthene	207-08-9	10.84	92	94
Benzo[a]pyrene	50-32-8	11.23	89	92
Indeno[1,2,3-cd]pyrene	193-39-5	12.62	80	80
Dibenzo[a,h]anthracene	53-70-3	12.66	67	65
Benzo[g,h,i]perylene	191-24-2	12.95	83	73
Total (USEPA16) PAHs	-	-	1414	-

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	102
Acenaphthene-d10	100
Phenanthrene-d10	108
Chrysene-d12	117
Perylene-d12	110

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	89
Terphenyl-d14	109

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

ALIPHATIC / AROMATIC FRACTION BY GC/FID

Customer and Site Details: Worley Parsons Komex : Maelor Works
Job Number: W12_4560
QC Batch Number: 110789
Directory: D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\072B2801.D
Method: Separating Funnel

Separation: Silica gel
Eluents: Hexane, DCM

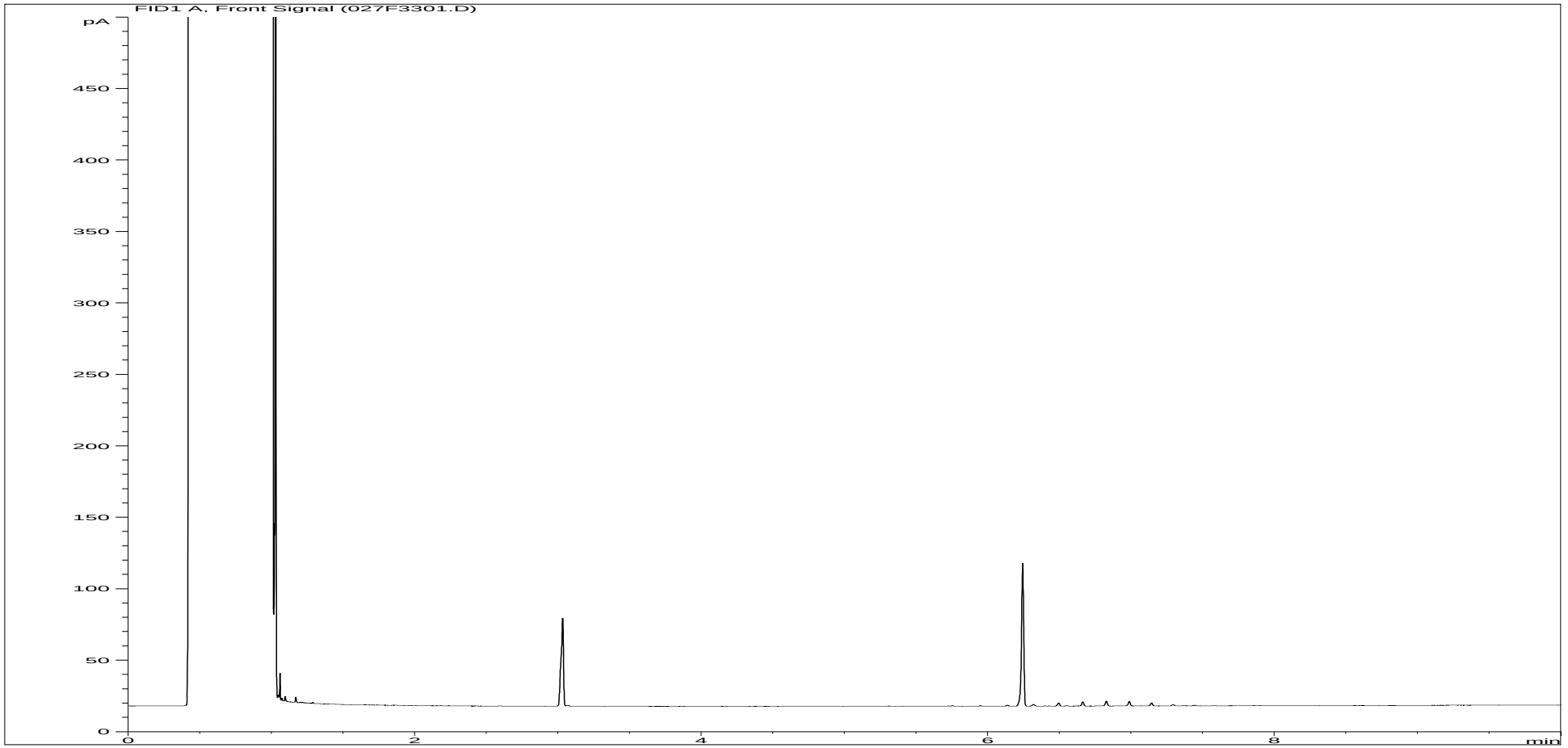
Matrix: Water
Date Booked ir 25-Aug-11
Date Extracted 05-Sep-11
Date Analysed 06-Sep-11, 16:04:03

*** This sample data is not UKAS accredited.**

		Concentration, (mg/l)											
		>C8 - C10		>C10 - C12		>C12 - C16		>C16 - C21		>C21 - C35		>C8 - C40	
Sample ID	**Client ID**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**	**Aliphatics**	**Aromatics**
EX1136560	MW11-10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013
EX1136561	MW3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136562	MW11-11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EX1136564	Report 124560 Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX1136565	Report 124560 Blank Spike	0.565	0.179	0.91	0.298	1.63	0.535	0.96	0.269	2.56	0.644	6.68	1.94

Where individual results are flagged see report notes for status.

