## APPENDIX C
## CHEMICAL LABORATORY TESTING RESULTS


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|---|---|
| Soil Chemical Testing Results | C1 |
| Groundwater Chemical Testing Results | C2 |

# APPENDIX C1
# SOIL CHEMICAL TESTING RESULTS

Our Ref: EFS/157442M (Ver. 1)
Your Ref: R5123

November 9, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr M Gray
ESG Wokingham
Glossop House
Hogwood Lane
Finchamstead
Wokingham
Berkshire
RG40 4QW

For the attention of Mr M Gray

Dear Mr Gray

**Sample Analysis - Marsh Lane, Tottenham**

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 14/12/15 when they will be discarded. Please call 01283 554467 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

L Thompson
Project Co-ordinator
01283 554467


Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

# TEST REPORT

1252

## Report No. EFS/157442M (Ver. 1)

ESG Wokingham
Glossop House
Hogwood Lane
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Marsh Lane, Tottenham**

The 19 samples described in this report were registered for analysis by ESG on 02-Nov-2015. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Nov-2015

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 (Page 2)
Table of GRO Results (Page 3)
Table of TPH (Si) banding (std) (Page 4)
GC-FID Chromatograms (Pages 5 to 50)
Analytical and Deviating Sample Overview (Pages 51 to 52)
Table of Additional Report Notes (Page 53)
Table of Method Descriptions (Page 54)
Table of Report Notes (Page 55)
Table of Sample Descriptions (Appendix A Page 1 of 1)


On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 09-Nov-2015

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$^{o}$C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.



Where individual results are flagged see report notes for status.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | % | mg/kg | mg/kg | % M/M | | | | | | | | | | | |
| **Method Codes :** | | | GROHSA | TMSS | TPHFID-SCU | TPHUSSI | WSLM59 | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 0.2 | 0.2 | 10 | 20 | 0.04 | | | | | | | | | | | |
| **Accreditation Code:** | | | | U | N | | N | | | | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **GRO (AA) by HSA GC-FID** | **Tot.Moisture @ 105C** | **TPH by GCFID (AR) SCU** | **TPH by GCFID (ARSi)** | **Total Organic Carbon** | | | | | | | | | | | |
| 1568011 | WS20 ES 1 0.8 | 27-Oct-15 | | 30.2 | 193 | Req | 6.8 | | | | | | | | | | | |
| 1568012 | WS20 ES 2 3.0 | 27-Oct-15 | | 20.4 | 245 | Req | 4.60 | | | | | | | | | | | |
| 1568013 | WS21 ES 1 1.1 | 27-Oct-15 | Req | 25.5 | | Req | 2.56 | | | | | | | | | | | |
| 1568014 | WS21 ES 2 1.9 | 27-Oct-15 | Req | 20.0 | | Req | 1.72 | | | | | | | | | | | |
| 1568015 | WS22 ES 1 0.6 | 27-Oct-15 | | 17.1 | 230 | Req | 1.47 | | | | | | | | | | | |
| 1568016 | WS22 ES 2 3.6 | 27-Oct-15 | Req | 10.6 | | Req | 0.13 | | | | | | | | | | | |
| 1568017 | WS22 ES 3 3.8 | 27-Oct-15 | Req | 7.8 | | Req | 0.07 | | | | | | | | | | | |
| 1568018 | WS23 ES 1 0.6 (NVM) | 28-Oct-15 | | 16.8 § | 129§ | Req § | 1.37 | | | | | | | | | | | |
| 1568019 | WS23 ES 2 1.8 | 28-Oct-15 | | 30.5 | 164 | Req | 3.42 | | | | | | | | | | | |
| 1568020 | WS23 ES 3 3.8 (NVM) | 28-Oct-15 | Req § | 8.9 § | | Req § | 0.16 | | | | | | | | | | | |
| 1568021 | WS24 ES 1 0.5 | 28-Oct-15 | | 13.1 | 494 | Req | 7.8 | | | | | | | | | | | |
| 1568022 | WS24 ES 2 3.0 | 28-Oct-15 | Req | 23.6 | | Req | 0.79 | | | | | | | | | | | |
| 1568023 | WS24 ES 3 3.8 (NVM) | 28-Oct-15 | Req § | 10.2 § | | Req § | 0.11 | | | | | | | | | | | |
| 1568024 | WS25 ES 1 0.6 | 28-Oct-15 | Req | 12.7 | | Req | 1.92 | | | | | | | | | | | |
| 1568025 | WS25 ES 2 1.6 (NVM) | 28-Oct-15 | Req § | 28.3 § | | Req § | 13.1 | | | | | | | | | | | |
| 1568026 | WS25 ES 3 3.1 | 28-Oct-15 | Req | 21.9 | | Req | 2.19 | | | | | | | | | | | |
| 1568027 | WS25 ES 4 3.9 (NVM) | 28-Oct-15 | Req § | 11.3 § | | Req § | 0.14 | | | | | | | | | | | |
| 1568028 | WS26 ES 1 0.8 | 29-Oct-15 | | 15.9 | 757 | Req | 1.32 | | | | | | | | | | | |
| 1568029 | WS26 ES 2 1.9 (NVM) | 29-Oct-15 | | 20.7 § | 199§ | Req § | 4.73 | | | | | | | | | | | |


Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422


**Client Name** ESG Wokingham

**Contact** Mr M Gray

# Marsh Lane, Tottenham

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **09-Nov-2015** |
| **Report Number** | **EFS/157442M** |
| **Table Number** | **1** |



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

# Gasoline Range Organics
# (BTEX and Aliphatic Carbon Ranges)

**Customer and Site Details:** ESG Wokingham : Marsh Lane, Tottenham
**Job Number:** S15_7442
**Directory:** C:\CHEM32\1\DATA\1106HSA_GC12\110615 2015-11-06 11-33-31\157B5701.D
**Method:** Headspace GCFID
Accreditation Code: N

**Matrix:** Soil
**Date Booked in:** 02-Nov-15
**Date extracted:** 05-Nov-15
**Date Analysed:** 07-Nov-15, 05:4

*** Sample data with an asterisk are not UKAS accredited.**

| | | 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 |
| CL1568013 | WS21 ES 1 1.1 | <0.013 | <0.013 | <0.013 | <0.013 | <0.013 | <0.3 | <0.3 | <0.3 | 0.7* | 0.7 |
| CL1568014 | WS21 ES 2 1.9 | <0.013 | <0.013 | <0.013 | <0.013 | <0.013 | <0.3 | <0.3 | <0.3 | <0.3* | <0.3 |
| CL1568016 | WS22 ES 2 3.6 | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2* | <0.2 |
| CL1568017 | WS22 ES 3 3.8 | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2* | <0.2 |
| * CL1568020 | WS23 ES 3 3.8 (NVM) | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2* | <0.2 |
| CL1568022 | WS24 ES 2 3.0 | <0.013 | <0.013 | <0.013 | <0.013 | <0.013 | <0.3 | <0.3 | <0.3 | <0.3* | <0.3 |
| * CL1568023 | WS24 ES 3 3.8 (NVM) | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2* | <0.2 |
| CL1568024 | WS25 ES 1 0.6 | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2* | <0.2 |
| * CL1568025 | WS25 ES 2 1.6 (NVM) | <0.014 | <0.014 | <0.014 | <0.014 | <0.014 | <0.3 | <0.3 | <0.3 | <0.3* | 0.3 |
| CL1568026 | WS25 ES 3 3.1 | <0.640 | <0.640 | 12.312 | 35.108 | 13.292 | <13 | <13 | 50.8 | 1210* | 1330.0 |
| * CL1568027 | WS25 ES 4 3.9 (NVM) | <0.564 | <0.564 | 0.694 | 1.935 | 0.910 | <11 | <11 | <11 | 83.3* | 90.6 |
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Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

# ALIPHATIC / AROMATIC FRACTION BY GC/FID

**Customer and Site Details:** ESG Wokingham : Marsh Lane, Tottenham
**Job Number:** S15_7442M
**QC Batch Number:** 151139
**Directory:** D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\054B6001.D
**Method:** Ultra Sonic

**Separation:** Silica gel
**Eluents:** Hexane, DCM

**Matrix:** Soil
**Date Booked in** 02-Nov-15
**Date Extracted** 05-Nov-15
**Date Analysed:** 06-Nov-15, 23:37:03

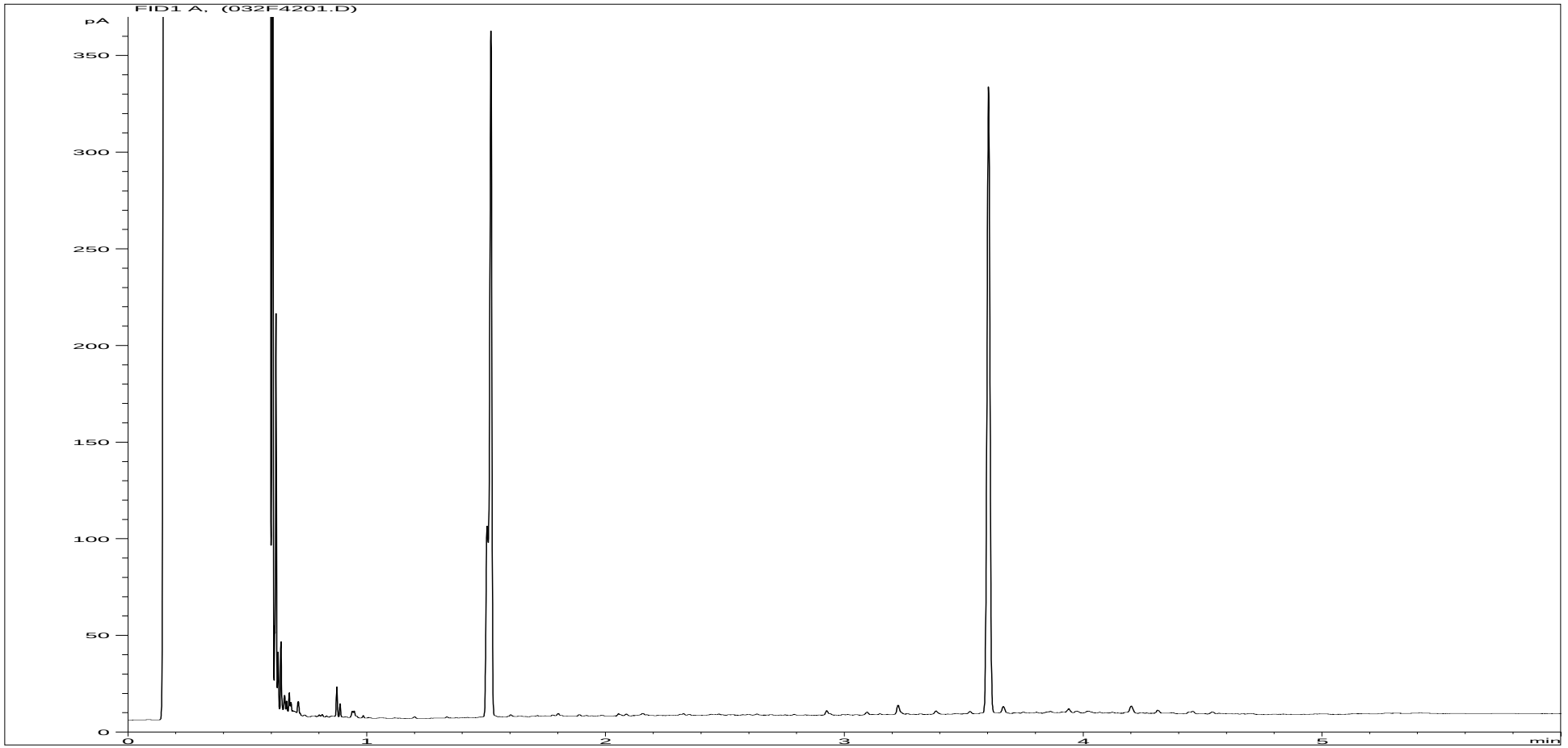
This sample data is not MCERTS accredited.
*** This sample data is not ISO17025 accredited.**

| | | 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 |
| CL1568011 | WS20 ES 1 0.8 | <6 | <6 | <6 | <6 | 8.42 | 6.68 | 19.1 | 30.5 | 59.2 | 129.7 | 93.7 | 185 |
| CL1568012 | WS20 ES 2 3.0 | <5 | <5 | <5 | <5 | <5 | 6.37 | 6.43 | 18.1 | 68 | 131 | 87.6 | 181 |
| CL1568013 | WS21 ES 1 1.1 | <5 | <5 | 19.1 | <5 | 104.8 | 52.1 | 164 | 145 | 1500 | 741 | 1970 | 1020 |
| CL1568014 | WS21 ES 2 1.9 | <5 | <5 | 13 | <5 | 100.6 | 43 | 152 | 154 | 775 | 529 | 1110 | 775 |
| CL1568015 | WS22 ES 1 0.6 | <5 | <5 | <5 | <5 | <5 | 8.05 | 10 | 10.07 | 92.5 | 93.8 | 123 | 136 |
| CL1568016 | WS22 ES 2 3.6 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <9.80 | <9.80 | <22 | <22 |
| CL1568017 | WS22 ES 3 3.8 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <9.50 | <9.50 | <22 | <22 |
| * CL1568018 | WS23 ES 1 0.6 (NVM) | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 17.3 | 40.5 | 108.4 | 54.6 | 153 |
| CL1568019 | WS23 ES 2 1.8 | <6 | <6 | <6 | <6 | <6 | <6 | 6.46 | 11.01 | 51.9 | 106.3 | 66.5 | 140.7 |
| * CL1568020 | WS23 ES 3 3.8 (NVM) | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <9.62 | <9.62 | <22 | <22 |
| CL1568021 | WS24 ES 1 0.5 | <5 | <5 | <5 | <5 | <5 | <5 | 7.88 | 17 | 111.5 | 389 | 139 | 453 |
| CL1568022 | WS24 ES 2 3.0 | <5 | <5 | <5 | <5 | <5 | 6.88 | <5 | <5 | 14 | 16.9 | <26 | 35.2 |
| * CL1568023 | WS24 ES 3 3.8 (NVM) | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | 30 | 14.8 | 34.1 | 25.4 |
| CL1568024 | WS25 ES 1 0.6 | <5 | <5 | <5 | <5 | <5 | 13.6 | 30.4 | 78.4 | 400 | 612 | 509 | 820 |
| * CL1568025 | WS25 ES 2 1.6 (NVM) | <6 | <6 | <6 | <6 | <6 | 6.58 | 8.8 | 7.45 | 30 | 23.8 | 45.9 | 50 |
| CL1568026 | WS25 ES 3 3.1 | 986 | 209 | 1860 | 569 | 1540 | 656 | 165 | 142 | 424 | 378 | 4970 | 1960 |
| * CL1568027 | WS25 ES 4 3.9 (NVM) | 115 | 19.4 | 329 | 87.5 | 320 | 125 | 33.4 | 27.2 | 108.6 | 84.8 | 908 | 347 |
| CL1568028 | WS26 ES 1 0.8 | <5 | <5 | <5 | <5 | <5 | 5.65 | 37.8 | 22 | 373 | 265 | 468 | 340 |
| * CL1568029 | WS26 ES 2 1.9 (NVM) | <5 | <5 | <5 | <5 | <5 | 5.57 | 6.73 | 6.19 | 98.1 | 83.4 | 117 | 111.7 |
| | | | | | | | | | | | | | |



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

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

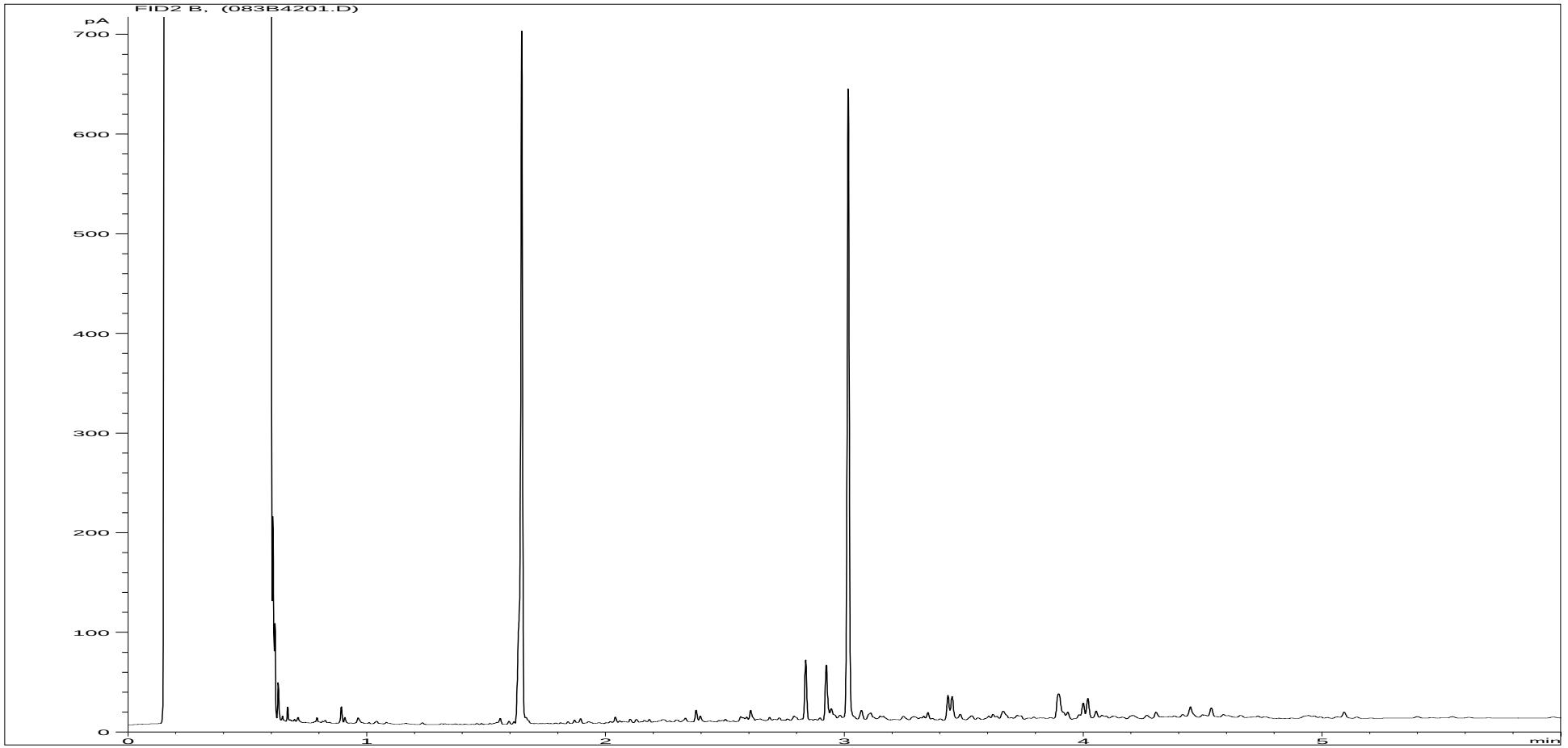



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568011ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS20 ES 1 0.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 19:40:21 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\032F4201.D | | |



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

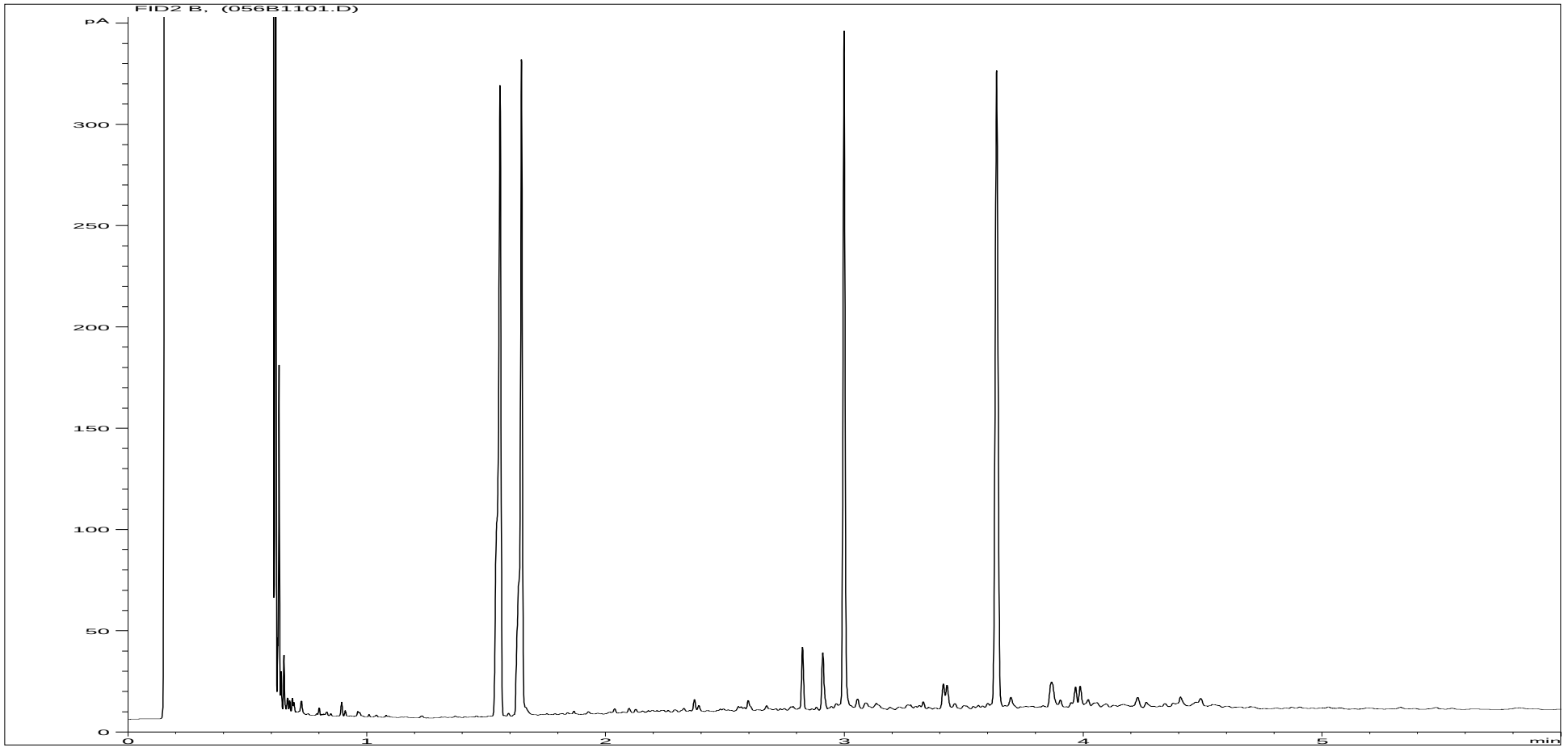
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568011ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.88 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS20 ES 1 0.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 19:40:21 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\083B4201.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

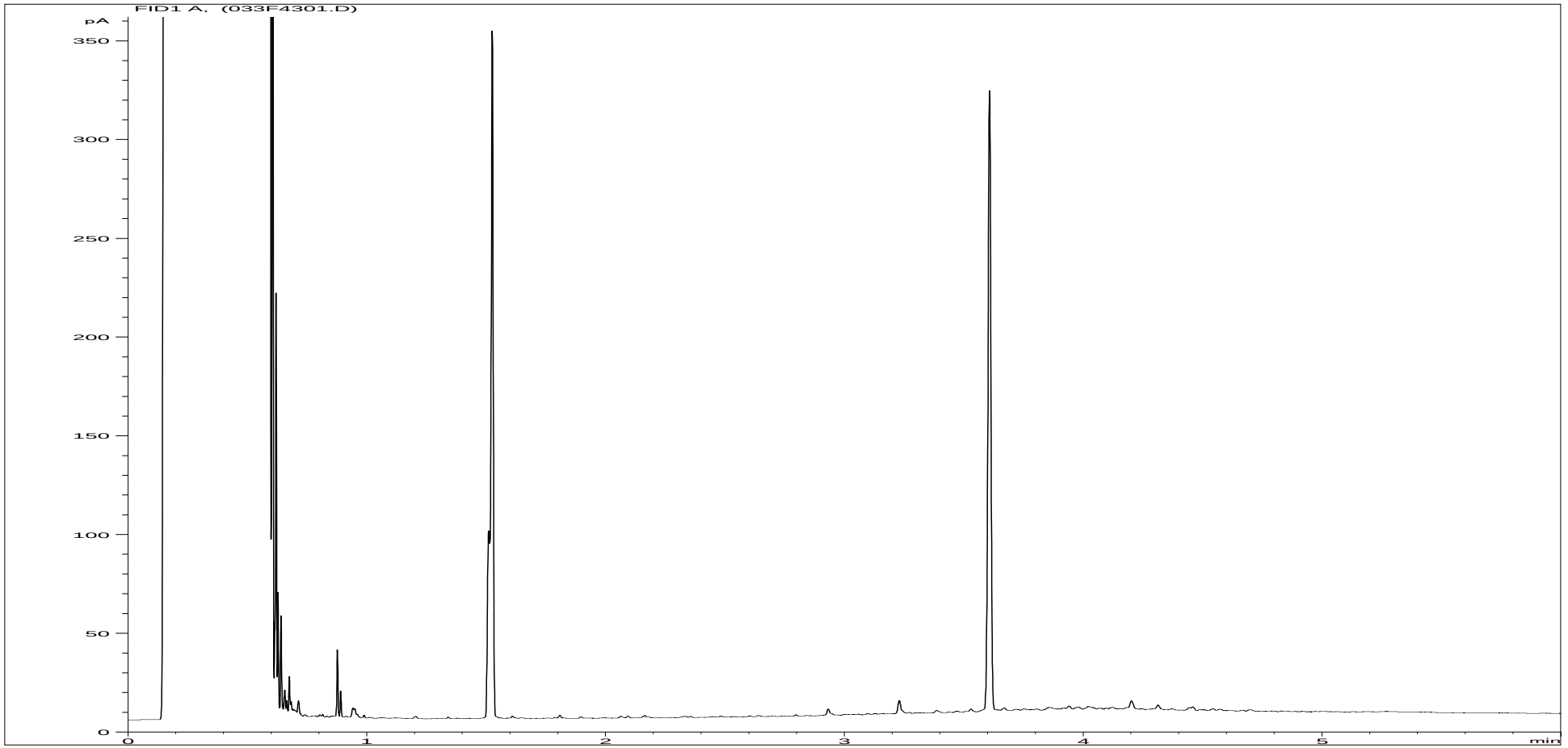



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568011SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 15.84 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 12:24:51 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\056B1101.D | | |



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

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

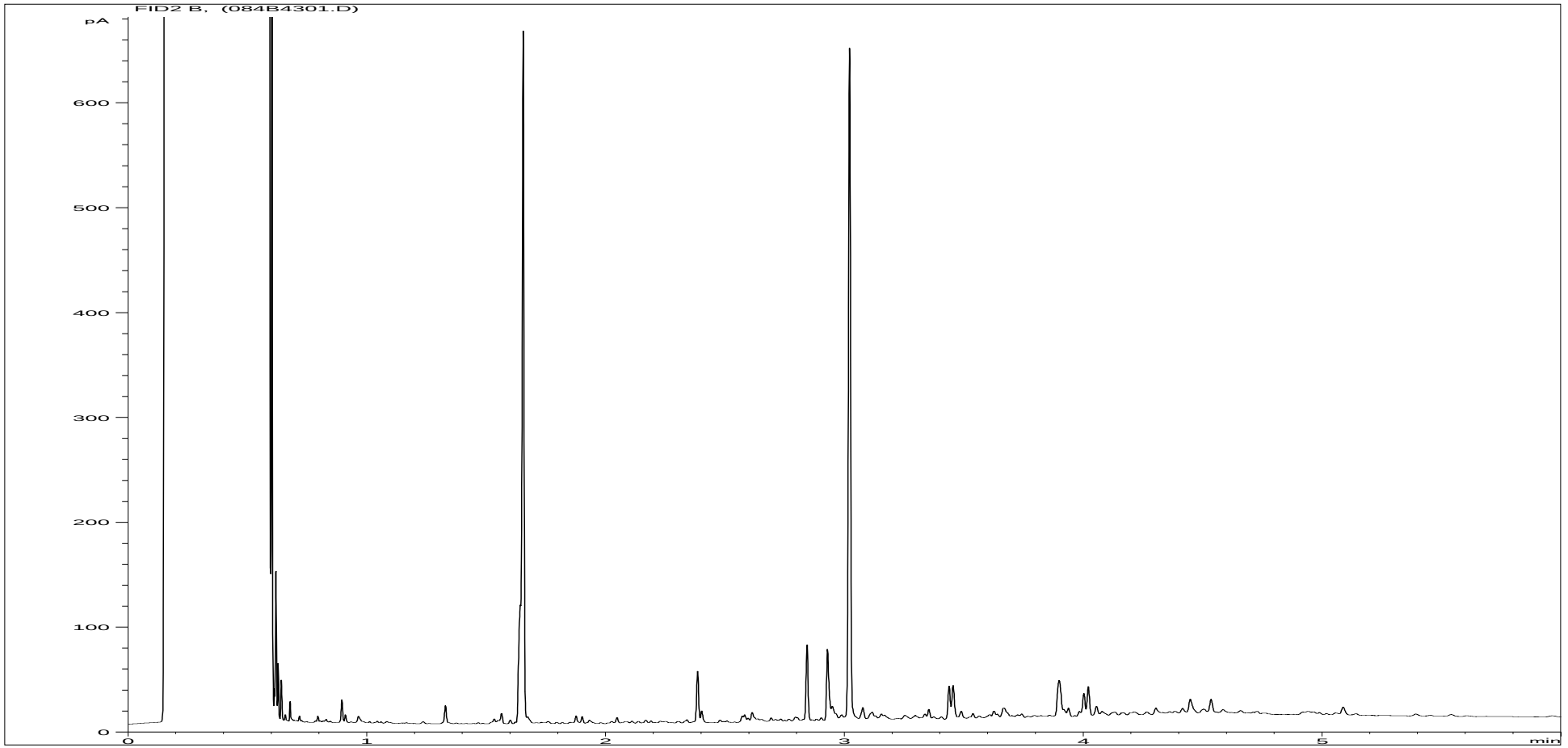



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568012ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS20 ES 2 3.0 |
| **Acquisition Date/Time:** | 06-Nov-15, 19:53:37 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\033F4301.D | | |



