

WEST MEADOWS WASTE RECOVERY  
FACILITY

BASELINE REPORT

[APPENDIX 6 – ZLF\_BR]



FEBRUARY 2022

### SITE CONDITION REPORT

WEST MEADOWS WASTE RECOVERY FACILITY, DOWNING ROAD, WEST  
MEADOWS INDUSTRIAL ESTATE,  
DERBY, DE21 6HA

2ZLF

Version 1  
Status Final

Prepared by Gill Pawson  
Approved by Chris Smith

Day Month Year  
10/11/14  
13/11/14



**Name of installation: West Meadows Waste Recovery Facility, Downing Road**

**1 Location of installation**

Installation address: West Meadows Waste Recovery Facility, Downing Road, West Meadows Industrial Estate, Derby, DE21 6HA  
National Grid reference SP 59953 72291

Supporting Information  
Plan showing location of installation – GPP/2ZLF/D/13/01  
Plan showing installation boundary – GPP/2ZLF/D/14/05

**2 Condition of land at permit issue**

Environmental Setting including  
Geology: No groundworks other than fully concreting the site surface upon which to store incoming waste and products, therefore geology is not relevant in this case.  
Hydrology: The site is outside any groundwater protection zone.  
Surface waters: The site is 360m from the River Derwent, which lies to the South and flows W-E. The site is within the river’s flood plain – Flood Zone 3a, but the site has been in industrial use for many years and the new use is only a change of use, therefore no Flood Risk Assessment was carried out at the planning application stage.

Pollution history including  
Pollution incidents that may have affected the land: The site was last used for general industrial use, but prior to that was part of the railway sidings.  
Historical land-uses and associated contaminants: A report by ESG is attached at Appendix 1 which records four trial pit excavations and the result of testing of the samples taken.  
Any visual/olfactory evidence of existing contamination: there is no visual or olfactory evidence of contamination at the site.

Evidence of damage to pollution prevention measures; there are no pollution prevention measures at the site.

Evidence of historic contamination; A report by ESG is attached at Appendix 1 which records four trial pit excavations and the result of testing of the samples taken.

Baseline reference data: Four trial pit samples.

**3. Permitted activities**

Permitted activities: Treatment of wet waste to recover inert components for re-use in construction.  
Non-permitted activities undertaken at the installation: None.

Dangerous substances used and produced by the permitted activities; small proportion of potentially hazardous waste to be treated at the site, principally contaminated by hydrocarbons and heavy metals.

Supporting Information  
Plan showing installation layout – Drawing 01132

List of substances used  
Gully Waste

20 03 03	Street cleaning residues
13 05 01*	Solids from grit chambers and oil water separators
13 05 02*	Sludge’s from oil water separators

Road sweepings

20 03 03	Street cleaning residues
20 03 01	Mixed municipal waste
20 02 02	Soil & stones
20 02 01	Biodegradable waste

MBT and trommel fines

20 03 01	Mixed municipal waste
19 02 03	Pre mixed wastes consisting only of non-hazardous wastes
19 05 01	Non composted fraction of municipal and similar wastes
19 05 03	Off specification compost
19 06 04	Digestate from anaerobic treatment of municipal waste

C&D waste including track ballast

17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 05 03*	Soil and stones containing dangerous substances
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 01 07	Mixture of concrete, bricks and tiles other than those mentioned in 17 01 06
17 05 06	Dredging soil other than those mentioned in 17 05 05
17 05 07*	Track ballast containing dangerous substances
17 05 08	Track ballast other than those mentioned in 17 05 07
17 09 03	Other construction and demolition wastes (including mixed wastes) containing dangerous substances.
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

Oil contaminated wastes from road drainage

13 05 01*	Solids from grit chambers and oil water separators
13 05 02*	Sludge's from oil water separators
13 05 03*	Interceptor sludge's
13 05 08*	Mixtures of wastes from grit chambers and oil water separators
13 05 07*	Oily water from oily water separators
16 07 08*	Wastes containing oil

Chemical additives: Polymer flocculent and hydrochloric acid

The plant will produce the following

19 12 09	0-3mm sand
19 12 09	3-5 mm sand
19 12 09	5-10mm stone
19 12 09	10mm plus oversize stone
19 12 09	0.63 micron and smaller mineralic fines
19 12 02	Ferrous metals, including heavy metals
19 12 03	Nonferrous metals, including heavy metals
19 02 07	Recovered hydrocarbons
19 12 04	Plastics
19 12 07	Wood
19 12 12	Recycled wash water; organic fraction

Assessment of whether any is a dangerous substance. Heavy metals and hydrocarbons recovered during processing.

#### **4. Changes to the activity**

This stage is not relevant

#### **5. Measures taken to protect land**

The site will be fully concreted, with a bund around the perimeter, to ensure that all rainfall is collected into the purpose-designed drainage system, which will be fitted with an oil interceptor, the details of which are set out in the document attached to the EMS reference ATS Operating Description. This will eliminate the risk of contaminated water affecting surface or groundwater.

All pollution incidents will be managed on-site, for which the installed equipment is designed to treat contaminated water and solids. Records of pollution incidents will be kept in the Site Diary, as required by the conditions of the Environmental Permit.

Sections to be completed at the time of permit surrender

#### **6.0 Pollution incidents that may have had an impact on land, and their remediation**

#### **7.0 Soil gas and water quality monitoring (where undertaken)**

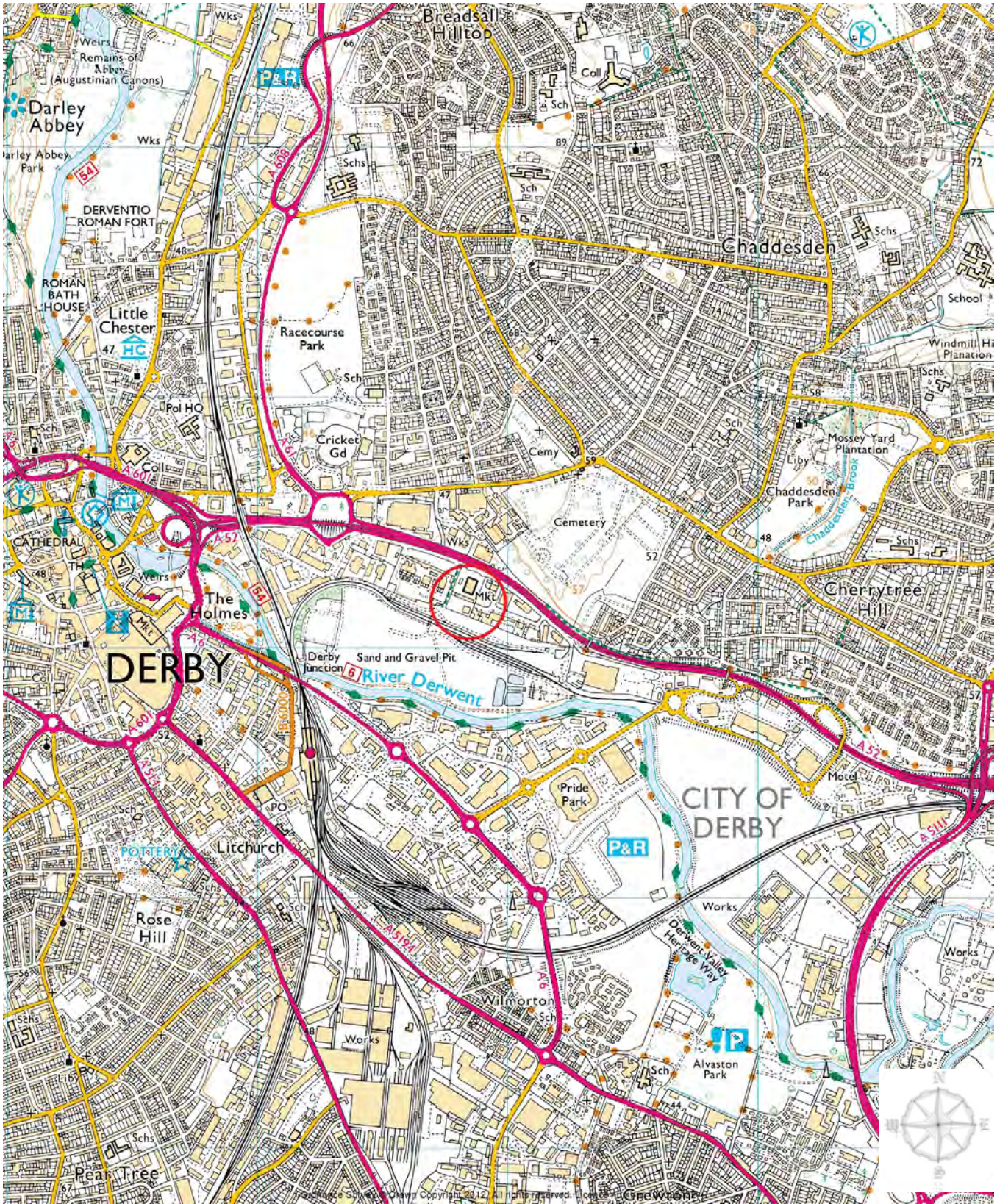
Not relevant

#### **8.0 Decommissioning and removal of pollution risk**

#### **9.0 Reference data and remediation (where relevant)**

#### **10.0 Statement of site condition**





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DRAWN BY: KD  
 DRAWING NO.: GPP/2ZLF/D/13/01  
 SCALE: 1:25,000 @ A4  
 CHECKED BY: CS  
 REV NO.: 1  
 DATE: 07/11/13

West Meadows Industrial Estate, Derby  
 2ZLF Ltd

**SITE LOCATION PLAN**


Grid Reference X 436870 Y 336169  
 Postcode (nearest) DE21 6HA

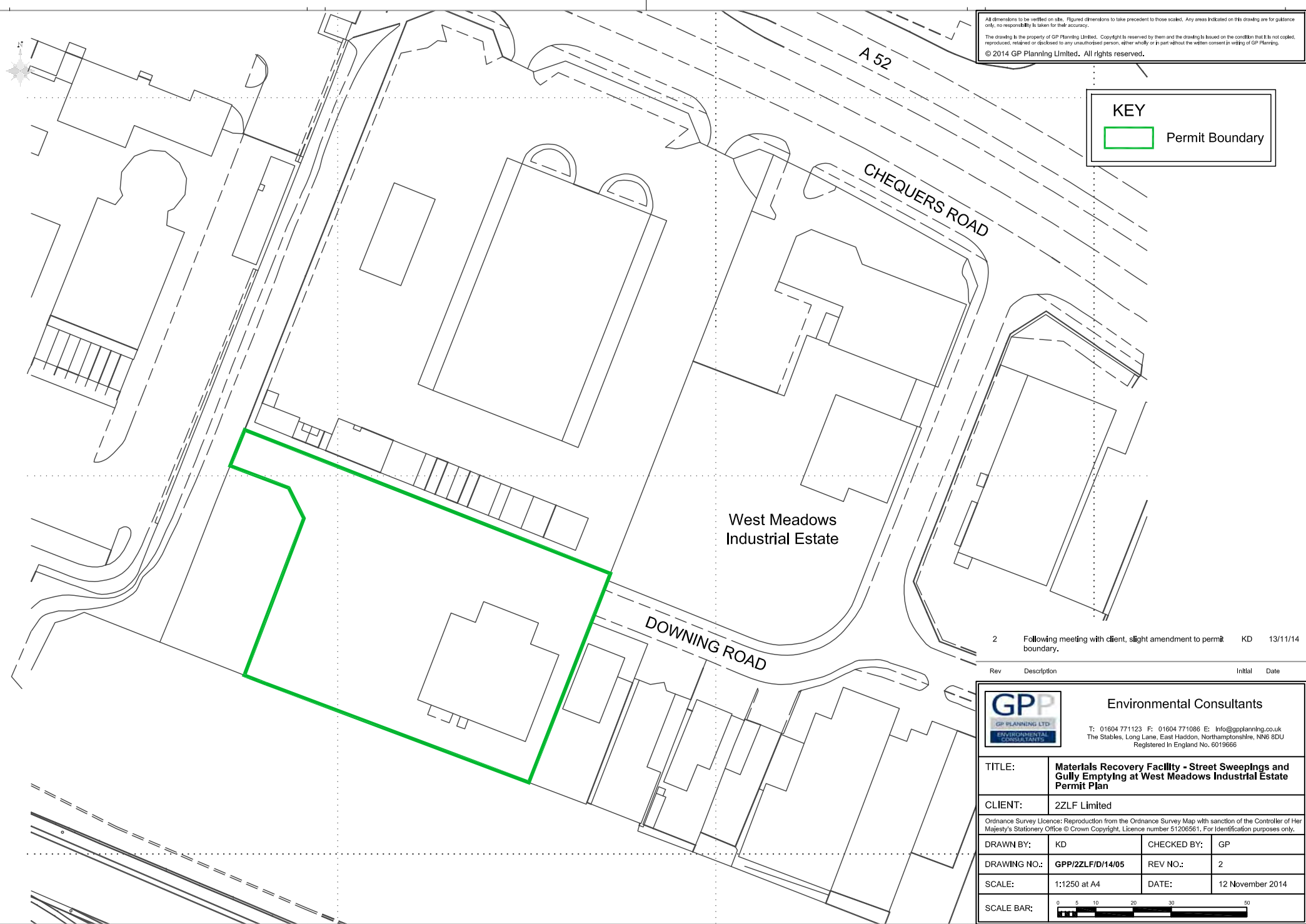




All dimensions to be verified on site. Figured dimensions to take precedent to those scaled. Any areas indicated on this drawing are for guidance only, no responsibility is taken for their accuracy.  
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**KEY**

 Permit Boundary



2	Following meeting with client, slight amendment to permit boundary.	KD	13/11/14
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Rev	Description	Initial	Date
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 <p><b>GPP</b> GP PLANNING LTD ENVIRONMENTAL CONSULTANTS</p>	<p><b>Environmental Consultants</b></p> <p>T: 01604 771123 F: 01604 771086 E: <a href="mailto:info@gpplanning.co.uk">info@gpplanning.co.uk</a>          The Stables, Long Lane, East Haddon, Northamptonshire, NN6 8DU          Registered in England No. 6019666</p>		
	<p><b>TITLE:</b> Materials Recovery Facility - Street Sweepings and Gully Emptying at West Meadows Industrial Estate Permit Plan</p>		
<p><b>CLIENT:</b> 2ZLF Limited</p>		<p><small>Ordnance Survey Licence; Reproduction from the Ordnance Survey Map with sanction of the Controller of Her Majesty's Stationery Office © Crown Copyright. Licence number 51206561. For identification purposes only.</small></p>	
<p><b>DRAWN BY:</b> KD</p>	<p><b>CHECKED BY:</b> GP</p>		
<p><b>DRAWING NO.:</b> GPP/2ZLF/D/14/05</p>	<p><b>REV NO.:</b> 2</p>		
<p><b>SCALE:</b> 1:1250 at A4</p>	<p><b>DATE:</b> 12 November 2014</p>		
<p><b>SCALE BAR:</b></p> 			

**APPENDIX 1: ESG REPORT**



Our Ref: EFS/142651M (Ver. 1)

Your Ref: DAM0046556

May 14, 2014



Environmental Scientifics Group

Environmental Chemistry

ESG

Bretby Business Park

Ashby Road

Burton-on-Trent

Staffordshire

DE15 0YZ

Telephone: 01283 554400

Facsimile: 01283 554422

Ms M Carr  
APSU Environmental Services  
Sharps Gate  
Station Road  
Oxton  
TD2 6PW

For the attention of Ms M Carr

Dear Ms Carr

**Soil Sample Analysis - West Meadows Industrial Estate**

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 17/06/14 when they will be discarded. Please call 01283 554458 for an extension of this date.

Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

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

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

Yours sincerely

for ESG

A handwritten signature in black ink that reads 'David Simpson'. The signature is written in a cursive style with a large initial 'D'.

D Simpson  
Project Co-ordinator  
01283 554458

# TEST REPORT

## SOIL SAMPLE ANALYSIS



Report No. EFS/142651M (Ver. 1)

APSU Environmental Services  
Sharps Gate  
Station Road  
Oxton  
TD2 6PW

### Site: West Meadows Industrial Estate

The 4 samples described in this report were registered for analysis by ESG on 06-May-2014. This report supersedes any versions previously issued by the laboratory.

The analysis was completed by: 14-May-2014

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 ESG.

The following tables are contained in this report:

- Table 1 Main Analysis Results (Pages 2 to 3)
- Table of PAH (MS-SIM) (80) Results (Pages 4 to 7)
- Table of PCB Congener Results (Page 8)
- Table of SVOC Results (Pages 9 to 12)
- Table of GRO Results (Page 13)
- Table of TPH (Si) banding (std) (Page 14)
- GC-FID Chromatograms (Pages 15 to 26)
- Table of VOC (HSA) Results (Pages 27 to 30)
- Table of WAC Analysis Results (Pages 31 to 34)
- Table of Asbestos Screening Results (Page 35)
- Analytical and Deviating Sample Overview (Pages 36 to 37)
- Table of Method Descriptions (Pages 38 to 39)
- Table of Report Notes (Page 40)
- Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of  
ESG :  
Declan Burns

Operations Director  
Laboratory and Analytical Business

Date of Issue: 14-May-2014

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)

Tests marked 'A' 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)  
ESG accepts no responsibility for any sampling not carried out by our personnel.