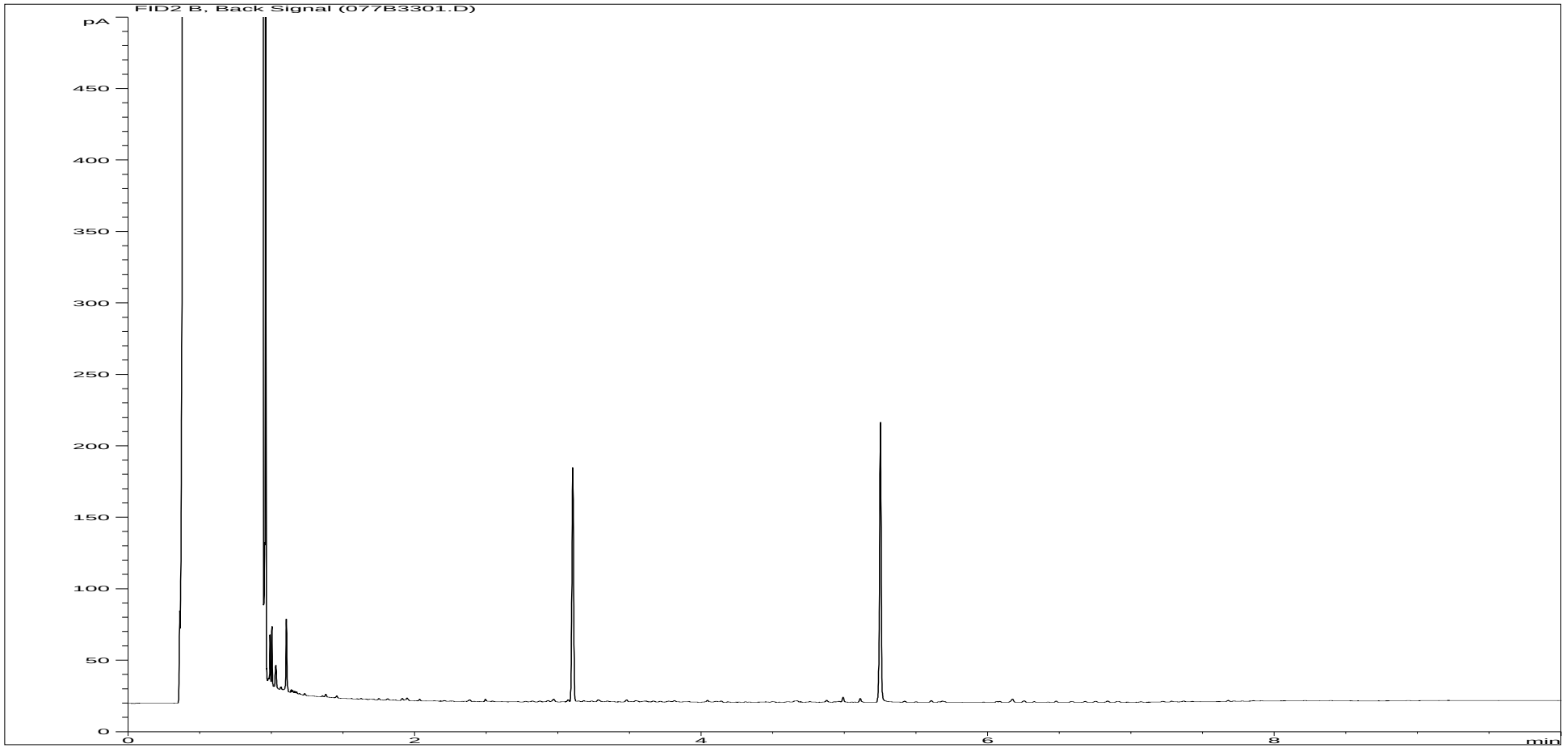
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136560ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	06-Sep-11, 17:30:38		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\027F3301.D		

Where individual results are flagged see report notes for status.

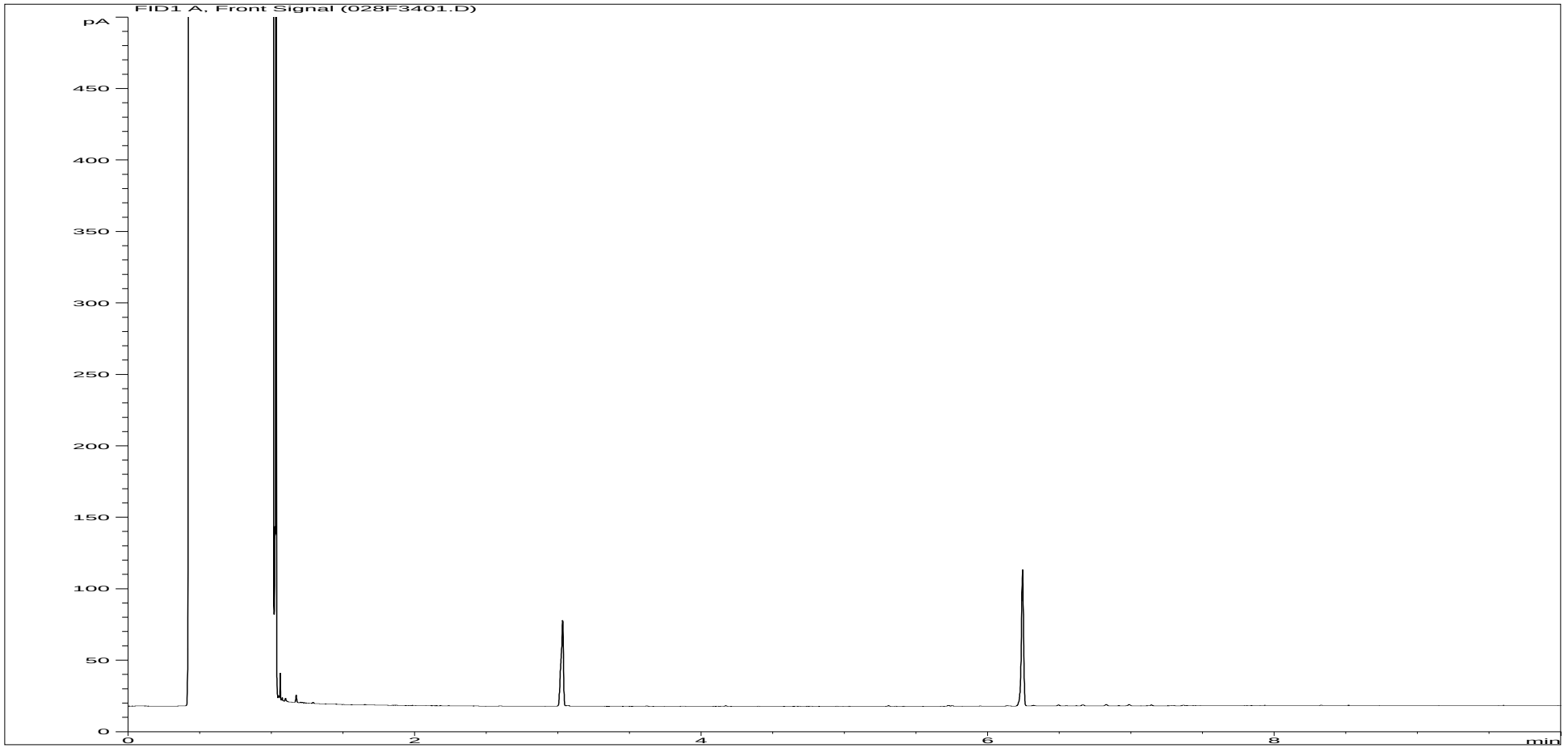
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136560ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-10
Acquisition Date/Time:	06-Sep-11, 17:30:38		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\077B3301.D		

Where individual results are flagged see report notes for status.