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

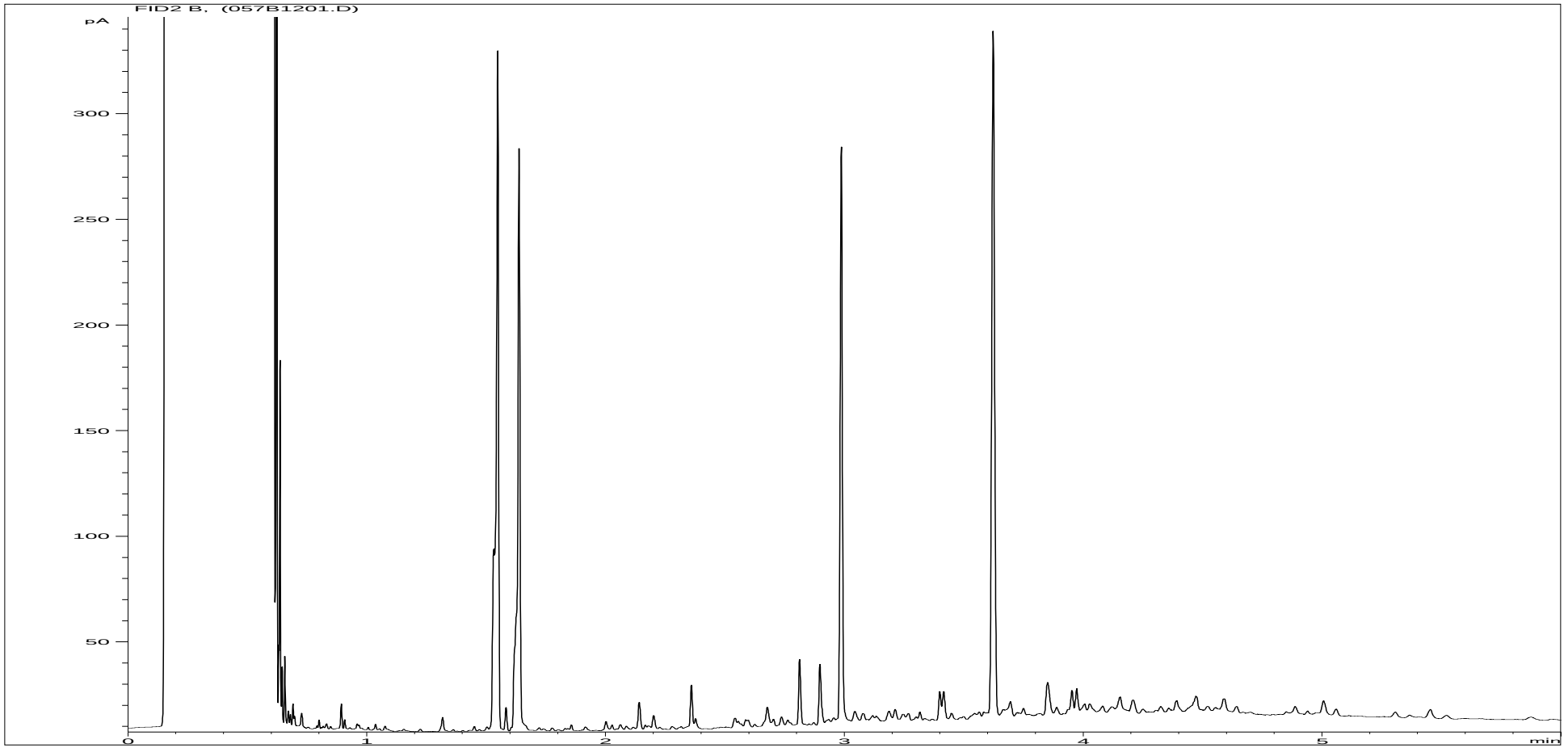
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568012ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.24 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS20 ES 2 3.0 |
| **Acquisition Date/Time:** | 06-Nov-15, 19:53:37 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\084B4301.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

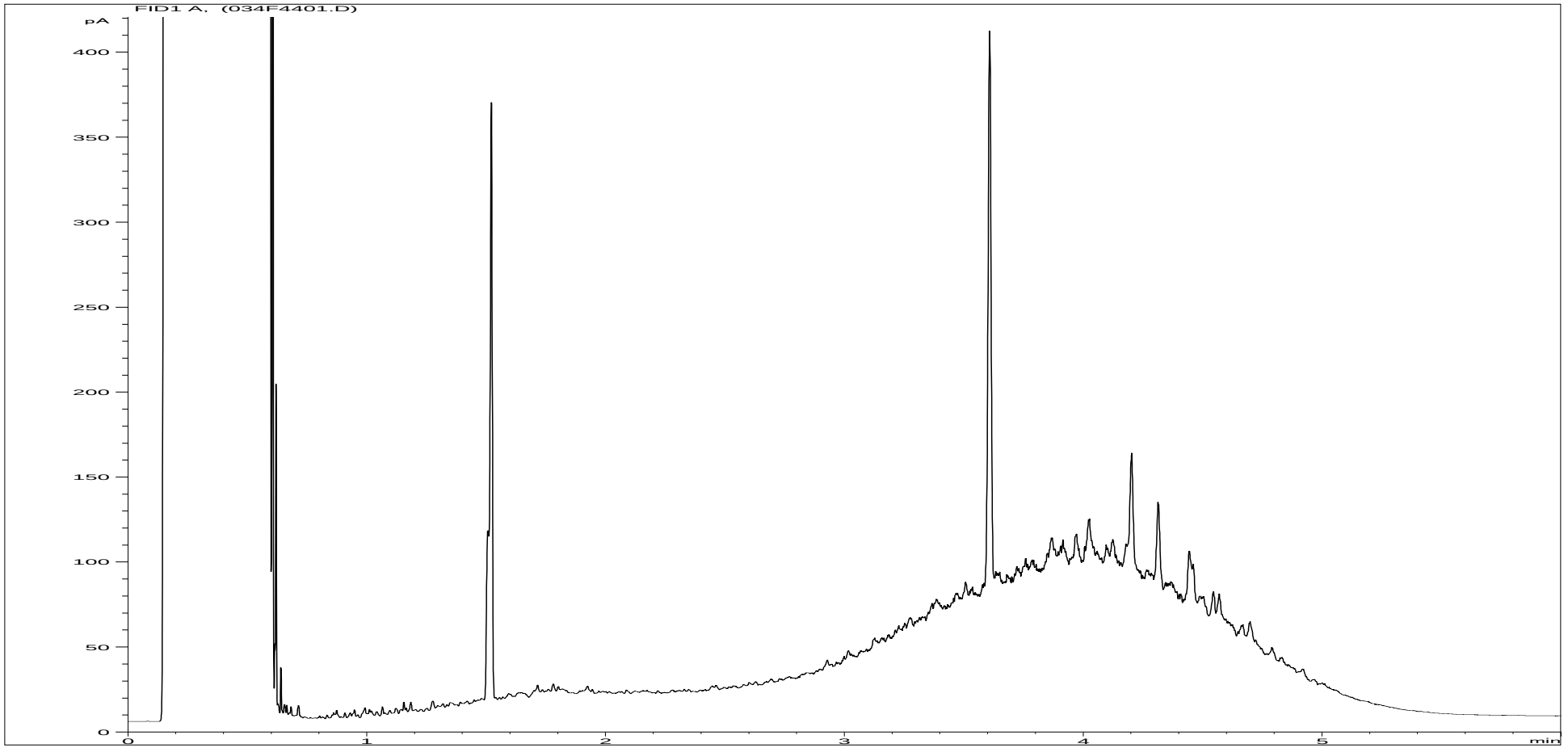



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568012SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 12:38:14 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\057B1201.D | | |



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

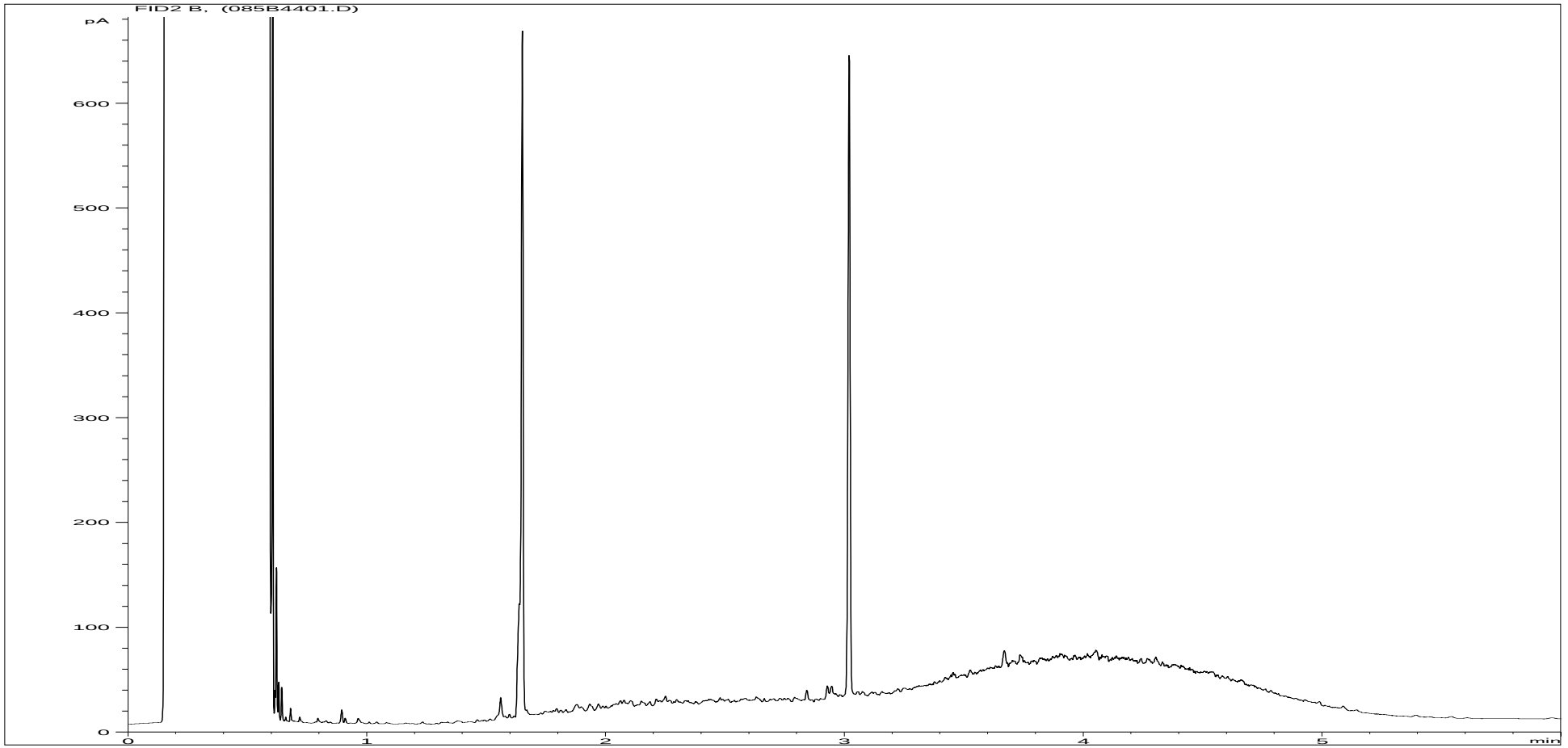
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568013ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS21 ES 1 1.1 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:06:46 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\034F4401.D | | |


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

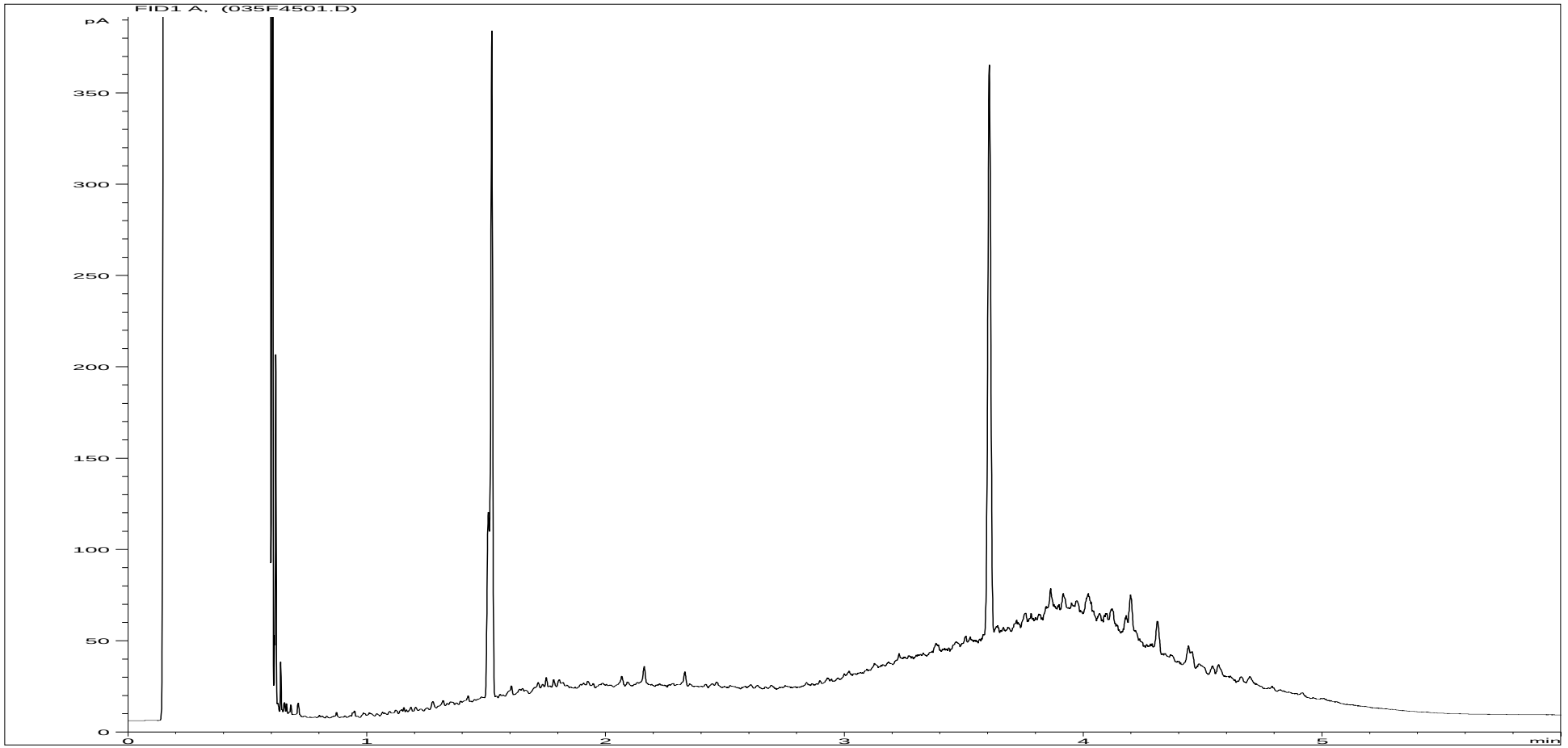
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568013ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.4 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS21 ES 1 1.1 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:06:46 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\085B4401.D | | |


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

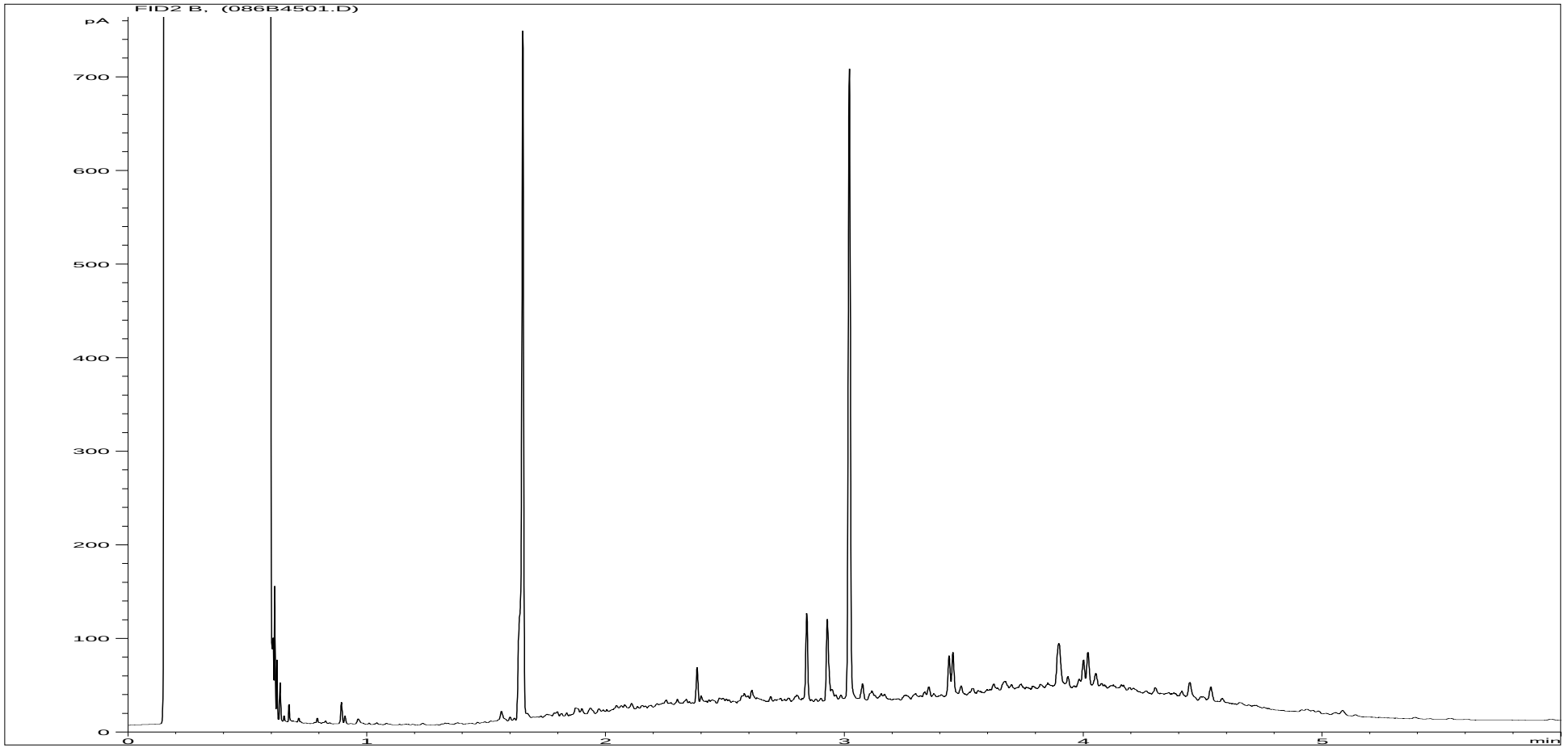
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568014ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS21 ES 2 1.9 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:19:53 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\035F4501.D | | |


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

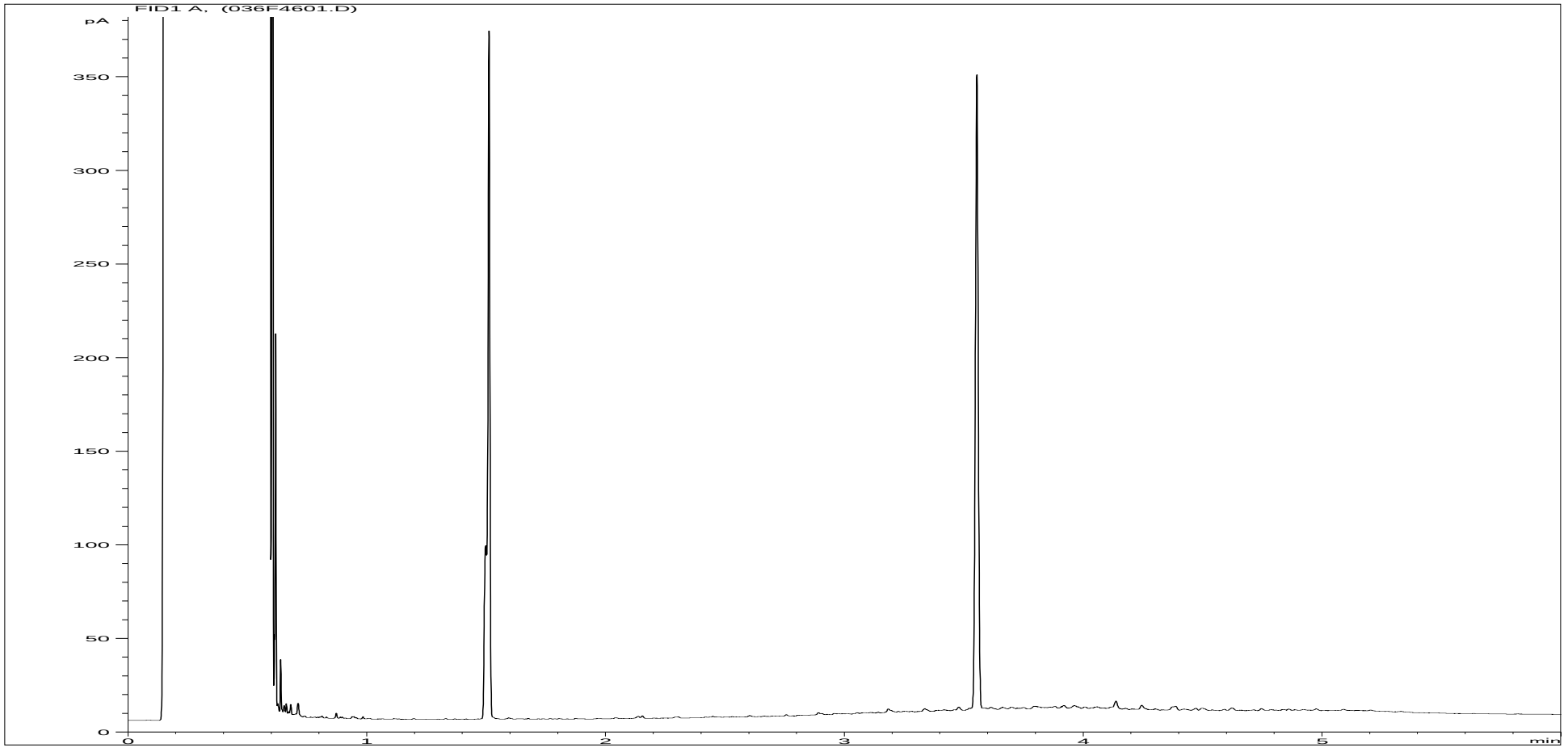
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568014ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.4 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS21 ES 2 1.9 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:19:53 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\086B4501.D | | |


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

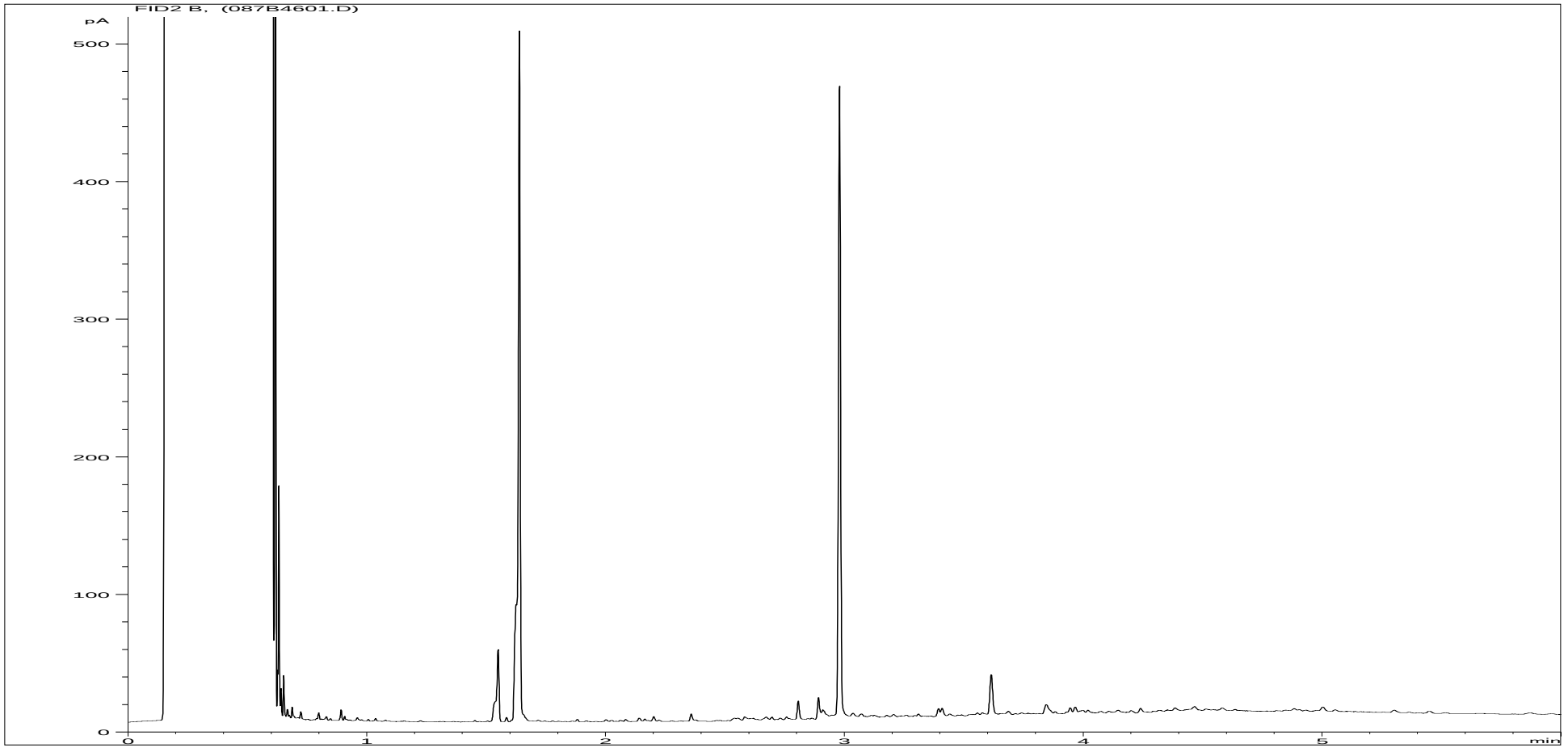
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568015ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 1 0.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:33:14 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\036F4601.D | | |


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

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

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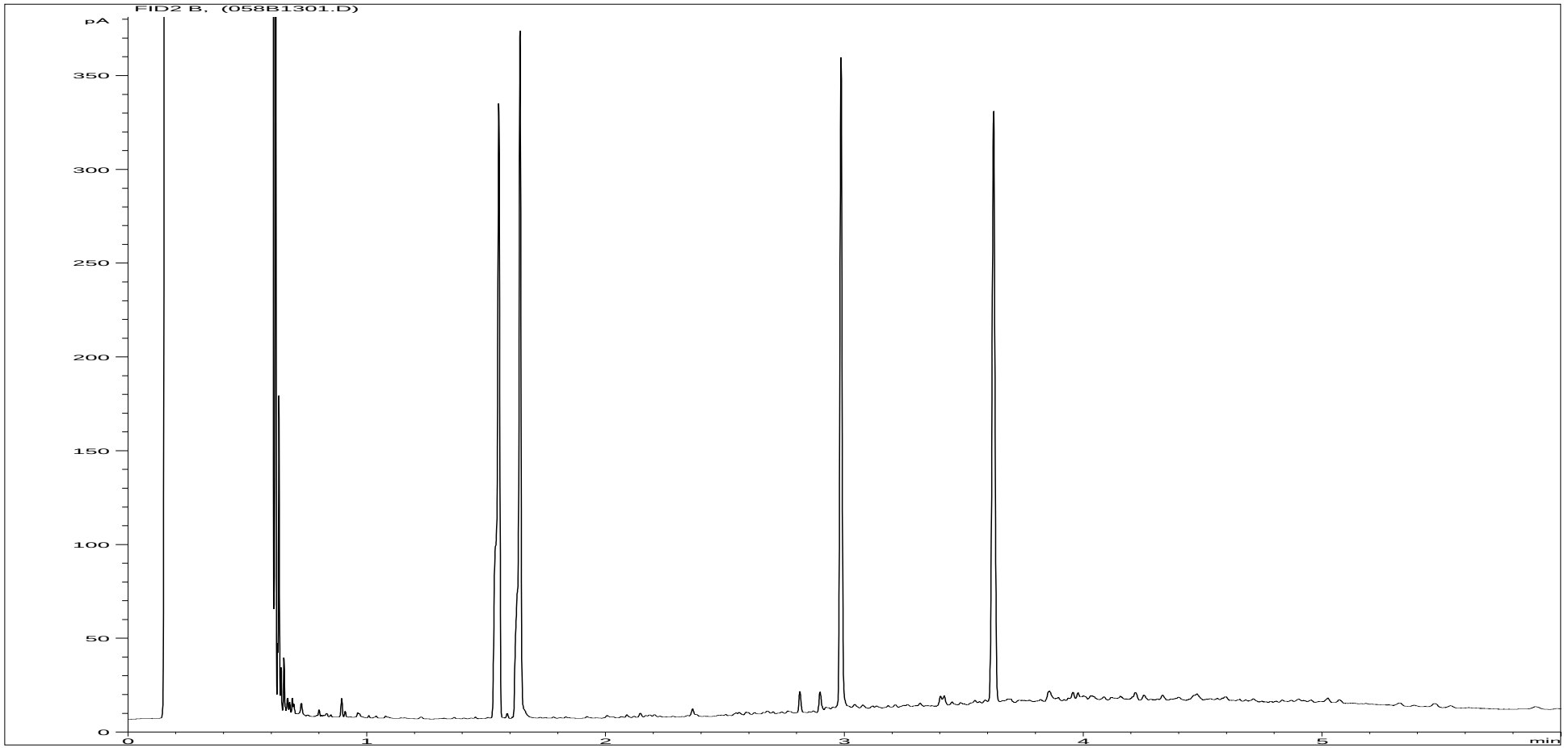
|---|---|---|---|
| **Sample ID:** | CL1568015ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.68 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 1 0.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:33:14 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\087B4601.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