# Polycyclic Aromatic Hydrocarbons GC/MS (SIM)

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208816 Site 1 TP1 North **Job Number:** S14\_2651M  
**LIMS ID Number:** CL1411633 **Date Booked in:** 06-May-14  
**QC Batch Number:** 140379 **Date Extracted:** 08-May-14  
**Quantitation File:** Initial Calibration **Date Analysed:** 12-May-14  
**Directory:** 1214PAH.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	-	< 0.12	-	UM
Acenaphthylene	208-96-8	-	< 0.12	-	U
Acenaphthene	83-32-9	-	< 0.12	-	UM
Fluorene	86-73-7	-	< 0.12	-	UM
Phenanthrene	85-01-8	5.83	0.52	98	UM
Anthracene	120-12-7	5.88	0.20	97	U
Fluoranthene	206-44-0	7.20	1.01	99	UM
Pyrene	129-00-0	7.50	0.87	98	UM
Benzo[a]anthracene	56-55-3	9.21	0.58	85	UM
Chrysene	218-01-9	9.26	0.50	94	UM
Benzo[b]fluoranthene	205-99-2	10.75	0.69	75	UM
Benzo[k]fluoranthene	207-08-9	10.79	0.23	95	UM
Benzo[a]pyrene	50-32-8	11.18	0.52	98	UM
Indeno[1,2,3-cd]pyrene	193-39-5	12.58	0.43	97	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.12	-	UM
Benzo[g,h,i]perylene	191-24-2	12.90	0.34	76	UM
Coronene	191-07-1 *	15.26	0.18	0	N
Total (USEPA16) PAHs	-	-	< 6.41	-	N

\* Denotes compound is not UKAS accredited

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	106
Acenaphthene-d10	103
Phenanthrene-d10	107
Chrysene-d12	115
Perylene-d12	128

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	92
Terphenyl-d14	71

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:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208817 Site 1 TP1 North **Job Number:** S14\_2651M  
**LIMS ID Number:** CL1411634 **Date Booked in:** 06-May-14  
**QC Batch Number:** 140379 **Date Extracted:** 08-May-14  
**Quantitation File:** Initial Calibration **Date Analysed:** 12-May-14  
**Directory:** 1214PAH.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	-	UM
Acenaphthylene	208-96-8	-	< 0.08	-	U
Acenaphthene	83-32-9	-	< 0.08	-	UM
Fluorene	86-73-7	-	< 0.08	-	UM
Phenanthrene	85-01-8	-	< 0.08	-	UM
Anthracene	120-12-7	-	< 0.08	-	U
Fluoranthene	206-44-0	-	< 0.08	-	UM
Pyrene	129-00-0	-	< 0.08	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.08	-	UM
Chrysene	218-01-9	-	< 0.08	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.08	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.08	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.08	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.08	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.08	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.08	-	UM
Coronene	191-07-1 *	-	< 0.08	-	N
Total (USEPA16) PAHs	-	-	< 1.35	-	N

\* Denotes compound is not UKAS accredited

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	105
Acenaphthene-d10	101
Phenanthrene-d10	104
Chrysene-d12	110
Perylene-d12	118

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	76
Terphenyl-d14	58

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)

<b>Customer and Site Details:</b>	APSU Environmental Services: West Meadows Industrial Estate		
<b>Sample Details:</b>	45208818 Site 2 TP2 Soutl	<b>Job Number:</b>	S14_2651M
<b>LIMS ID Number:</b>	CL1411635	<b>Date Booked in:</b>	06-May-14
<b>QC Batch Number:</b>	140379	<b>Date Extracted:</b>	08-May-14
<b>Quantitation File:</b>	Initial Calibration	<b>Date Analysed:</b>	12-May-14
<b>Directory:</b>	1214PAH.GC5\	<b>Matrix:</b>	Soil
<b>Dilution:</b>	1.0	<b>Ext Method:</b>	Ultrasonic

Accredited?: Yes

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Naphthalene	91-20-3	-	< 0.11	-	UM
Acenaphthylene	208-96-8	-	< 0.11	-	U
Acenaphthene	83-32-9	-	< 0.11	-	UM
Fluorene	86-73-7	-	< 0.11	-	UM
Phenanthrene	85-01-8	-	< 0.11	-	UM
Anthracene	120-12-7	-	< 0.11	-	U
Fluoranthene	206-44-0	-	< 0.11	-	UM
Pyrene	129-00-0	-	< 0.11	-	UM
Benzo[a]anthracene	56-55-3	-	< 0.11	-	UM
Chrysene	218-01-9	-	< 0.11	-	UM
Benzo[b]fluoranthene	205-99-2	-	< 0.11	-	UM
Benzo[k]fluoranthene	207-08-9	-	< 0.11	-	UM
Benzo[a]pyrene	50-32-8	-	< 0.11	-	UM
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.11	-	UM
Dibenzo[a,h]anthracene	53-70-3	-	< 0.11	-	UM
Benzo[g,h,i]perylene	191-24-2	-	< 0.11	-	UM
Coronene	191-07-1 *	-	< 0.11	-	N
Total (USEPA16) PAHs	-	-	< 1.74	-	N

\* Denotes compound is not UKAS accredited

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	111
Acenaphthene-d10	106
Phenanthrene-d10	106
Chrysene-d12	116
Perylene-d12	123

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	84
Terphenyl-d14	67

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:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208819 Site 3 TP3 Adj to Job Number: S14\_2651M  
**LIMS ID Number:** CL1411636 **Date Booked in:** 06-May-14  
**QC Batch Number:** 140379 **Date Extracted:** 08-May-14  
**Quantitation File:** Initial Calibration **Date Analysed:** 12-May-14  
**Directory:** 1214PAH.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
Coronene	191-07-1 *	-	< 0.09	-	N
Total (USEPA16) PAHs	-	-	< 1.51	-	N

\* Denotes compound is not UKAS accredited

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	NA
Naphthalene-d8	107
Acenaphthene-d10	102
Phenanthrene-d10	105
Chrysene-d12	111
Perylene-d12	118

Surrogates	% Rec
Nitrobenzene-d5	NA
2-Fluorobiphenyl	91
Terphenyl-d14	70

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.



# Polychlorinated Biphenyls (congeners)

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Job Number:** S14\_2651M  
**QC Batch Number:** 140138  
**Directory:** 0509PCB.GC8  
**Method:** Ultrasonic  
**Accreditation code:** N

**Matrix:** SOIL  
**Date Booked in:** 06-May-14  
**Date Extracted:** 08-May-14  
**Date Analysed:** 12-May-14

Sample ID	Customer ID	Concentration, (µg/kg)						
		PCB28	PCB52	PCB101	PCB118	PCB153	PCB138	PCB180
* CL1411633	45208816 Site 1 TP1 Northern 1.1	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3
* CL1411634	45208817 Site 1 TP1 Northern 2.8	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7
* CL1411635	45208818 Site 2 TP2 South	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3
* CL1411636	45208819 Site 3 TP3 Adj to 3.0	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4

# Semi-Volatile Organic Compounds

Accredited?: No

**Customer and Site Details:**

APSU Environmental Services: West Meadows Industrial Estate

**Sample Details:**

45208816 Site 1 TP1 Northern 1. **Date Booked in:** 06-May-14

**LIMS ID Number:**

CL1411633 **Date Extracted:** 07-May-14

**Job Number:**

S14\_2651M **Date Analysed:** 08-May-14

**Matrix:**

Soil

**Ext Method:**

Ultrasonic

**Operator:**

JO

**Directory/Quant File:**

14SVOC.MS16\

**QC Batch Number:**

93

**Multiplier:**

0.2

**Dilution Factor:**

1

**GPC (Y/N)**

N

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Phenol	108-95-2	-	< 0.2	-	N
bis(2-Chloroethyl)ether	111-44-4	-	< 0.2	-	N
2-Chlorophenol	95-57-8	-	< 0.2	-	N
1,3-Dichlorobenzene	541-73-1	-	< 0.2	-	N
1,4-Dichlorobenzene	106-46-7	-	< 0.2	-	N
Benzyl alcohol	100-51-6	-	< 0.2	-	N
1,2-Dichlorobenzene	95-50-1	-	< 0.2	-	N
2-Methylphenol	95-48-7	-	< 0.2	-	N
bis(2-Chloroisopropyl)ether	108-60-1	-	< 0.8	-	N
Hexachloroethane	67-72-1	-	< 0.2	-	N
N-Nitroso-di-n-propylamine	621-64-7	-	< 0.8	-	N
3- & 4-Methylphenol	108-39-4/106-44-5	-	< 0.2	-	N
Nitrobenzene	98-95-3	-	< 0.8	-	N
Isophorone	78-59-1	-	< 0.2	-	N
2-Nitrophenol	88-75-5	-	< 0.2	-	N
2,4-Dimethylphenol	105-67-9	-	< 0.2	-	N
Benzoic Acid	65-85-0	-	< 0.8	-	N
bis(2-Chloroethoxy)methane	111-91-1	-	< 0.2	-	N
2,4-Dichlorophenol	120-83-2	-	< 0.2	-	N
1,2,4-Trichlorobenzene	120-82-1	-	< 0.2	-	N
Naphthalene	91-20-3	-	< 0.2	-	N
4-Chlorophenol	106-48-9	-	< 0.8	-	N
4-Chloroaniline	106-47-8	-	< 0.8	-	N
Hexachlorobutadiene	87-68-3	-	< 0.2	-	N
4-Chloro-3-methylphenol	59-50-7	-	< 0.2	-	N
2-Methylnaphthalene	91-57-6	-	< 0.2	-	N
1-Methylnaphthalene	90-12-0	-	< 0.2	-	N
Hexachlorocyclopentadiene	77-47-4	-	< 0.2	-	N
2,4,6-Trichlorophenol	88-06-2	-	< 0.2	-	N
2,4,5-Trichlorophenol	95-95-4	-	< 0.2	-	N
2-Chloronaphthalene	91-58-7	-	< 0.2	-	N
Biphenyl	92-52-4	-	< 0.2	-	N
Diphenyl ether	101-84-8	-	< 0.2	-	N
2-Nitroaniline	88-74-4	-	< 0.8	-	N
Acenaphthylene	208-96-8	-	< 0.2	-	N
Dimethylphthalate	131-11-3	-	< 0.2	-	N
2,6-Dinitrotoluene	606-20-2	-	< 0.2	-	N
Acenaphthene	83-32-9	-	< 0.2	-	N
3-Nitroaniline	99-09-2	-	< 0.8	-	N

Target Compounds	CAS #	R.T.	Concentration mg/kg	% Fit	Accr. code
2,4-Dinitrophenol	51-28-5	-	< 0.8	-	N
Dibenzofuran	132-64-9	-	< 0.2	-	N
4-Nitrophenol	100-02-7	-	< 0.8	-	N
2,4-Dinitrotoluene	121-14-2	-	< 0.8	-	N
Fluorene	86-73-7	-	< 0.2	-	N
Diethylphthalate	84-66-2	-	< 0.2	-	N
4-Chlorophenyl-phenylether	7005-72-3	-	< 0.2	-	N
4,6-Dinitro-2-methylphenol	534-52-1	-	< 0.8	-	N
4-Nitroaniline	100-01-6	-	< 0.8	-	N
N-Nitrosodiphenylamine	86-30-6	-	< 0.2	-	N
4-Bromophenyl-phenylether	101-55-3	-	< 0.2	-	N
Hexachlorobenzene	118-74-1	-	< 0.2	-	N
Pentachlorophenol	87-86-5	-	< 0.8	-	N
Phenanthrene	85-01-8	10.65	0.3	99	N
Anthracene	120-12-7	-	< 0.2	-	N
Di-n-butylphthalate	84-74-2	-	< 0.2	-	N
Fluoranthene	206-44-0	12.47	0.5	93	N
Pyrene	129-00-0	12.81	0.5	88	N
Butylbenzylphthalate	85-68-7	-	< 0.3	-	N
Benzo[a]anthracene	56-55-3	-	< 0.3	-	N
Chrysene	218-01-9	14.78	0.3	86	N
3,3'-Dichlorobenzidine	91-94-1	-	< 0.8	-	N
bis(2-Ethylhexyl)phthalate	117-81-7	-	< 0.3	-	N
Di-n-octylphthalate	117-84-0	-	< 0.3	-	N
Benzo[b]fluoranthene	205-99-2	16.35	0.3	78	N
Benzo[k]fluoranthene	207-08-9	-	< 0.3	-	N
Benzo[a]pyrene	50-32-8	-	< 0.3	-	N
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.8	-	N
Dibenzo[a,h]anthracene	53-70-3	-	< 0.8	-	N
Benzo[g,h,i]perylene	191-24-2	-	< 0.8	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	119
Naphthalene-d8	117
Acenaphthene-d10	113
Phenanthrene-d10	108
Chrysene-d12	112
Perylene-d12	96

Surrogates	% Rec
2-Fluorophenol	102
Phenol-d5	107
Nitrobenzene-d5	113
2-Fluorobiphenyl	92
2,4,6-Tribromophenol	82
Terphenyl-d14	97

This analysis was conducted on an 'As Received' basis.

Concentrations are reported on a dry weight basis.

# Semi-Volatile Organic Compounds

Accredited?: No

**Customer and Site Details:**

APSU Environmental Services: West Meadows Industrial Estate

**Sample Details:**

45208817 Site 1 TP1 Northern 2. **Date Booked in:** 06-May-14

**LIMS ID Number:**

CL1411634 **Date Extracted:** 07-May-14

**Job Number:**

s14\_2651M **Date Analysed:** 08-May-14

**Matrix:**

Soil

**Ext Method:**

Ultrasonic

**Operator:**

JO

**Directory/Quant File:**

14SVOC.MS16\

**QC Batch Number:**

93

**Multiplier:**

0.2

**Dilution Factor:**

1

**GPC (Y/N)**

N

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Phenol	108-95-2	-	< 0.1	-	N
bis(2-Chloroethyl)ether	111-44-4	-	< 0.1	-	N
2-Chlorophenol	95-57-8	-	< 0.1	-	N
1,3-Dichlorobenzene	541-73-1	-	< 0.1	-	N
1,4-Dichlorobenzene	106-46-7	-	< 0.1	-	N
Benzyl alcohol	100-51-6	-	< 0.1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 0.1	-	N
2-Methylphenol	95-48-7	-	< 0.1	-	N
bis(2-Chloroisopropyl)ether	108-60-1	-	< 0.5	-	N
Hexachloroethane	67-72-1	-	< 0.1	-	N
N-Nitroso-di-n-propylamine	621-64-7	-	< 0.5	-	N
3- & 4-Methylphenol	108-39-4/106-44-5	-	< 0.1	-	N
Nitrobenzene	98-95-3	-	< 0.5	-	N
Isophorone	78-59-1	-	< 0.1	-	N
2-Nitrophenol	88-75-5	-	< 0.1	-	N
2,4-Dimethylphenol	105-67-9	-	< 0.1	-	N
Benzoic Acid	65-85-0	-	< 0.5	-	N
bis(2-Chloroethoxy)methane	111-91-1	-	< 0.1	-	N
2,4-Dichlorophenol	120-83-2	-	< 0.1	-	N
1,2,4-Trichlorobenzene	120-82-1	-	< 0.1	-	N
Naphthalene	91-20-3	-	< 0.1	-	N
4-Chlorophenol	106-48-9	-	< 0.5	-	N
4-Chloroaniline	106-47-8	-	< 0.5	-	N
Hexachlorobutadiene	87-68-3	-	< 0.1	-	N
4-Chloro-3-methylphenol	59-50-7	-	< 0.1	-	N
2-Methylnaphthalene	91-57-6	-	< 0.1	-	N
1-Methylnaphthalene	90-12-0	-	< 0.1	-	N
Hexachlorocyclopentadiene	77-47-4	-	< 0.1	-	N
2,4,6-Trichlorophenol	88-06-2	-	< 0.1	-	N
2,4,5-Trichlorophenol	95-95-4	-	< 0.1	-	N
2-Chloronaphthalene	91-58-7	-	< 0.1	-	N
Biphenyl	92-52-4	-	< 0.1	-	N
Diphenyl ether	101-84-8	-	< 0.1	-	N
2-Nitroaniline	88-74-4	-	< 0.5	-	N
Acenaphthylene	208-96-8	-	< 0.1	-	N
Dimethylphthalate	131-11-3	-	< 0.1	-	N
2,6-Dinitrotoluene	606-20-2	-	< 0.1	-	N
Acenaphthene	83-32-9	-	< 0.1	-	N
3-Nitroaniline	99-09-2	-	< 0.5	-	N

Target Compounds	CAS #	R.T.	Concentration mg/kg	% Fit	Accr. code
2,4-Dinitrophenol	51-28-5	-	< 0.5	-	N
Dibenzofuran	132-64-9	-	< 0.1	-	N
4-Nitrophenol	100-02-7	-	< 0.5	-	N
2,4-Dinitrotoluene	121-14-2	-	< 0.5	-	N
Fluorene	86-73-7	-	< 0.1	-	N
Diethylphthalate	84-66-2	-	< 0.1	-	N
4-Chlorophenyl-phenylether	7005-72-3	-	< 0.1	-	N
4,6-Dinitro-2-methylphenol	534-52-1	-	< 0.5	-	N
4-Nitroaniline	100-01-6	-	< 0.5	-	N
N-Nitrosodiphenylamine	86-30-6	-	< 0.1	-	N
4-Bromophenyl-phenylether	101-55-3	-	< 0.1	-	N
Hexachlorobenzene	118-74-1	-	< 0.1	-	N
Pentachlorophenol	87-86-5	-	< 0.5	-	N
Phenanthrene	85-01-8	-	< 0.1	-	N
Anthracene	120-12-7	-	< 0.1	-	N
Di-n-butylphthalate	84-74-2	-	< 0.1	-	N
Fluoranthene	206-44-0	-	< 0.2	-	N
Pyrene	129-00-0	-	< 0.2	-	N
Butylbenzylphthalate	85-68-7	-	< 0.2	-	N
Benzo[a]anthracene	56-55-3	-	< 0.2	-	N
Chrysene	218-01-9	-	< 0.2	-	N
3,3'-Dichlorobenzidine	91-94-1	-	< 0.5	-	N
bis(2-Ethylhexyl)phthalate	117-81-7	-	< 0.2	-	N
Di-n-octylphthalate	117-84-0	-	< 0.2	-	N
Benzo[b]fluoranthene	205-99-2	-	< 0.2	-	N
Benzo[k]fluoranthene	207-08-9	-	< 0.2	-	N
Benzo[a]pyrene	50-32-8	-	< 0.2	-	N
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.5	-	N
Dibenzo[a,h]anthracene	53-70-3	-	< 0.5	-	N
Benzo[g,h,i]perylene	191-24-2	-	< 0.5	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	117
Naphthalene-d8	114
Acenaphthene-d10	107
Phenanthrene-d10	104
Chrysene-d12	96
Perylene-d12	87

Surrogates	% Rec
2-Fluorophenol	100
Phenol-d5	109
Nitrobenzene-d5	114
2-Fluorobiphenyl	96
2,4,6-Tribromophenol	66
Terphenyl-d14	110

This analysis was conducted on an 'As Received' basis.