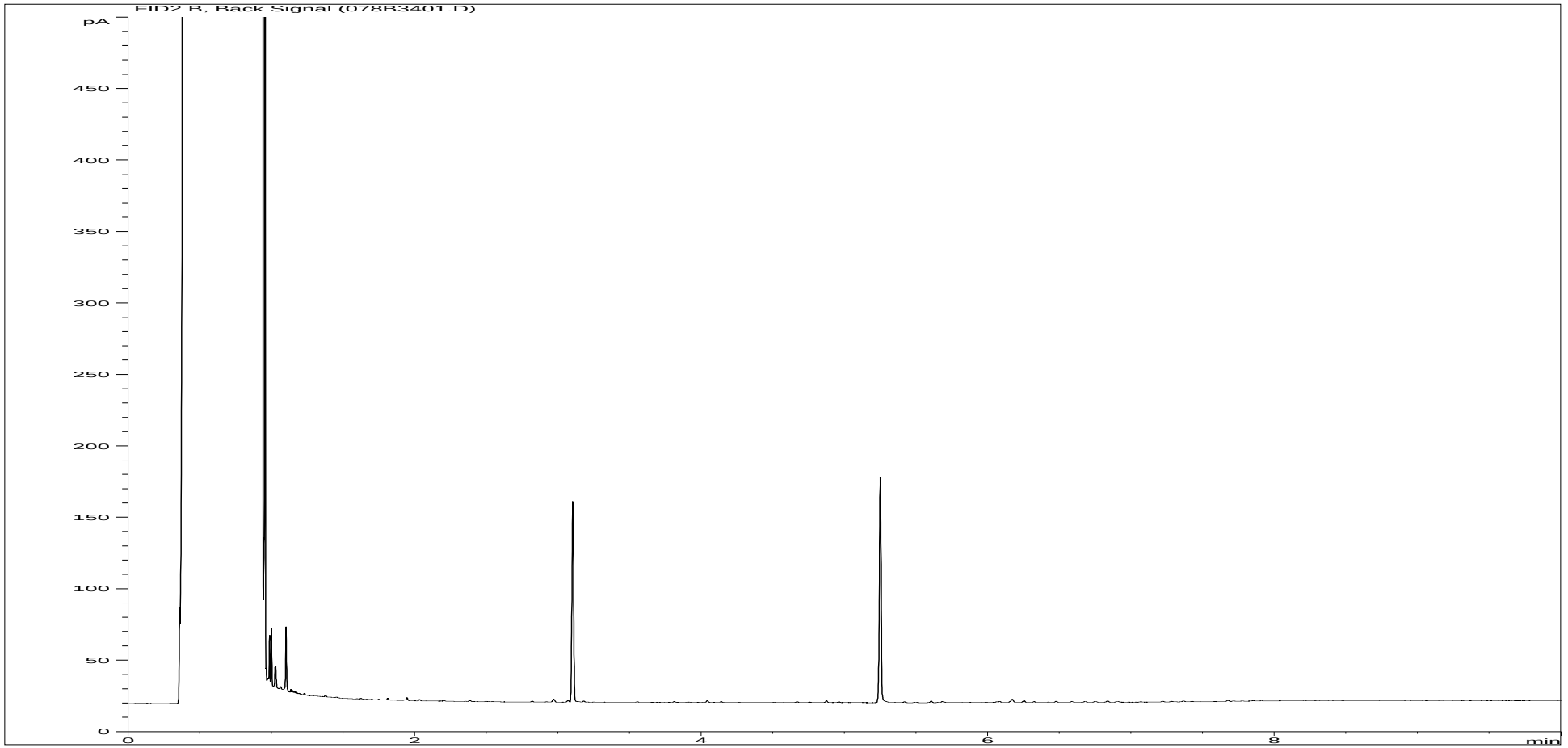
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136561ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	06-Sep-11, 17:47:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\028F3401.D		

Where individual results are flagged see report notes for status.

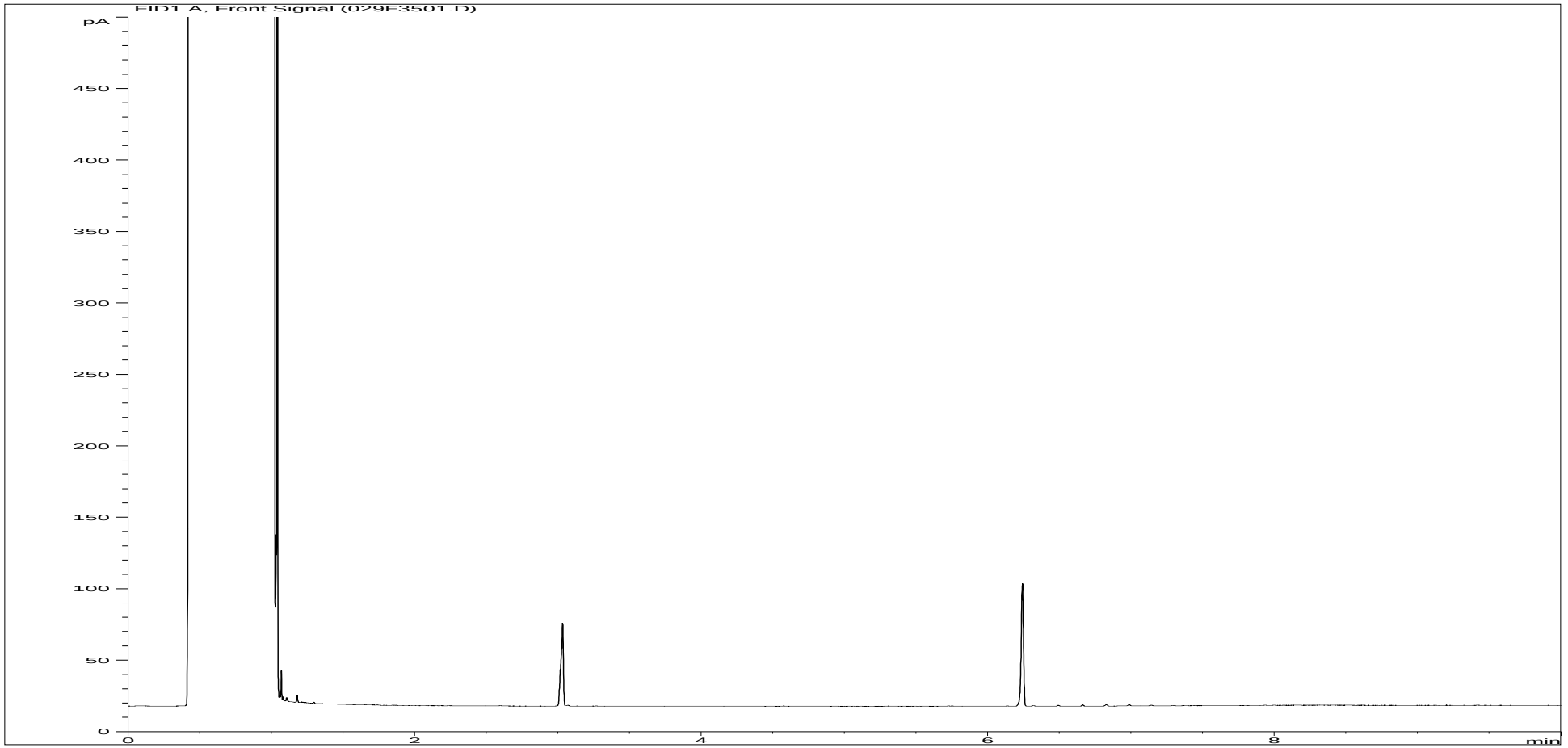
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136561ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW3
Acquisition Date/Time:	06-Sep-11, 17:47:54		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\078B3401.D		