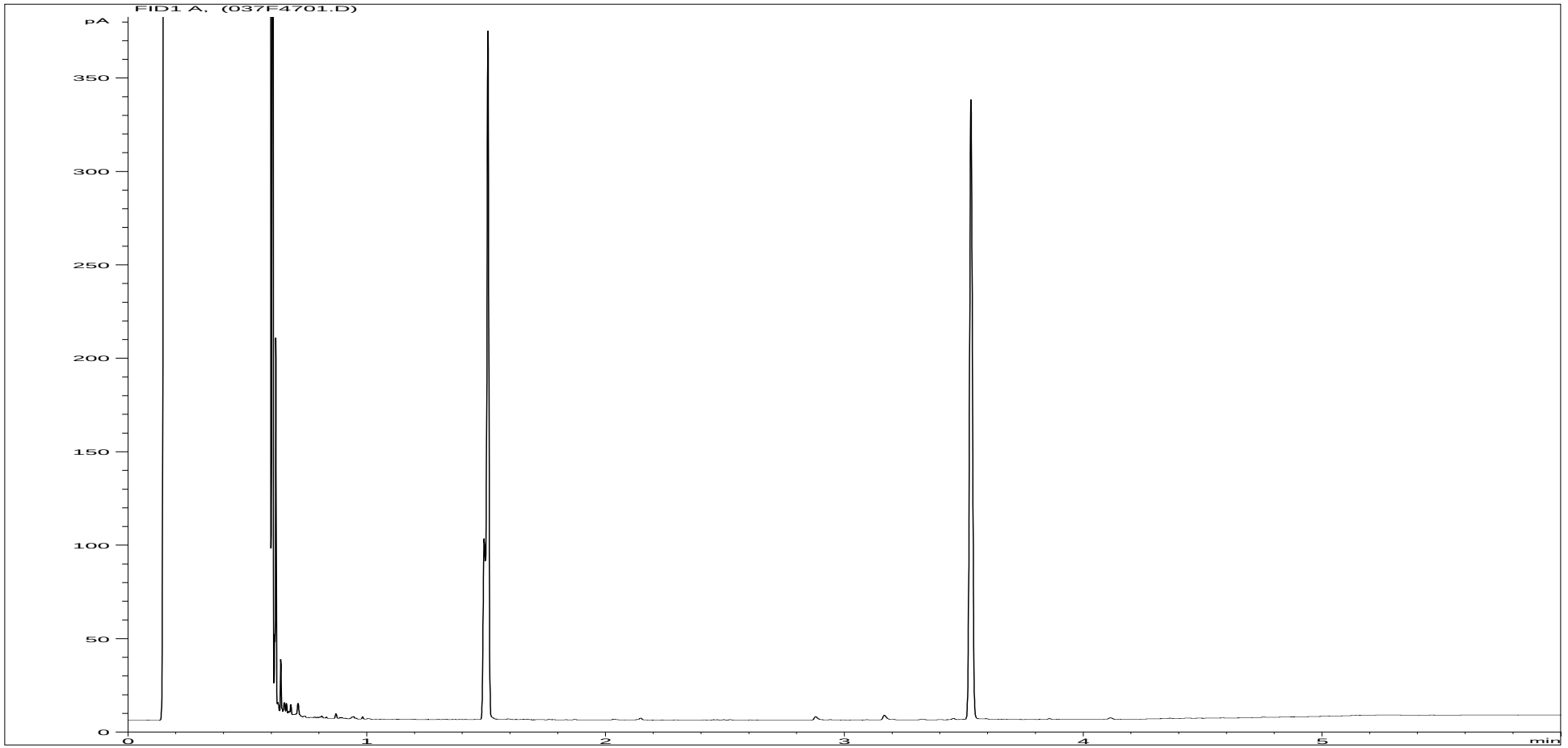



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568015SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 12:51:47 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\058B1301.D | | |



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

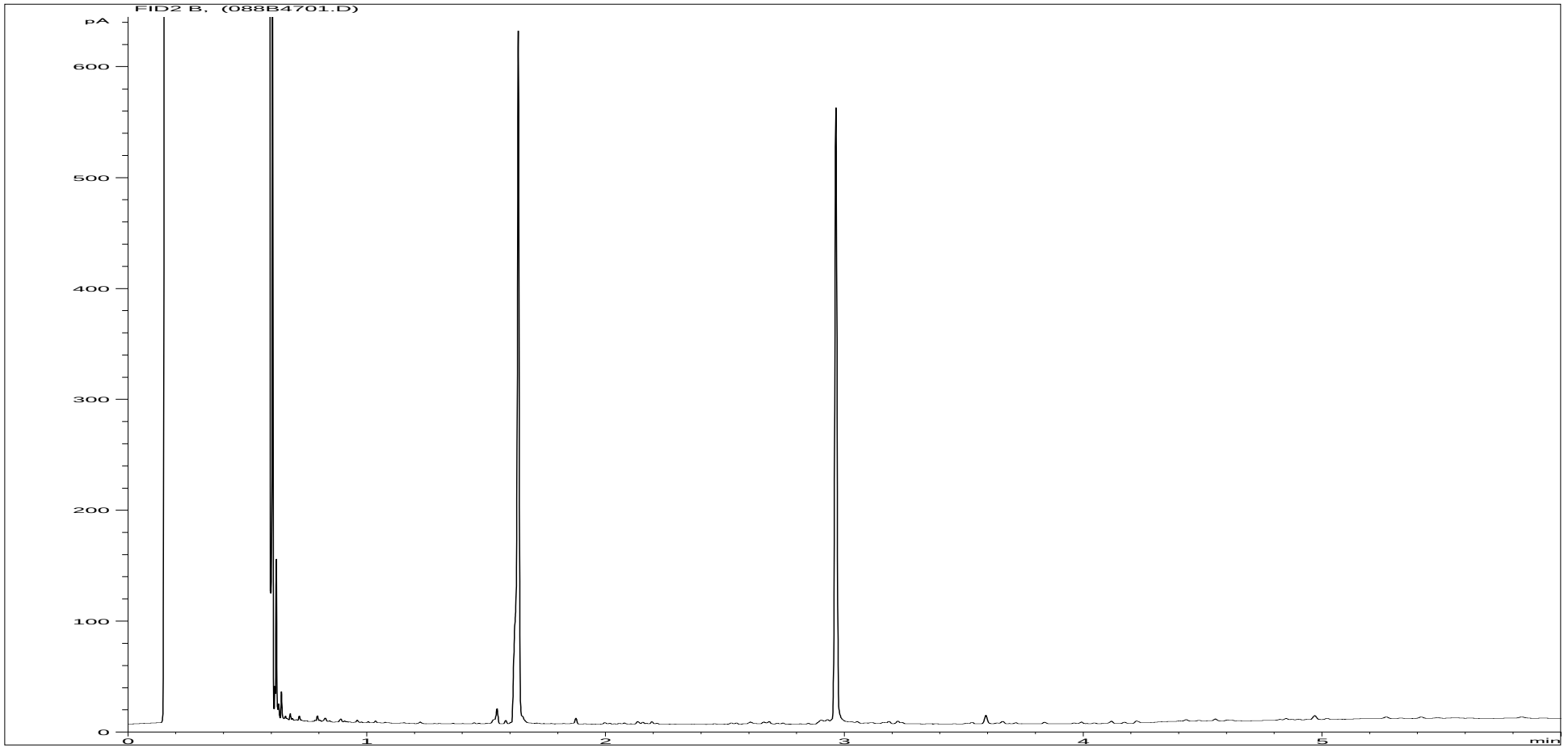
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568016ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 2 3.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:46:24 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\037F4701.D | | |


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

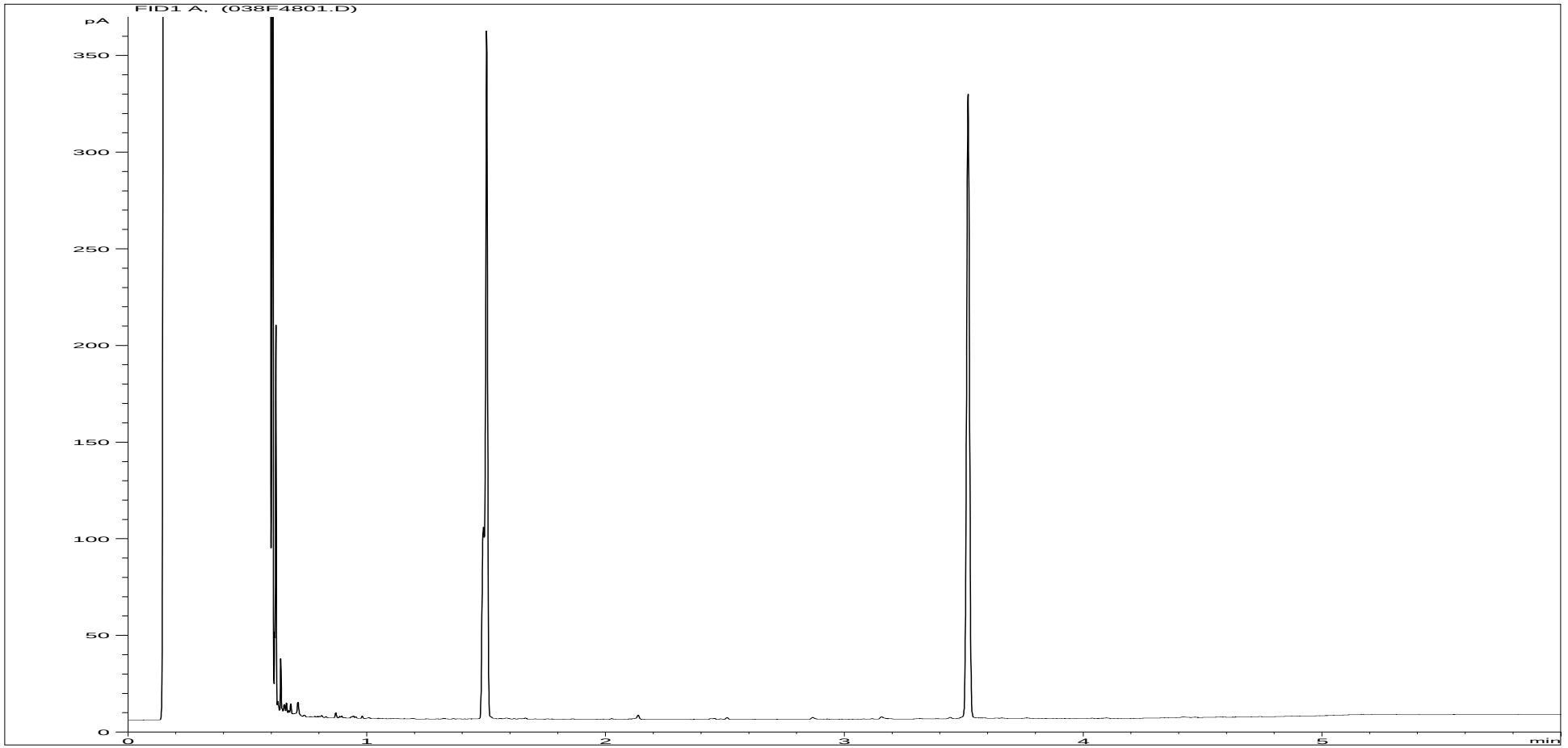
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568016ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.2 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 2 3.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:46:24 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\088B4701.D | | |


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

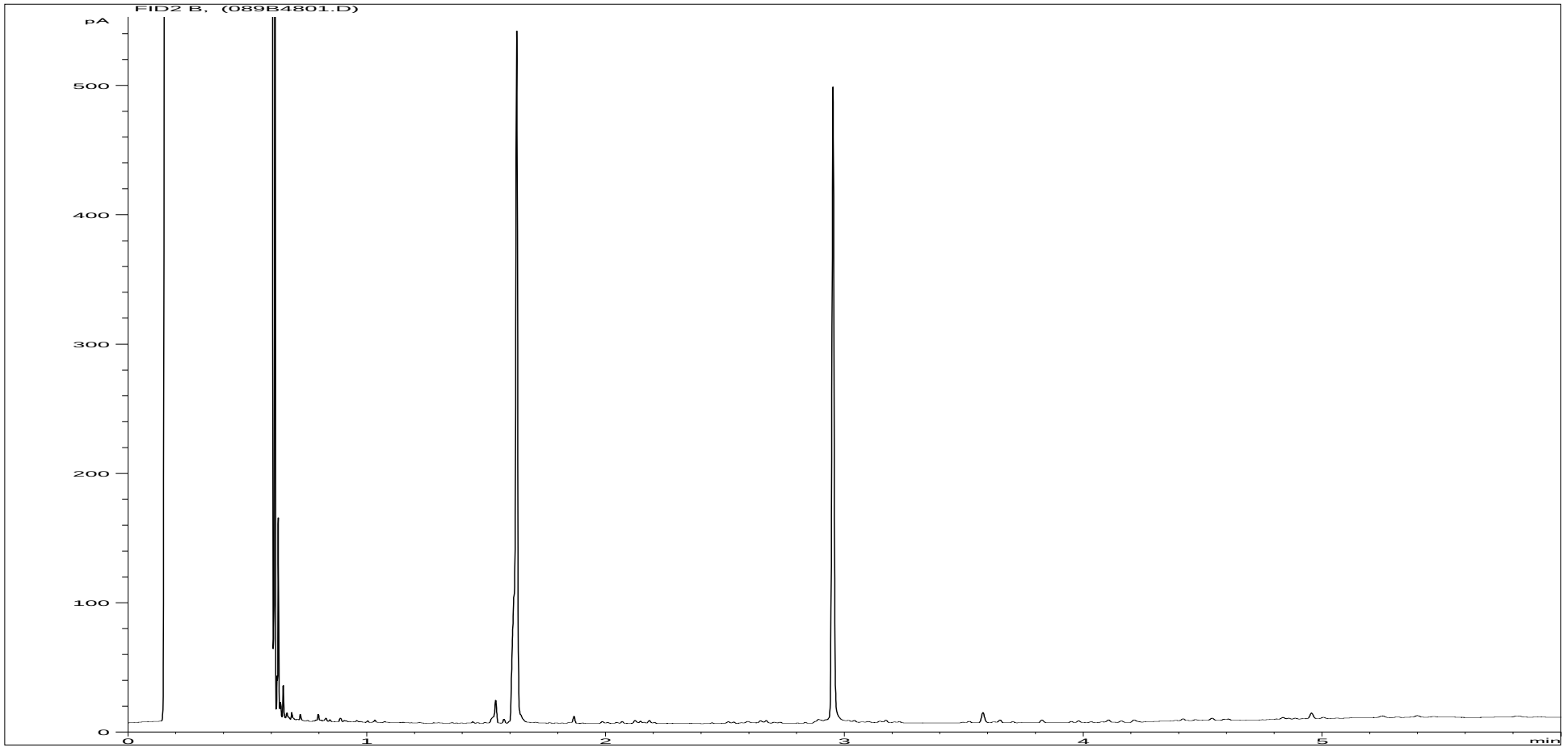
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568017ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 3 3.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:59:37 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\038F4801.D | | |


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

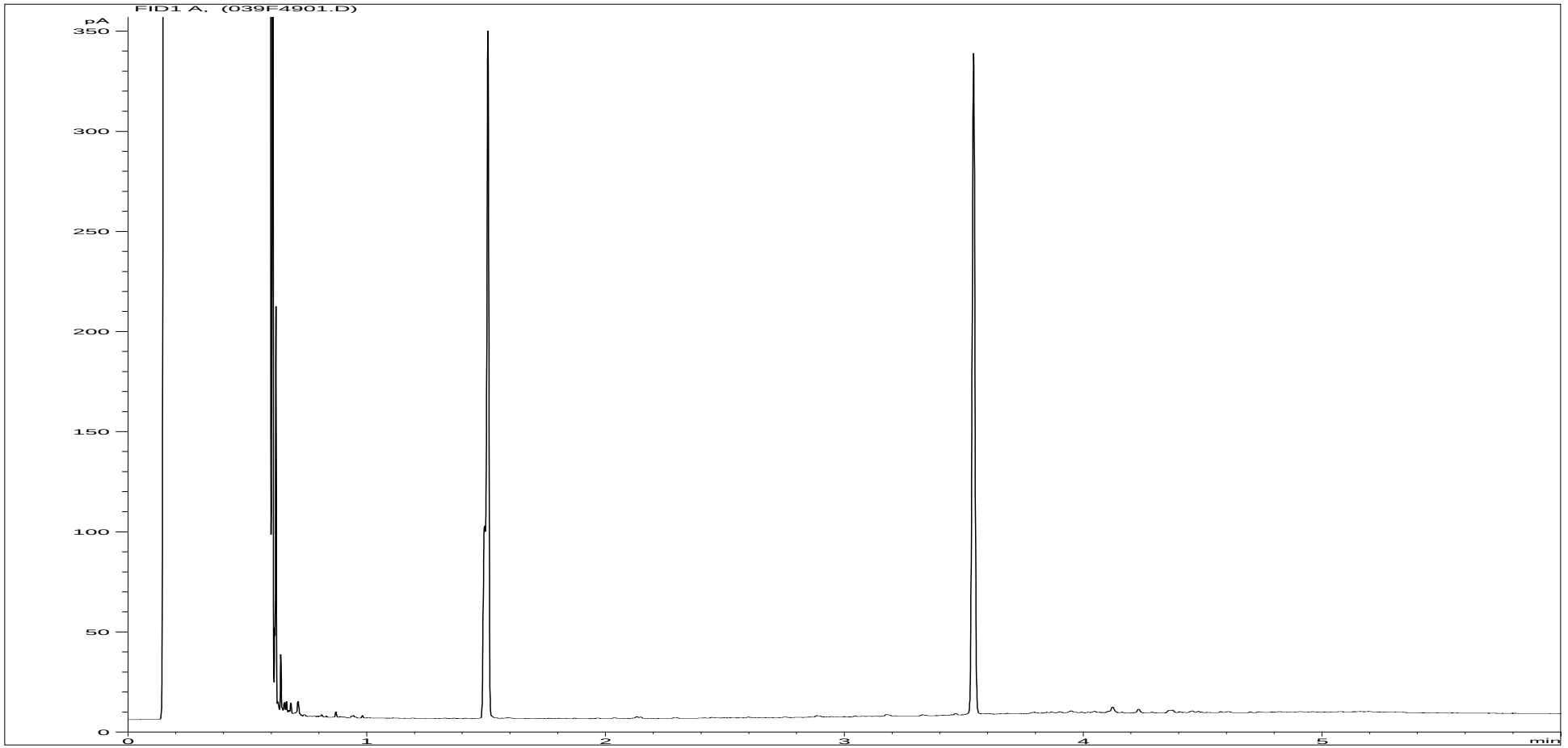
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568017ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.36 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS22 ES 3 3.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 20:59:37 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\089B4801.D | | |


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

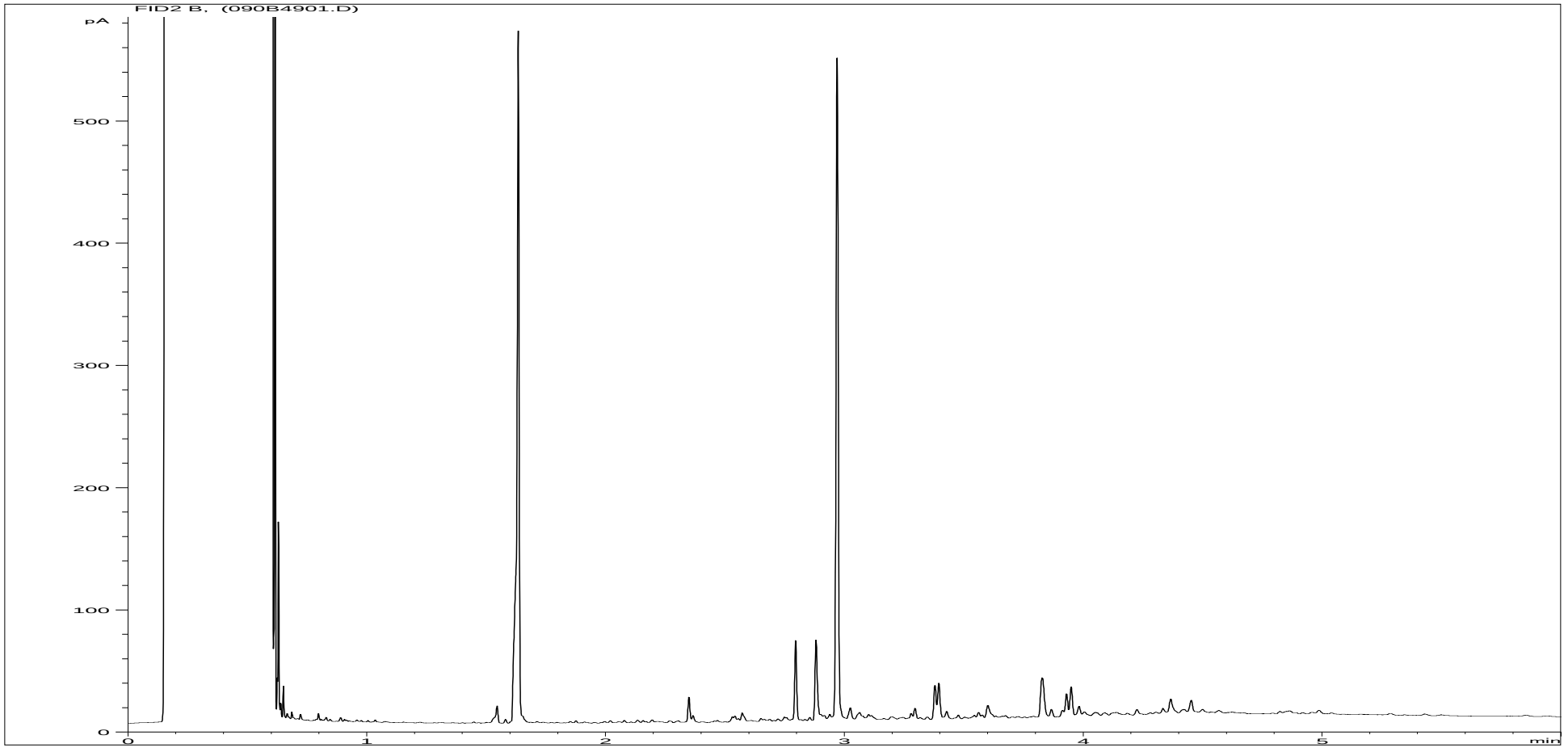
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568018ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 1 0.6 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 21:12:44 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\039F4901.D | | |


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

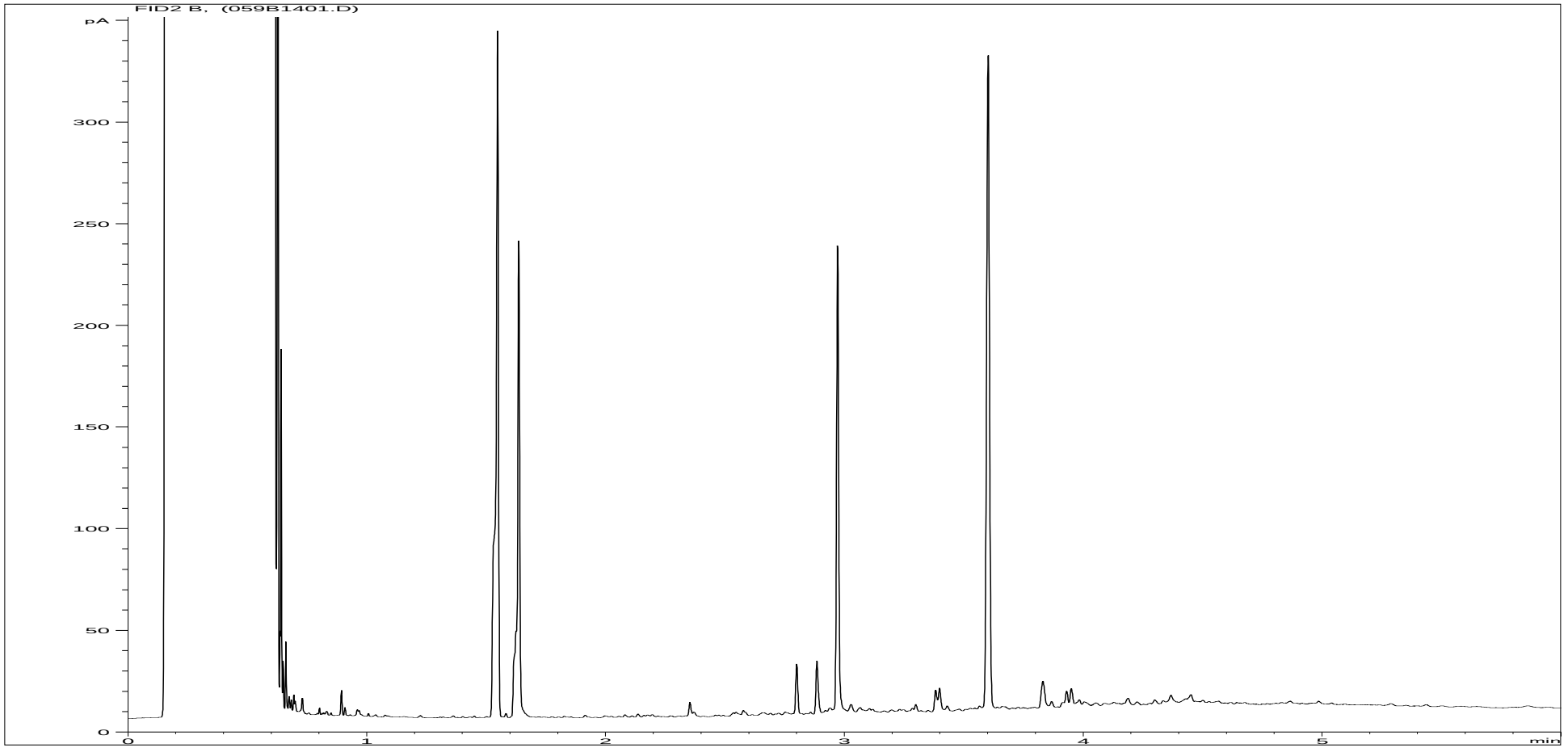
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568018ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.2 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 1 0.6 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 21:12:44 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\090B4901.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

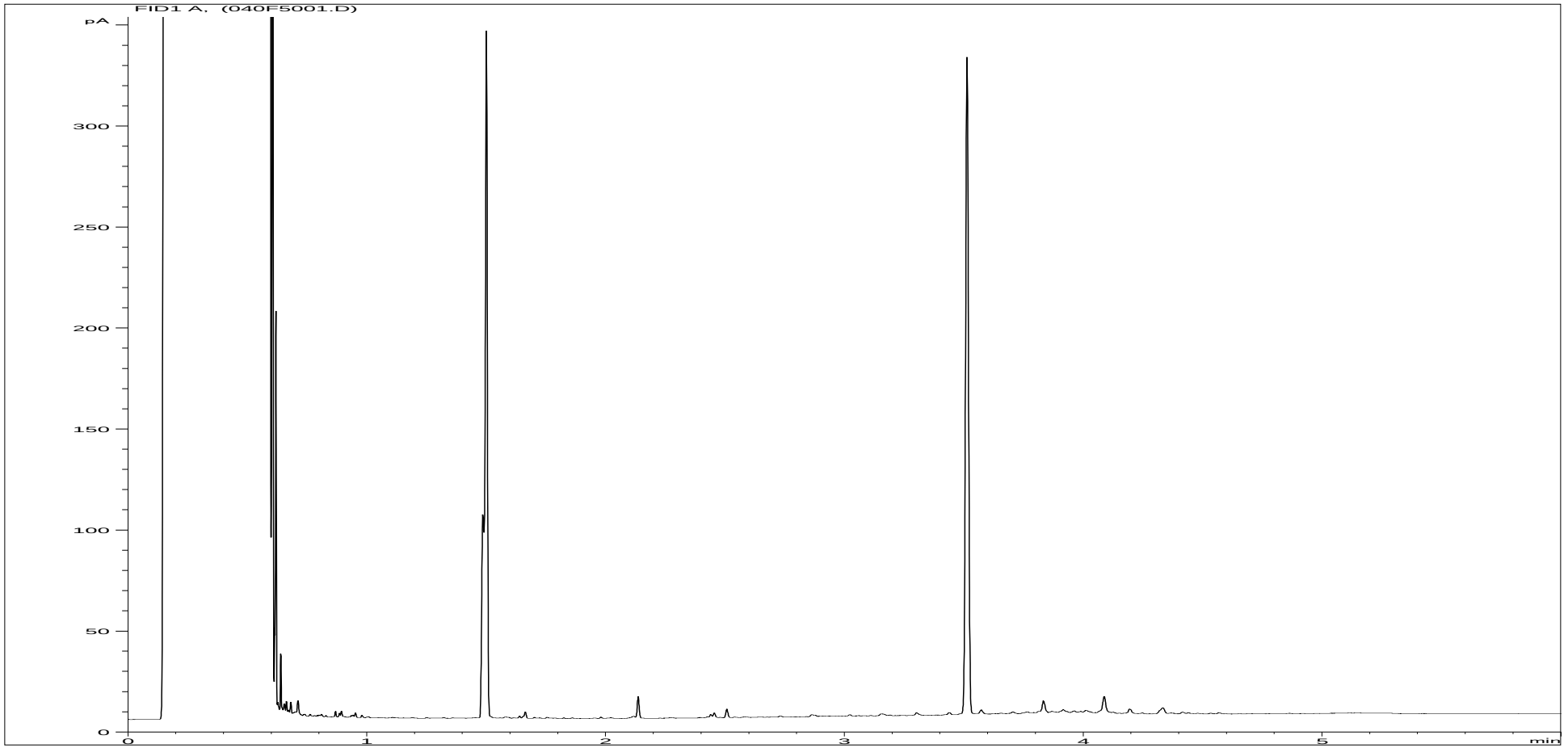



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568018SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 13:05:14 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\059B1401.D | | |