Concentrations are reported on a dry weight basis.

# Semi-Volatile Organic Compounds

Accredited?: No

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208818 Site 2 TP2 South **Date Booked in:** 06-May-14  
**LIMS ID Number:** CL1411635 **Date Extracted:** 07-May-14  
**Job Number:** S14\_2651M **Date Analysed:** 08-May-14

**Matrix:** Soil **QC Batch Number:** 93  
**Ext Method:** Ultrasonic **Multiplier:** 0.2  
**Operator:** JO **Dilution Factor:** 1  
**Directory/Quant File:** 14SVOC.MS16\ **GPC (Y/N)** N

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Phenol	108-95-2	-	< 0.1	-	N
bis(2-Chloroethyl)ether	111-44-4	-	< 0.1	-	N
2-Chlorophenol	95-57-8	-	< 0.1	-	N
1,3-Dichlorobenzene	541-73-1	-	< 0.1	-	N
1,4-Dichlorobenzene	106-46-7	-	< 0.1	-	N
Benzyl alcohol	100-51-6	-	< 0.1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 0.1	-	N
2-Methylphenol	95-48-7	-	< 0.1	-	N
bis(2-Chloroisopropyl)ether	108-60-1	-	< 0.7	-	N
Hexachloroethane	67-72-1	-	< 0.1	-	N
N-Nitroso-di-n-propylamine	621-64-7	-	< 0.7	-	N
3- & 4-Methylphenol	108-39-4/106-44-5	-	< 0.1	-	N
Nitrobenzene	98-95-3	-	< 0.7	-	N
Isophorone	78-59-1	-	< 0.1	-	N
2-Nitrophenol	88-75-5	-	< 0.1	-	N
2,4-Dimethylphenol	105-67-9	-	< 0.1	-	N
Benzoic Acid	65-85-0	-	< 0.7	-	N
bis(2-Chloroethoxy)methane	111-91-1	-	< 0.1	-	N
2,4-Dichlorophenol	120-83-2	-	< 0.1	-	N
1,2,4-Trichlorobenzene	120-82-1	-	< 0.1	-	N
Naphthalene	91-20-3	-	< 0.1	-	N
4-Chlorophenol	106-48-9	-	< 0.7	-	N
4-Chloroaniline	106-47-8	-	< 0.7	-	N
Hexachlorobutadiene	87-68-3	-	< 0.1	-	N
4-Chloro-3-methylphenol	59-50-7	-	< 0.1	-	N
2-Methylnaphthalene	91-57-6	-	< 0.1	-	N
1-Methylnaphthalene	90-12-0	-	< 0.1	-	N
Hexachlorocyclopentadiene	77-47-4	-	< 0.1	-	N
2,4,6-Trichlorophenol	88-06-2	-	< 0.1	-	N
2,4,5-Trichlorophenol	95-95-4	-	< 0.1	-	N
2-Chloronaphthalene	91-58-7	-	< 0.1	-	N
Biphenyl	92-52-4	-	< 0.1	-	N
Diphenyl ether	101-84-8	-	< 0.1	-	N
2-Nitroaniline	88-74-4	-	< 0.7	-	N
Acenaphthylene	208-96-8	-	< 0.1	-	N
Dimethylphthalate	131-11-3	-	< 0.1	-	N
2,6-Dinitrotoluene	606-20-2	-	< 0.1	-	N
Acenaphthene	83-32-9	-	< 0.1	-	N
3-Nitroaniline	99-09-2	-	< 0.7	-	N

Target Compounds	CAS #	R.T.	Concentration mg/kg	% Fit	Accr. code
2,4-Dinitrophenol	51-28-5	-	< 0.7	-	N
Dibenzofuran	132-64-9	-	< 0.1	-	N
4-Nitrophenol	100-02-7	-	< 0.7	-	N
2,4-Dinitrotoluene	121-14-2	-	< 0.7	-	N
Fluorene	86-73-7	-	< 0.1	-	N
Diethylphthalate	84-66-2	-	< 0.1	-	N
4-Chlorophenyl-phenylether	7005-72-3	-	< 0.1	-	N
4,6-Dinitro-2-methylphenol	534-52-1	-	< 0.7	-	N
4-Nitroaniline	100-01-6	-	< 0.7	-	N
N-Nitrosodiphenylamine	86-30-6	-	< 0.1	-	N
4-Bromophenyl-phenylether	101-55-3	-	< 0.1	-	N
Hexachlorobenzene	118-74-1	-	< 0.1	-	N
Pentachlorophenol	87-86-5	-	< 0.7	-	N
Phenanthrene	85-01-8	-	< 0.1	-	N
Anthracene	120-12-7	-	< 0.1	-	N
Di-n-butylphthalate	84-74-2	-	< 0.1	-	N
Fluoranthene	206-44-0	-	< 0.3	-	N
Pyrene	129-00-0	-	< 0.3	-	N
Butylbenzylphthalate	85-68-7	-	< 0.3	-	N
Benzo[a]anthracene	56-55-3	-	< 0.3	-	N
Chrysene	218-01-9	-	< 0.3	-	N
3,3'-Dichlorobenzidine	91-94-1	-	< 0.7	-	N
bis(2-Ethylhexyl)phthalate	117-81-7	-	< 0.3	-	N
Di-n-octylphthalate	117-84-0	-	< 0.3	-	N
Benzo[b]fluoranthene	205-99-2	-	< 0.3	-	N
Benzo[k]fluoranthene	207-08-9	-	< 0.3	-	N
Benzo[a]pyrene	50-32-8	-	< 0.3	-	N
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.7	-	N
Dibenzo[a,h]anthracene	53-70-3	-	< 0.7	-	N
Benzo[g,h,i]perylene	191-24-2	-	< 0.7	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	125
Naphthalene-d8	125
Acenaphthene-d10	118
Phenanthrene-d10	116
Chrysene-d12	104
Perylene-d12	83

Surrogates	% Rec
2-Fluorophenol	107
Phenol-d5	113
Nitrobenzene-d5	110
2-Fluorobiphenyl	95
2,4,6-Tribromophenol	54
Terphenyl-d14	110

This analysis was conducted on an 'As Received' basis.

Concentrations are reported on a dry weight basis.



# Semi-Volatile Organic Compounds

Accredited?: No

**Customer and Site Details:**

APSU Environmental Services: West Meadows Industrial Estate

**Sample Details:**

45208819 Site 3 TP3 Adj to 3.0

**LIMS ID Number:**

CL1411636

**Job Number:**

S14\_2651M

**Date Booked in:**

06-May-14

**Date Extracted:**

07-May-14

**Date Analysed:**

08-May-14

**Matrix:**

Soil

**Ext Method:**

Ultrasonic

**Operator:**

JO

**Directory/Quant File:**

14SVOC.MS16\

**QC Batch Number:**

93

**Multiplier:**

0.2

**Dilution Factor:**

1

**GPC (Y/N)**

N

Target Compounds	CAS #	R.T. (min)	Concentration mg/kg	% Fit	Accr. code
Phenol	108-95-2	-	< 0.1	-	N
bis(2-Chloroethyl)ether	111-44-4	-	< 0.1	-	N
2-Chlorophenol	95-57-8	-	< 0.1	-	N
1,3-Dichlorobenzene	541-73-1	-	< 0.1	-	N
1,4-Dichlorobenzene	106-46-7	-	< 0.1	-	N
Benzyl alcohol	100-51-6	-	< 0.1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 0.1	-	N
2-Methylphenol	95-48-7	-	< 0.1	-	N
bis(2-Chloroisopropyl)ether	108-60-1	-	< 0.6	-	N
Hexachloroethane	67-72-1	-	< 0.1	-	N
N-Nitroso-di-n-propylamine	621-64-7	-	< 0.6	-	N
3- & 4-Methylphenol	108-39-4/106-44-5	-	< 0.1	-	N
Nitrobenzene	98-95-3	-	< 0.6	-	N
Isophorone	78-59-1	-	< 0.1	-	N
2-Nitrophenol	88-75-5	-	< 0.1	-	N
2,4-Dimethylphenol	105-67-9	-	< 0.1	-	N
Benzoic Acid	65-85-0	-	< 0.6	-	N
bis(2-Chloroethoxy)methane	111-91-1	-	< 0.1	-	N
2,4-Dichlorophenol	120-83-2	-	< 0.1	-	N
1,2,4-Trichlorobenzene	120-82-1	-	< 0.1	-	N
Naphthalene	91-20-3	-	< 0.1	-	N
4-Chlorophenol	106-48-9	-	< 0.6	-	N
4-Chloroaniline	106-47-8	-	< 0.6	-	N
Hexachlorobutadiene	87-68-3	-	< 0.1	-	N
4-Chloro-3-methylphenol	59-50-7	-	< 0.1	-	N
2-Methylnaphthalene	91-57-6	-	< 0.1	-	N
1-Methylnaphthalene	90-12-0	-	< 0.1	-	N
Hexachlorocyclopentadiene	77-47-4	-	< 0.1	-	N
2,4,6-Trichlorophenol	88-06-2	-	< 0.1	-	N
2,4,5-Trichlorophenol	95-95-4	-	< 0.1	-	N
2-Chloronaphthalene	91-58-7	-	< 0.1	-	N
Biphenyl	92-52-4	-	< 0.1	-	N
Diphenyl ether	101-84-8	-	< 0.1	-	N
2-Nitroaniline	88-74-4	-	< 0.6	-	N
Acenaphthylene	208-96-8	-	< 0.1	-	N
Dimethylphthalate	131-11-3	-	< 0.1	-	N
2,6-Dinitrotoluene	606-20-2	-	< 0.1	-	N
Acenaphthene	83-32-9	-	< 0.1	-	N
3-Nitroaniline	99-09-2	-	< 0.6	-	N

Target Compounds	CAS #	R.T.	Concentration mg/kg	% Fit	Accr. code
2,4-Dinitrophenol	51-28-5	-	< 0.6	-	N
Dibenzofuran	132-64-9	-	< 0.1	-	N
4-Nitrophenol	100-02-7	-	< 0.6	-	N
2,4-Dinitrotoluene	121-14-2	-	< 0.6	-	N
Fluorene	86-73-7	-	< 0.1	-	N
Diethylphthalate	84-66-2	-	< 0.1	-	N
4-Chlorophenyl-phenylether	7005-72-3	-	< 0.1	-	N
4,6-Dinitro-2-methylphenol	534-52-1	-	< 0.6	-	N
4-Nitroaniline	100-01-6	-	< 0.6	-	N
N-Nitrosodiphenylamine	86-30-6	-	< 0.1	-	N
4-Bromophenyl-phenylether	101-55-3	-	< 0.1	-	N
Hexachlorobenzene	118-74-1	-	< 0.1	-	N
Pentachlorophenol	87-86-5	-	< 0.6	-	N
Phenanthrene	85-01-8	-	< 0.1	-	N
Anthracene	120-12-7	-	< 0.1	-	N
Di-n-butylphthalate	84-74-2	-	< 0.1	-	N
Fluoranthene	206-44-0	-	< 0.2	-	N
Pyrene	129-00-0	-	< 0.2	-	N
Butylbenzylphthalate	85-68-7	-	< 0.2	-	N
Benzo[a]anthracene	56-55-3	-	< 0.2	-	N
Chrysene	218-01-9	-	< 0.2	-	N
3,3'-Dichlorobenzidine	91-94-1	-	< 0.6	-	N
bis(2-Ethylhexyl)phthalate	117-81-7	-	< 0.2	-	N
Di-n-octylphthalate	117-84-0	-	< 0.2	-	N
Benzo[b]fluoranthene	205-99-2	-	< 0.2	-	N
Benzo[k]fluoranthene	207-08-9	-	< 0.2	-	N
Benzo[a]pyrene	50-32-8	-	< 0.2	-	N
Indeno[1,2,3-cd]pyrene	193-39-5	-	< 0.6	-	N
Dibenzo[a,h]anthracene	53-70-3	-	< 0.6	-	N
Benzo[g,h,i]perylene	191-24-2	-	< 0.6	-	N

"M" denotes that % fit has been manually interpreted

Internal Standards	% Area
1,4-Dichlorobenzene-d4	115
Naphthalene-d8	113
Acenaphthene-d10	104
Phenanthrene-d10	103
Chrysene-d12	93
Perylene-d12	72

Surrogates	% Rec
2-Fluorophenol	101
Phenol-d5	104
Nitrobenzene-d5	114
2-Fluorobiphenyl	99
2,4,6-Tribromophenol	59
Terphenyl-d14	110

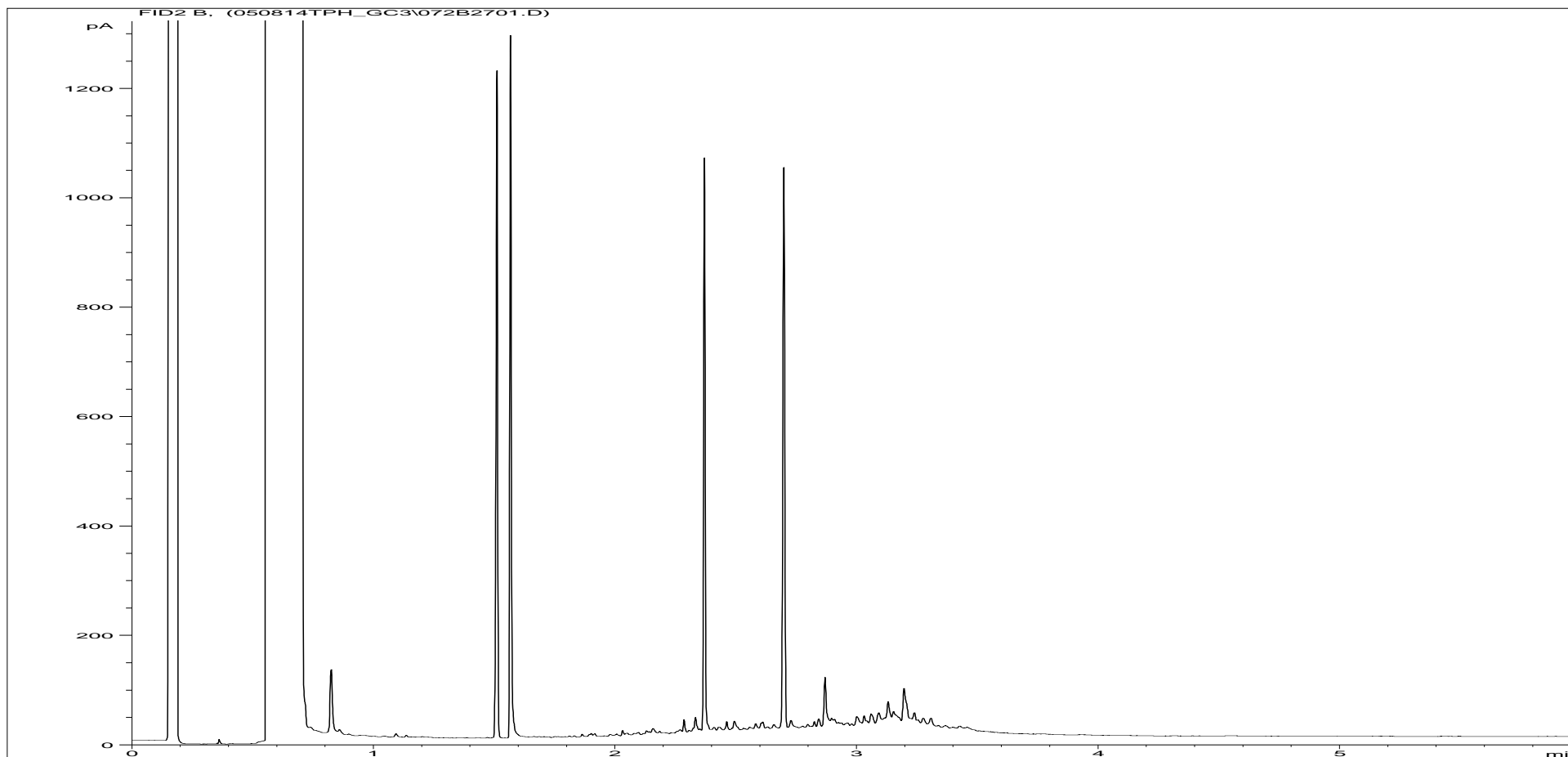
This analysis was conducted on an 'As Received' basis.