Where individual results are flagged see report notes for status.

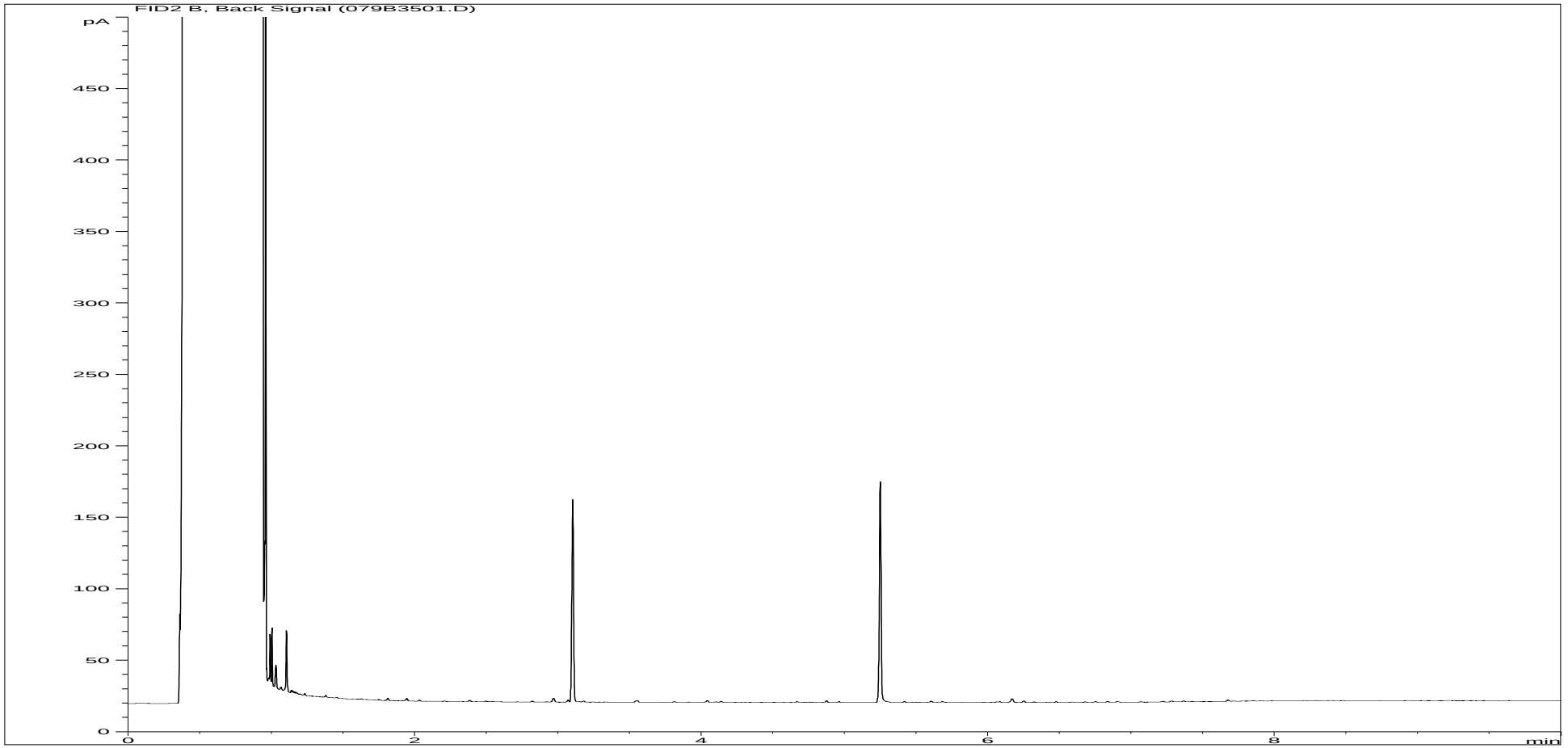
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136562ALI	**Job Number:**	W12_4560
Multiplier:	0.02	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	06-Sep-11, 18:05:04		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\029F3501.D		

Where individual results are flagged see report notes for status.