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

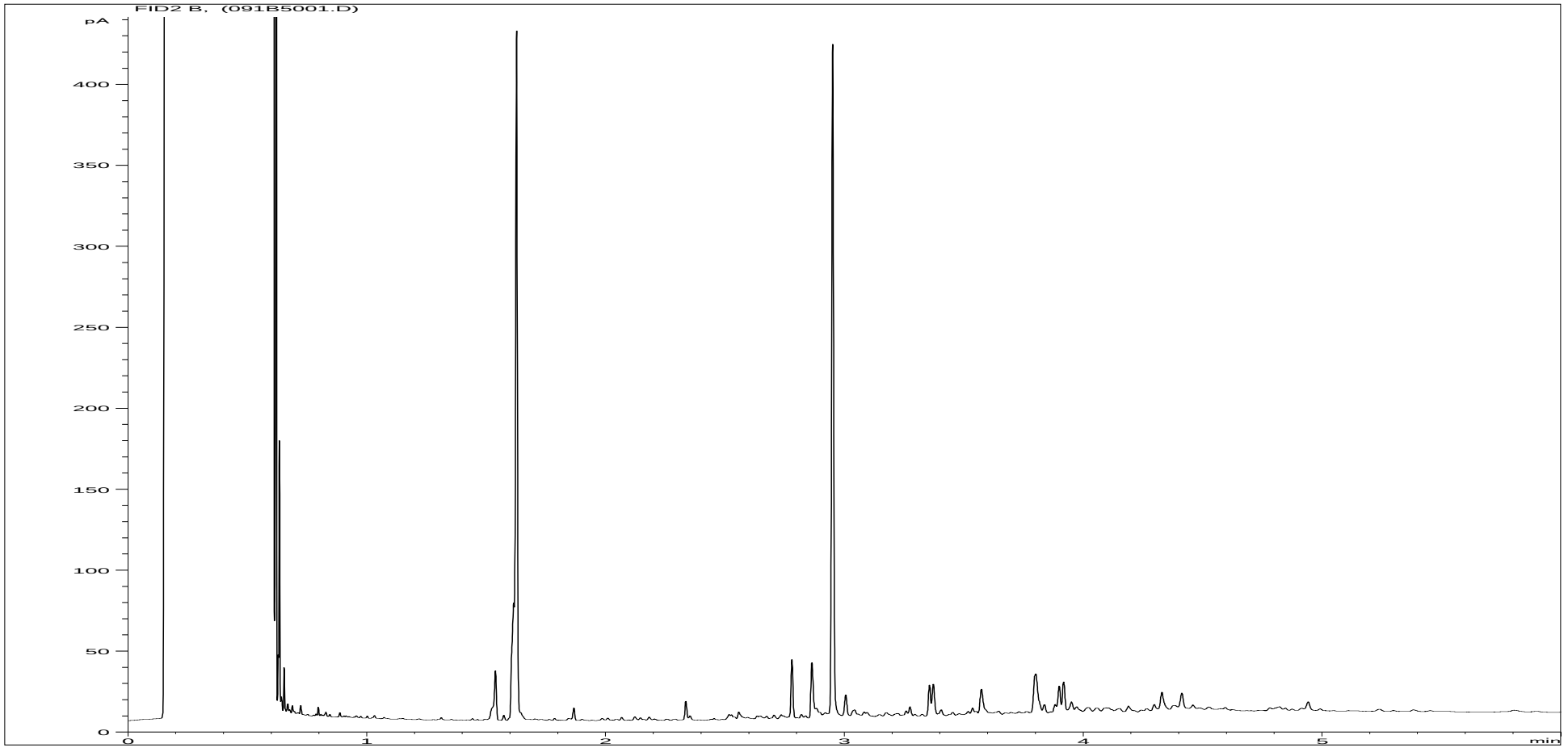
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568019ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 2 1.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 21:25:49 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\040F5001.D | | |


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

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

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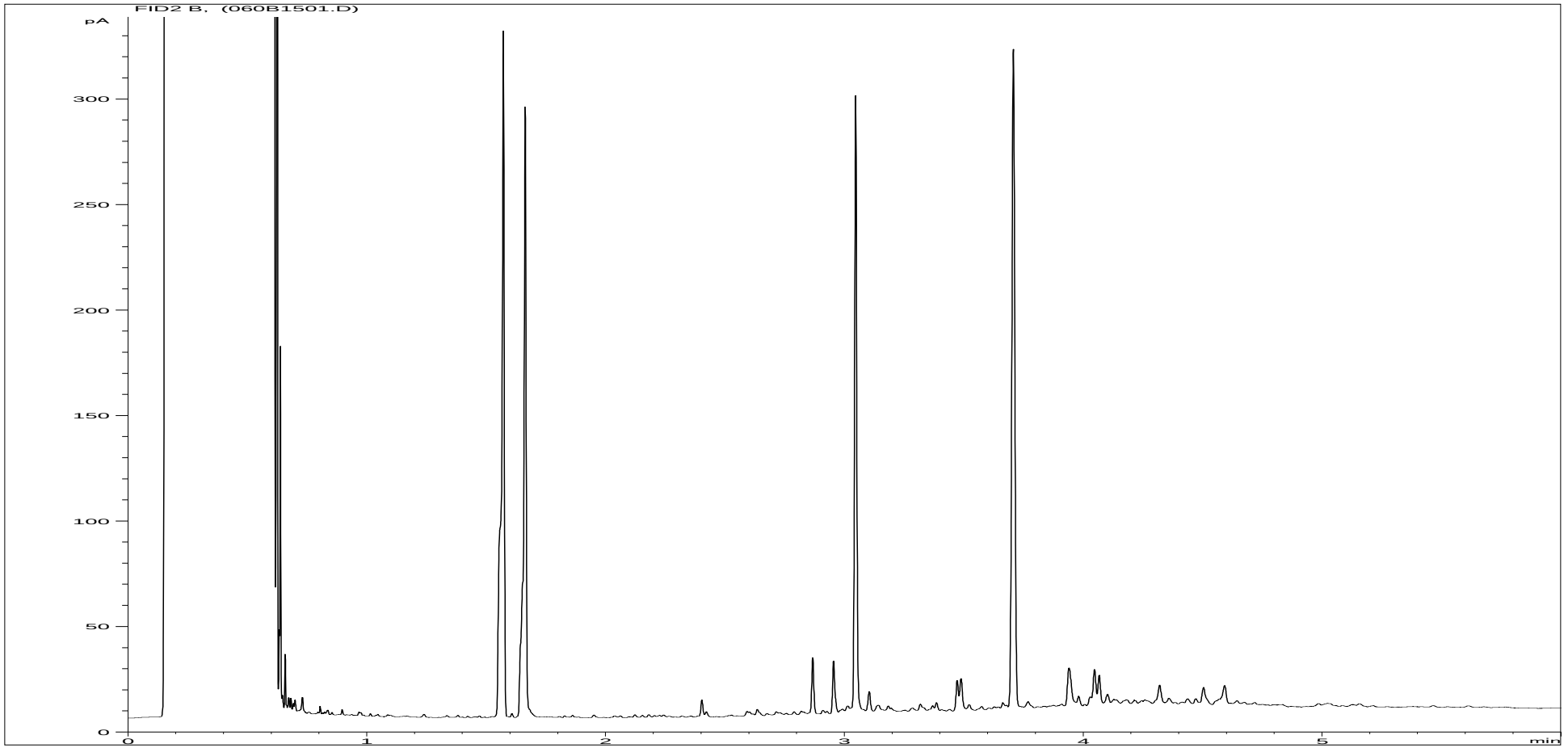
|---|---|---|---|
| **Sample ID:** | CL1568019ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.52 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 2 1.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 21:25:49 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\091B5001.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

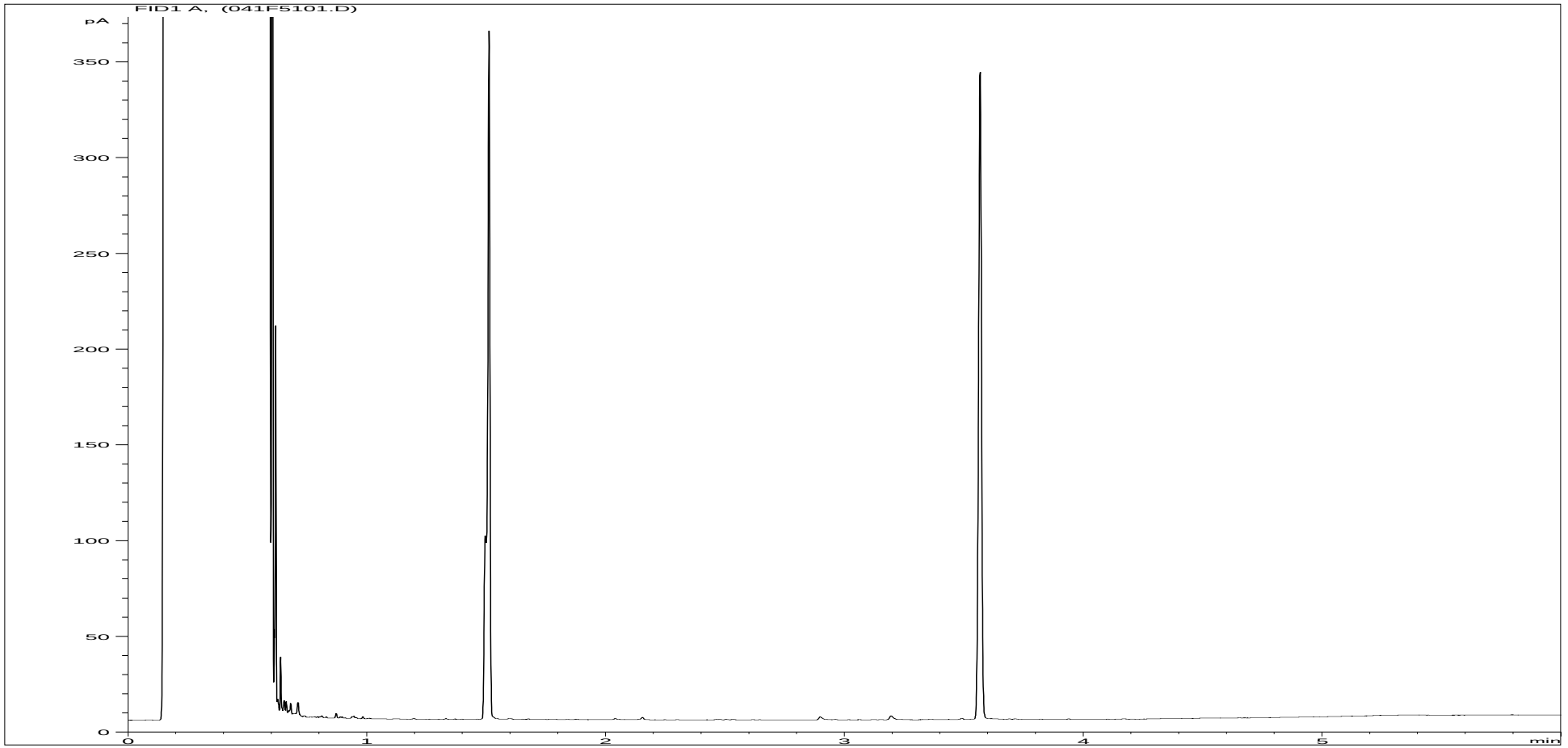



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568019SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 13:18:46 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\060B1501.D | | |



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

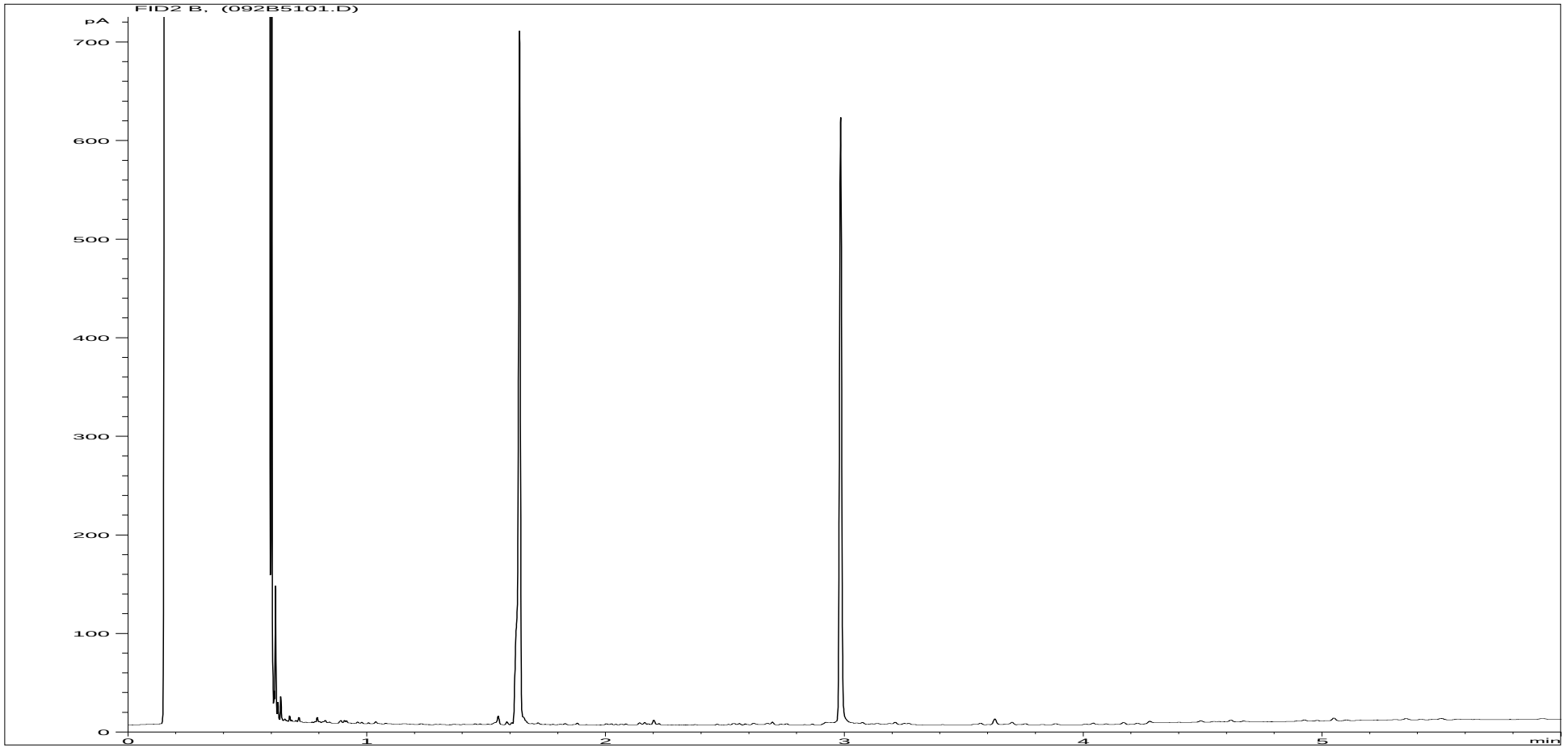
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568020ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 21:39:09 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\041F5101.D | | |


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

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

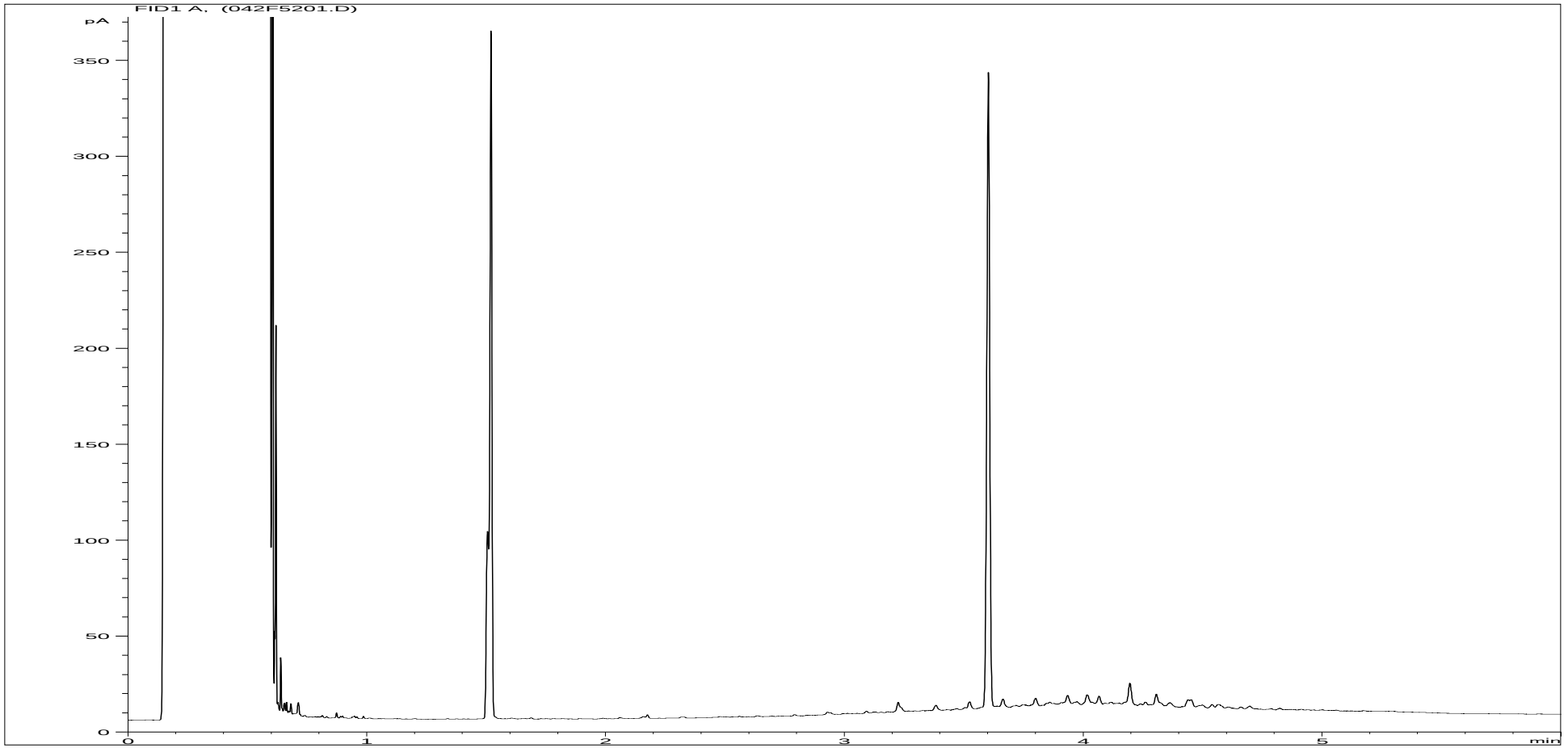



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568020ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.56 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS23 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 21:39:09 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\092B5101.D | | |



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

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

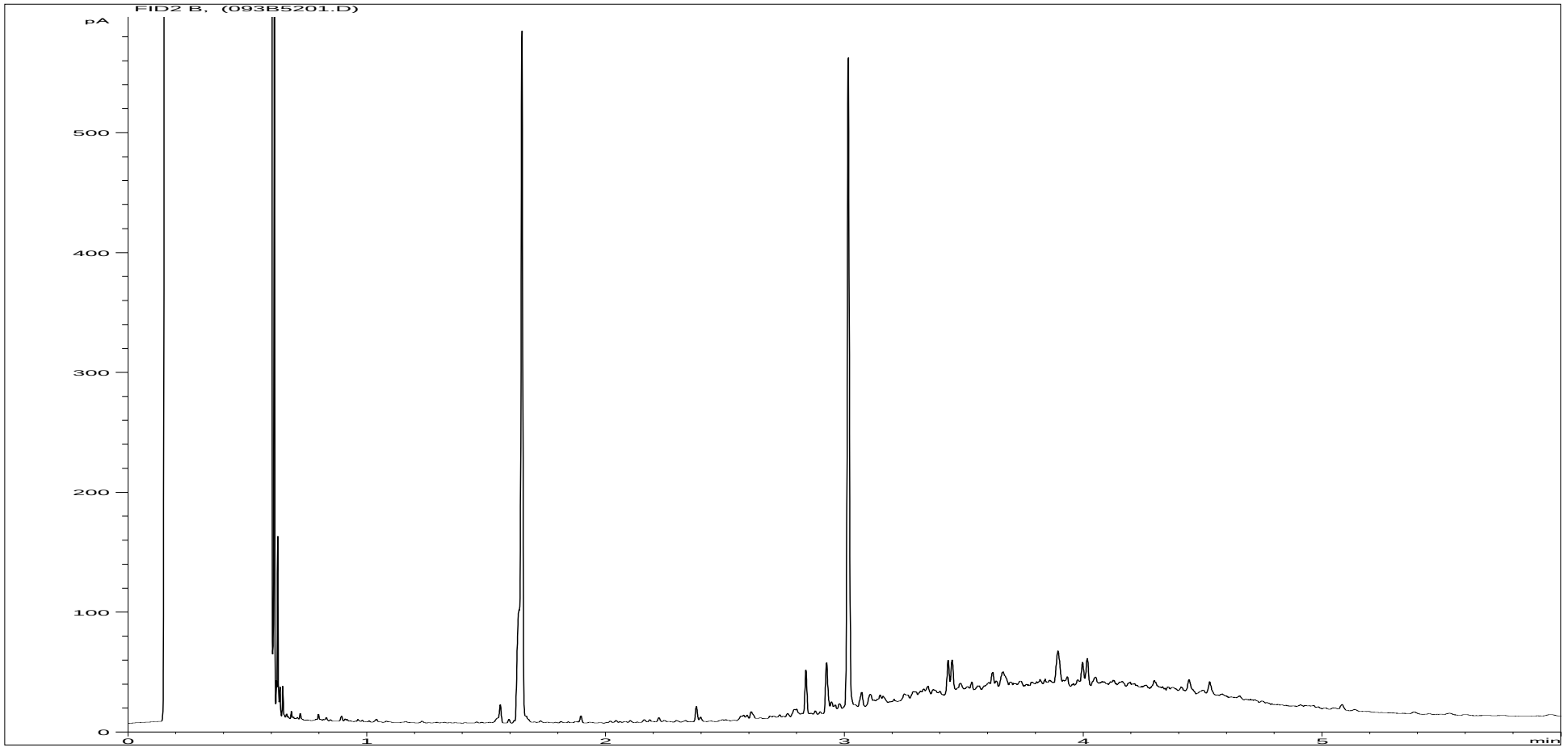



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568021ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 1 0.5 |
| **Acquisition Date/Time:** | 06-Nov-15, 21:52:20 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\042F5201.D | | |



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

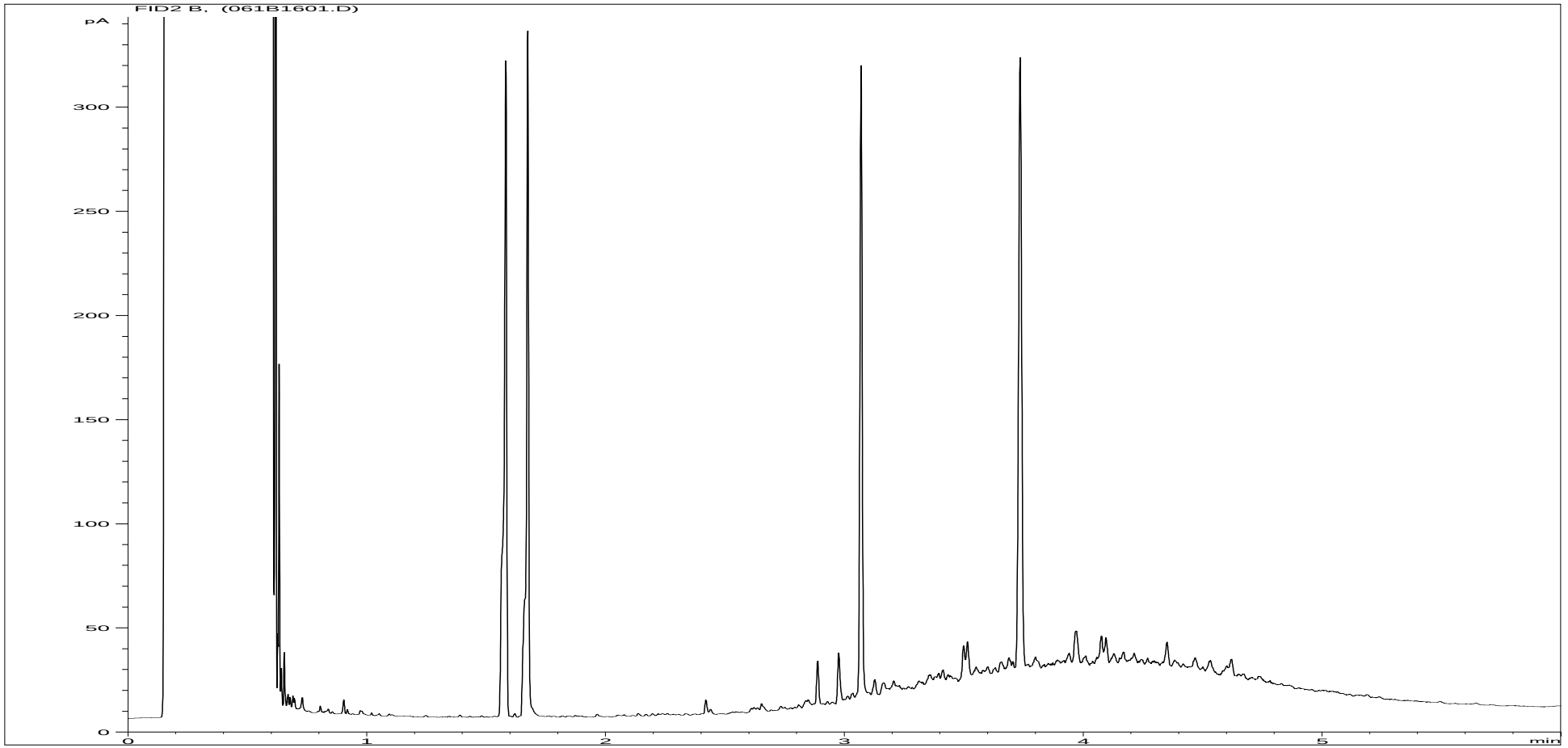
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568021ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.2 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 1 0.5 |
| **Acquisition Date/Time:** | 06-Nov-15, 21:52:20 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\093B5201.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

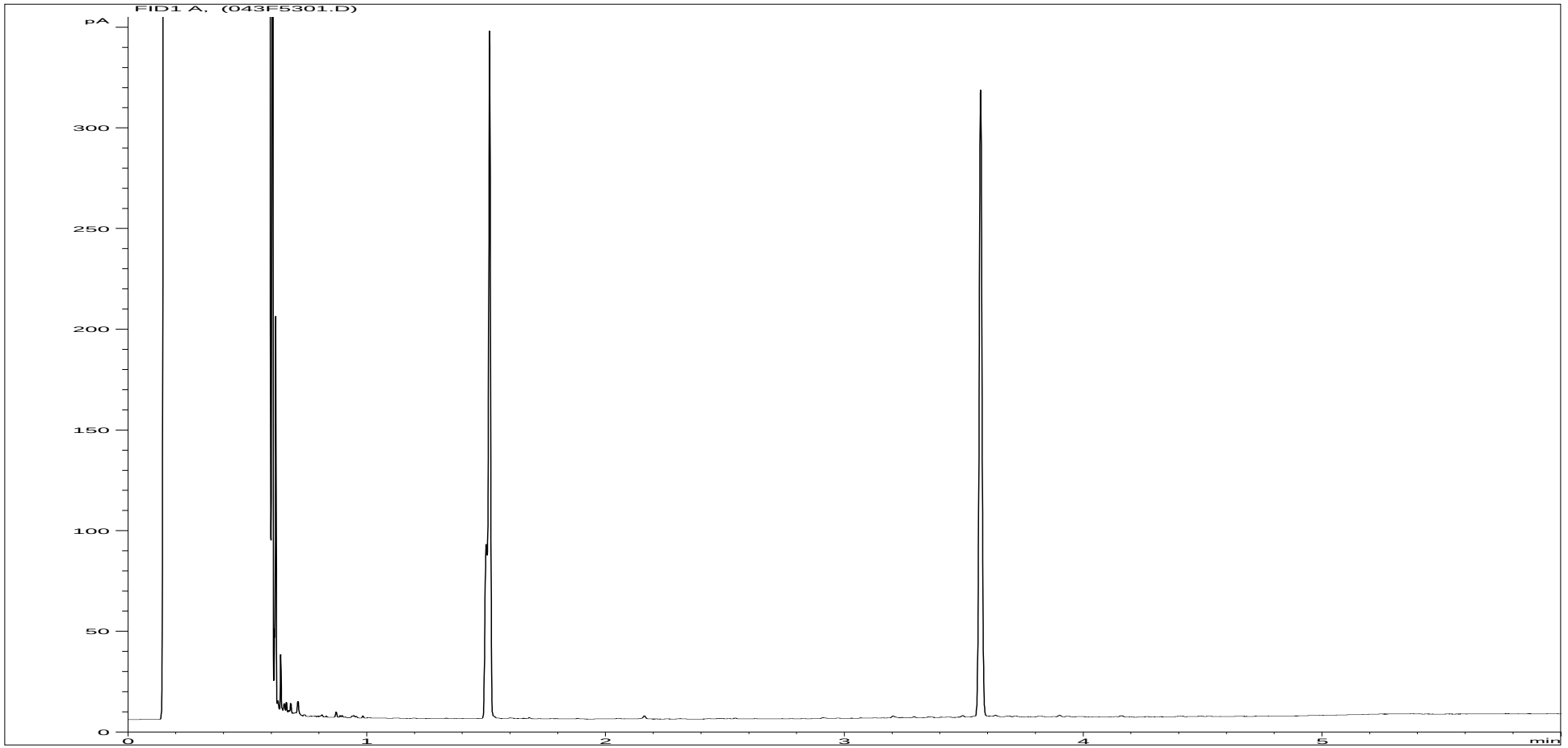



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568021SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 15.84 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 13:32:09 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\061B1601.D | | |