Concentrations are reported on a dry weight basis.





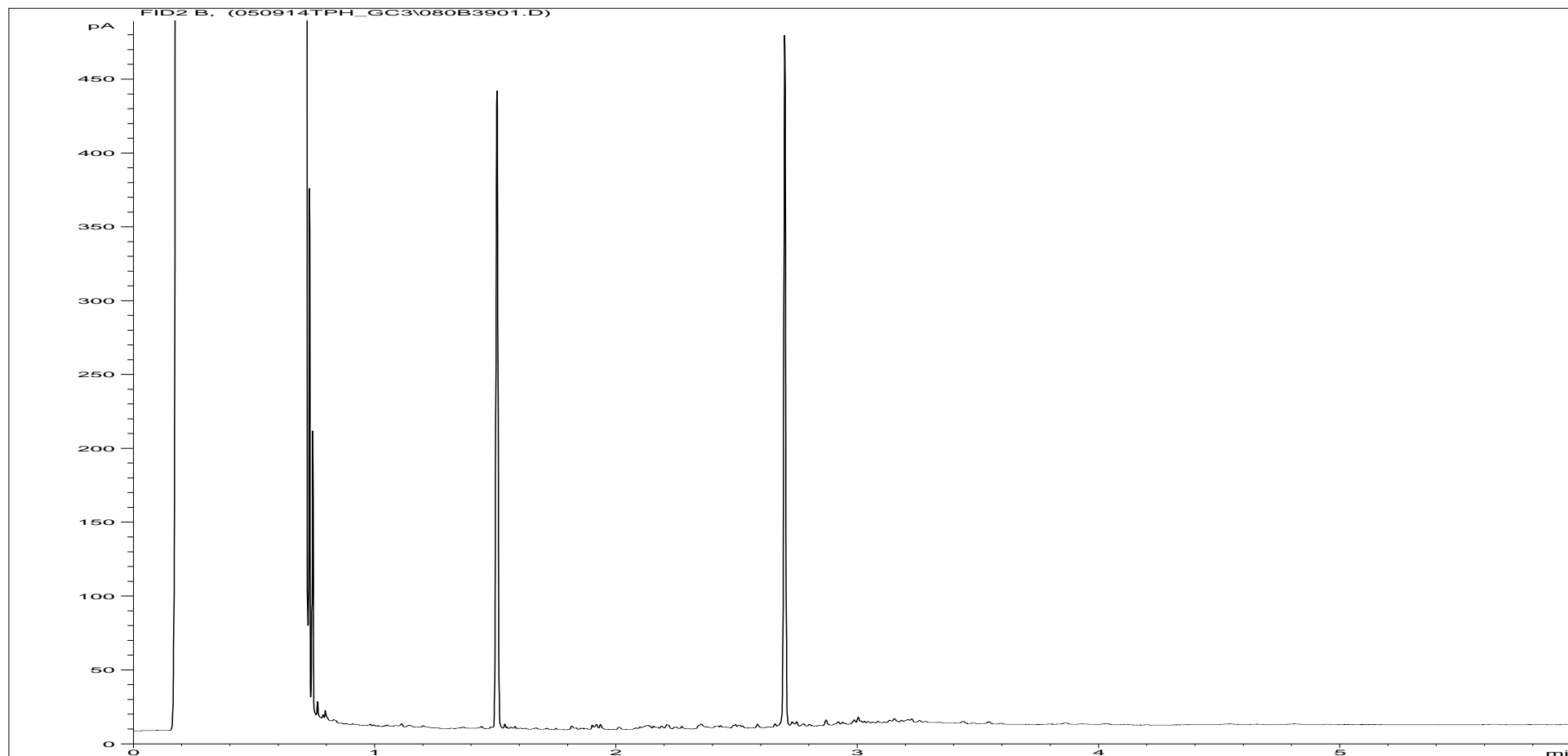
Petroleum Hydrocarbons (C8 to C40) by GC/FID



<b>Sample ID:</b>	CL1411633	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	8	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208816 Site 1 TP1 Northern 1.1
<b>Acquisition Date/Time:</b>	08-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050814TPH_GC3\072B2701.D		

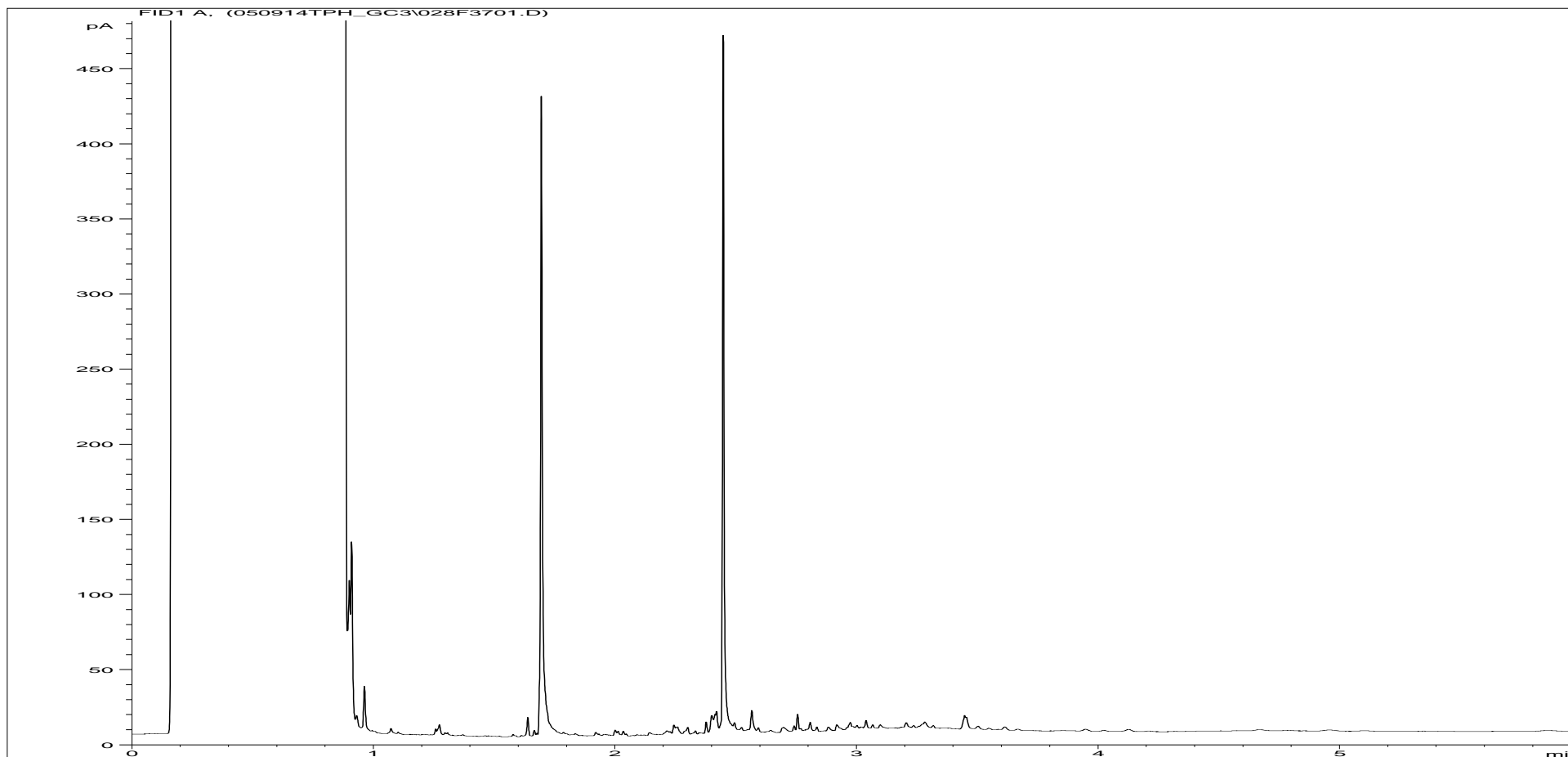


Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



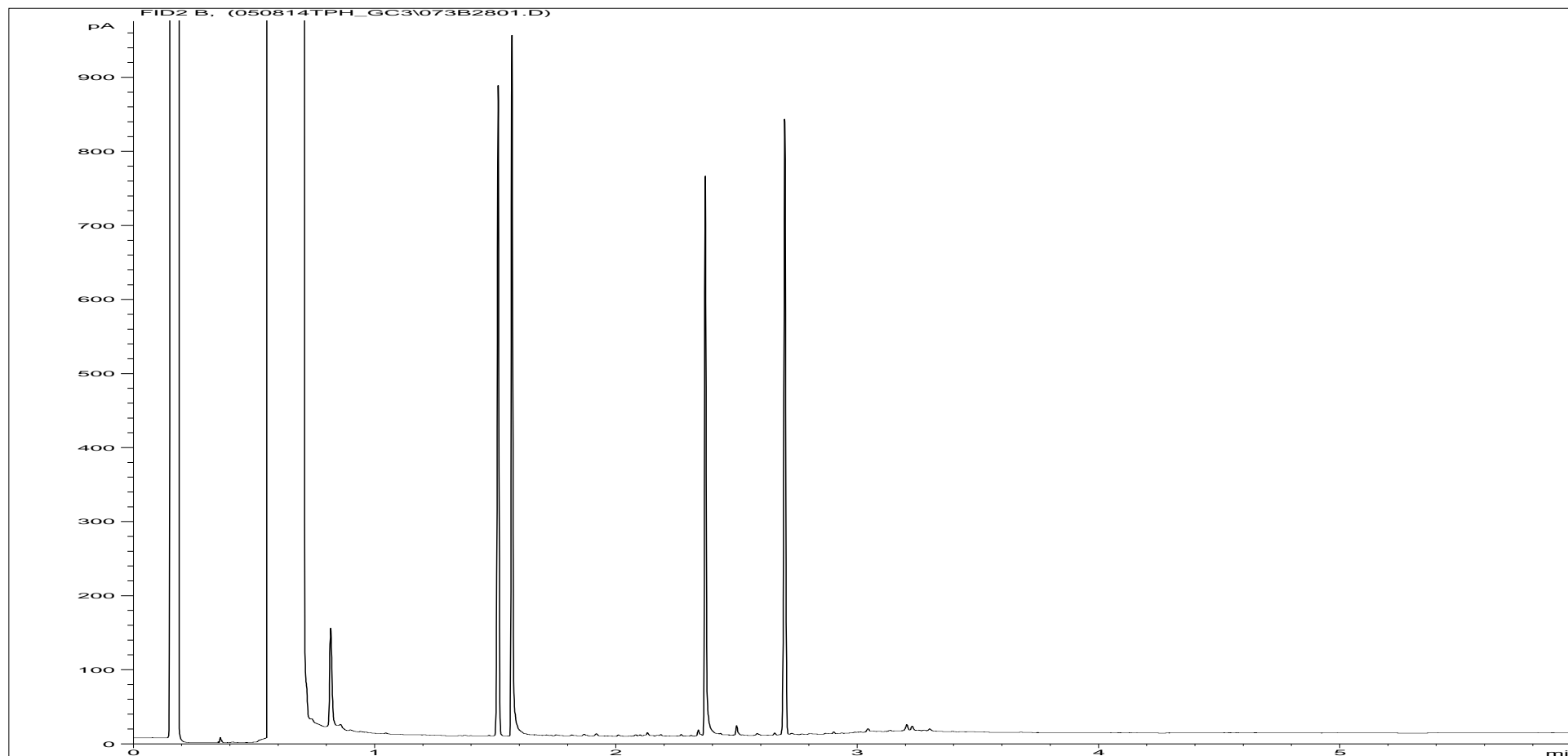
<b>Sample ID:</b>	CL1411633ALI	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	15.36	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208816 Site 1 TP1 Northern 1.1
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\080B3901.D		

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



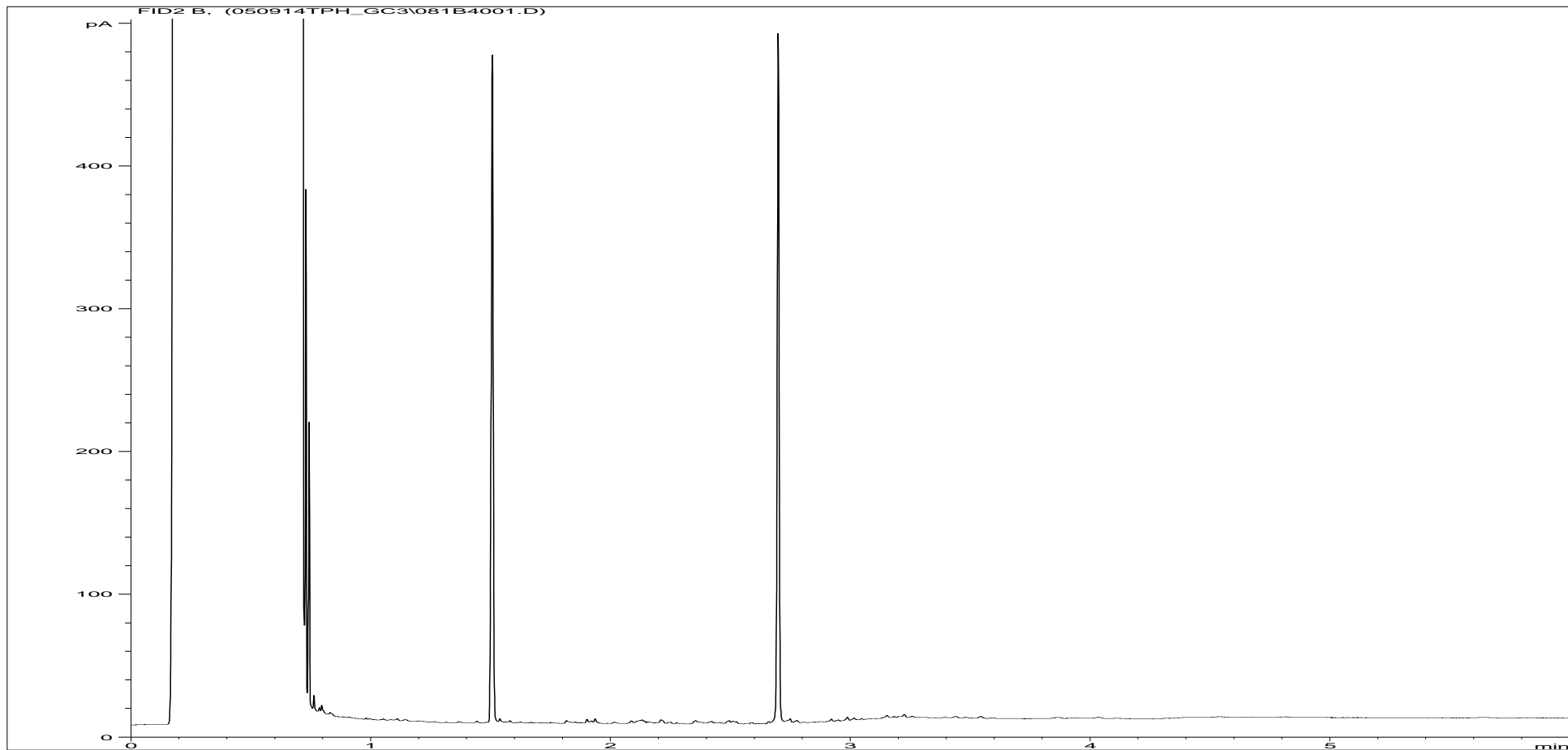
<b>Sample ID:</b>	CL1411633ARO	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	11.68	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208816 Site 1 TP1 Northern 1.1
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\028F3701.D		