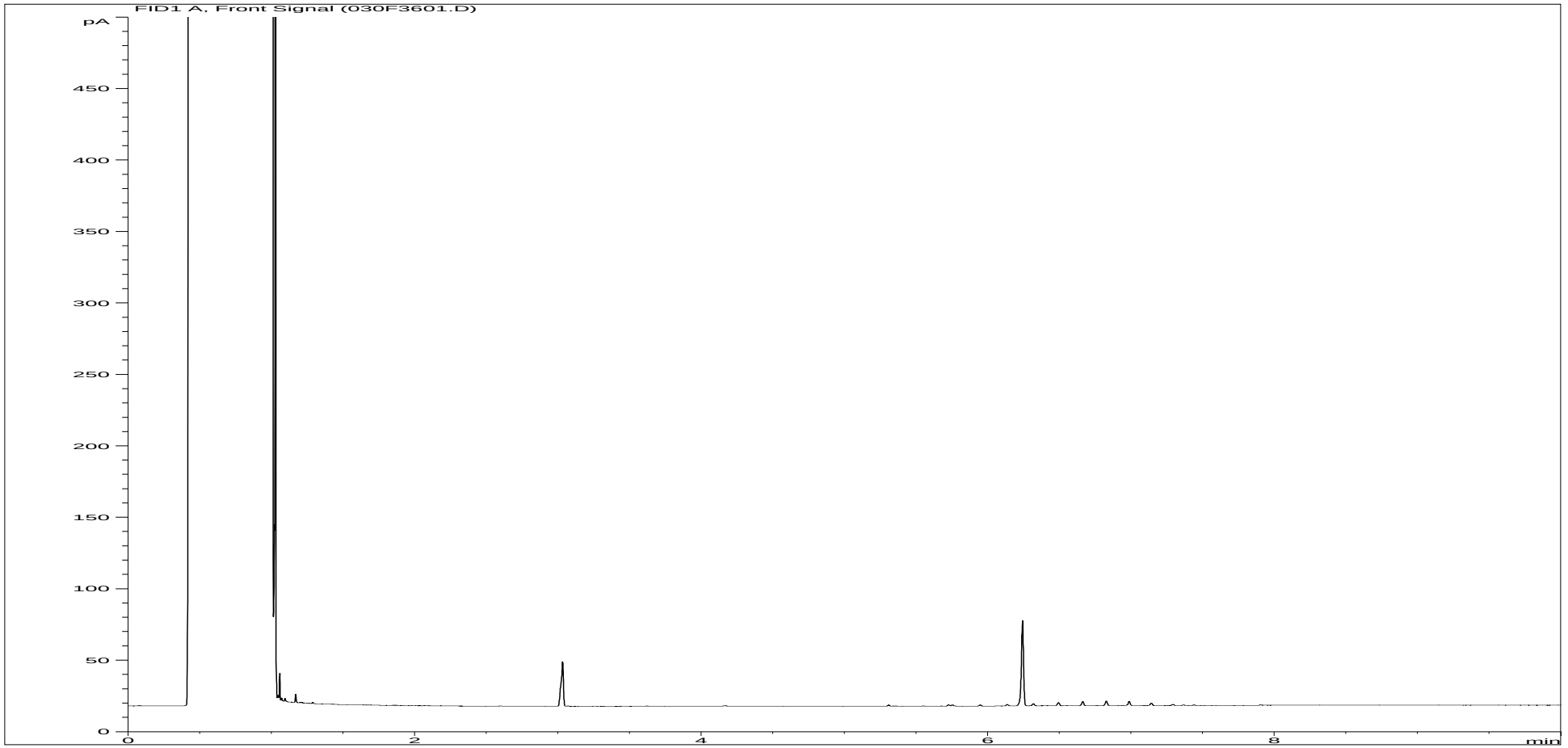
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136562ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-11
Acquisition Date/Time:	06-Sep-11, 18:05:04		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\079B3501.D		

Where individual results are flagged see report notes for status.

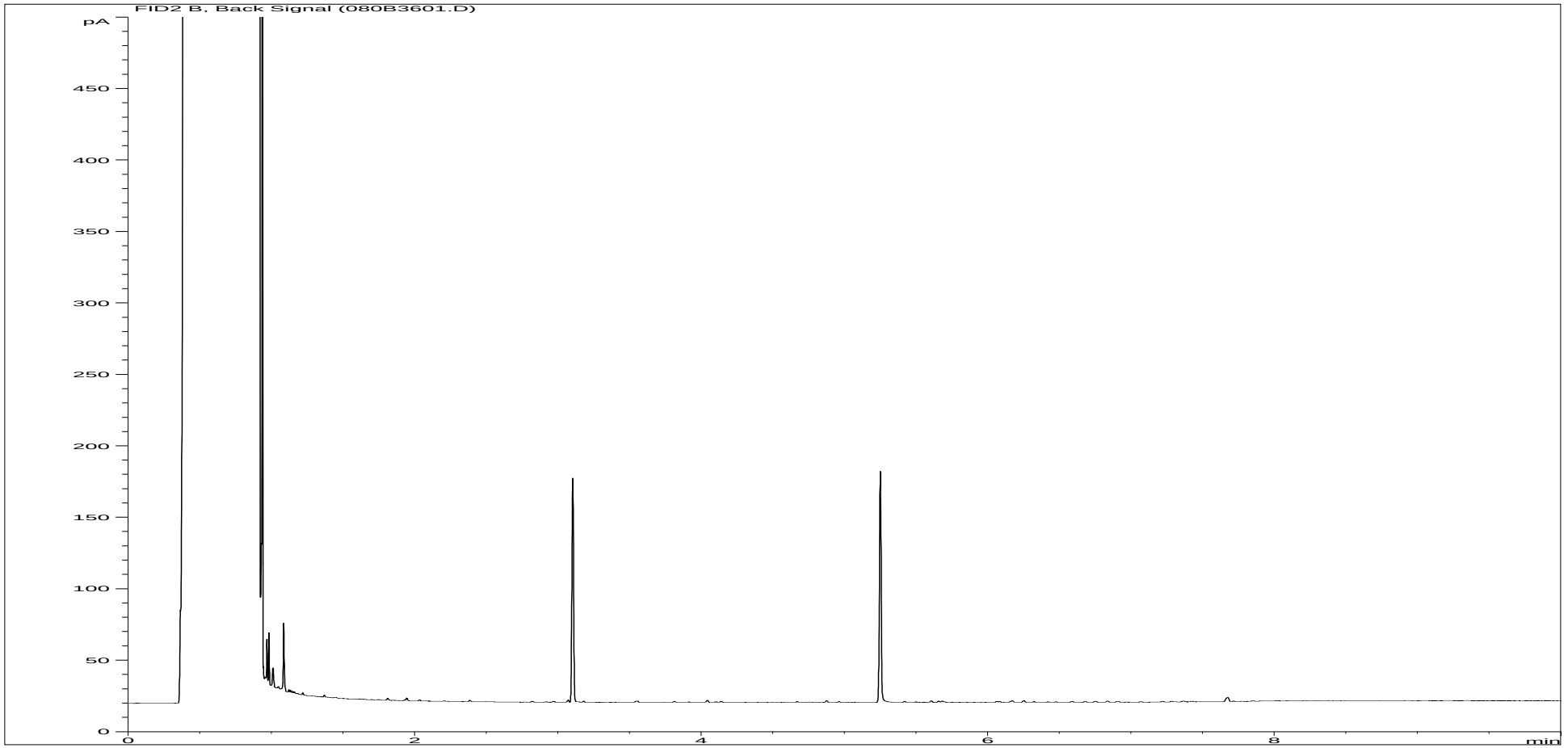
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136563ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	06-Sep-11, 18:22:22		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\030F3601.D		

Where individual results are flagged see report notes for status.