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

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

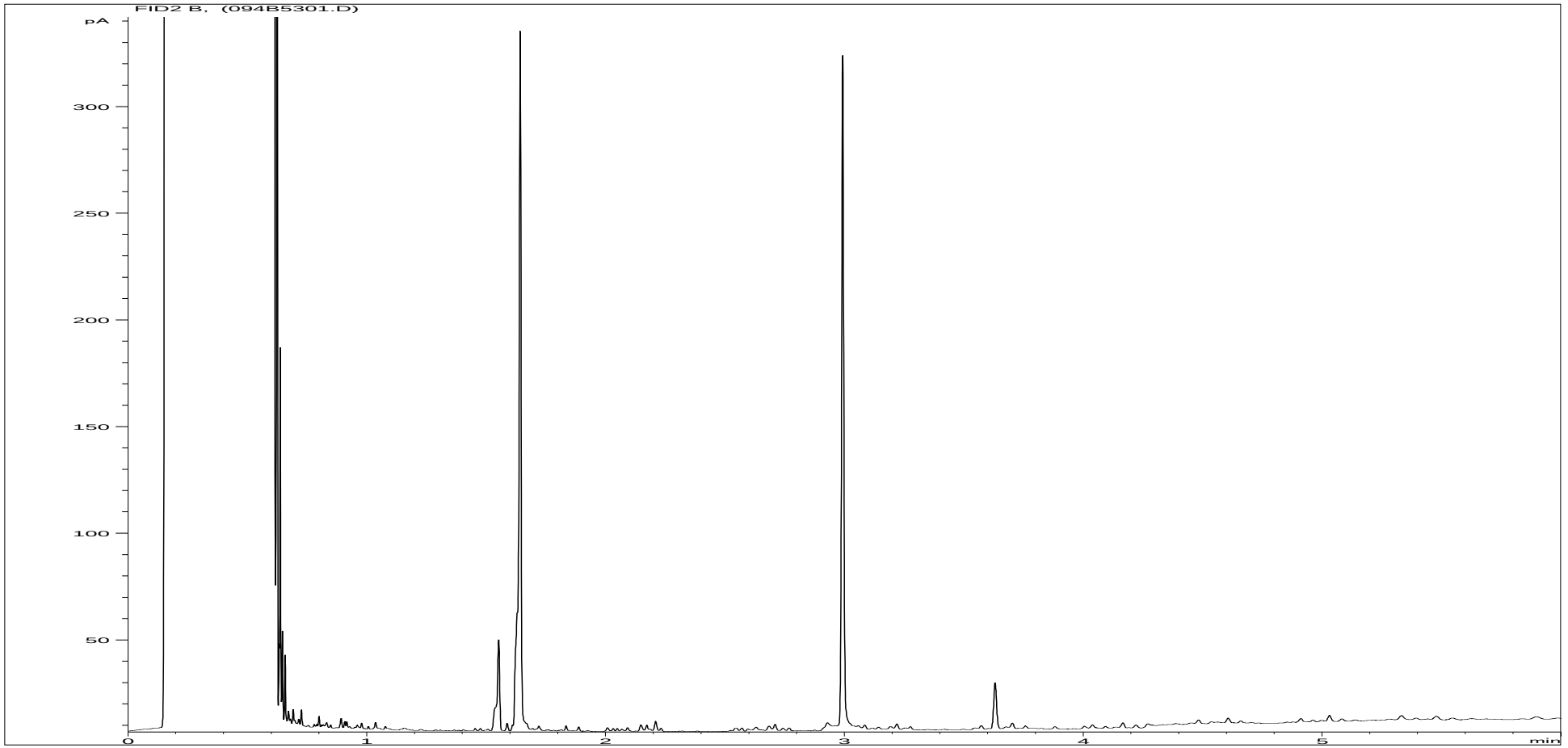



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568022ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 2 3.0 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:05:29 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\043F5301.D | | |



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

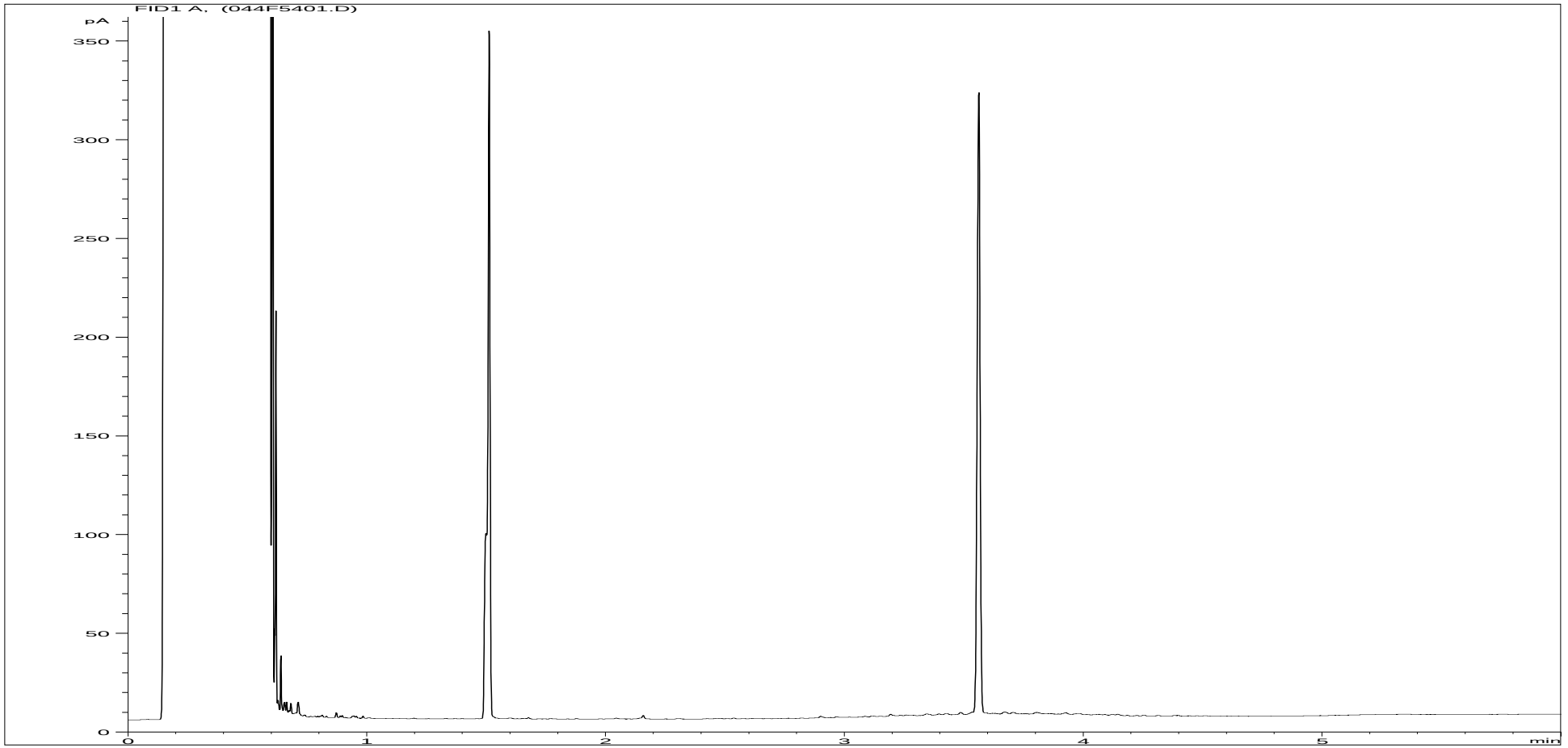
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568022ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.52 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 2 3.0 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:05:29 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\094B5301.D | | |


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

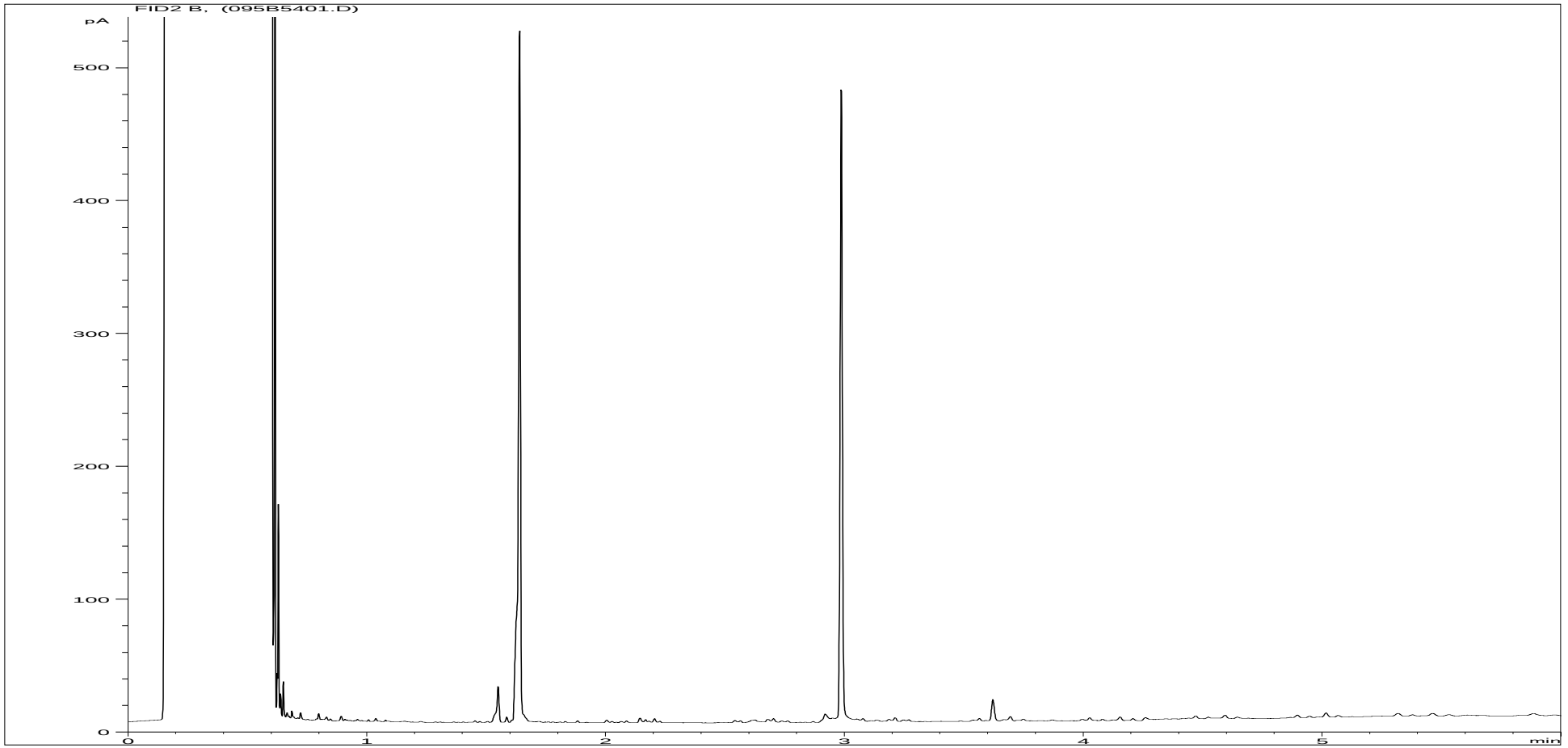
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568023ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 22:18:32 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\044F5401.D | | |


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

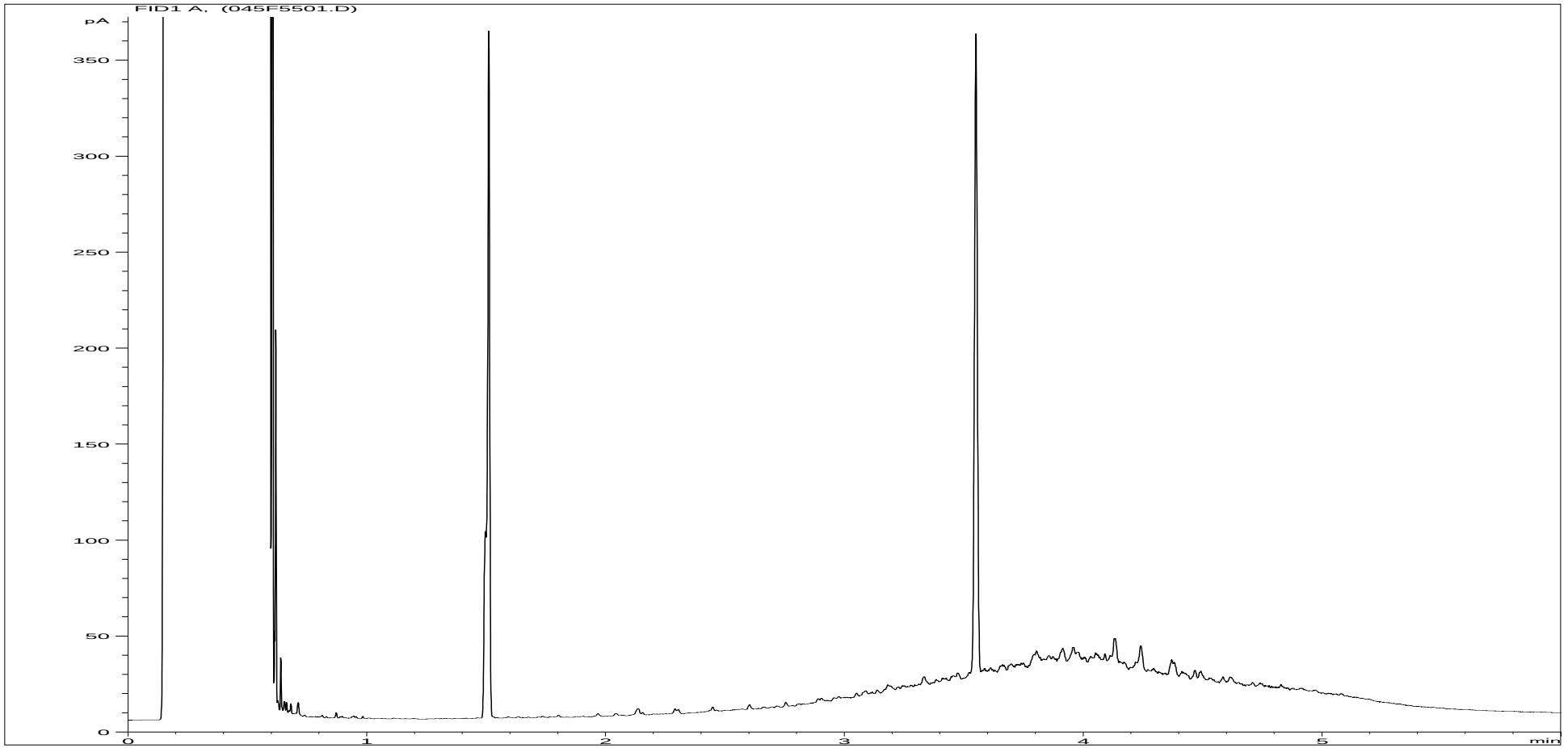
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568023ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.88 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS24 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 22:18:32 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\095B5401.D | | |


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

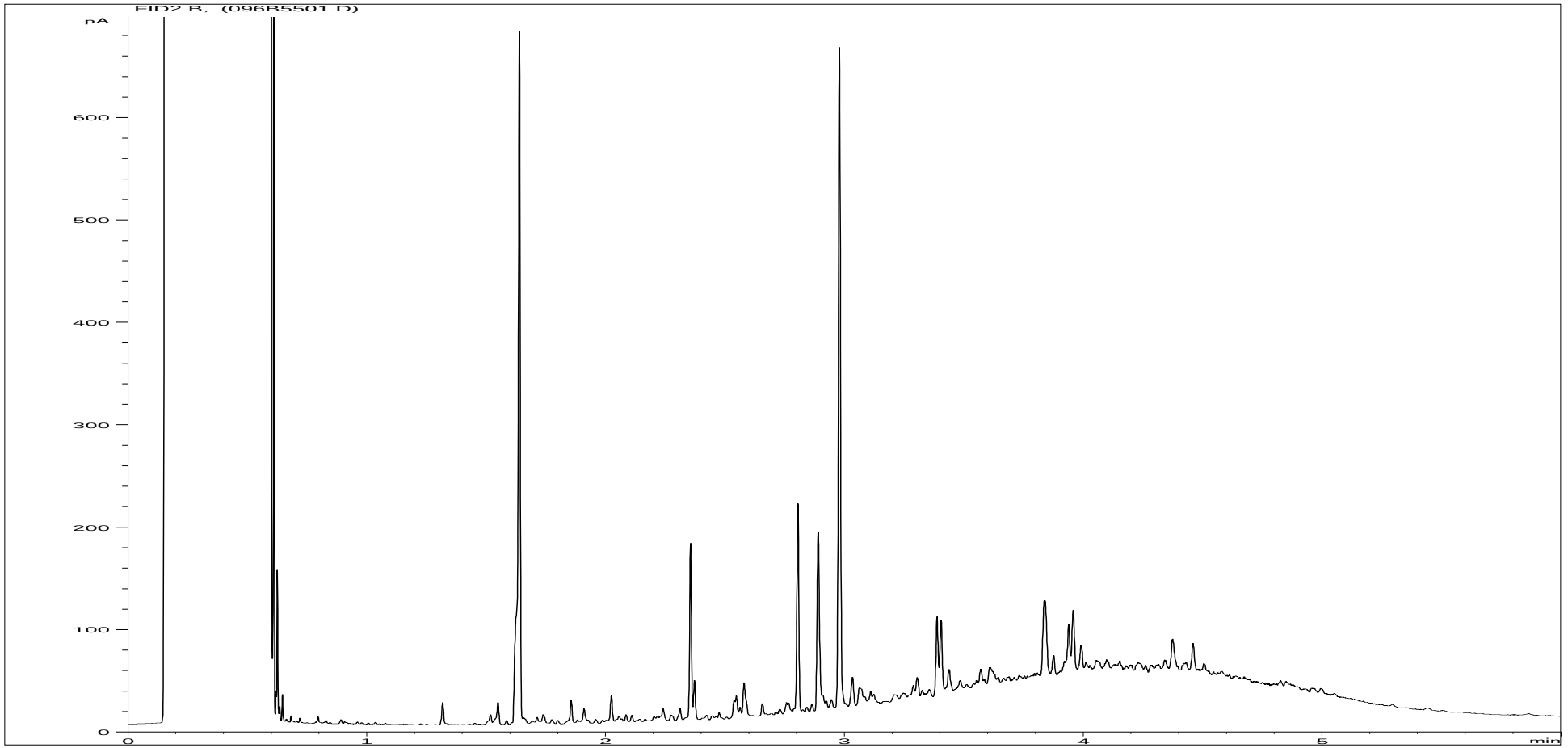
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568024ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 1 0.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:31:33 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\045F5501.D | | |


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

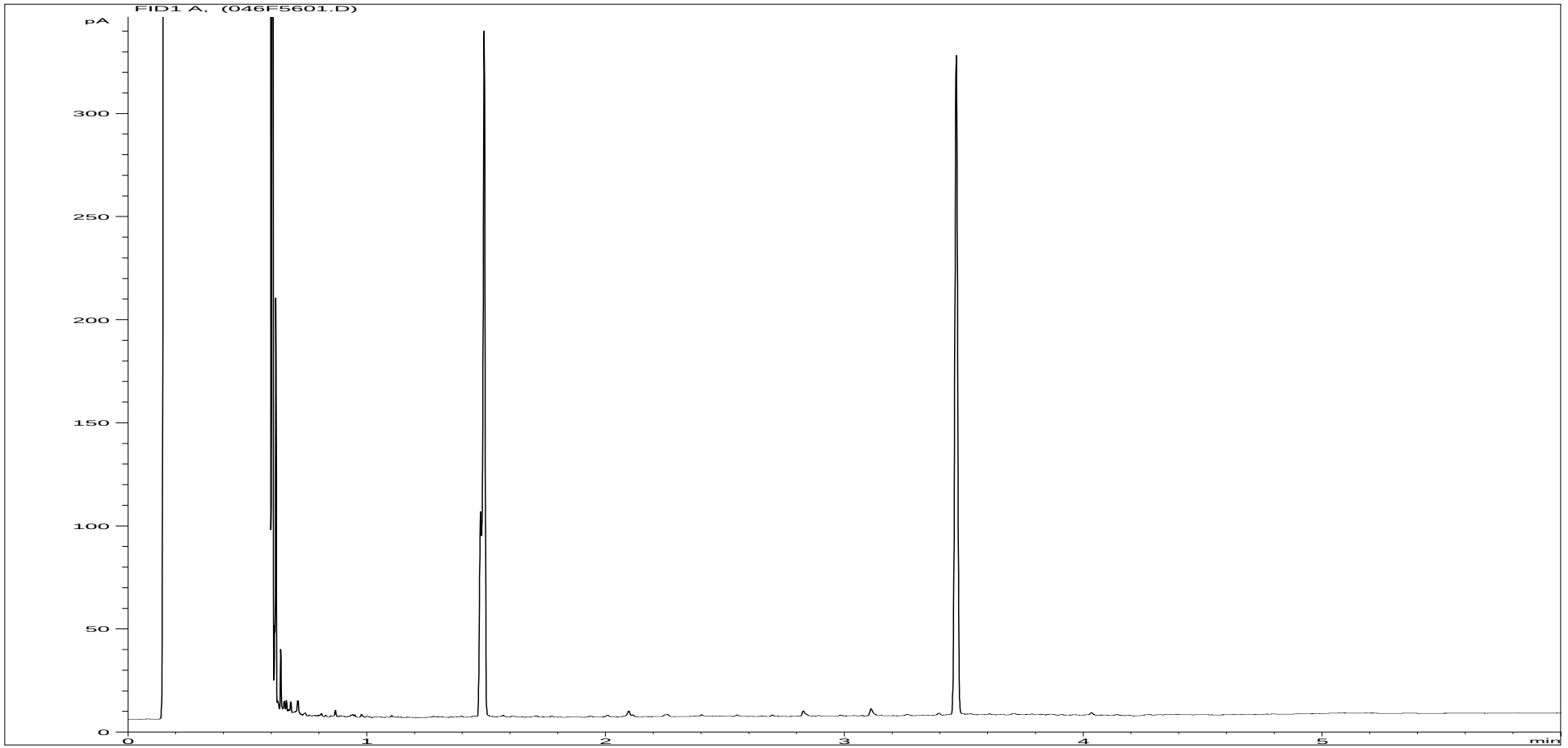
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568024ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.56 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 1 0.6 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:31:33 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\096B5501.D | | |


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

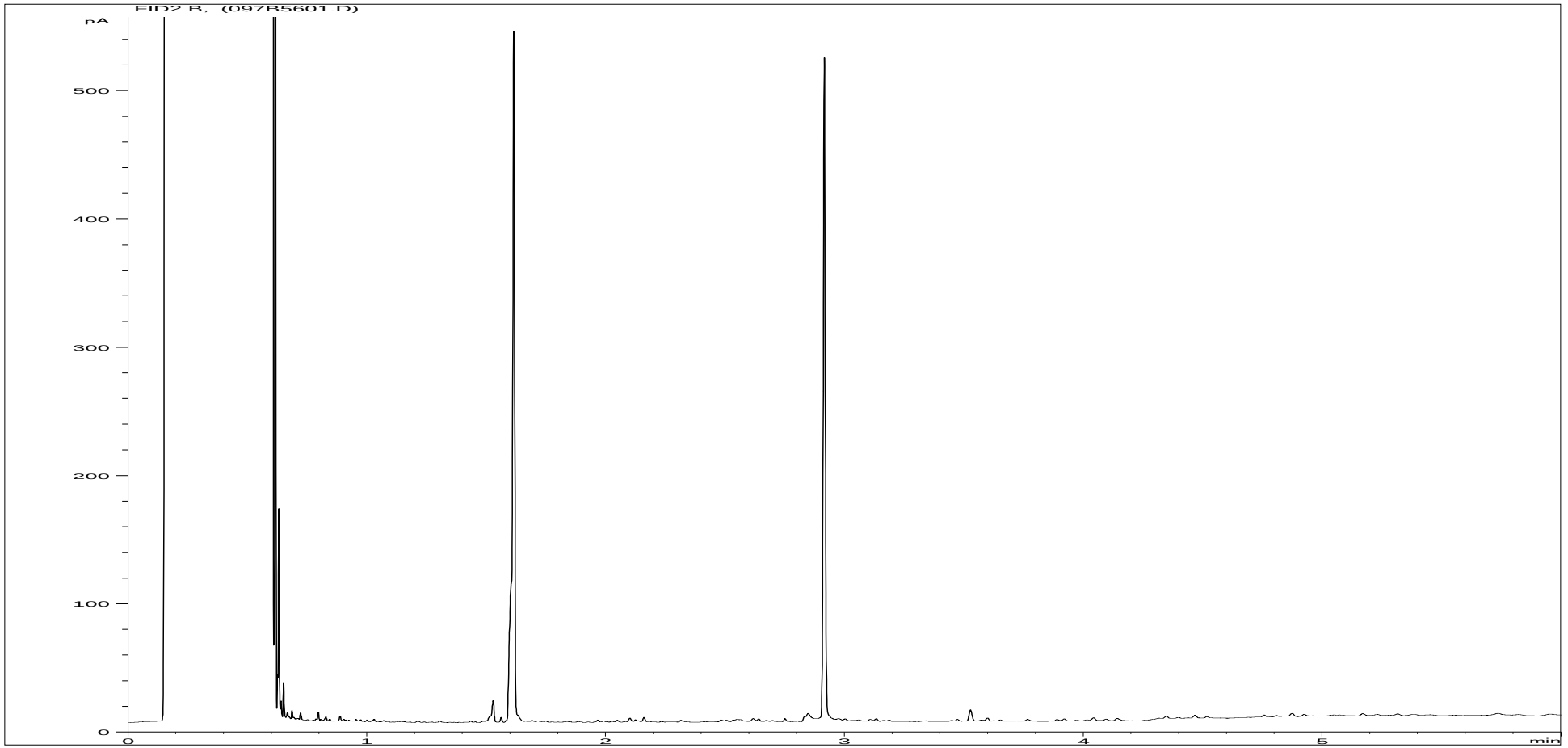
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568025ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 2 1.6 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 22:44:38 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\046F5601.D | | |