Petroleum Hydrocarbons (C8 to C40) by GC/FID



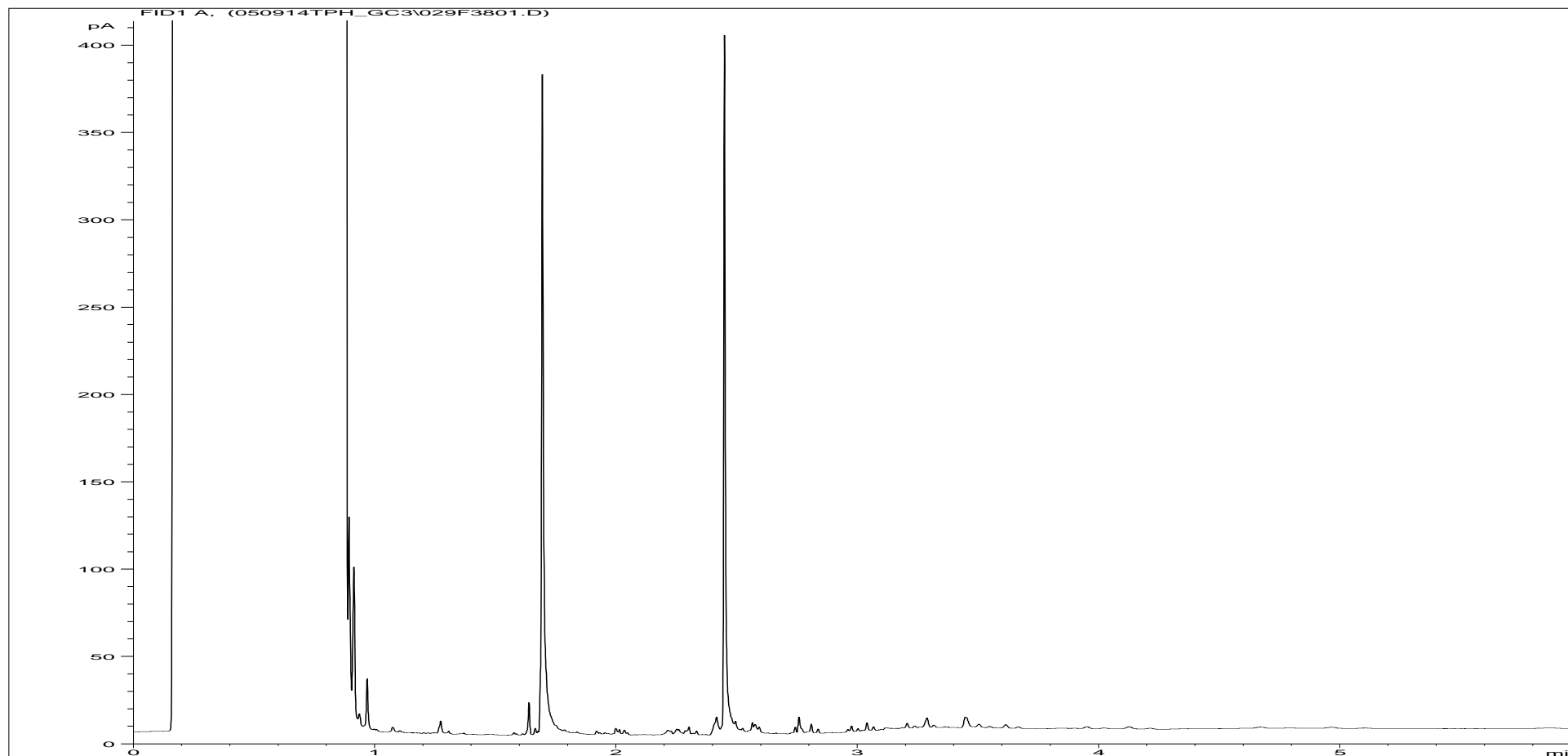
<b>Sample ID:</b>	CL1411634	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	8	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208817 Site 1 TP1 Northern 2.8
<b>Acquisition Date/Time:</b>	08-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050814TPH_GC3\073B2801.D		

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



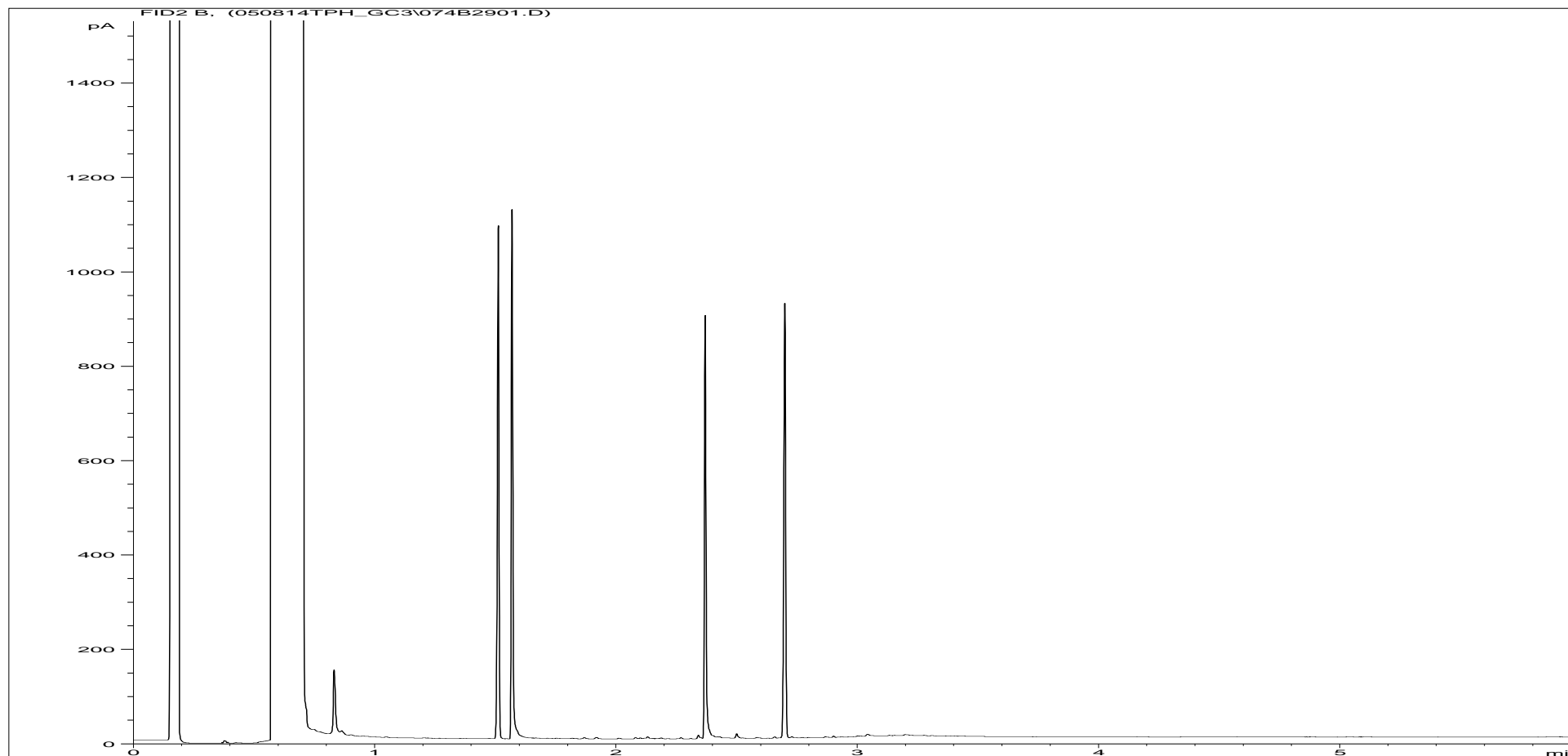
<b>Sample ID:</b>	CL1411634ALI	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	15.52	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208817 Site 1 TP1 Northern 2.8
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\081B4001.D		

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



<b>Sample ID:</b>	CL1411634ARO	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	11.68	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208817 Site 1 TP1 Northern 2.8
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\029F3801.D		

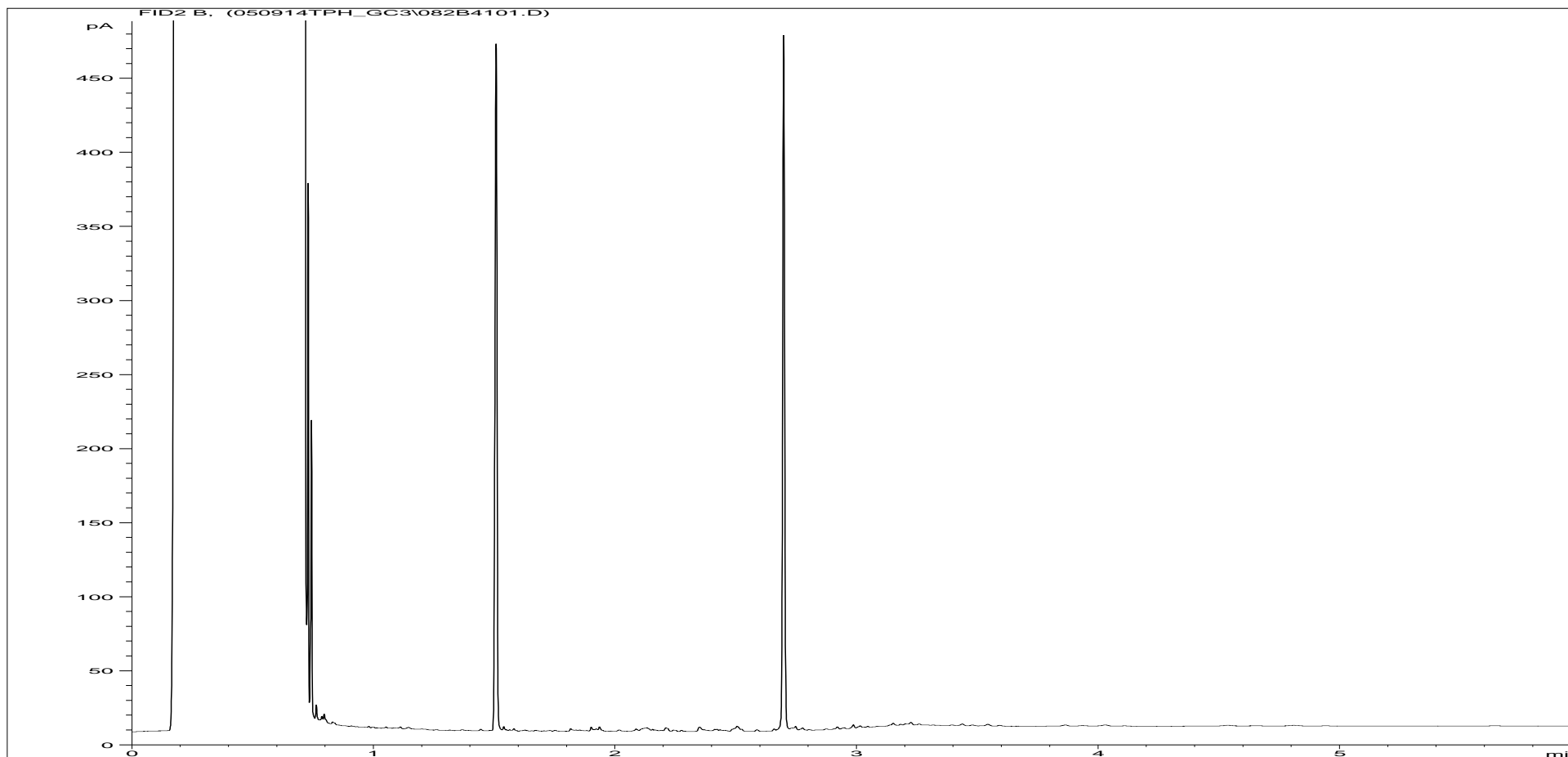
Petroleum Hydrocarbons (C8 to C40) by GC/FID



<b>Sample ID:</b>	CL1411635	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	8	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208818 Site 2 TP2 South
<b>Acquisition Date/Time:</b>	08-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050814TPH_GC3\074B2901.D		

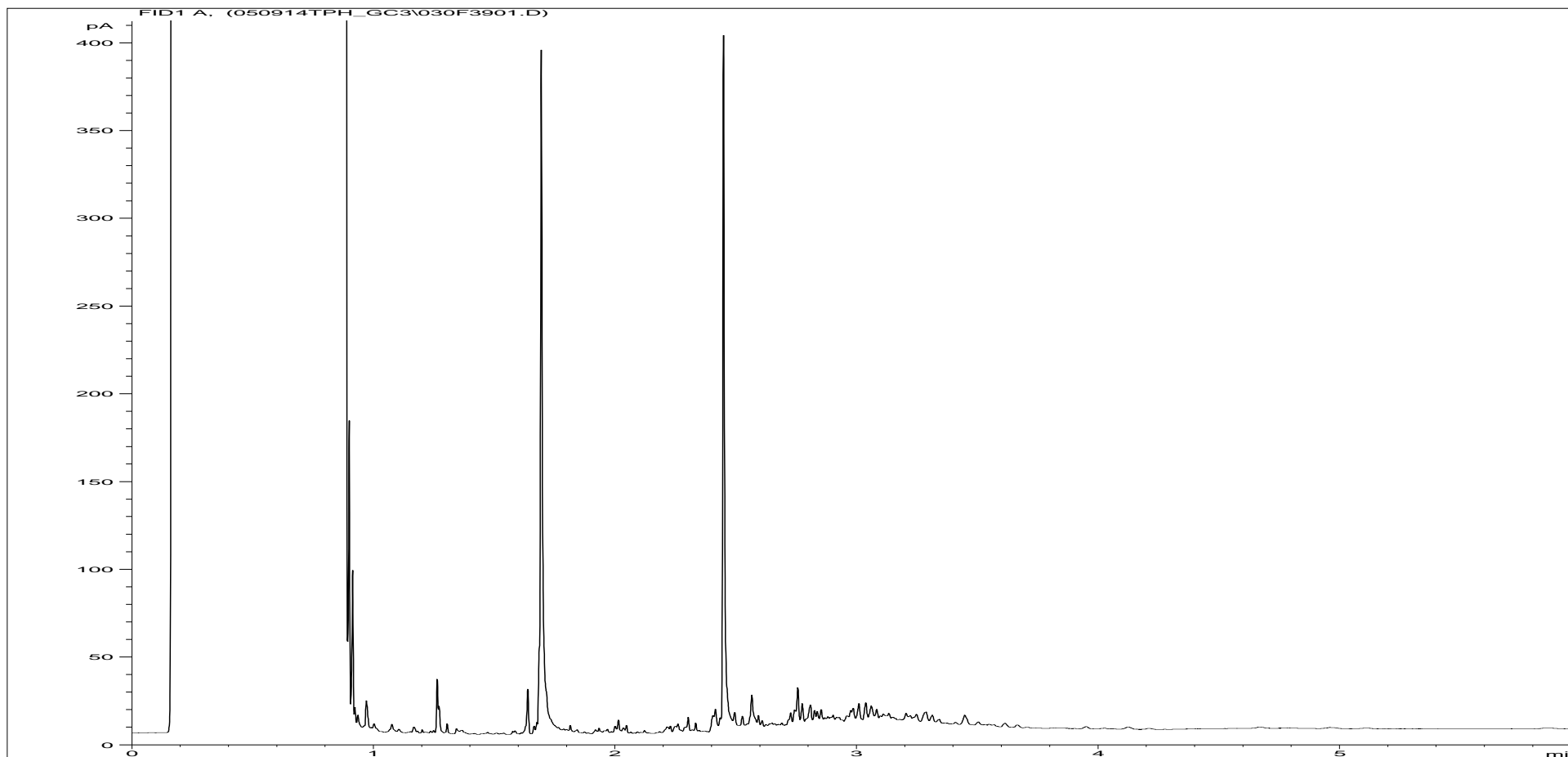


Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.



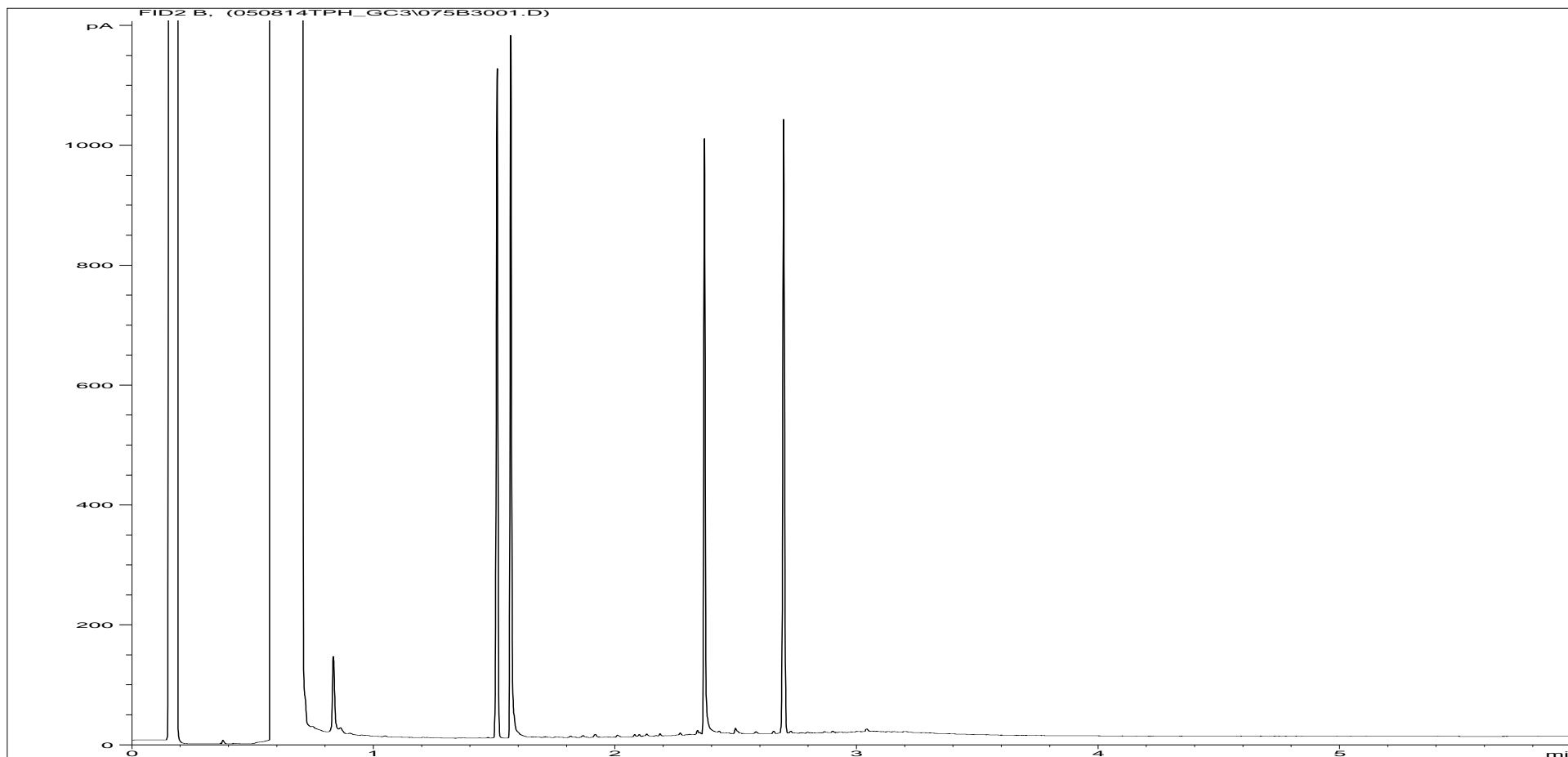
<b>Sample ID:</b>	CL1411635ALI	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	15.52	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208818 Site 2 TP2 South
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\082B4101.D		