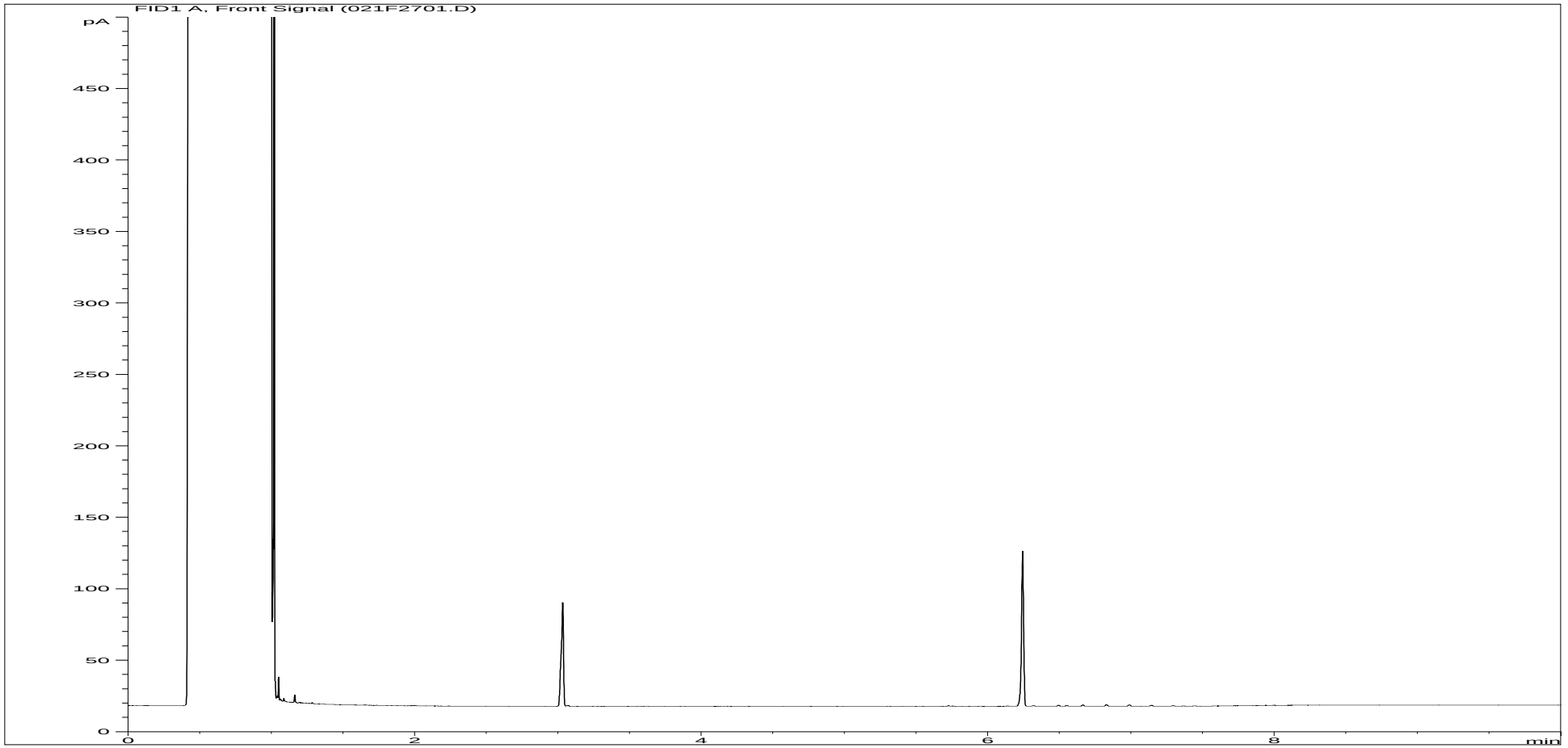
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136563ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	MW11-17
Acquisition Date/Time:	06-Sep-11, 18:22:22		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\080B3601.D		

Where individual results are flagged see report notes for status.

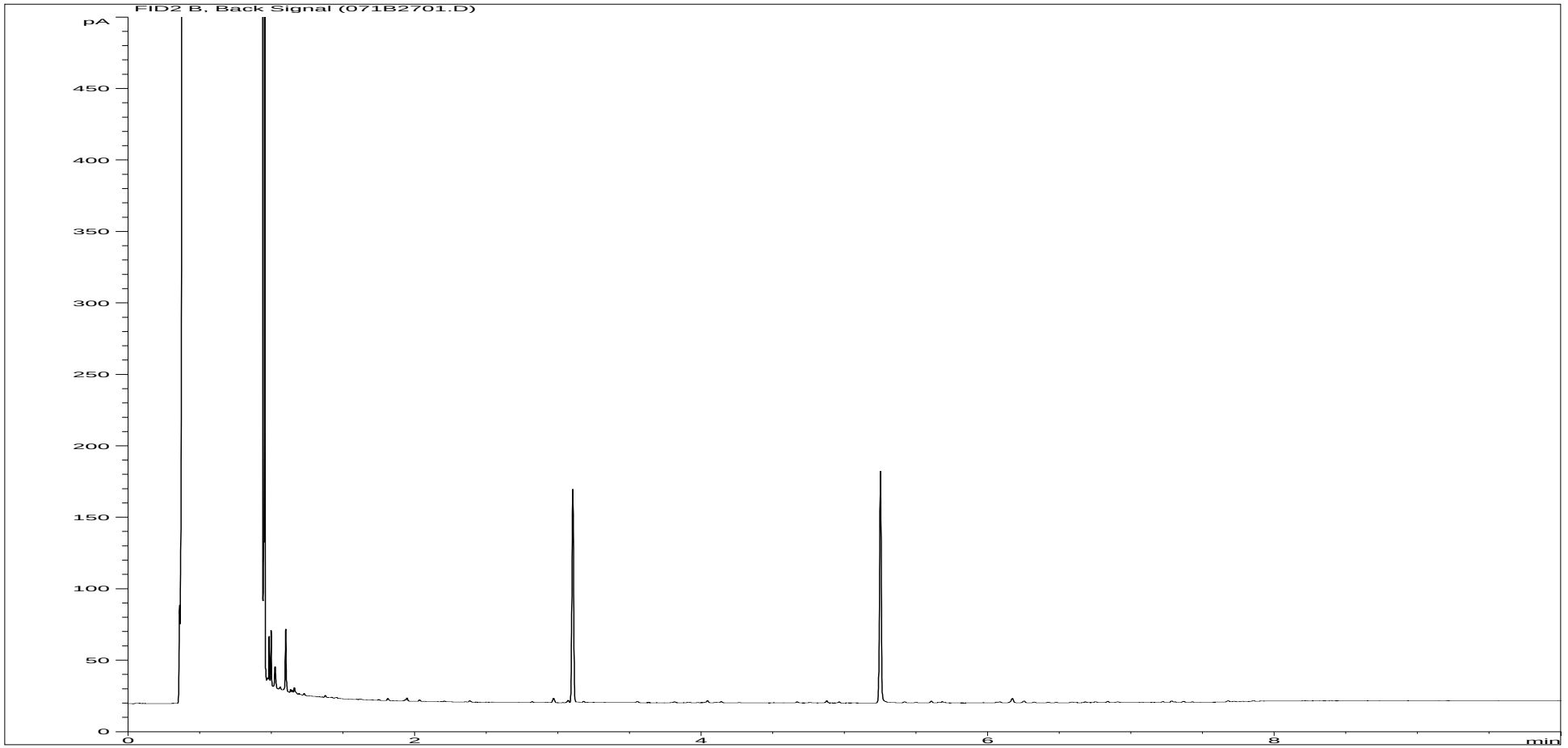
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136564ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank
Acquisition Date/Time:	06-Sep-11, 15:46:48		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\021F2701.D		

Where individual results are flagged see report notes for status.