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

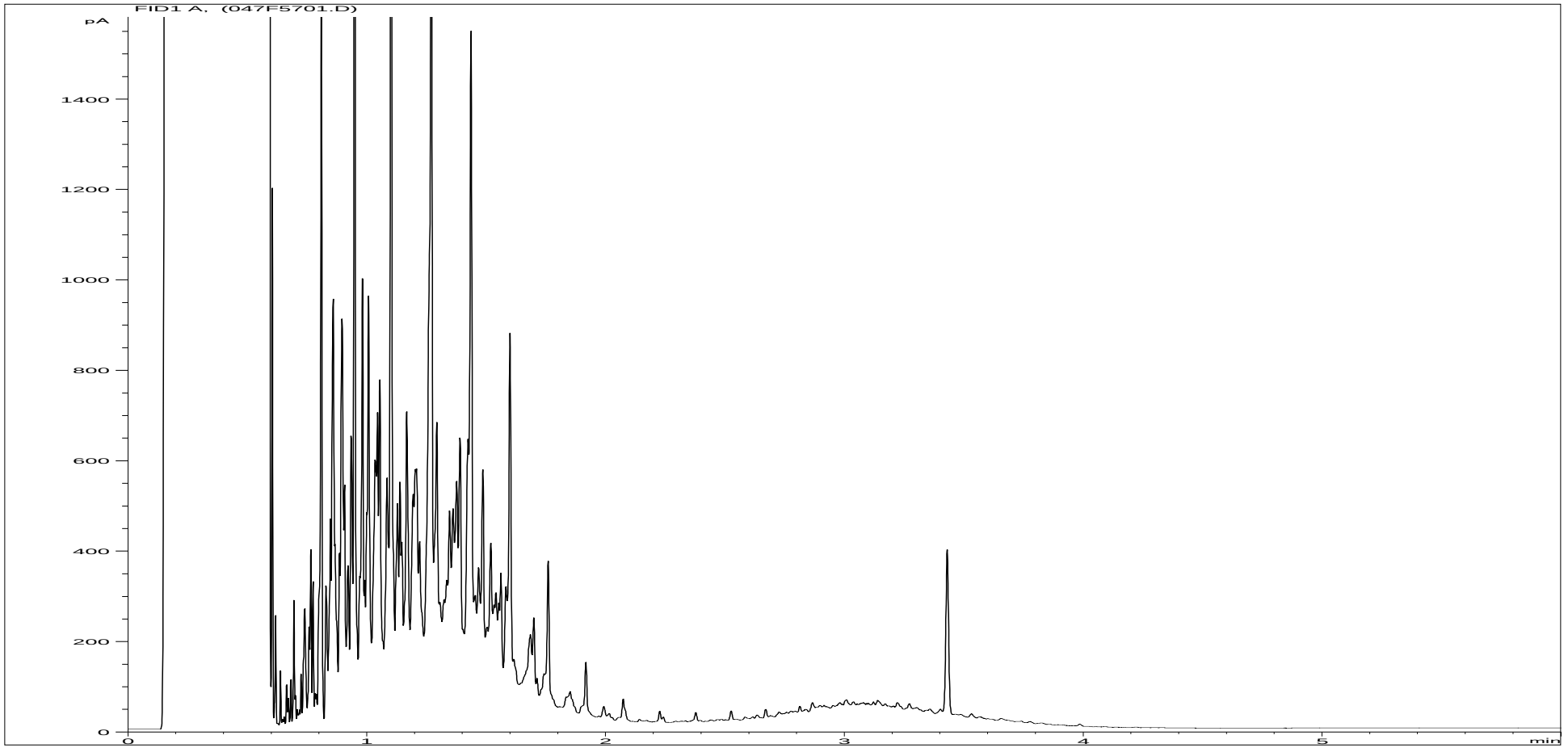
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568025ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.72 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 2 1.6 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 22:44:38 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\097B5601.D | | |


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

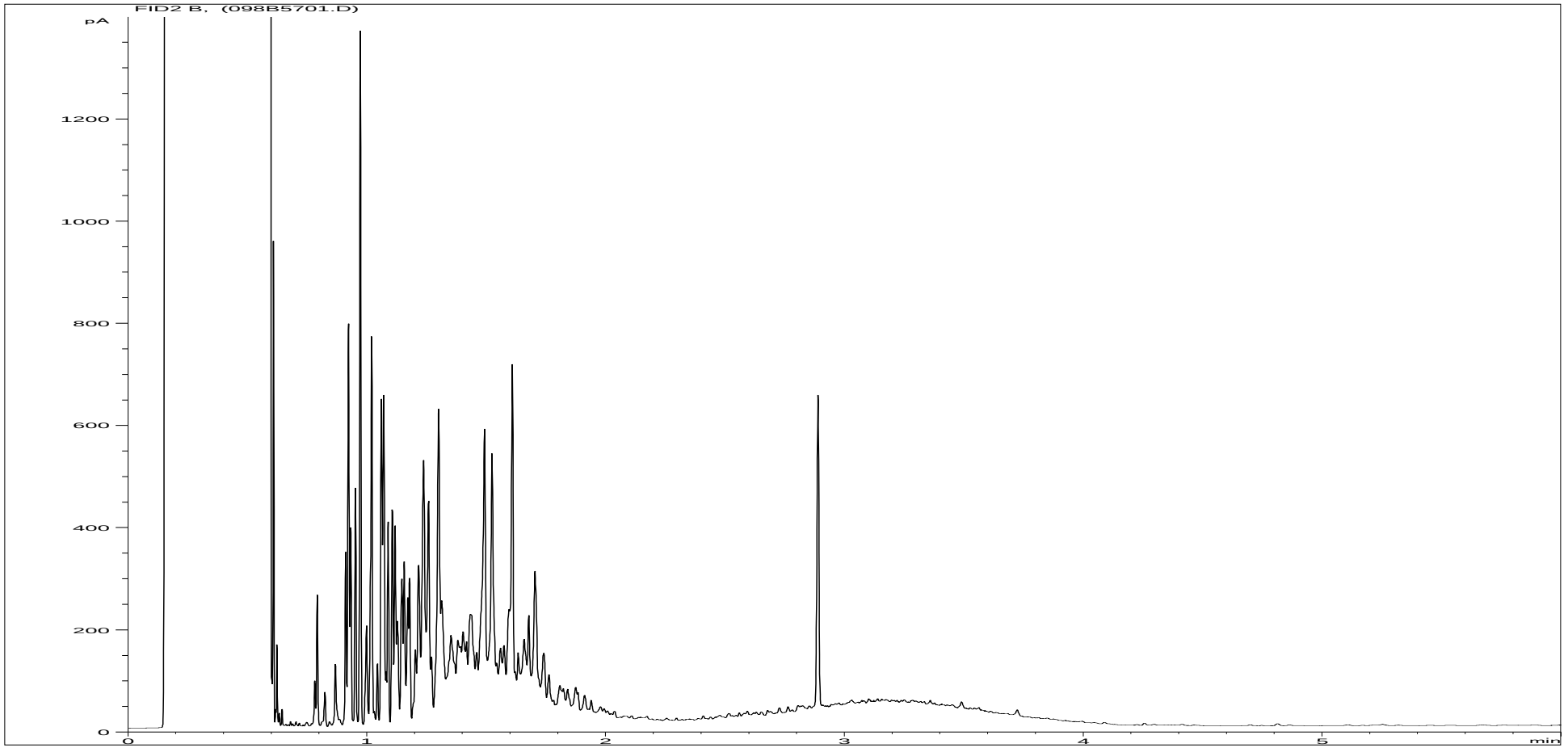
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568026ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 3 3.1 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:57:49 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\047F5701.D | | |


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

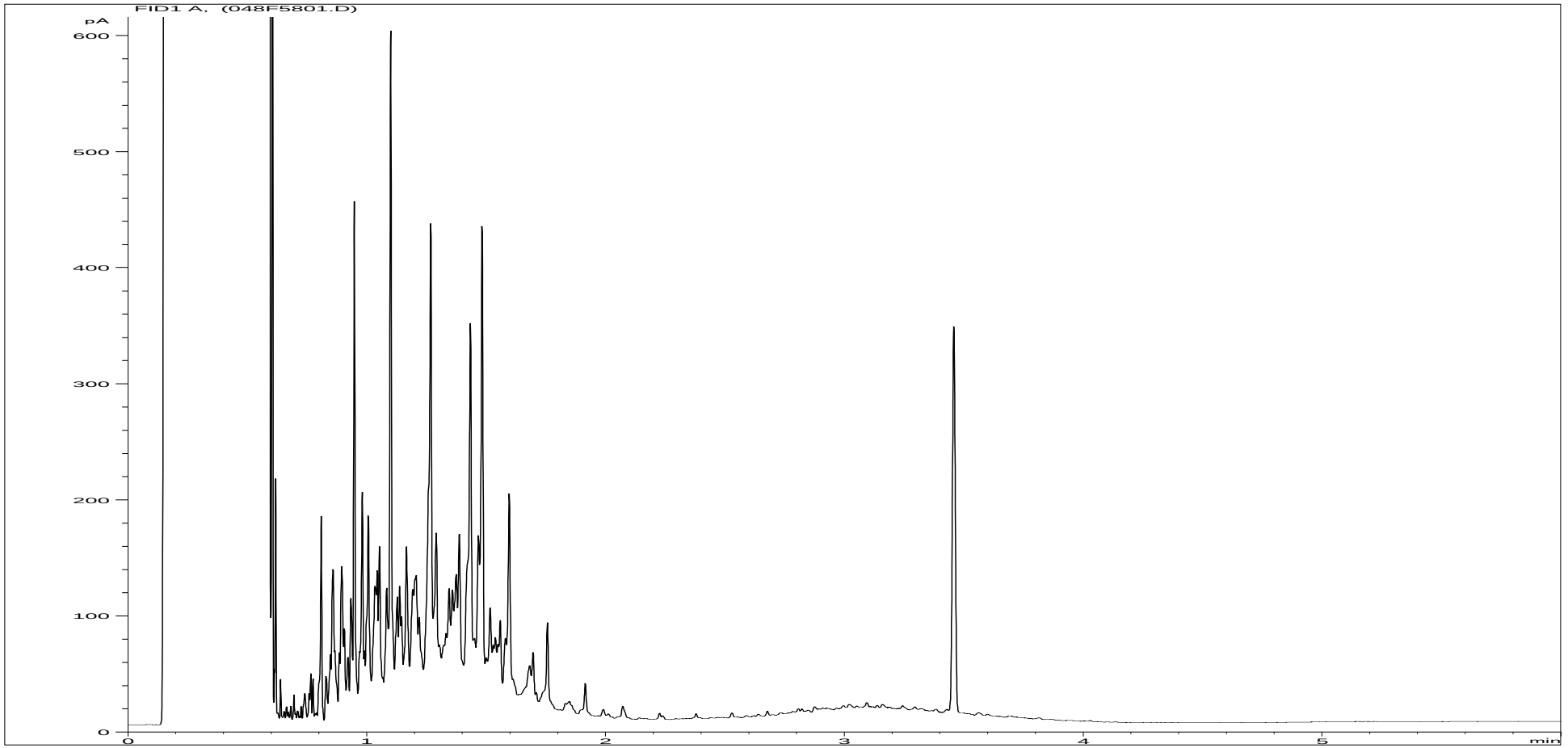
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568026ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.72 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 3 3.1 |
| **Acquisition Date/Time:** | 06-Nov-15, 22:57:49 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\098B5701.D | | |


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

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

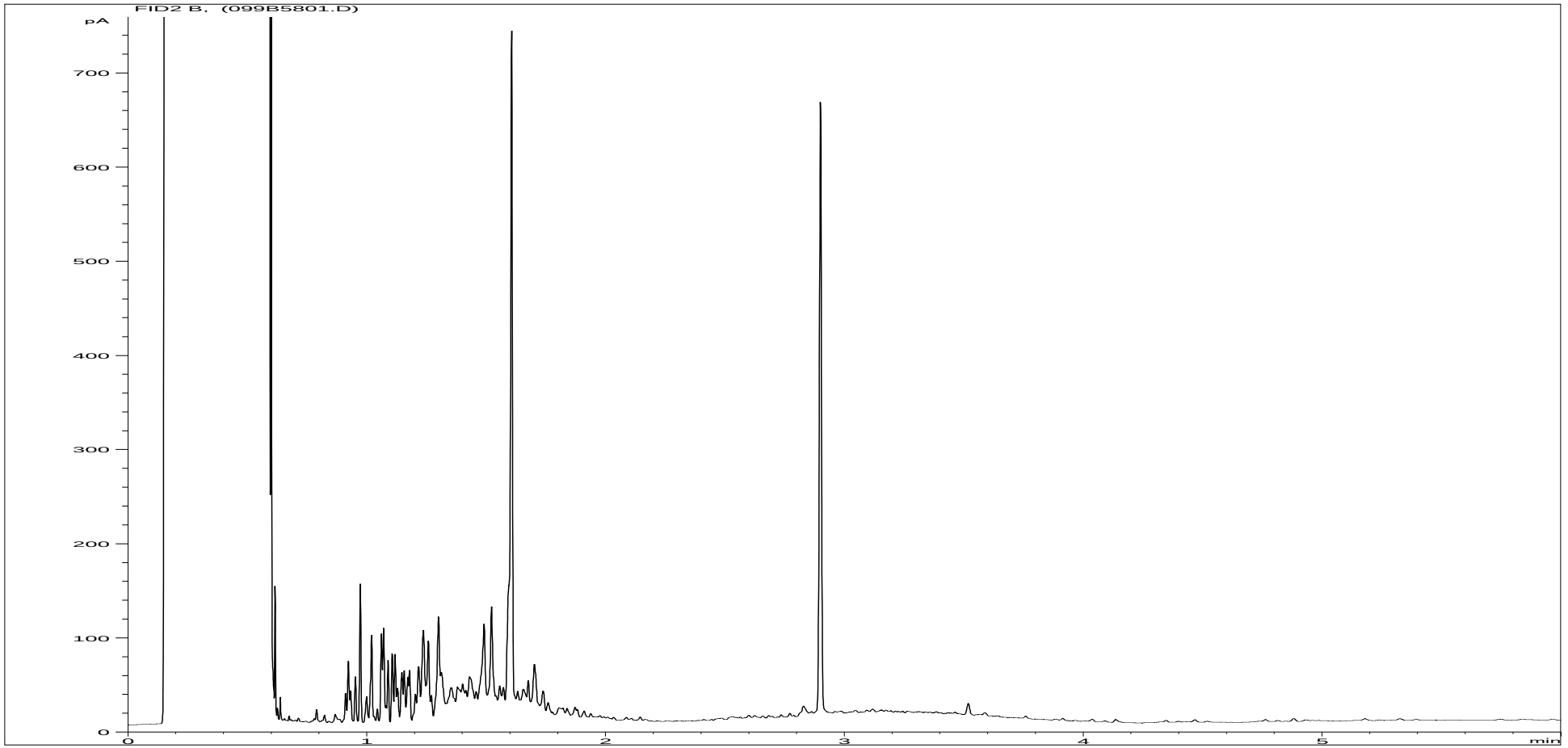



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568027ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 4 3.9 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 23:10:57 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\048F5801.D | | |



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

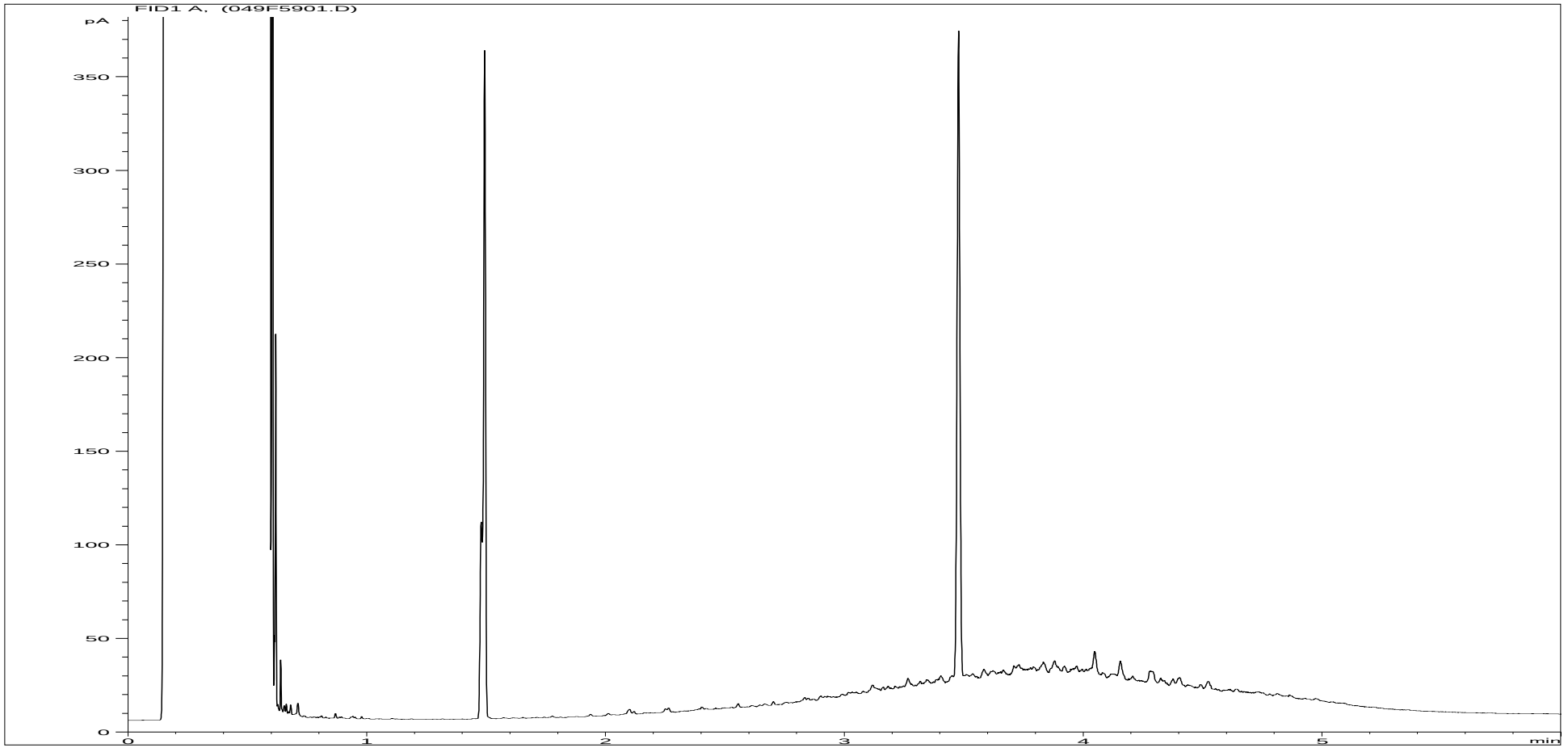
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568027ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.56 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS25 ES 4 3.9 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 23:10:57 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\099B5801.D | | |


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

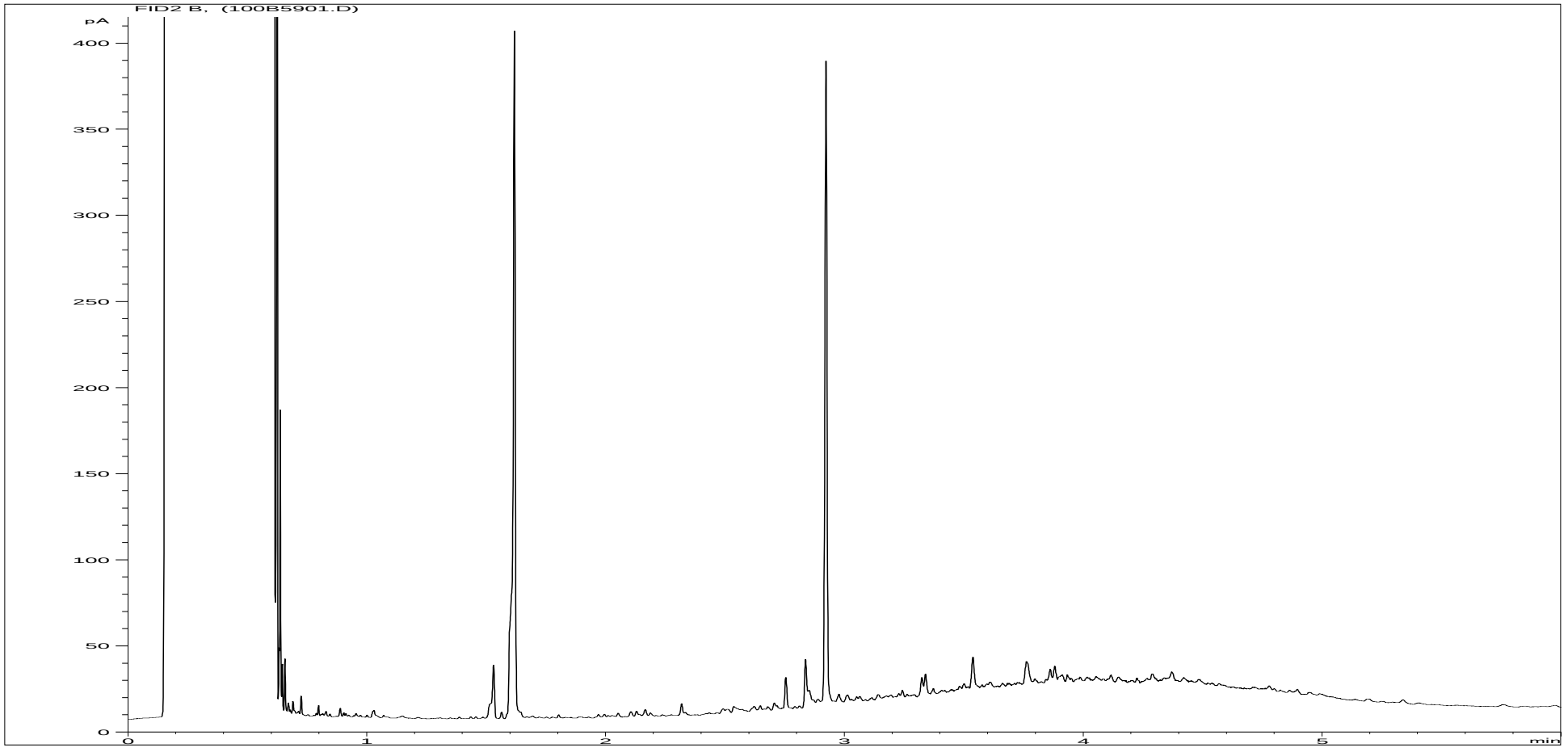
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568028ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 1 0.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 23:24:01 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\049F5901.D | | |


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

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

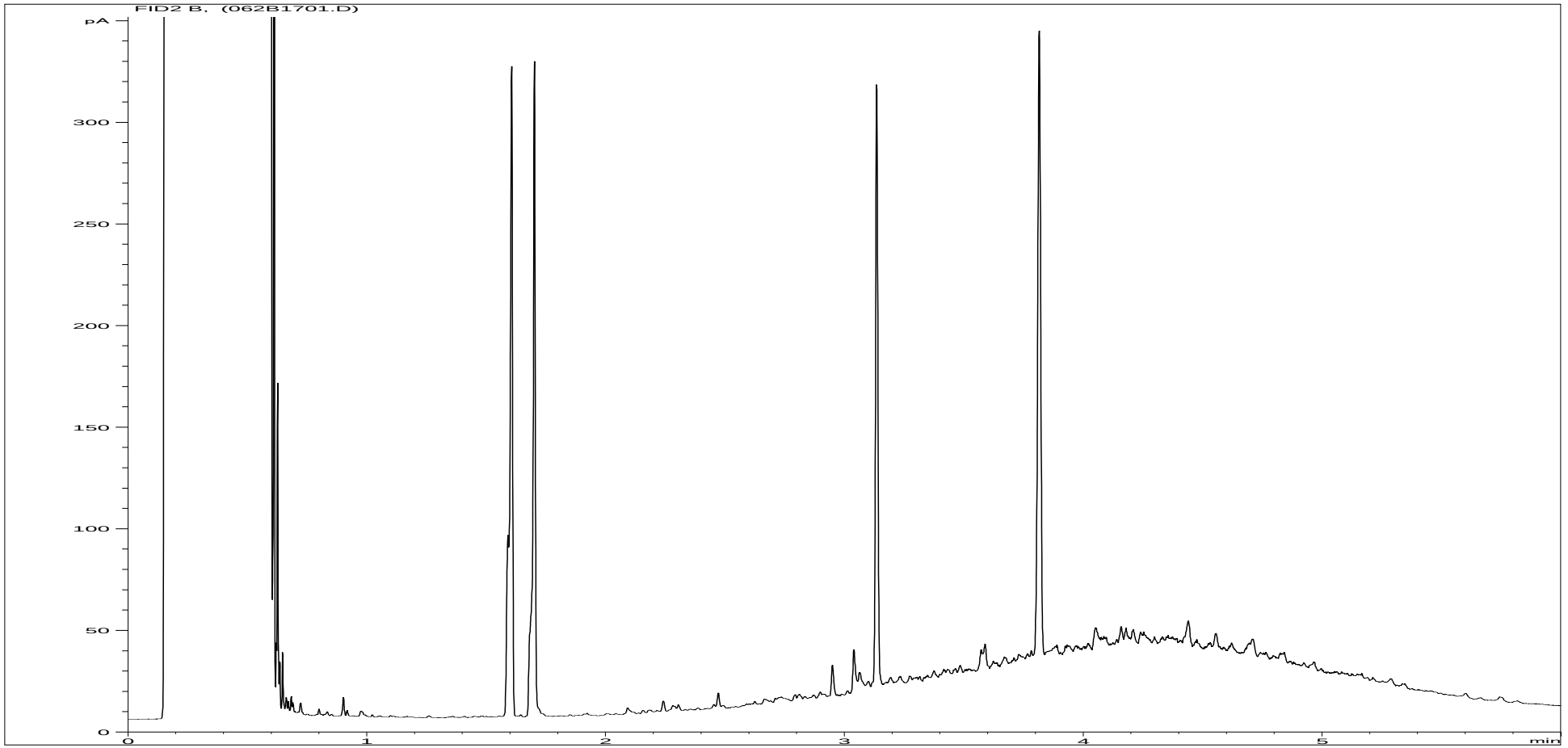



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568028ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 11.36 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 1 0.8 |
| **Acquisition Date/Time:** | 06-Nov-15, 23:24:01 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\100B5901.D | | |



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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

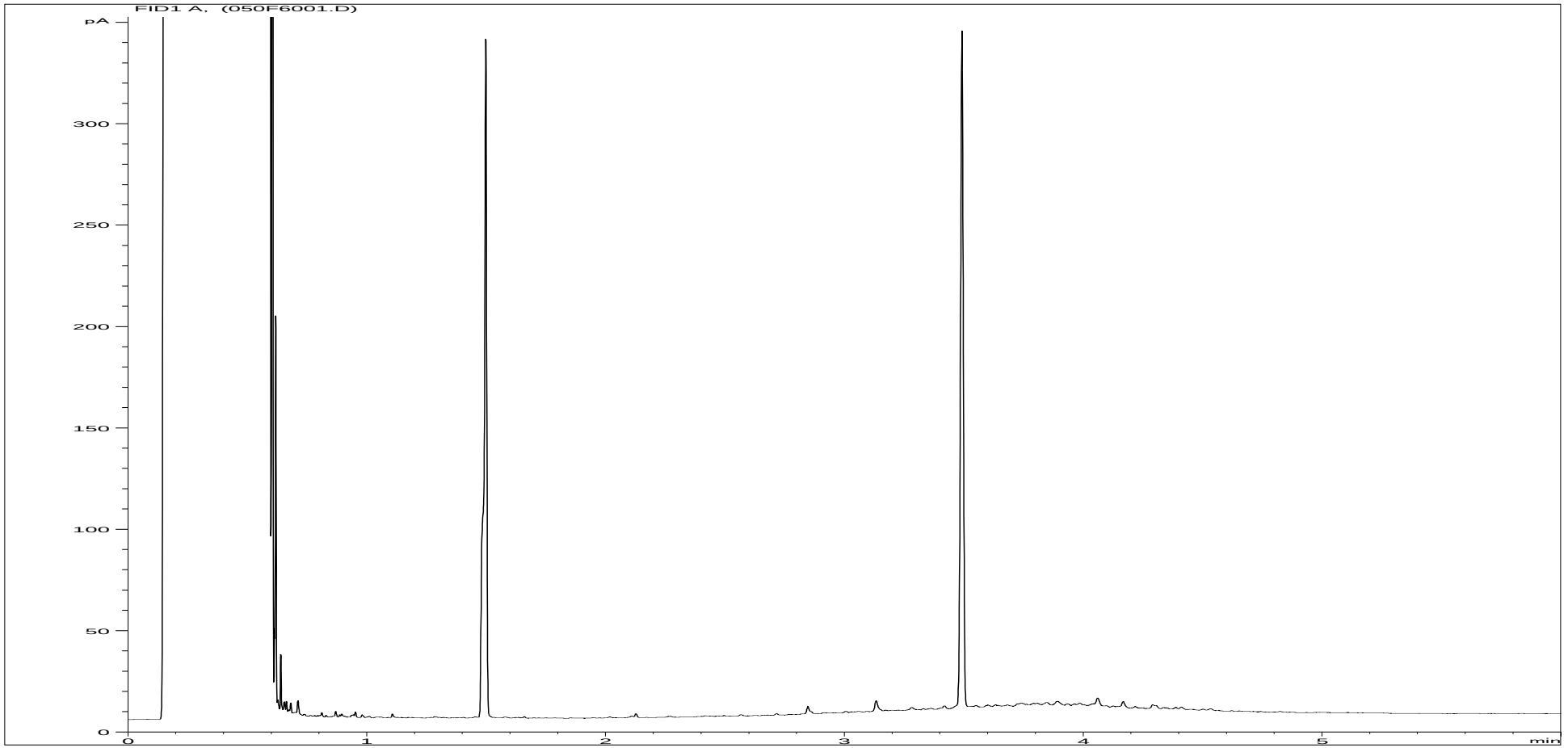



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568028SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 06-Nov-15, 14:07:14 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\062B1701.D | | |