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



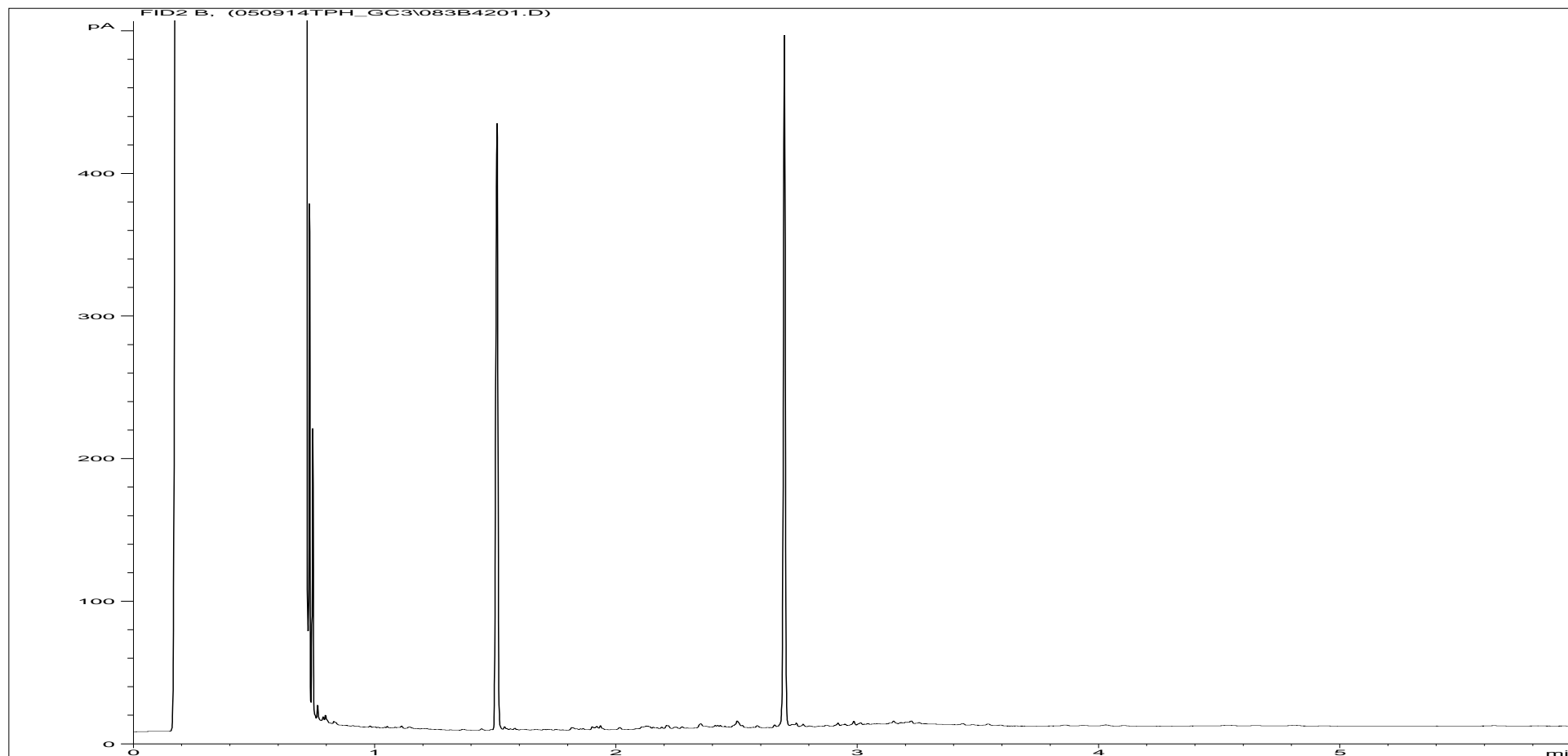
<b>Sample ID:</b>	CL1411635ARO	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	11.52	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208818 Site 2 TP2 South
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\030F3901.D		

Petroleum Hydrocarbons (C8 to C40) by GC/FID



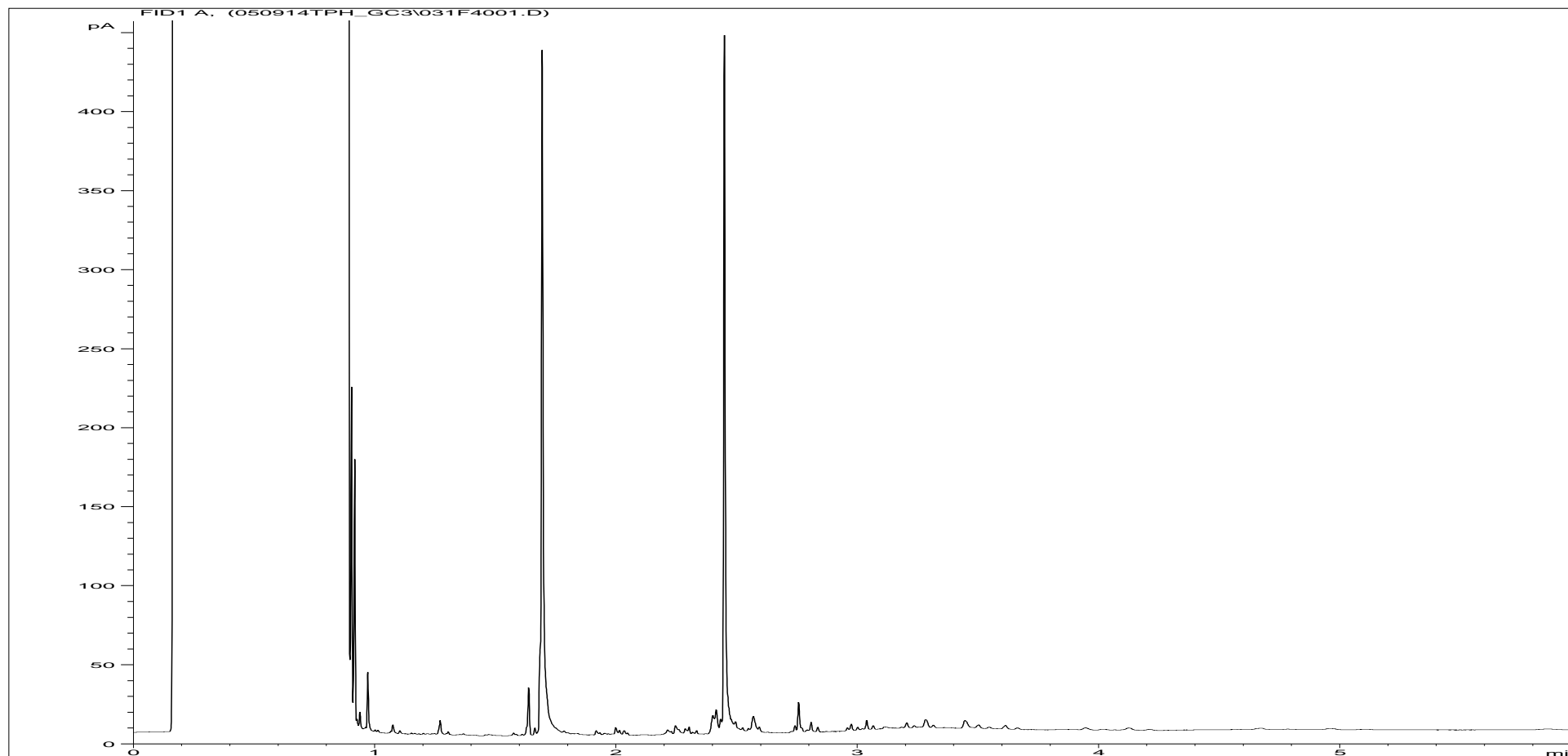
<b>Sample ID:</b>	CL1411636	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	8	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208819 Site 3 TP3 Adj to 3.0
<b>Acquisition Date/Time:</b>	08-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050814TPH_GC3\075B3001.D		

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



<b>Sample ID:</b>	CL1411636ALI	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	15.52	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208819 Site 3 TP3 Adj to 3.0
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\083B4201.D		

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



<b>Sample ID:</b>	CL1411636ARO	<b>Job Number:</b>	S14_2651M
<b>Multiplier:</b>	11.68	<b>Client:</b>	APSU Environmental Services
<b>Dilution:</b>	1	<b>Site:</b>	West Meadows Industrial Estate
<b>Acquisition Method:</b>	5UL_RUNF.M	<b>Client Sample Ref:</b>	45208819 Site 3 TP3 Adj to 3.0
<b>Acquisition Date/Time:</b>	09-May-14		
<b>Datafile:</b>	D:\TES\DATA\Y2013\02\050914TPH_GC3\031F4001.D		

# Volatile Organic Compounds by HSA-GCMS

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208816 Site 1 TP1 Northern 1.1  
**LIMS ID Number:** CL1411633  
**Job Number:** S14\_2651M

**Accredited?:** Yes

**Directory/Quant file:** 512VOC\_MS19\ Initial Calibration  
**Date Booked in:** 06-May-14  
**Date Analysed:** 12-May-14  
**Operator:** TP

**Matrix:** Soil  
**Method:** Headspace  
**Multiplier:** 1  
**Position:** 15

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
Dichlorodifluoromethane	75-71-8 **	-	< 2	-	N
Chloromethane	74-87-3 *	-	< 5	-	N
Vinyl Chloride	75-01-4	-	< 2	-	UM
Bromomethane	74-83-9	-	< 2	-	UM
Chloroethane	75-00-3 *	-	< 3	-	N
Trichlorofluoromethane	75-69-4 **	-	< 2	-	N
1,1-Dichloroethene	75-35-48 *	-	< 2	-	N
trans 1,2-Dichloroethene	156-60-5	-	< 2	-	UM
1,1-Dichloroethane	75-34-3	-	< 2	-	UM
MTBE	1634-04-4	-	< 2	-	UM
2,2-Dichloropropane	594-20-7	-	< 2	-	UM
cis 1,2-Dichloroethene	156-59-2	-	< 8	-	UM
Bromochloromethane	74-97-5	-	< 2	-	UM
Chloroform	67-66-3	-	< 2	-	UM
1,1,1-Trichloroethane	71-55-6	-	< 2	-	UM
Carbon Tetrachloride	56-23-5	-	< 2	-	UM
1,1-Dichloropropene	563-58-6	-	< 2	-	UM
Benzene	71-43-2	-	< 2	-	UM
1,2-Dichloroethane	107-06-2	-	< 2	-	UM
Trichloroethene	79-01-6	-	< 2	-	UM
1,2-Dichloropropane	78-87-5	-	< 2	-	UM
Dibromomethane	74-95-3	-	< 2	-	UM
Bromodichloromethane	75-27-4	-	< 2	-	UM
cis 1,3-Dichloropropene	10061-01-5	-	< 2	-	UM
Toluene	108-88-3	-	< 8	-	UM
trans 1,3-Dichloropropene	10061-02-6	-	< 2	-	UM
1,1,2-Trichloroethane	79-00-5	-	< 2	-	UM
Tetrachloroethene	127-18-4	-	< 5	-	UM
1,3-Dichloropropane	142-28-9	-	< 2	-	UM
Dibromochloromethane	124-48-1	-	< 2	-	UM
1,2-Dibromoethane	106-93-4	-	< 2	-	UM
Chlorobenzene	108-90-7	-	< 2	-	UM
Ethylbenzene	100-41-4	-	< 3	-	UM
1,1,1,2-Tetrachloroethane	630-20-6	-	< 2	-	UM
m and p-Xylene	108-38-3/106-42-3	-	< 6	-	UM

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
o-Xylene	95-47-6	-	< 3	-	UM
Styrene	100-42-5	-	< 2	-	UM
Bromoform	75-25-2	-	< 2	-	UM
iso-Propylbenzene	98-82-8	-	< 2	-	UM
1,1,2,2-Tetrachloroethane	79-34-5 **	-	< 2	-	N
Propylbenzene	103-65-1	-	< 2	-	UM
Bromobenzene	108-86-1	-	< 2	-	UM
1,2,3-Trichloropropane	96-18-4	-	< 2	-	UM
2-Chlorotoluene	95-49-8	-	< 2	-	UM
1,3,5-Trimethylbenzene	108-67-8	-	< 2	-	UM
4-Chlorotoluene	106-43-4	-	< 2	-	UM
tert-Butylbenzene	98-06-6	-	< 2	-	UM
1,2,4-Trimethylbenzene	95-63-6	-	< 2	-	UM
sec-Butylbenzene	135-98-8	-	< 2	-	UM
p-Isopropyltoluene	99-87-6	-	< 2	-	UM
1,3-Dichlorobenzene	541-73-1	-	< 2	-	UM
1,4-Dichlorobenzene	106-46-7	-	< 2	-	UM
n-Butylbenzene	104-51-8 *	-	< 2	-	N
1,2-Dichlorobenzene	95-50-1	-	< 2	-	UM
1,2-Dibromo-3-chloropropane	96-12-8	-	< 2	-	UM
1,2,4-Trichlorobenzene	120-82-1 *	-	< 5	-	N
Hexachlorobutadiene	87-68-3 **	-	< 3	-	N
Naphthalene	91-20-3	-	< 8	-	UM
1,2,3-Trichlorobenzene	87-61-6	-	< 5	-	UM

Concentrations are reported on a dry weight basis  
 Compounds marked \*\* are not UKAS or Mcerts accredited  
 "M" denotes that % fit has been manually interpreted  
 This analysis was conducted on an 'As Received' basis.

Internal standards	R.T.	Area %	Surrogates	% Rec
Pentafluorobenzene	4.11	93	Dibromofluoromethane	116
1,4-Difluorobenzene	4.45	90	Toluene-d8	95
Chlorobenzene-d5	5.56	77		
Bromofluorobenzene	5.96	63		
1,4-Dichlorobenzene-d4	6.35	51		
Naphthalene-d8	7.22	20		

Note: Volatile compounds degrade with time, and this may affect the integrity of the data depending on the timescale between sampling and analysis. It is recommended that analysis takes place within 7 days of sampling.