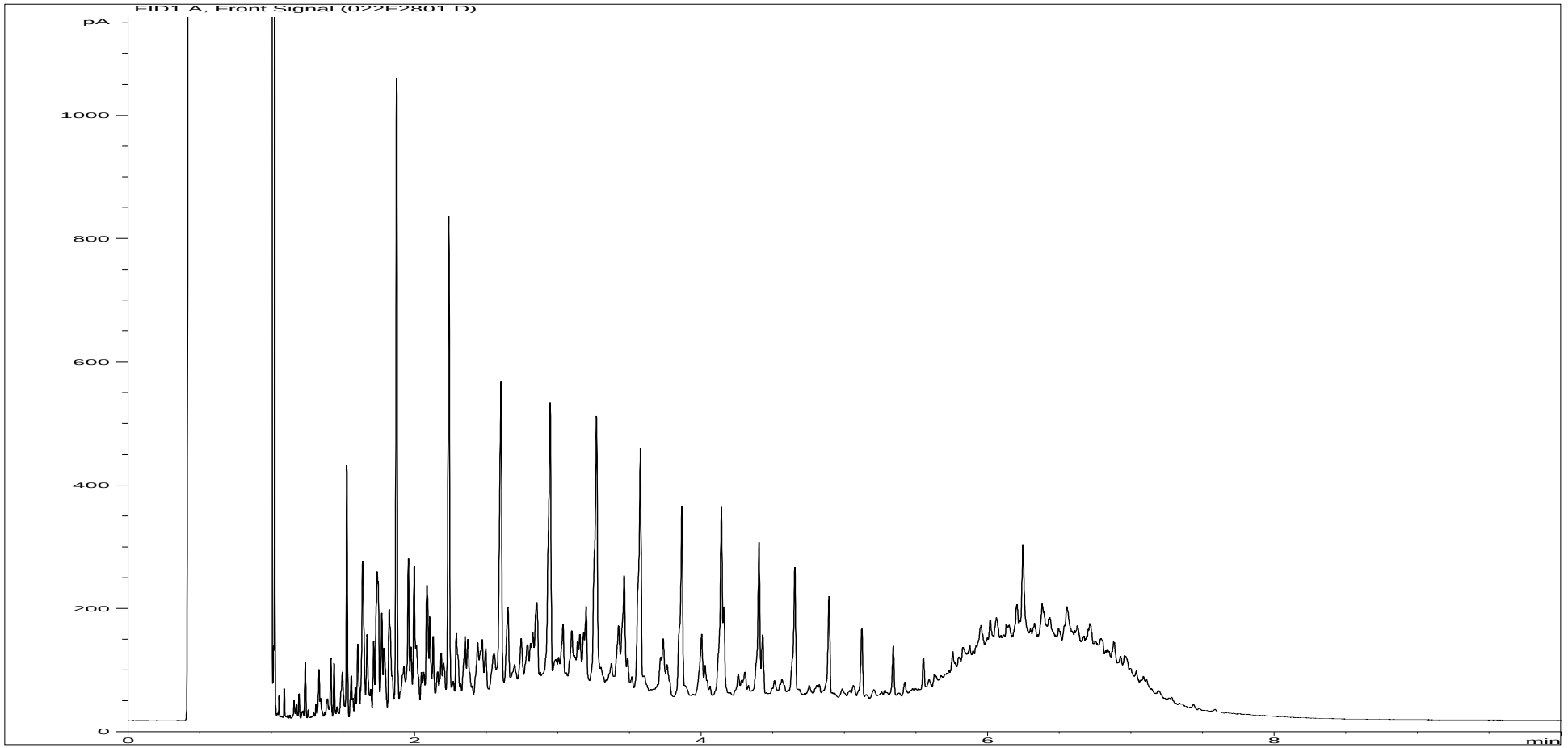
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136564ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank
Acquisition Date/Time:	06-Sep-11, 15:46:48		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\071B2701.D		

Where individual results are flagged see report notes for status.