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

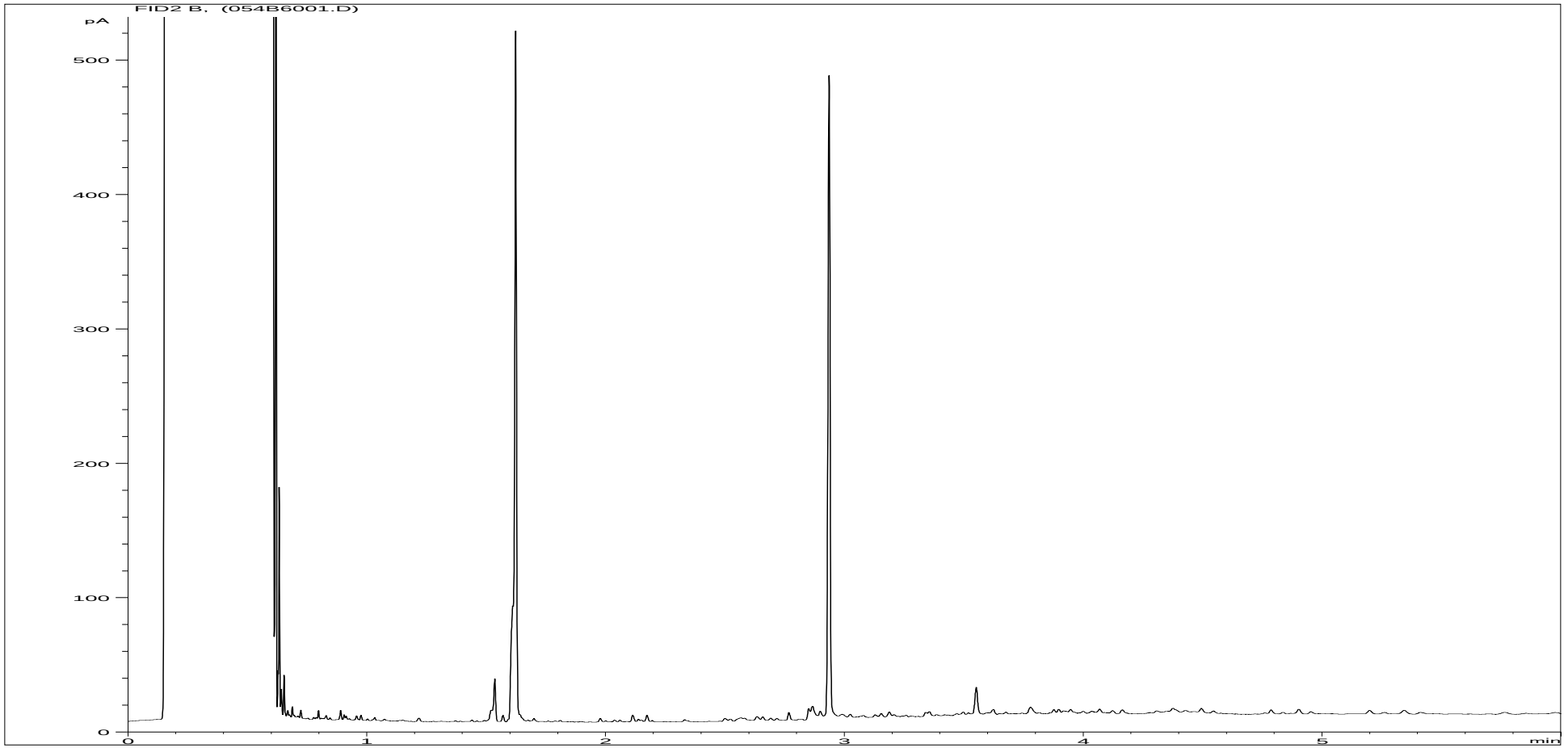
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568029ALI | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 2 1.9 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 23:37:03 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\050F6001.D | | |


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

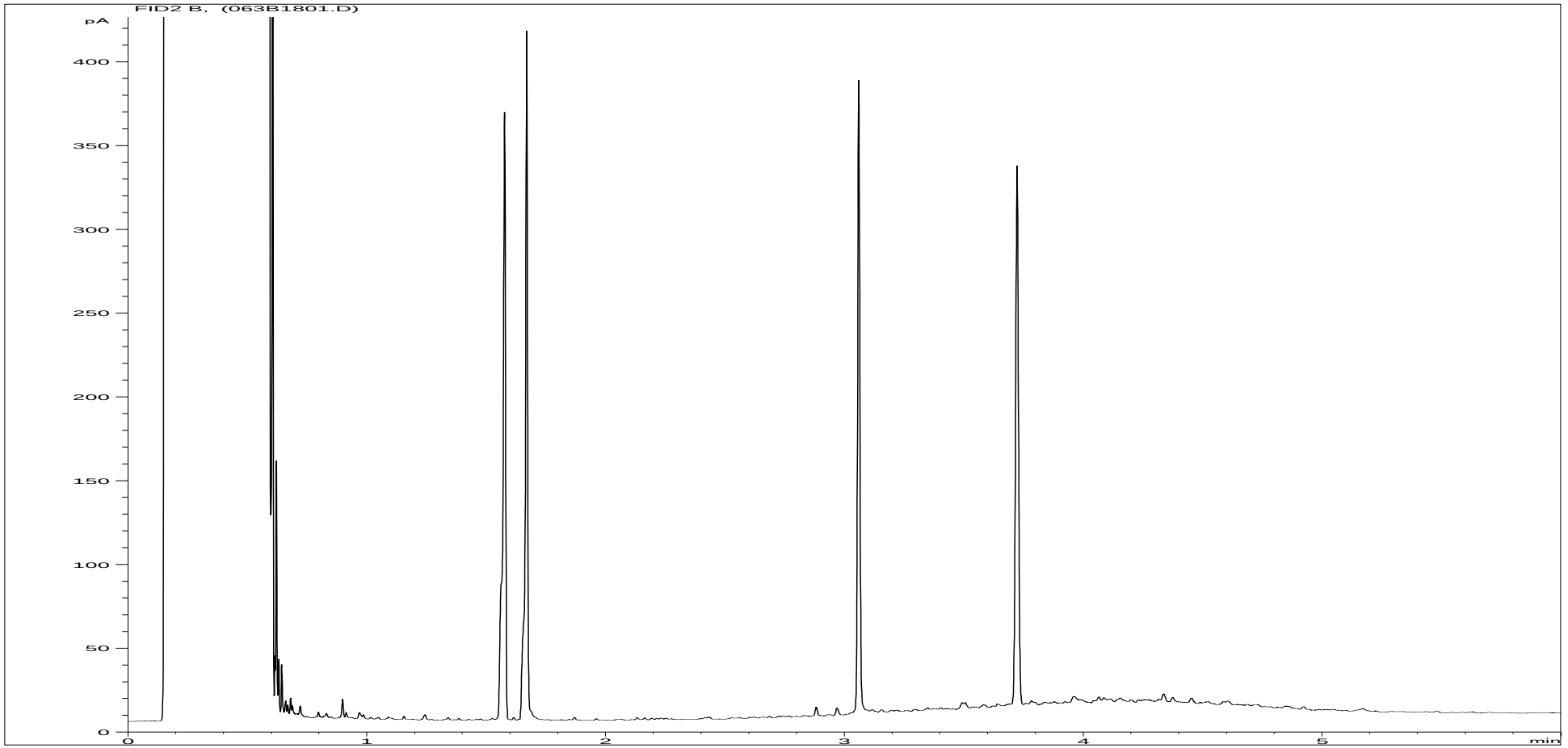
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568029ARO | **Job Number:** | S15_7442M |
| **Multiplier:** | 10.88 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 2 1.9 (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 23:37:03 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\054B6001.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568029SCU | **Job Number:** | S15_7442M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | (NVM) |
| **Acquisition Date/Time:** | 06-Nov-15, 14:20:42 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110615TPH_GC4\110615 2015-11-06 09-28-36\063B1801.D | | |



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

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview



**Customer** ESG Wokingham
**Site** Marsh Lane, Tottenham
**Report No** S157442M

Consignment No S51558
Date Logged 02-Nov-2015
Report Due 09-Nov-2015

| ID Number | Description | Sampled | MethodID | CustServ | GROHSA | MCertS | TMSS | TPHFID-SCU | TPHUSSI | WSLM59 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | REPORT A | GRO (AA) by HSA GC-FID | MCertS Analysis | Tot.Moisture @ 105C | TPH by GCFID (AR) SCU | TPH by GCFID (AR/Si) | Total Organic Carbon |
| CL/1568011 | WS20 0.8 | 27/10/15 | | | | | | | | |
| CL/1568012 | WS20 3.0 | 27/10/15 | | | | | | | | |
| CL/1568013 | WS21 1.1 | 27/10/15 | | | | | | | | |
| CL/1568014 | WS21 1.9 | 27/10/15 | | | | | | | | |
| CL/1568015 | WS22 0.6 | 27/10/15 | | | | | | | | |
| CL/1568016 | WS22 3.6 | 27/10/15 | | | | | | | | |
| CL/1568017 | WS22 3.8 | 27/10/15 | | | | | | | | |
| CL/1568018 | WS23 0.6 | 28/10/15 | | | | | | | | |
| CL/1568019 | WS23 1.8 | 28/10/15 | | | | | | | | |
| CL/1568020 | WS23 3.8 | 28/10/15 | | | | | | | | |
| CL/1568021 | WS24 0.5 | 28/10/15 | | | | | | | | |
| CL/1568022 | WS24 3.0 | 28/10/15 | | | | | | | | |
| CL/1568023 | WS24 3.8 | 28/10/15 | | | | | | | | |
| CL/1568024 | WS25 0.6 | 28/10/15 | | | | | | | | |
| CL/1568025 | WS25 1.6 | 28/10/15 | | | | | | | | |

**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 | **appropriate container for this analysis** |
| B | **he 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 |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

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

Where individual results are flagged see report notes for status.

# Sample Analysis

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview

# S157442M

**Customer** **ESG Wokingham**
**Site** **Marsh Lane, Tottenham**
**Report No** **S157442M**

Consignment No S51558
Date Logged 02-Nov-2015
Report Due 09-Nov-2015

| ID Number | Description | Sampled | MethodID | CustServ | GROHSA | MCertS | TMSS | TPHFID-SCU | TPHUSSI | WSLM59 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | REPORT A | GRO (AA) by HSA GC-FID | MCertS Analysis | Tot.Moisture @ 105C | TPH by GCFID (AR) SCU | TPH by GCFID (AR/Si) | Total Organic Carbon |
| CL/1568026 | WS25 3.1 | 28/10/15 | | | | | | | | |
| CL/1568027 | WS25 3.9 | 28/10/15 | | | | | | | | |
| CL/1568028 | WS26 0.8 | 29/10/15 | | | | | | | | |
| CL/1568029 | WS26 1.9 | 29/10/15 | | | | | | | | |

**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**

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|---|---|
| A | **appropriate container for this analysis** |
| B | **he 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 |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

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

Where individual results are flagged see report notes for status.

**Report Number : EFS/157442**

# Additional Report Notes

| Method Code | Sample ID | The following information should be taken into consideration when using the data contained within this report |
|---|---|---|
| GROHSA | CL1568013 TO CL1568027 | The Secondary process control result associated with this Test has not wholly met the requirements of the Laboratory Quality Management System (QMS) for C8-C10 banding. All other Process controls (including the Primary Process control) are within specification. The Laboratory believes that the validity of the data has not been affected but in line with our QMS policy we have removed accreditation from the affected banding(s) . These circumstances should be taken into consideration when utilising the data. |
| | | |
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| | | |

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | GROHSA | As Received | Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID |
| Soil | TMSS | As Received | Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis (% based upon wet weight) |
| Soil | TPHFID-SCU | As Received | Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including cleanup of extract using activated silica |
| Soil | TPHUSSI | As Received | Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including quantitation of Aromatic and Aliphatic fractions. |
| Soil | WSLM59 | Oven Dried @ < 35°C | Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection |


Where individual results are flagged see report notes for status.

# 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 105ºC 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$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**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
**N.F** No Flow
**NS** Information Not Supplied
**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
§ accreditation has been removed for this result as it is a non-accredited matrix

**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 :** ESG Wokingham

**Site :** Marsh Lane, Tottenham

**Report Number :** S15_7442

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1568011 | WS20 ES 1 0.8 | Grey Stone CLAY |
| CL/1568012 | WS20 ES 2 3.0 | Brown Stone CLAY |
| CL/1568013 | WS21 ES 1 1.1 | Brown Stone CLAY |
| CL/1568014 | WS21 ES 2 1.9 | Brown Stone CLAY |
| CL/1568015 | WS22 ES 1 0.6 | Brown MADE GROUND |
| CL/1568016 | WS22 ES 2 3.6 | Brown Stone SAND |
| CL/1568017 | WS22 ES 3 3.8 | Brown Stone SAND |
| CL/1568018 | WS23 ES 1 0.6 (NVM) | Grey STONE |
| CL/1568019 | WS23 ES 2 1.8 | Grey CLAY |
| CL/1568020 | WS23 ES 3 3.8 (NVM) | Brown Sand STONE |
| CL/1568021 | WS24 ES 1 0.5 | Grey Stone CLAY |
| CL/1568022 | WS24 ES 2 3.0 | Brown Stone SAND |
| CL/1568023 | WS24 ES 3 3.8 (NVM) | Brown Sand STONE |
| CL/1568024 | WS25 ES 1 0.6 | Brown Stone SAND |
| CL/1568025 | WS25 ES 2 1.6 (NVM) | Grey Sand STONE |
| CL/1568026 | WS25 ES 3 3.1 | Grey Stone CLAY |
| CL/1568027 | WS25 ES 4 3.9 (NVM) | Brown Sand STONE |
| CL/1568028 | WS26 ES 1 0.8 | Brown Stone SAND |
| CL/1568029 | WS26 ES 2 1.9 (NVM) | Grey Silt STONE |

Our Ref: EFS/157445M (Ver. 1)
Your Ref: R5123

November 9, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr M Gray
ESG Wokingham
Glossop House
Hogwood Lane
Finchamstead
Wokingham
Berkshire
RG40 4QW

For the attention of Mr M Gray

Dear Mr Gray

**Sample Analysis - Marsh Lane, Tottenham**

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 14/12/15 when they will be discarded. Please call 01283 554467 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

L Thompson
Project Co-ordinator
01283 554467


Environmental Chemistry, ESG, P.O. Box 100, Burton-upon-trent, DE15 0XD Tel: 01283 554400 Fax: 01283 554422
Environmental Scientifics Group Limited.
Registered No: 2880501

# TEST REPORT

1252

## Report No. EFS/157445M (Ver. 1)

ESG Wokingham
Glossop House
Hogwood Lane
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Marsh Lane, Tottenham**

The 5 samples described in this report were registered for analysis by ESG on 02-Nov-2015. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 09-Nov-2015

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 (Page 2)
Table of GRO Results (Page 3)
Table of TPH (Si) banding (std) (Page 4)
GC-FID Chromatograms (Pages 5 to 16)
Analytical and Deviating Sample Overview (Page 17)
Table of Method Descriptions (Page 18)
Table of Report Notes (Page 19)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 09-Nov-2015

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$^{o}$C unless otherwise stated. (except QC samples)
ESG accepts no responsibility for any sampling not carried out by our personnel.



Where individual results are flagged see report notes for status.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | % | mg/kg | mg/kg | % M/M | | | | | | | | | | | |
| **Method Codes :** | | | GROHSA | TMSS | TPHFID-SCU | TPHUSSI | WSLM59 | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 0.2 | 0.2 | 10 | 20 | 0.04 | | | | | | | | | | | |
| **Accreditation Code:** | | | | U | N | | N | | | | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **GRO (AA) by HSA GC-FID** | **Tot.Moisture @ 105C** | **TPH by GCFID (AR) SCU** | **TPH by GCFID (AR/Si)** | **Total Organic Carbon** | | | | | | | | | | | |
| 1568035 | WS26 ES 3 3.8 (NVM) | 29-Oct-15 | Req § | 10.4 § | | Req § | 0.30 | | | | | | | | | | | |
| 1568036 | WS27 ES 1 0.8 | 29-Oct-15 | | 22.8 | 2940 | Req | 2.10 | | | | | | | | | | | |
| 1568037 | WS27 ES 2 3.0 | 29-Oct-15 | Req | 10.1 | | Req | 0.20 | | | | | | | | | | | |
| 1568038 | WS28 ES 1 1.0 | 29-Oct-15 | | 12.4 | 114 | Req | 1.22 | | | | | | | | | | | |
| 1568039 | WS28 ES 2 3.0 | 29-Oct-15 | Req | 10.9 | | Req | 0.18 | | | | | | | | | | | |


ESG

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422


**Client Name** ESG Wokingham

**Contact** Mr M Gray

# Marsh Lane, Tottenham

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **09-Nov-2015** |
| **Report Number** | **EFS/157445M** |
| **Table Number** | **1** |



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

# Gasoline Range Organics
# (BTEX and Aliphatic Carbon Ranges)

**Customer and Site Details:** ESG Wokingham : Marsh Lane, Tottenham
**Job Number:** S15_7445
**Directory:** E:\TES\DATA\2015\1106HSA_GC9\151106 2015-11-06 10-22-09\015F1501.D
**Method:** Headspace GCFID
Accreditation Code: UM

**Matrix:** Soil
**Date Booked in:** 02-Nov-15
**Date extracted:** 06-Nov-15
**Date Analysed:** 06-Nov-15, 15:0

*** Sample data with an asterisk are not UKAS accredited.**

| | | | 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 |
| * CL1568035 | WS26 ES 3 3.8 (NVM) | <0.011 | <0.011 | 0.137 | 0.373 | 0.209 | <0.2 | <0.2 | 0.9 | 12.6 | 14.3 |
| CL1568037 | WS27 ES 2 3.0 | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| CL1568039 | WS28 ES 2 3.0 | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |



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

# ALIPHATIC / AROMATIC FRACTION BY GC/FID

**Customer and Site Details:** ESG Wokingham : Marsh Lane, Tottenham
**Job Number:** S15_7445M
**QC Batch Number:** 151130
**Directory:** D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\061BAS01.D
**Method:** Ultra Sonic

**Separation:** Silica gel
**Eluents:** Hexane, DCM

**Matrix:** Soil
**Date Booked in** 02-Nov-15
**Date Extracted** 04-Nov-15
**Date Analysed:** 05-Nov-15, 21:59:44

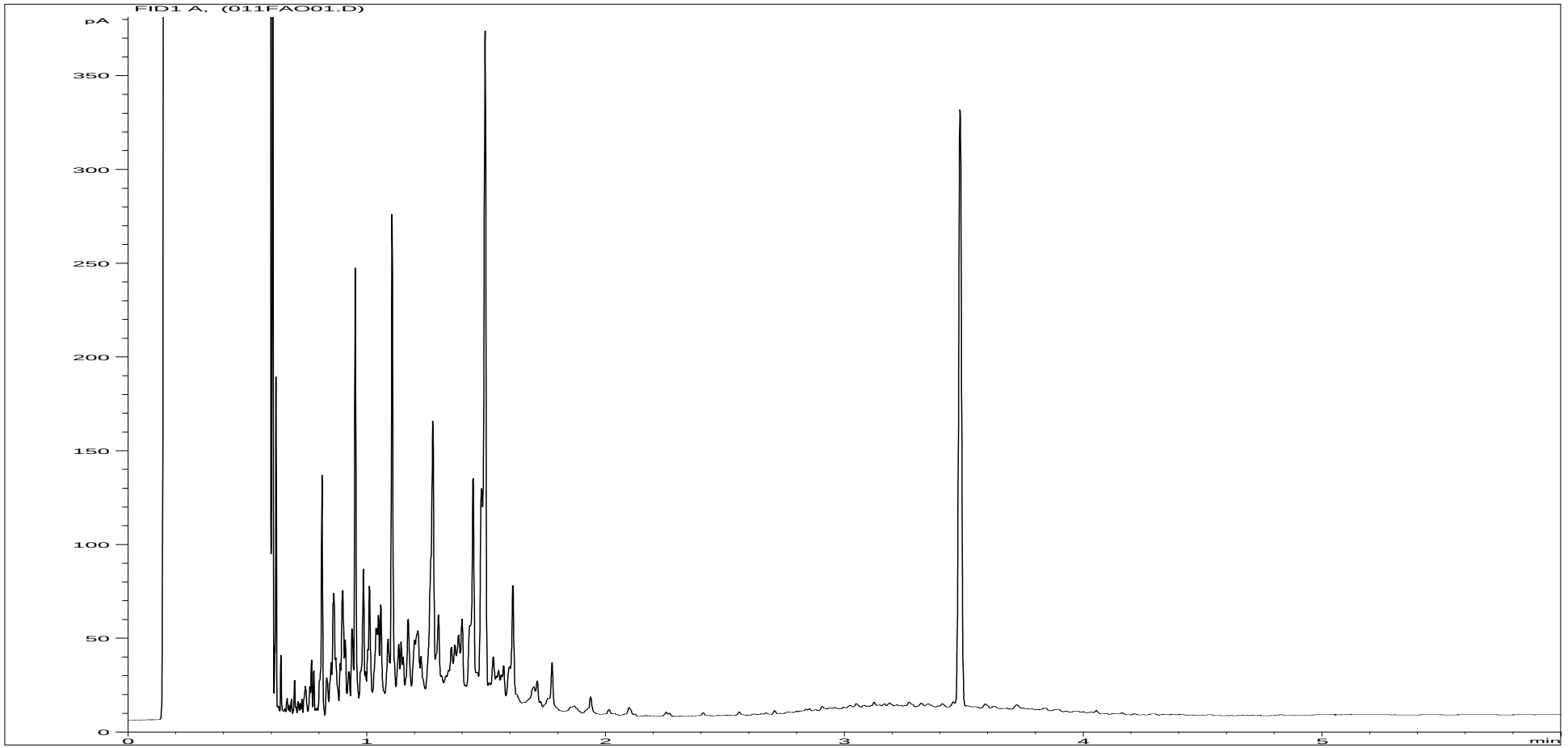
This sample data is not MCERTS accredited.
*** This sample data is not ISO17025 accredited.**

| | | 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 |
| * CL1568035 | WS26 ES 3 3.8 (NVM) | 61.8 | 6.8 | 125 | 21.9 | 105.4 | 32.7 | 8.81 | <4 | 65.1 | 33.6 | 366 | 98.5 |
| CL1568036 | WS27 ES 1 0.8 | <5 | <5 | <5 | <5 | <5 | 54.5 | <5 | 551 | 46.8 | 799 | 55.8 | 1440 |
| CL1568037 | WS27 ES 2 3.0 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <9.74 | <9.74 | <22 | <22 |
| CL1568038 | WS28 ES 1 1.0 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 19.5 | 21 | 74.8 | 26.7 | 100.8 |
| CL1568039 | WS28 ES 2 3.0 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <4 | <9.83 | <9.83 | <22 | <22 |



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

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

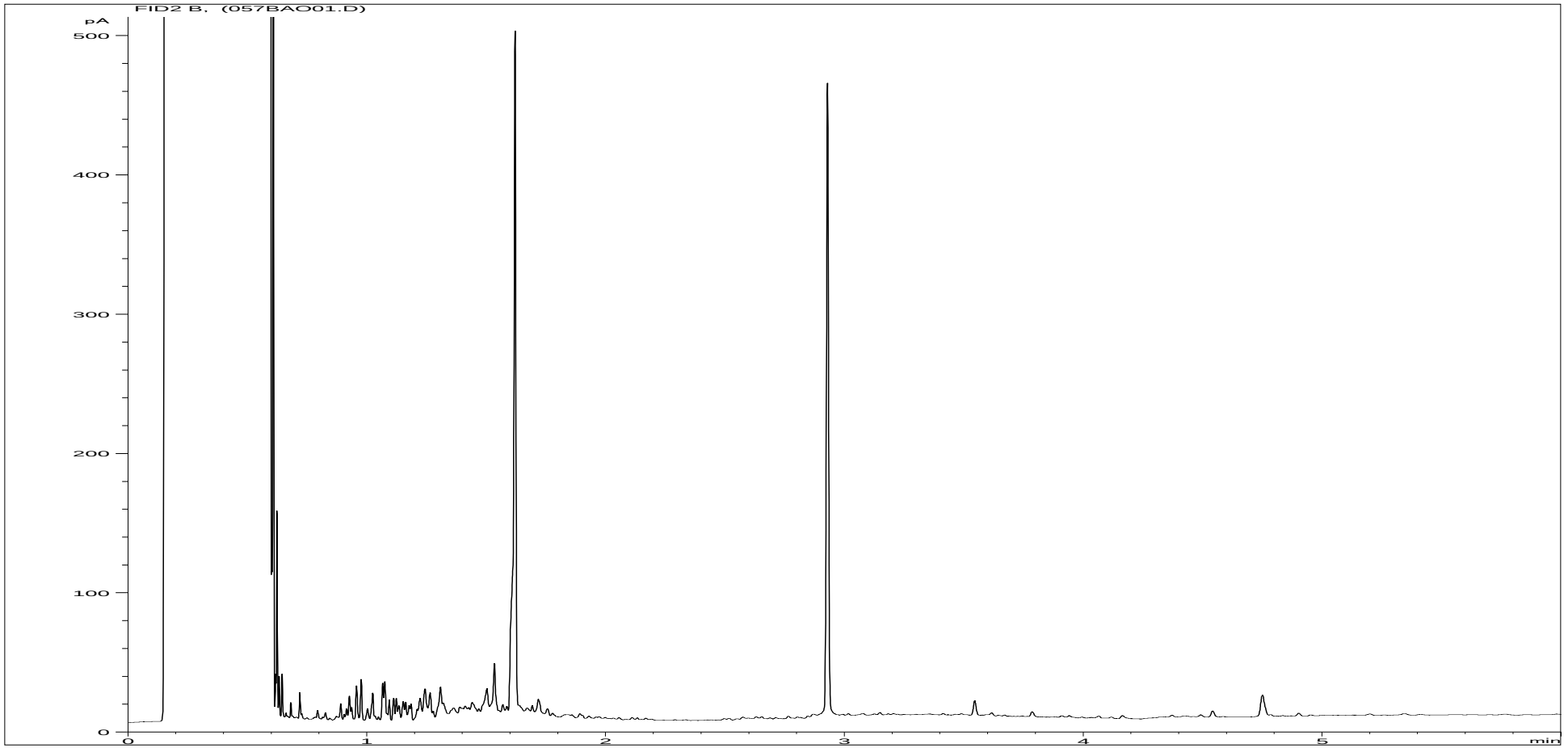



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568035ALI | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 05-Nov-15, 21:05:56 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\011FAO01.D | | |



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

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

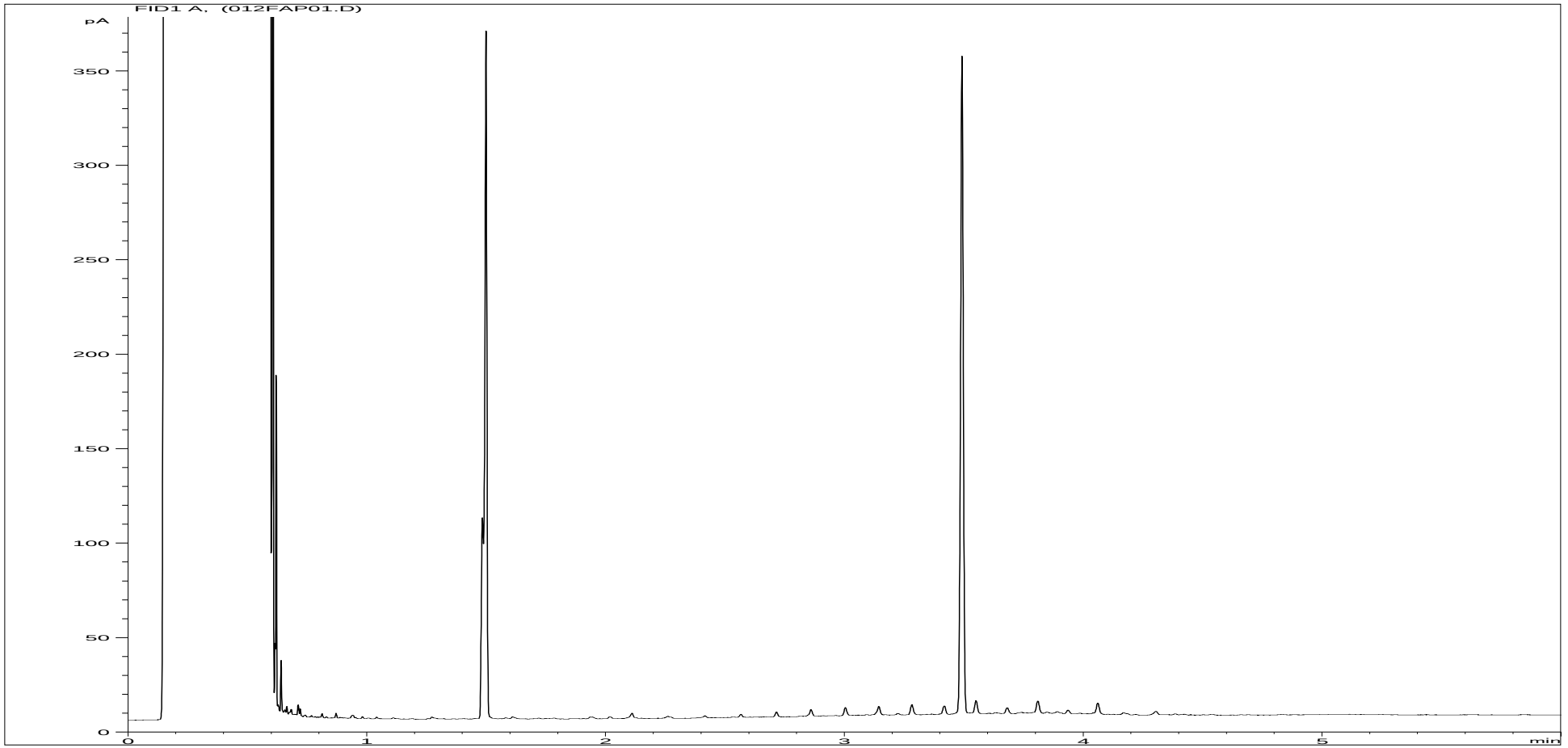



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568035ARO | **Job Number:** | S15_7445M |
| **Multiplier:** | 11.52 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS26 ES 3 3.8 (NVM) |
| **Acquisition Date/Time:** | 05-Nov-15, 21:05:56 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\057BAO01.D | | |