# Volatile Organic Compounds by HSA-GCMS

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208817 Site 1 TP1 Northern 2.8  
**LIMS ID Number:** CL1411634  
**Job Number:** S14\_2651M

**Accredited?:** Yes

**Directory/Quant file:** 508VOC\_MS19\ Initial Calibration  
**Date Booked in:** 06-May-14  
**Date Analysed:** 09-May-14  
**Operator:** TP

**Matrix:** Soil  
**Method:** Headspace  
**Multiplier:** 1  
**Position:** 1

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
Dichlorodifluoromethane	75-71-8 **	-	< 1	-	N
Chloromethane	74-87-3 *	-	< 3	-	N
Vinyl Chloride	75-01-4	-	< 1	-	UM
Bromomethane	74-83-9	-	< 1	-	UM
Chloroethane	75-00-3	-	< 2	-	UM
Trichlorofluoromethane	75-69-4 **	-	< 1	-	N
1,1-Dichloroethene	75-35-48 *	-	< 1	-	N
trans 1,2-Dichloroethene	156-60-5	-	< 1	-	UM
1,1-Dichloroethane	75-34-3	-	< 1	-	UM
MTBE	1634-04-4	-	< 1	-	UM
2,2-Dichloropropane	594-20-7	-	< 1	-	UM
cis 1,2-Dichloroethene	156-59-2	-	< 5	-	UM
Bromochloromethane	74-97-5	-	< 1	-	UM
Chloroform	67-66-3	-	< 1	-	UM
1,1,1-Trichloroethane	71-55-6	-	< 1	-	UM
Carbon Tetrachloride	56-23-5	-	< 1	-	UM
1,1-Dichloropropene	563-58-6	-	< 1	-	UM
Benzene	71-43-2	-	< 1	-	UM
1,2-Dichloroethane	107-06-2	-	< 1	-	UM
Trichloroethene	79-01-6	-	< 1	-	UM
1,2-Dichloropropane	78-87-5	-	< 1	-	UM
Dibromomethane	74-95-3	-	< 1	-	UM
Bromodichloromethane	75-27-4	-	< 1	-	UM
cis 1,3-Dichloropropene	10061-01-5	-	< 1	-	UM
Toluene	108-88-3	-	< 5	-	UM
trans 1,3-Dichloropropene	10061-02-6	-	< 1	-	UM
1,1,2-Trichloroethane	79-00-5	-	< 1	-	UM
Tetrachloroethene	127-18-4	-	< 3	-	UM
1,3-Dichloropropane	142-28-9	-	< 1	-	UM
Dibromochloromethane	124-48-1	-	< 1	-	UM
1,2-Dibromoethane	106-93-4	-	< 1	-	UM
Chlorobenzene	108-90-7	-	< 1	-	UM
Ethylbenzene	100-41-4	-	< 2	-	UM
1,1,1,2-Tetrachloroethane	630-20-6	-	< 1	-	UM
m and p-Xylene	108-38-3/106-42-3	-	< 4	-	UM

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
o-Xylene	95-47-6	-	< 2	-	UM
Styrene	100-42-5	-	< 1	-	UM
Bromoform	75-25-2	-	< 1	-	UM
iso-Propylbenzene	98-82-8	-	< 1	-	UM
1,1,2,2-Tetrachloroethane	79-34-5 **	-	< 1	-	N
Propylbenzene	103-65-1	-	< 1	-	UM
Bromobenzene	108-86-1	-	< 1	-	UM
1,2,3-Trichloropropane	96-18-4	-	< 1	-	UM
2-Chlorotoluene	95-49-8	-	< 1	-	UM
1,3,5-Trimethylbenzene	108-67-8	-	< 1	-	UM
4-Chlorotoluene	106-43-4	-	< 1	-	UM
tert-Butylbenzene	98-06-6	-	< 1	-	UM
1,2,4-Trimethylbenzene	95-63-6	-	< 1	-	UM
sec-Butylbenzene	135-98-8	-	< 1	-	UM
p-Isopropyltoluene	99-87-6	-	< 1	-	UM
1,3-Dichlorobenzene	541-73-1	-	< 1	-	UM
1,4-Dichlorobenzene	106-46-7	-	< 1	-	UM
n-Butylbenzene	104-51-8 *	-	< 1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 1	-	UM
1,2-Dibromo-3-chloropropane	96-12-8	-	< 1	-	UM
1,2,4-Trichlorobenzene	120-82-1 *	-	< 3	-	N
Hexachlorobutadiene	87-68-3 **	-	< 2	-	N
Naphthalene	91-20-3	-	< 5	-	UM
1,2,3-Trichlorobenzene	87-61-6 **	-	< 3	-	N

Concentrations are reported on a dry weight basis  
 Compounds marked \*\* are not UKAS or Mcerts accredited  
 "M" denotes that % fit has been manually interpreted  
 This analysis was conducted on an 'As Received' basis.

Internal standards	R.T.	Area %	Surrogates	% Rec
Pentafluorobenzene	4.11	86	Dibromofluoromethane	114
1,4-Difluorobenzene	4.45	85	Toluene-d8	95
Chlorobenzene-d5	5.56	80		
Bromofluorobenzene	5.96	72		
1,4-Dichlorobenzene-d4	6.35	65		
Naphthalene-d8	7.22	40		

Note: Volatile compounds degrade with time, and this may affect the integrity of the data depending on the timescale between sampling and analysis. It is recommended that analysis takes place within 7 days of sampling.

# Volatile Organic Compounds by HSA-GCMS

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208818 Site 2 TP2 South  
**LIMS ID Number:** CL1411635  
**Job Number:** S14\_2651M

**Accredited?:** Yes

**Directory/Quant file:** 508VOC\_MS19\ Initial Calibration  
**Date Booked in:** 06-May-14  
**Date Analysed:** 09-May-14  
**Operator:** TP

**Matrix:** Soil  
**Method:** Headspace  
**Multiplier:** 1  
**Position:** 2

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
Dichlorodifluoromethane	75-71-8 **	-	< 1	-	N
Chloromethane	74-87-3 *	-	< 4	-	N
Vinyl Chloride	75-01-4	-	< 1	-	UM
Bromomethane	74-83-9	-	< 1	-	UM
Chloroethane	75-00-3	-	< 3	-	UM
Trichlorofluoromethane	75-69-4 **	-	< 1	-	N
1,1-Dichloroethene	75-35-48 *	-	< 1	-	N
trans 1,2-Dichloroethene	156-60-5	-	< 1	-	UM
1,1-Dichloroethane	75-34-3	-	< 1	-	UM
MTBE	1634-04-4	-	< 1	-	UM
2,2-Dichloropropane	594-20-7	-	< 1	-	UM
cis 1,2-Dichloroethene	156-59-2	-	< 7	-	UM
Bromochloromethane	74-97-5	-	< 1	-	UM
Chloroform	67-66-3	-	< 1	-	UM
1,1,1-Trichloroethane	71-55-6	-	< 1	-	UM
Carbon Tetrachloride	56-23-5	-	< 1	-	UM
1,1-Dichloropropene	563-58-6	-	< 1	-	UM
Benzene	71-43-2	-	< 1	-	UM
1,2-Dichloroethane	107-06-2	-	< 1	-	UM
Trichloroethene	79-01-6	-	< 1	-	UM
1,2-Dichloropropane	78-87-5	-	< 1	-	UM
Dibromomethane	74-95-3	-	< 1	-	UM
Bromodichloromethane	75-27-4	-	< 1	-	UM
cis 1,3-Dichloropropene	10061-01-5	-	< 1	-	UM
Toluene	108-88-3	-	< 7	-	UM
trans 1,3-Dichloropropene	10061-02-6	-	< 1	-	UM
1,1,2-Trichloroethane	79-00-5	-	< 1	-	UM
Tetrachloroethene	127-18-4	-	< 4	-	UM
1,3-Dichloropropane	142-28-9	-	< 1	-	UM
Dibromochloromethane	124-48-1	-	< 1	-	UM
1,2-Dibromoethane	106-93-4	-	< 1	-	UM
Chlorobenzene	108-90-7	-	< 1	-	UM
Ethylbenzene	100-41-4	-	< 3	-	UM
1,1,1,2-Tetrachloroethane	630-20-6	-	< 1	-	UM
m and p-Xylene	108-38-3/106-42-3	-	< 5	-	UM

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
o-Xylene	95-47-6	-	< 3	-	UM
Styrene	100-42-5	-	< 1	-	UM
Bromoform	75-25-2	-	< 1	-	UM
iso-Propylbenzene	98-82-8	-	< 1	-	UM
1,1,2,2-Tetrachloroethane	79-34-5 **	-	< 1	-	N
Propylbenzene	103-65-1	-	< 1	-	UM
Bromobenzene	108-86-1	-	< 1	-	UM
1,2,3-Trichloropropane	96-18-4	-	< 1	-	UM
2-Chlorotoluene	95-49-8	-	< 1	-	UM
1,3,5-Trimethylbenzene	108-67-8	-	< 1	-	UM
4-Chlorotoluene	106-43-4	-	< 1	-	UM
tert-Butylbenzene	98-06-6	-	< 1	-	UM
1,2,4-Trimethylbenzene	95-63-6	-	< 1	-	UM
sec-Butylbenzene	135-98-8	-	< 1	-	UM
p-Isopropyltoluene	99-87-6	-	< 1	-	UM
1,3-Dichlorobenzene	541-73-1	-	< 1	-	UM
1,4-Dichlorobenzene	106-46-7	-	< 1	-	UM
n-Butylbenzene	104-51-8 *	-	< 1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 1	-	UM
1,2-Dibromo-3-chloropropane	96-12-8	-	< 1	-	UM
1,2,4-Trichlorobenzene	120-82-1 *	-	< 4	-	N
Hexachlorobutadiene	87-68-3 **	-	< 3	-	N
Naphthalene	91-20-3	-	< 7	-	UM
1,2,3-Trichlorobenzene	87-61-6 **	-	< 4	-	N

Concentrations are reported on a dry weight basis  
 Compounds marked \*\* are not UKAS or Mcerts accredited  
 "M" denotes that % fit has been manually interpreted  
 This analysis was conducted on an 'As Received' basis.

Internal standards	R.T.	Area %	Surrogates	% Rec
Pentafluorobenzene	4.11	82	Dibromofluoromethane	122
1,4-Difluorobenzene	4.45	82	Toluene-d8	92
Chlorobenzene-d5	5.56	71		
Bromofluorobenzene	5.96	58		
1,4-Dichlorobenzene-d4	6.35	50		
Naphthalene-d8	7.22	20		

Note: Volatile compounds degrade with time, and this may affect the integrity of the data depending on the timescale between sampling and analysis. It is recommended that analysis takes place within 7 days of sampling.

# Volatile Organic Compounds by HSA-GCMS

**Customer and Site Details:** APSU Environmental Services: West Meadows Industrial Estate  
**Sample Details:** 45208819 Site 3 TP3 Adj to 3.0  
**LIMS ID Number:** CL1411636  
**Job Number:** S14\_2651M

**Accredited?:** Yes

**Directory/Quant file:** 508VOC\_MS19\ Initial Calibration  
**Date Booked in:** 06-May-14  
**Date Analysed:** 09-May-14  
**Operator:** TP

**Matrix:** Soil  
**Method:** Headspace  
**Multiplier:** 1  
**Position:** 3

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
Dichlorodifluoromethane	75-71-8 **	-	< 1	-	N
Chloromethane	74-87-3 *	-	< 4	-	N
Vinyl Chloride	75-01-4	-	< 1	-	UM
Bromomethane	74-83-9	-	< 1	-	UM
Chloroethane	75-00-3	-	< 2	-	UM
Trichlorofluoromethane	75-69-4 **	-	< 1	-	N
1,1-Dichloroethene	75-35-48 *	-	< 1	-	N
trans 1,2-Dichloroethene	156-60-5	-	< 1	-	UM
1,1-Dichloroethane	75-34-3	-	< 1	-	UM
MTBE	1634-04-4	-	< 1	-	UM
2,2-Dichloropropane	594-20-7	-	< 1	-	UM
cis 1,2-Dichloroethene	156-59-2	-	< 6	-	UM
Bromochloromethane	74-97-5	-	< 1	-	UM
Chloroform	67-66-3	-	< 1	-	UM
1,1,1-Trichloroethane	71-55-6	-	< 1	-	UM
Carbon Tetrachloride	56-23-5	-	< 1	-	UM
1,1-Dichloropropene	563-58-6	-	< 1	-	UM
Benzene	71-43-2	-	< 1	-	UM
1,2-Dichloroethane	107-06-2	-	< 1	-	UM
Trichloroethene	79-01-6	-	< 1	-	UM
1,2-Dichloropropane	78-87-5	-	< 1	-	UM
Dibromomethane	74-95-3	-	< 1	-	UM
Bromodichloromethane	75-27-4	-	< 1	-	UM
cis 1,3-Dichloropropene	10061-01-5	-	< 1	-	UM
Toluene	108-88-3	-	< 6	-	UM
trans 1,3-Dichloropropene	10061-02-6	-	< 1	-	UM
1,1,2-Trichloroethane	79-00-5	-	< 1	-	UM
Tetrachloroethene	127-18-4	-	< 4	-	UM
1,3-Dichloropropane	142-28-9	-	< 1	-	UM
Dibromochloromethane	124-48-1	-	< 1	-	UM
1,2-Dibromoethane	106-93-4	-	< 1	-	UM
Chlorobenzene	108-90-7	-	< 1	-	UM
Ethylbenzene	100-41-4	-	< 2	-	UM
1,1,1,2-Tetrachloroethane	630-20-6	-	< 1	-	UM
m and p-Xylene	108-38-3/106-42-3	-	< 5	-	UM

Target Compounds	CAS #	R.T. (min.)	Concentration µg/kg	% Fit	Accr. code
o-Xylene	95-47-6	-	< 2	-	UM
Styrene	100-42-5	-	< 1	-	UM
Bromoform	75-25-2	-	< 1	-	UM
iso-Propylbenzene	98-82-8	-	< 1	-	UM
1,1,2,2-Tetrachloroethane	79-34-5 **	-	< 1	-	N
Propylbenzene	103-65-1	-	< 1	-	UM
Bromobenzene	108-86-1	-	< 1	-	UM
1,2,3-Trichloropropane	96-18-4	-	< 1	-	UM
2-Chlorotoluene	95-49-8	-	< 1	-	UM
1,3,5-Trimethylbenzene	108-67-8	-	< 1	-	UM
4-Chlorotoluene	106-43-4	-	< 1	-	UM
tert-Butylbenzene	98-06-6	-	< 1	-	UM
1,2,4-Trimethylbenzene	95-63-6	-	< 1	-	UM
sec-Butylbenzene	135-98-8	-	< 1	-	UM
p-Isopropyltoluene	99-87-6	-	< 1	-	UM
1,3-Dichlorobenzene	541-73-1	-	< 1	-	UM
1,4-Dichlorobenzene	106-46-7	-	< 1	-	UM
n-Butylbenzene	104-51-8 *	-	< 1	-	N
1,2-Dichlorobenzene	95-50-1	-	< 1	-	UM
1,2-Dibromo-3-chloropropane	96-12-8	-	< 1	-	UM
1,2,4-Trichlorobenzene	120-82-1 *	-	< 4	-	N
Hexachlorobutadiene	87-68-3 **	-	< 2	-	N
Naphthalene	91-20-3	-	< 6	-	UM
1,2,3-Trichlorobenzene	87-61-6 **	-	< 4	-	N

Concentrations are reported on a dry weight basis  
 Compounds marked \*\* are not UKAS or Mcerts accredited  
 "M" denotes that % fit has been manually interpreted  
 This analysis was conducted on an 'As Received' basis.

Internal standards	R.T.	Area %	Surrogates	% Rec
Pentafluorobenzene	4.11	86	Dibromofluoromethane	119
1,4-Difluorobenzene	4.45	84	Toluene-d8	94
Chlorobenzene-d5	5.56	76		
Bromofluorobenzene	5.96	64		
1,4-Dichlorobenzene-d4	6.35	53		
Naphthalene-d8	7.22	24		

Note: Volatile compounds degrade with time, and this may affect the integrity of the data depending on the timescale between sampling and analysis. It is recommended that analysis takes place within 7 days of sampling.

# WASTE ACCEPTANCE CRITERIA TESTING

## BSEN 12457/3

Client	APSU Environmental Services				Leaching Data	
					Weight of sample (kg)	0.346
Contact	Ms M Carr				Moisture content @ 105°C (% of Wet Weight)	34.6
					Equivalent Weight based on drying at 105°C (kg)	0.225
Site	West Meadows Industrial Estate				Volume of water required to carry out 2:1 stage (litres)	0.329
					Fraction of sample above 4 mm %	0.000
Sample Description		Report No	Sample No	Issue Date	Fraction of non-crushable material %	0.000
45208816 Site 1 TP1 Northern 1.1		s14_2651	CL/1411633	14-May-14	Volume to undertake analysis (2:1 Stage) (litres)	0.300
					Weight of Deionised water to carry out 8:1 stage (kg)	1.650

Note: The >4mm fraction is crushed using a disc mill

Accreditation	Method Code	Solid Waste Analysis (Dry Basis)	Concentration in Solid (Dry Weight Basis)	Landfill Waste Acceptance Criteria Limit Values		
				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
N	WSLM59	Total Organic Carbon (% M/M)	7.1	3	5	6
N	LOI450	Loss on Ignition (%)	16.7			10
N	BTEXHSA	Sum of BTEX (mg/kg)	<0.075	6		
N	PCBUSECD	Sum of 7 Congener PCB's (mg/kg)	<0.0399	1		
U	TPHFIDUS	Mineral Oil (mg/kg)	266	500		
N	PAHMSUS	PAH Sum of 17 (mg/kg)	<6.59	100		
U	PHSOIL	pH (pH units)	7.3		>6	
N	ANC	Acid Neutralisation Capacity (mol/kg) @pH 7	1.43		To be evaluated	To be evaluated

Accreditation	Method Code	Leachate Analysis	2:1 Leachate	8:1 Leachate	Calculated amount leached @ 2:1	Calculated cumulative amount leached @ 10:1	Landfill Waste Acceptance Criteria Limit Values for BSEN 12457/3 @ L/S 10 litre kg-1		
			mg/l except <sup>00</sup>		mg/kg (dry weight)		mg/kg (dry weight)		
U	WSLM3	pH (pH units) <sup>00</sup>	7.3	8	Calculated data not UKAS Accredited				
U	WSLM2	Conductivity (µs/cm) <sup>00</sup>	623	205					
U	ICPMSW	Arsenic	0.034	0.011	0.068	0.14	0.5	2	25
U	ICPWATVAR	Barium	0.63	0.34	1.26	3.8	20	100	300
U	ICPMSW	Cadmium	0.0026	0.0004	0.0052	0.007	0.04	1	5
U	ICPMSW	Chromium	0.01	0.016	0.02	0.15	0.5	10	70
U	ICPMSW	Copper	0.515	0.096	1.03	1.52	2	50	100
U	ICPMSW	Mercury	<0.0001	0.0001	<0.0002	<0.001	0.01	0.2	2
U	ICPMSW	Molybdenum	0.016	0.015	0.032	0.15	0.5	10	30
U	ICPMSW	Nickel	0.022	0.013	0.044	0.14	0.4	10	40
U	ICPMSW	Lead	0.622	0.139	1.244	2.03	0.5	10	50
U	ICPMSW	Antimony	0.003	0.005	0.006	0.05	0.06	0.7	5
U	ICPMSW	Selenium	0.006	0.002	0.012	0.03	0.1	0.5	7
U	ICPMSW	Zinc	0.32	0.274	0.64	2.8	4	50	200
U	KONENS	Chloride	57	8	114	145	800	15000	25000
U	ISEF	Fluoride	1.5	1.8	3	18	10	150	500
U	ICPWATVAR	Sulphate as SO4	76	21	152	283	1000	20000	50000
N	WSLM27	Total Dissolved Solids	486	160	972	2035	4000	60000	100000
U	SFAPI	Phenol Index	<0.05	<0.05	<0.1	<0.5	1		
N	WSLM13	Dissolved Organic Carbon	220	40	440	640	500	800	1000

Template Ver. 1

Landfill Waste Acceptance Criteria limit values correct as of 11th March 2009.