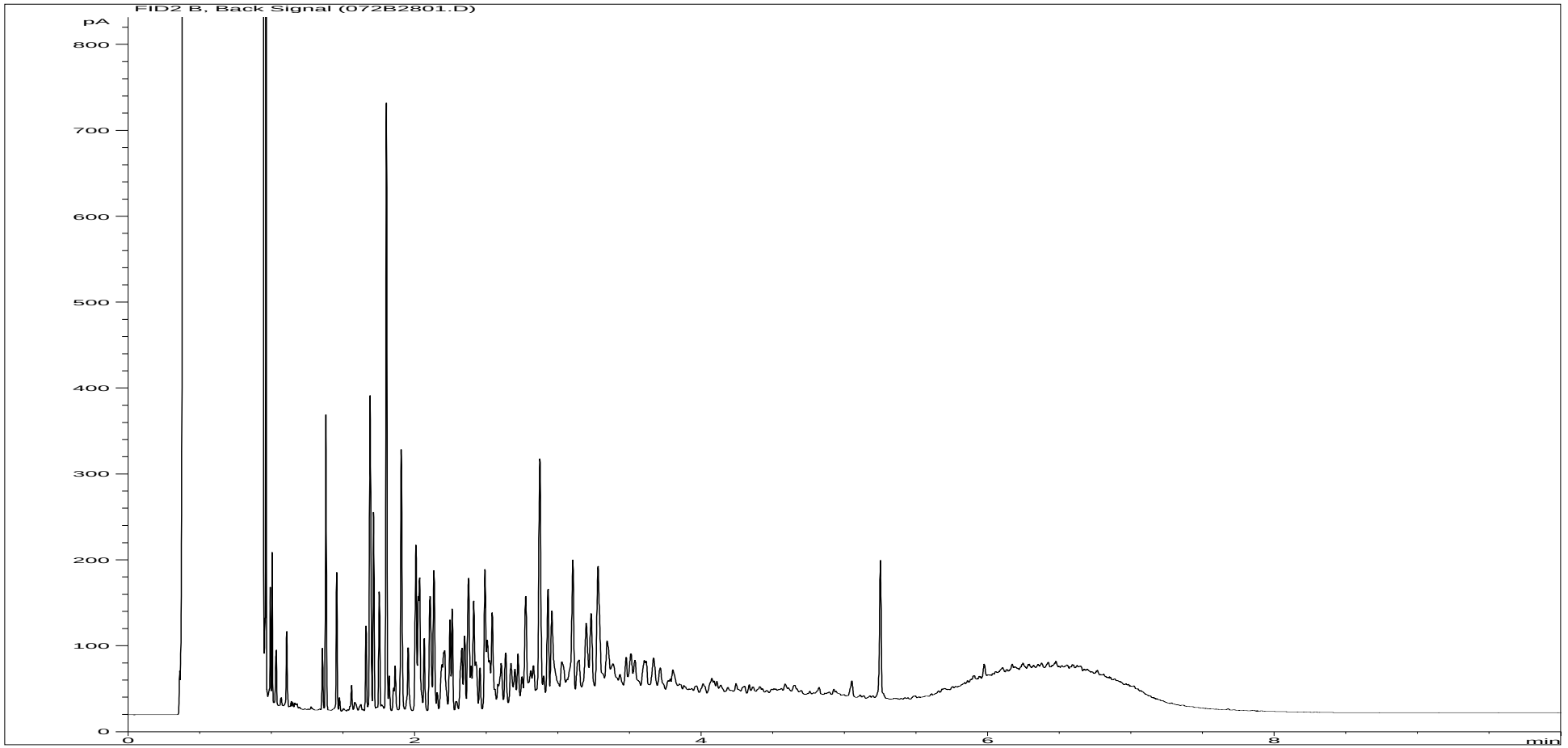
Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



Sample ID:	EX1136565ALI	**Job Number:**	W12_4560
Multiplier:	0.019	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank Spike
Acquisition Date/Time:	06-Sep-11, 16:04:03		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\022F2801.D		

Where individual results are flagged see report notes for status.

Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.



Sample ID:	EX1136565ARO	**Job Number:**	W12_4560
Multiplier:	0.015	**Client:**	Worley Parsons Komex
Dilution:	1	**Site:**	Maelor Works
Acquisition Method:	TPH_RUNF.M	**Client Sample Ref:**	Report 124560 Blank Spike
Acquisition Date/Time:	06-Sep-11, 16:04:03		
Datafile:	D:\TES\DATA\Y2011\090611TPH_GC15\090611 2011-09-06 08-19-28\072B2801.D		

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer Worley Parsons Komex
Site Maelor Works
Report No W124560

Consignment No 28785
Date Logged 25-Aug-2011

Report Due 08-Sep-2011

ID Number	Description	MethodID	Calc_HD	CUSTSERV	GROHSA	ICPMSW								ICPPWW13	ICPWATVAR						KONEFE			KONENS		
		Sampled	Total Hardness as CaCO3 (CALC)	Report B	GRO-HSA	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Manganese (II) as Mn	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Ferric Iron as Fe(3+)Calc KONE	Ferrous Iron as Fe(2+) KONE	Iron as Fe (Total) KONE	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Nitrate as N (Kone calc)
Accredited to ISO17025					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1136560	MW11-10	23/08/11																										
EX/1136561	MW3	23/08/11																										
EX/1136562	MW11-11	24/08/11																										
EX/1136563	MW11-17	24/08/11																										
EX/1136564	Report 124560 Blank																											
EX/1136565	Report 124560 Blank Spike																											

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

WATER Analysis

ESG Environmental Chemistry
Analytical and Deviating Sample Overview

W124560

Customer Worley Parsons Komex
Site Maelor Works
Report No W124560

Consignment No 28785
Date Logged 25-Aug-2011

Report Due 08-Sep-2011

ID Number	Description	MethodID	PAHMSW	PHEHPLC	SFAPI				SFAS	TNW	TPHFID-Si	VOCHSAW	WSLM10	WSLM13	WSLM2	WSLM20	WSLM3
		Sampled	PAH MS (16)	Phenol HPLC (Low)	Thiocyanate as SCN SFA	Cyanide (Free) as CN SFA	Cyanide (Total) as CN SFA	Complex Cyanide as CN (CALC)	Sulphide as S SFA	Total Nitrogen	TPH GC (Si) (0.01)	BTEX Analysis HSA MS	Suspended Solids	Total Organic Carbon	Conductivity uS/cm @ 25C	Dissolved Oxygen	pH units
	Accredited to ISO17025		✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
EX/1136560	MW11-10	23/08/11															
EX/1136561	MW3	23/08/11															
EX/1136562	MW11-11	24/08/11															
EX/1136563	MW11-17	24/08/11															
EX/1136564	Report 124560 Blank																
EX/1136565	Report 124560 Blank Spike																

Note: For analysis where the Report Due date is greater than 7 days (PAH, Pesticides, PCB, Phenols, Herbicides) or 2 days (BOD) after the sampling date, although we will do our utmost to prioritise your samples, they may become deviant whilst being processed in the Laboratory.

In this instance, please contact the Laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted

Where individual results are flagged see report notes for status

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	Calc_HD	As Received	Calculation based on Dissolved metals analysis by ICPOES
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPPWW13	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONEFE	As Received	Direct analysis using discrete colorimetric analysis (calculation of Ferric Iron from Total Iron and Ferrous Iron data if required)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	PHEHPLC	As Received	Determination of Total Phenol by HPLC
Water	SFAPI	As Received	Determination of Total Phenols by segmented flow analysis with colorimetric detection
Water	SFAS	As Received	Determination of Sulphide by segmented flow analysis with colorimetric detection
Water	TNW	As Received	Determination of Total Nitrogen, peroxodisulphate digestion, colourinetric quantitation using 2,6-dimethylphenol.
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	VOCHSAW	As Received	Determination of Volatile Organics Compounds or Gasoline Range Hydrocarbons (GRO) by Headspace GCMS
Water	WSLM10	As Received	Determination of Suspended Solids in waters by gravimetry
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity (µS/cm) by electrical conductivity probe.
Water	WSLM20.	As Received	Determination of Dissolved Oxygen in waters using an oxygen detecting probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on an air dried basis
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
NAIIS No Asbestos Identified in Sample

Symbol Reference

^ Sub-contracted analysis. Note: The accreditation status is that assigned by the subcontract laboratory.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

END OF REPORT

Where individual results are flagged see report notes for status.