# WASTE ACCEPTANCE CRITERIA TESTING

## BSEN 12457/3

<b>Client</b>	APSU Environmental Services				<b>Leaching Data</b>	
					Weight of sample (kg)	0.237
<b>Contact</b>	Ms M Carr				Moisture content @ 105°C (% of Wet Weight)	5.3
					Equivalent Weight based on drying at 105°C (kg)	0.225
<b>Site</b>	West Meadows Industrial Estate				Volume of water required to carry out 2:1 stage (litres)	0.438
					Fraction of sample above 4 mm %	64.800
<b>Sample Description</b>		<b>Report No</b>	<b>Sample No</b>	<b>Issue Date</b>	Fraction of non-crushable material %	0.000
45208817 Site 1 TP1 Northern 2.8		s14_2651	CL/1411634	14-May-14	Volume to undertake analysis (2:1 Stage) (litres)	0.300
					Weight of Deionised water to carry out 8:1 stage (kg)	1.650

Note: The >4mm fraction is crushed using a disc mill

Accreditation	Method Code	Solid Waste Analysis (Dry Basis)	Concentration in Solid (Dry Weight Basis)	Landfill Waste Acceptance Criteria Limit Values		
				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
N	WSLM59	Total Organic Carbon (% M/M)	0.48	3	5	6
N	LOI450	Loss on Ignition (%)	1.7			10
N	BTEXHSA	Sum of BTEX (mg/kg)	<0.055	6		
N	PCBUSECD	Sum of 7 Congener PCB's (mg/kg)	<0.0378	1		
U	TPHFIDUS	Mineral Oil (mg/kg)	13	500		
N	PAHMSUS	PAH Sum of 17 (mg/kg)	<1.44	100		
U	PHSOIL	pH (pH units)	8.6		>6	
N	ANC	Acid Neutralisation Capacity (mol/kg) @pH 7	1.68		To be evaluated	To be evaluated

Accreditation	Method Code	Leachate Analysis	2:1 Leachate	8:1 Leachate	Calculated amount leached @ 2:1	Calculated cumulative amount leached @ 10:1	Landfill Waste Acceptance Criteria Limit Values for BSEN 12457/3 @ L/S 10 litre kg-1		
			mg/l except <sup>00</sup>		mg/kg (dry weight)		mg/kg (dry weight)		
U	WSLM3	pH (pH units) <sup>00</sup>	7.6	8	Calculated data not UKAS Accredited				
U	WSLM2	Conductivity (µs/cm) <sup>00</sup>	996	191					
U	ICPMSW	Arsenic	0.002	<0.001	0.004	<0.01	0.5	2	25
U	ICPWATVAR	Barium	0.14	0.1	0.28	1.1	20	100	300
U	ICPMSW	Cadmium	0.0001	<0.0001	0.0002	<0.001	0.04	1	5
U	ICPMSW	Chromium	0.002	0.001	0.004	0.01	0.5	10	70
U	ICPMSW	Copper	0.078	0.023	0.156	0.3	2	50	100
U	ICPMSW	Mercury	<0.0001	<0.0001	<0.0002	<0.001	0.01	0.2	2
U	ICPMSW	Molybdenum	0.007	0.004	0.014	0.04	0.5	10	30
U	ICPMSW	Nickel	0.016	0.003	0.032	0.05	0.4	10	40
U	ICPMSW	Lead	0.004	<0.001	0.008	<0.01	0.5	10	50
U	ICPMSW	Antimony	0.004	0.002	0.008	0.02	0.06	0.7	5
U	ICPMSW	Selenium	0.007	0.002	0.014	0.03	0.1	0.5	7
U	ICPMSW	Zinc	0.063	0.022	0.126	0.27	4	50	200
U	KONENS	Chloride	17	2	34	40	800	15000	25000
U	ISEF	Fluoride	0.4	0.4	0.8	4	10	150	500
U	ICPWATVAR	Sulphate as SO4	475	46	950	1032	1000	20000	50000
N	WSLM27	Total Dissolved Solids	777	149	1554	2327	4000	60000	100000
U	SFAPI	Phenol Index	<0.05	<0.05	<0.1	<0.5	1		
N	WSLM13	Dissolved Organic Carbon	30	8.1	60	110	500	800	1000

Template Ver. 1

Landfill Waste Acceptance Criteria limit values correct as of 11th March 2009.

# WASTE ACCEPTANCE CRITERIA TESTING

## BSEN 12457/3

Client	APSU Environmental Services				Leaching Data	
					Weight of sample (kg)	0.308
Contact	Ms M Carr				Moisture content @ 105°C (% of Wet Weight)	26.5
					Equivalent Weight based on drying at 105°C (kg)	0.225
Site	West Meadows Industrial Estate				Volume of water required to carry out 2:1 stage (litres)	0.367
					Fraction of sample above 4 mm %	0.000
Sample Description		Report No	Sample No	Issue Date	Fraction of non-crushable material %	0.000
45208818 Site 2 TP2 South		s14_2651	CL/1411635	14-May-14	Volume to undertake analysis (2:1 Stage) (litres)	0.300
					Weight of Deionised water to carry out 8:1 stage (kg)	1.650

Note: The >4mm fraction is crushed using a disc mill

Accreditation	Method Code	Solid Waste Analysis (Dry Basis)	Concentration in Solid (Dry Weight Basis)	Landfill Waste Acceptance Criteria Limit Values		
				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
N	WSLM59	Total Organic Carbon (% M/M)	0.79	3	5	6
N	LOI450	Loss on Ignition (%)	4.6			10
N	BTEXHSA	Sum of BTEX (mg/kg)	<0.07	6		
N	PCBUSECD	Sum of 7 Congener PCB's (mg/kg)	<0.0385	1		
U	TPHFIDUS	Mineral Oil (mg/kg)	20	500		
N	PAHMSUS	PAH Sum of 17 (mg/kg)	<1.85	100		
U	PHSOIL	pH (pH units)	6.7		>6	
N	ANC	Acid Neutralisation Capacity (mol/kg) @pH 7	<0.04		To be evaluated	To be evaluated

Accreditation	Method Code	Leachate Analysis	2:1 Leachate	8:1 Leachate	Calculated amount leached @ 2:1	Calculated cumulative amount leached @ 10:1	Landfill Waste Acceptance Criteria Limit Values for BSEN 12457/3 @ L/S 10 litre kg-1		
			mg/l except <sup>00</sup>		mg/kg (dry weight)		mg/kg (dry weight)		
U	WSLM3	pH (pH units) <sup>00</sup>	7.3	7.6	Calculated data not UKAS Accredited				
U	WSLM2	Conductivity (µs/cm) <sup>00</sup>	793	174					
U	ICPMSW	Arsenic	<0.001	<0.001	<0.002	<0.01	0.5	2	25
U	ICPWATVAR	Barium	0.12	0.17	0.24	1.6	20	100	300
U	ICPMSW	Cadmium	0.0003	0.0001	0.0006	0.001	0.04	1	5
U	ICPMSW	Chromium	0.001	0.002	0.002	0.02	0.5	10	70
U	ICPMSW	Copper	0.012	0.052	0.024	0.47	2	50	100
U	ICPMSW	Mercury	<0.0001	<0.0001	<0.0002	<0.001	0.01	0.2	2
U	ICPMSW	Molybdenum	<0.001	<0.001	<0.002	<0.01	0.5	10	30
U	ICPMSW	Nickel	0.003	0.003	0.006	0.03	0.4	10	40
U	ICPMSW	Lead	0.001	0.002	0.002	0.02	0.5	10	50
U	ICPMSW	Antimony	<0.001	<0.001	<0.002	<0.01	0.06	0.7	5
U	ICPMSW	Selenium	0.002	<0.001	0.004	<0.01	0.1	0.5	7
U	ICPMSW	Zinc	0.099	0.103	0.198	1.02	4	50	200
U	KONENS	Chloride	14	2	28	36	800	15000	25000
U	ISEF	Fluoride	0.2	0.2	0.4	2	10	150	500
U	ICPWATVAR	Sulphate as SO4	341	52	682	905	1000	20000	50000
N	WSLM27	Total Dissolved Solids	619	136	1238	2004	4000	60000	100000
U	SFAPI	Phenol Index	<0.05	<0.05	<0.1	<0.5	1		
N	WSLM13	Dissolved Organic Carbon	9.4	7.4	18.8	77	500	800	1000

Template Ver. 1

Landfill Waste Acceptance Criteria limit values correct as of 11th March 2009.

# WASTE ACCEPTANCE CRITERIA TESTING

## BSEN 12457/3

<b>Client</b>	APSU Environmental Services				<b>Leaching Data</b>	
					Weight of sample (kg)	0.265
<b>Contact</b>	Ms M Carr				Moisture content @ 105°C (% of Wet Weight)	15.2
					Equivalent Weight based on drying at 105°C (kg)	0.225
<b>Site</b>	West Meadows Industrial Estate				Volume of water required to carry out 2:1 stage (litres)	0.410
					Fraction of sample above 4 mm %	50.400
<b>Sample Description</b>		<b>Report No</b>	<b>Sample No</b>	<b>Issue Date</b>	Fraction of non-crushable material %	0.000
45208819 Site 3 TP3 Adj to 3.0		s14_2651	CL/1411636	14-May-14	Volume to undertake analysis (2:1 Stage) (litres)	0.300
					Weight of Deionised water to carry out 8:1 stage (kg)	1.650

Note: The >4mm fraction is crushed using a disc mill

Accreditation	Method Code	Solid Waste Analysis (Dry Basis)	Concentration in Solid (Dry Weight Basis)	Landfill Waste Acceptance Criteria Limit Values		
				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
N	WSLM59	Total Organic Carbon (% M/M)	0.59	3	5	6
N	LOI450	Loss on Ignition (%)	1.9			10
N	BTEXHSA	Sum of BTEX (mg/kg)	<0.06	6		
N	PCBUSECD	Sum of 7 Congener PCB's (mg/kg)	<0.0406	1		
U	TPHFIDUS	Mineral Oil (mg/kg)	63	500		
N	PAHMSUS	PAH Sum of 17 (mg/kg)	<1.60	100		
U	PHSOIL	pH (pH units)	8.3		>6	
N	ANC	Acid Neutralisation Capacity (mol/kg) @pH 7	4.45		To be evaluated	To be evaluated

Accreditation	Method Code	Leachate Analysis	2:1 Leachate	8:1 Leachate	Calculated amount leached @ 2:1	Calculated cumulative amount leached @ 10:1	Landfill Waste Acceptance Criteria Limit Values for BSEN 12457/3 @ L/S 10 litre kg-1		
			mg/l except <sup>00</sup>		mg/kg (dry weight)		mg/kg (dry weight)		
U	WSLM3	pH (pH units) <sup>00</sup>	7.8	8.1	Calculated data not UKAS Accredited				
U	WSLM2	Conductivity (µs/cm) <sup>00</sup>	329	130					
U	ICPMSW	Arsenic	0.001	<0.001	0.002	<0.01	0.5	2	25
U	ICPWATVAR	Barium	0.15	0.12	0.3	1.2	20	100	300
U	ICPMSW	Cadmium	<0.0001	<0.0001	<0.0002	<0.001	0.04	1	5
U	ICPMSW	Chromium	0.002	<0.001	0.004	<0.01	0.5	10	70
U	ICPMSW	Copper	0.013	0.005	0.026	0.06	2	50	100
U	ICPMSW	Mercury	<0.0001	<0.0001	<0.0002	<0.001	0.01	0.2	2
U	ICPMSW	Molybdenum	0.01	0.009	0.02	0.09	0.5	10	30
U	ICPMSW	Nickel	0.003	<0.001	0.006	<0.01	0.4	10	40
U	ICPMSW	Lead	0.016	0.001	0.032	0.03	0.5	10	50
U	ICPMSW	Antimony	<0.001	<0.001	<0.002	<0.01	0.06	0.7	5
U	ICPMSW	Selenium	0.006	0.002	0.012	0.03	0.1	0.5	7
U	ICPMSW	Zinc	0.042	0.032	0.084	0.33	4	50	200
U	KONENS	Chloride	6	1	12	17	800	15000	25000
U	ISEF	Fluoride	0.7	0.6	1.4	6	10	150	500
U	ICPWATVAR	Sulphate as SO4	75	15	150	230	1000	20000	50000
N	WSLM27	Total Dissolved Solids	257	101	514	1218	4000	60000	100000
U	SFAPI	Phenol Index	<0.05	<0.05	<0.1	<0.5	1		
N	WSLM13	Dissolved Organic Carbon	6.8	6.6	13.6	66	500	800	1000

Template Ver. 1

Landfill Waste Acceptance Criteria limit values correct as of 11th March 2009.





Customer APSU Environmental Services  
Site West Meadows Industrial Estate  
Report No S142651

Consignment No S41116  
Date Logged 06-May-2014

Report Due 14-May-2014

ID Number	Description	MethodID	ANC	BTEXISA	CEN Leachate	CEN Leachate (P)1	CEN Leachate (P)2	CUSTSERV	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	KONECR	LOI(%MM)	MCErTS	MCErTS Analysis	MRA Leachate	PARMSUS	PARMSUS	PCB-7 Congeners Analysis	PHSOIL	pH units (AR)	SEAPI	Cyanide(Complex)(AR)	Cyanide(Free) (AR)	Sampled																												
																																		Acid Neut. Capacity	MTBE (µg/kg)	REPORT A	GRO (AA) by HSA GC-FID	Boron (H2O Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	L.O.I. % @ 450C	NRA Leachate	PAH (17) by GCMS	PCB-7 Congeners Analysis	pH units (AR)	Cyanide(Complex)(AR)	Cyanide(Free) (AR)						
Accredited to ISO17025																												✓																																	
CL/1411633	45208816 Site 1 TP1 Northern	D																																																											
CL/1411634	45208817 Site 1 TP1 Northern	D																																																											
CL/1411635	45208818 Site 2 TP2 South	D																																																											
CL/1411636	45208819 Site 3 TP3 Adj to 3.0	D																																																											

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could 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 - <b>Note: due date may be affected if triggered</b>
	No analysis scheduled
	Analysis Subcontracted - <b>Note: due date may vary</b>

Customer APSU Environmental Services  
Site West Meadows Industrial Estate  
Report No S142651





Consignment No S41116  
Date Logged 06-May-2014

Report Due 14-May-2014

ID Number	Description	MethodID	Report Due 14-May-2014																		
			SFAPI	Sub002a	SVOCMS	TMSS	TPHIDUS	TPHUSI	VOCHSAS	WSLMS9	Cyanide(Total) (AR)	Phenol Index.(AR)	Thiocyanate(SCN)(AR)	Asbestos Screen	SVOC by GCMS (AR)	Tot.Moisture @ 105C	TPH Band (>C10-C40)	TPH by GC/FID (AR)	TPH by GC/FID (AR/SI)	VOC HSA-GCMS	Total Organic Carbon
Accredited to ISO17025			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CL/1411633	45208816 Site 1 TP1 Northern	D																			
CL/1411634	45208817 Site 1 TP1 Northern	D																			
CL/1411635	45208818 Site 2 TP2 South	D																			
CL/1411636	45208819 Site 3 TP3 Adj to 3.0	D																			

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

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Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
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	Analysis Required
	Analysis dependant upon trigger result - <b>Note: due date may be affected if triggered</b>
	No analysis scheduled
	Analysis Subcontracted - <b>Note: due date may vary</b>

# Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	ANC	Air Dried	Quantitative digestion with Hydrochloric Acid back titration with 1M Sodium Hydroxide to pH 7
Soil	BTEXHSA	As Received	Determination of Benzene, Toluene, Ethyl benzene and Xylenes (BTEX) by Headspace GCFID
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	KONECR	Air Dried	Determination of Chromium vi in soil samples by water extraction followed by 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	PCBUSECDAR	As Received	Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD 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	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	SVOCMSUS	As Received	Determination of Semi Volatile Organic Compounds in soil samples by Dichloromethane/Acetone extraction followed by GCMS detection
Soil	TMSS	As Received	Determination of the Total Moisture content at 105°C by loss on oven drying gravimetric analysis (% based upon wet weight)
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
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS

# Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	ISEF	As Received	Determination of Fluoride in water samples by Ion Selective Electrode (ISE)
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity ( $\mu\text{S}/\text{cm}$ ) by electrical conductivity probe.
Water	WSLM27	As Received	Gravimetric Determination
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 the basis indicated in the Method Description table.  
All results on MCERTS reports are reported on a 105°C dry weight basis with the exception of pH and conductivity.
- 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<sup>3</sup>@ 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

**NADIS** No Asbestos Detected In Sample

## Symbol Reference

^ Sub-contracted analysis.

\$\$ 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

**NS** Information Not Supplied

**Req** Analysis requested, see attached sheets for results

▮ 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.