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

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

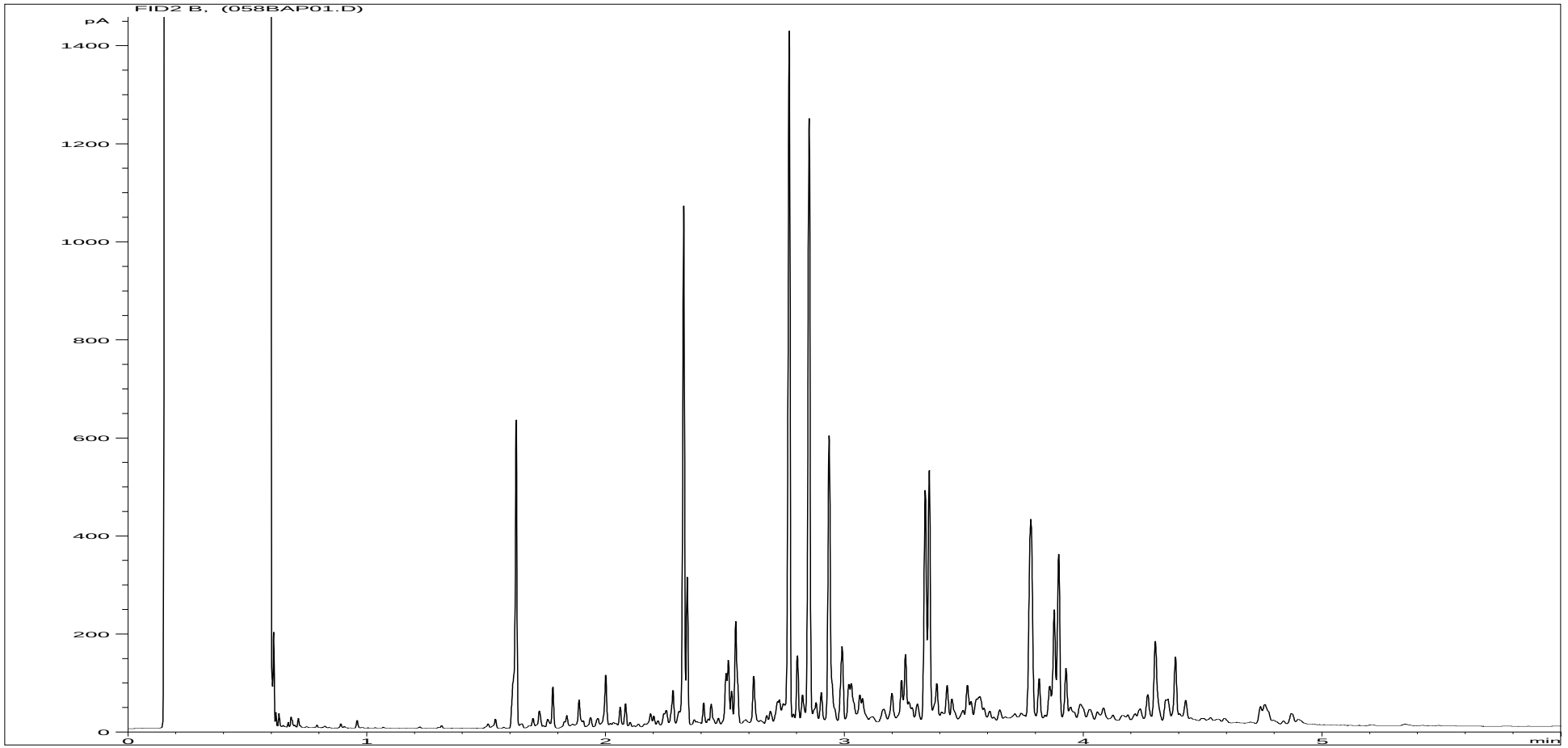



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568036ALI | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS27 ES 1 0.8 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:19:13 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\012FAP01.D | | |



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

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

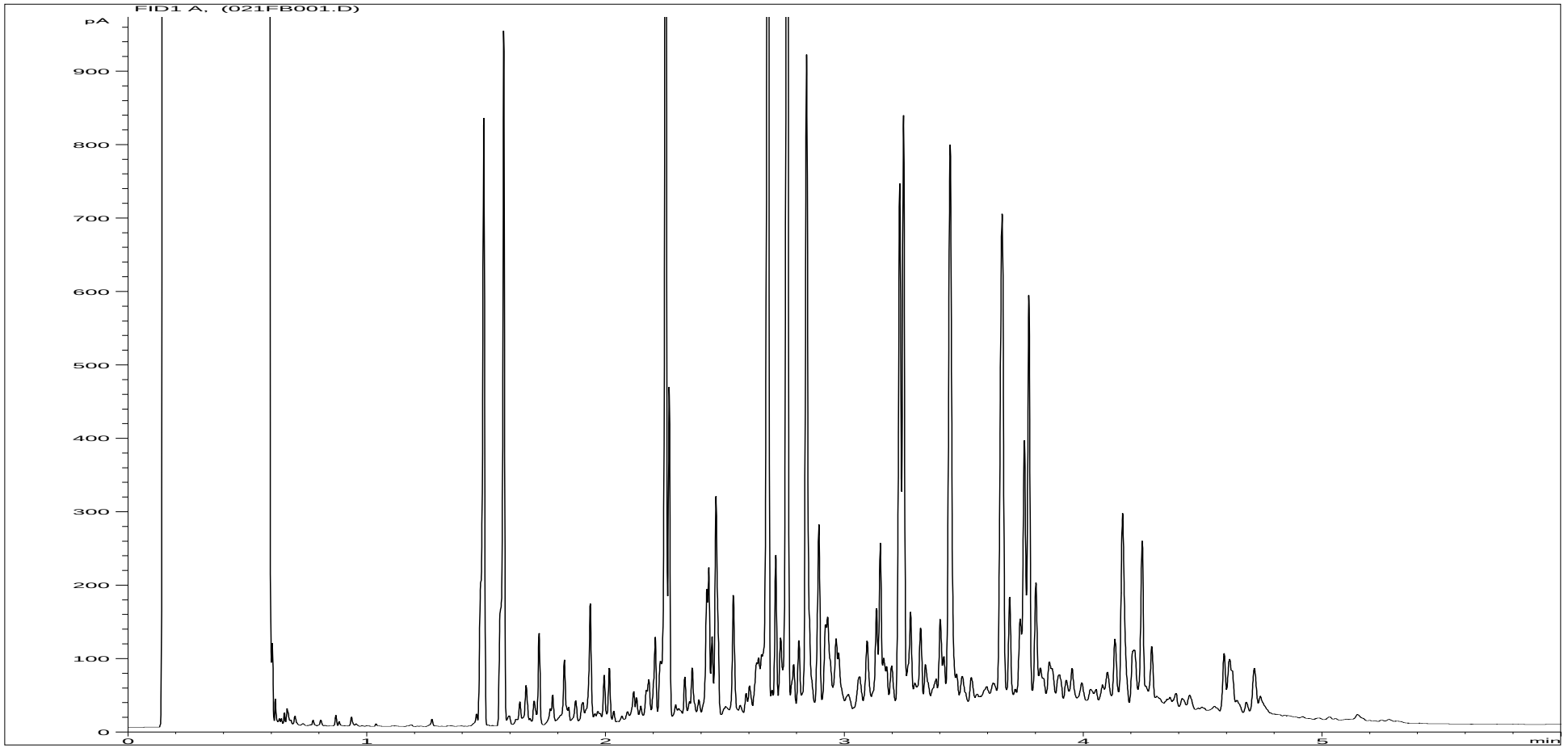



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568036ARO | **Job Number:** | S15_7445M |
| **Multiplier:** | 11.68 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS27 ES 1 0.8 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:19:13 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\058BAP01.D | | |



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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

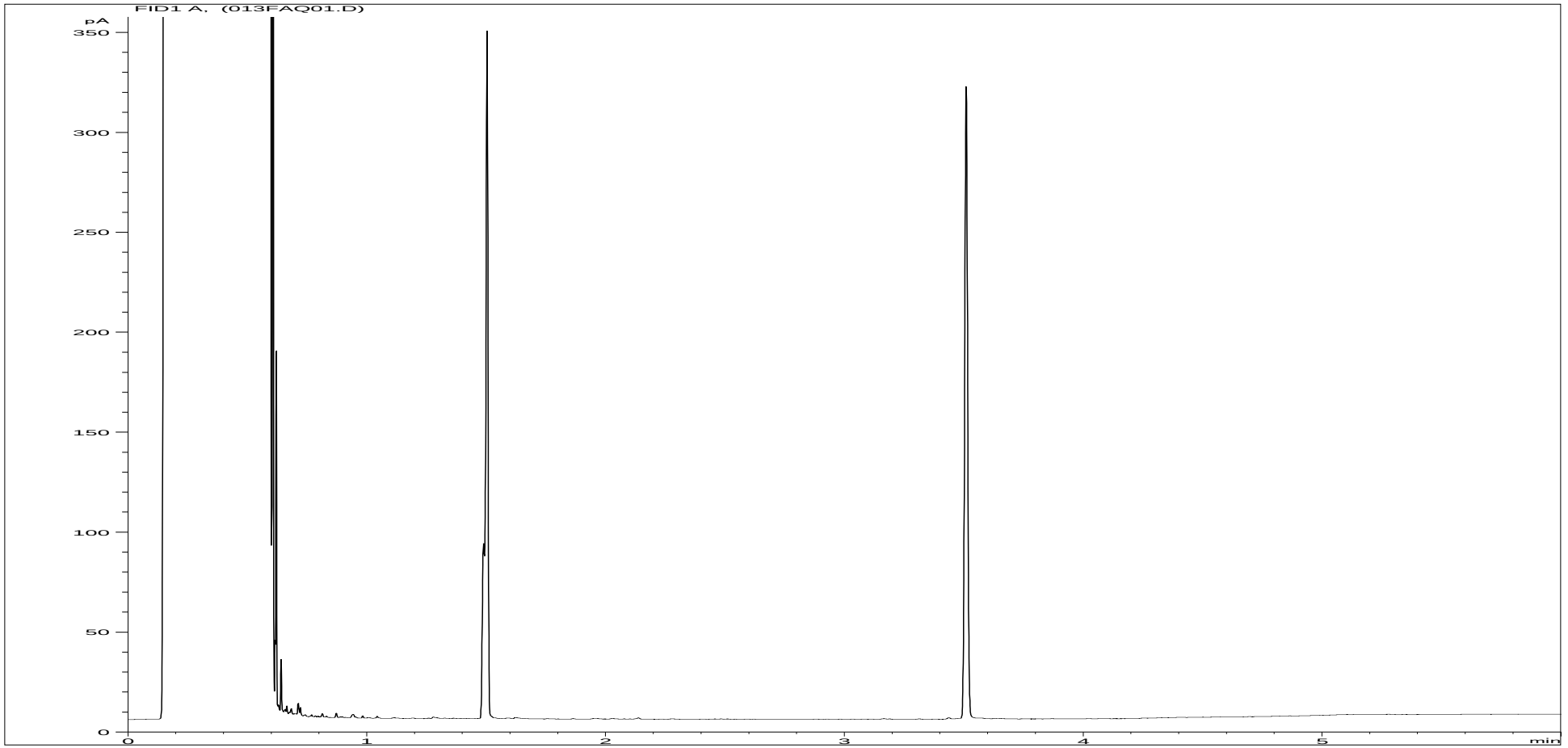



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568036SCU | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 05-Nov-15, 23:45:13 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\021FB001.D | | |



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

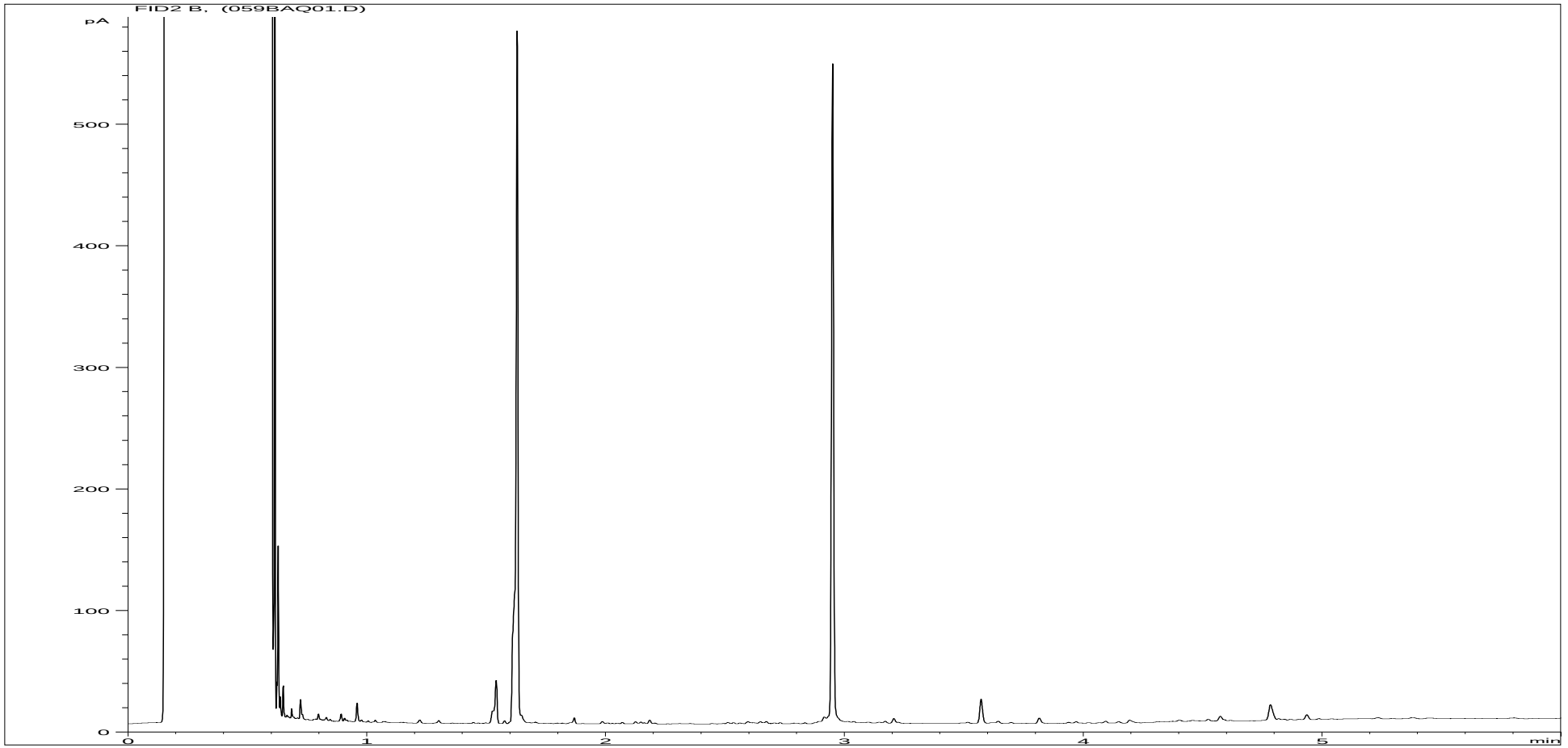
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568037ALI | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS27 ES 2 3.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:32:28 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\013FAQ01.D | | |


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

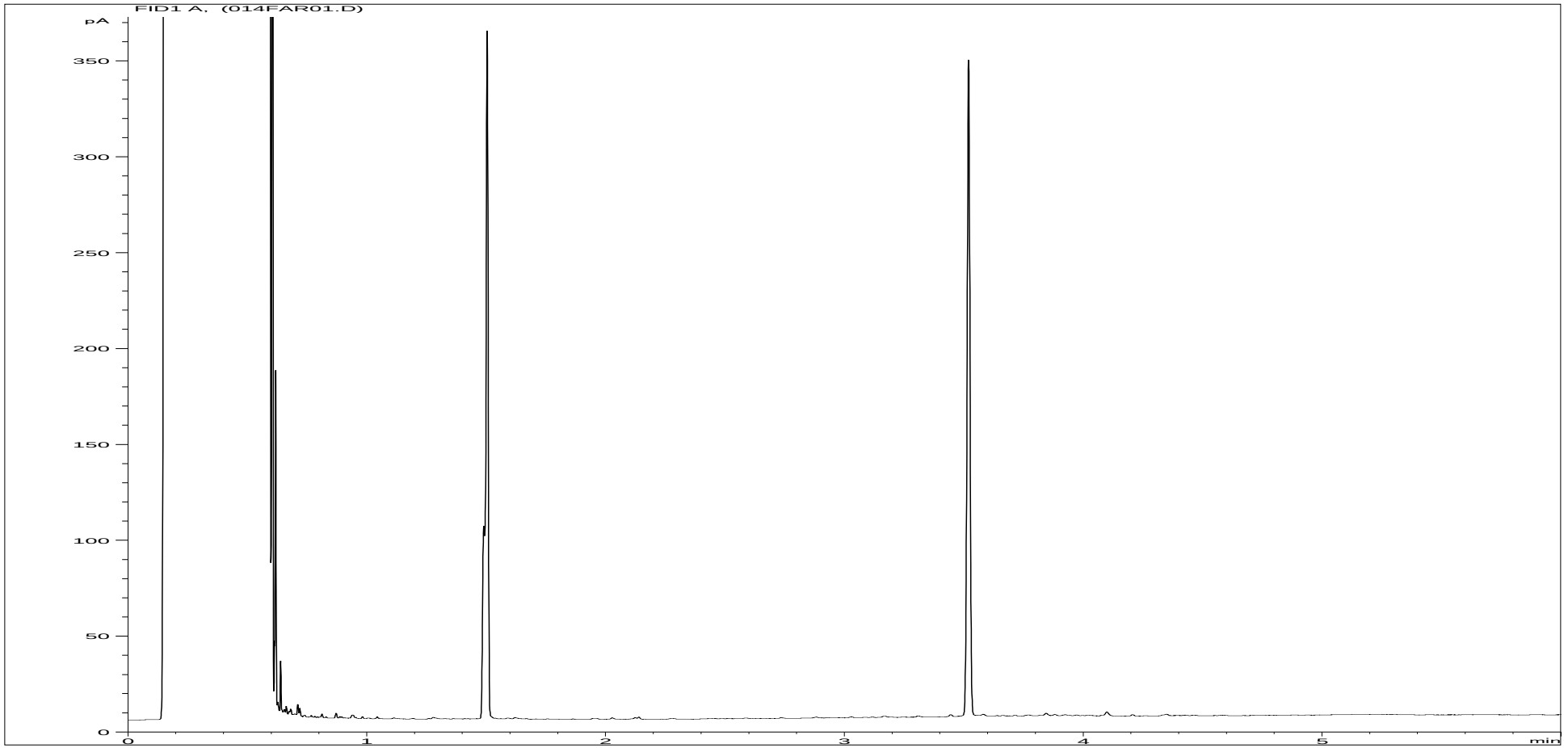
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568037ARO | **Job Number:** | S15_7445M |
| **Multiplier:** | 11.84 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS27 ES 2 3.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:32:28 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\059BAQ01.D | | |


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

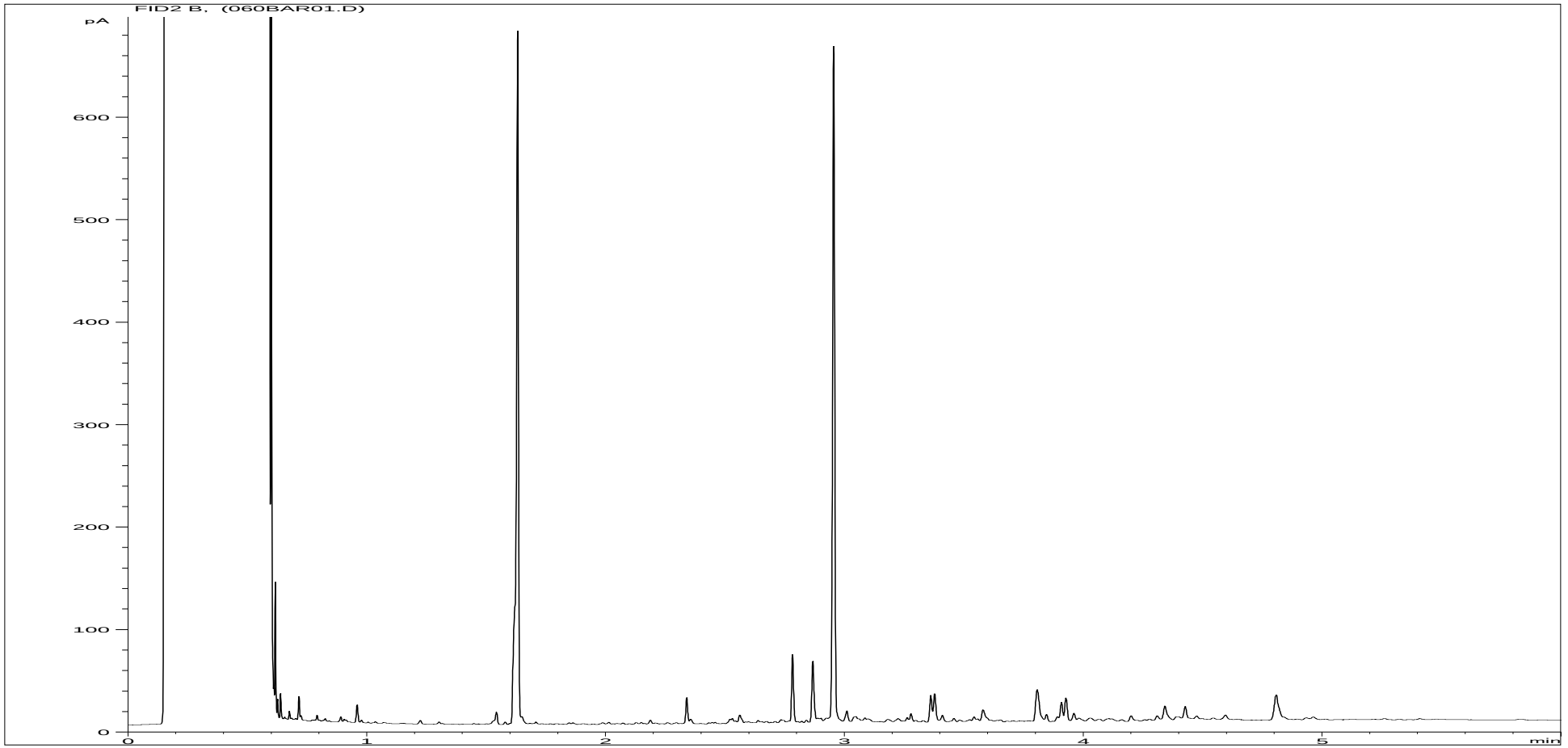
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568038ALI | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS28 ES 1 1.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:46:09 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\014FAR01.D | | |


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

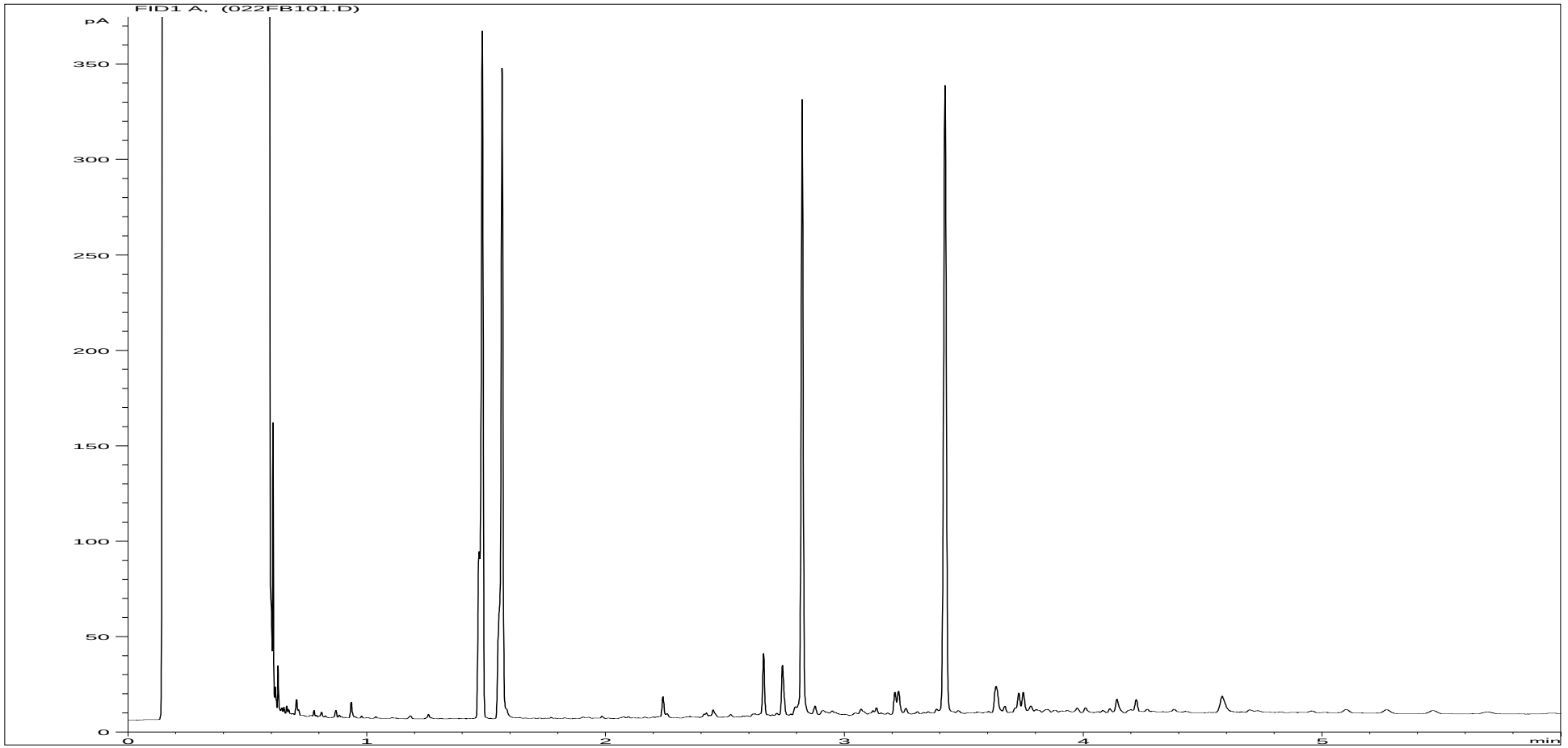
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568038ARO | **Job Number:** | S15_7445M |
| **Multiplier:** | 11.2 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS28 ES 1 1.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:46:09 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\060BAR01.D | | |


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

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**

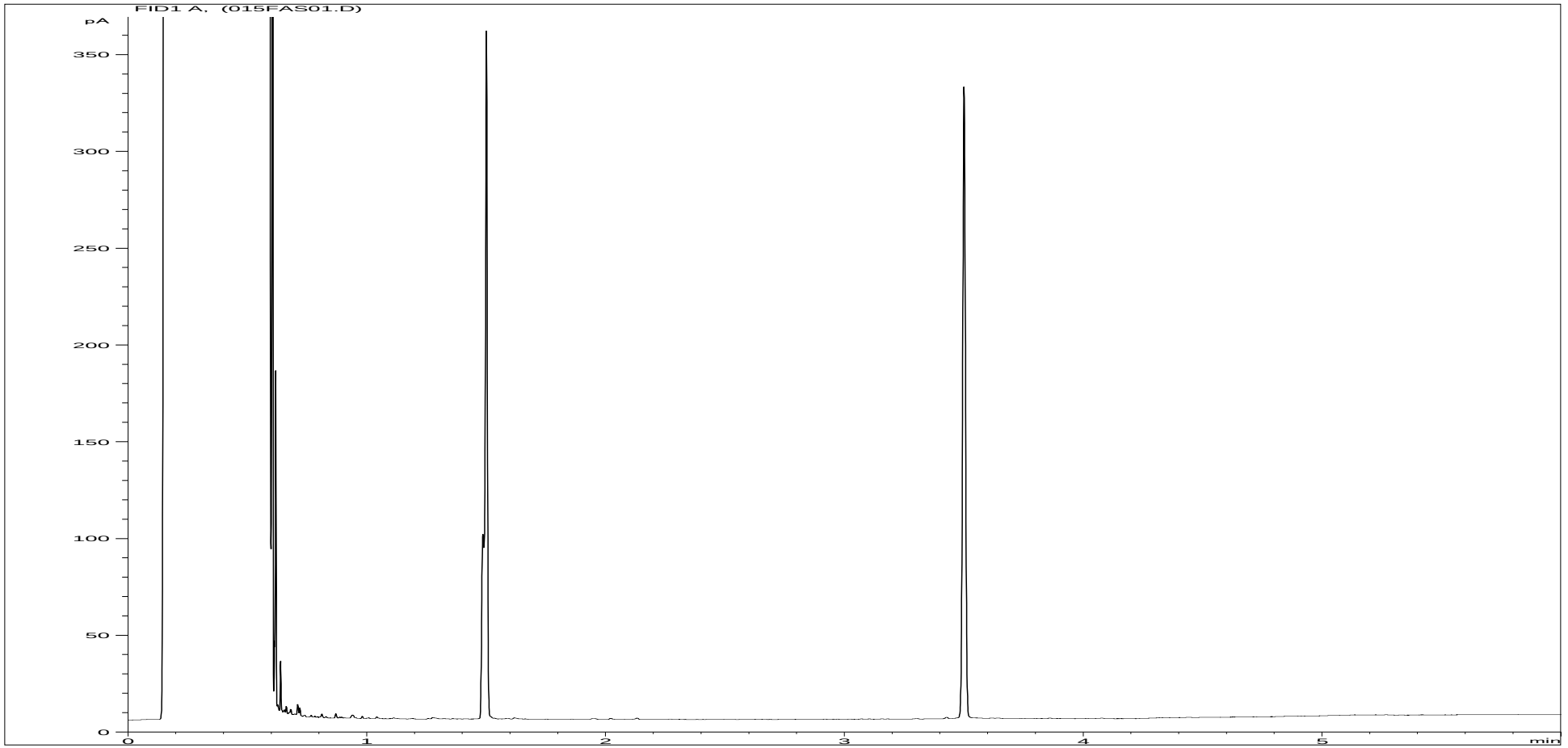



| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568038SCU | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | |
| **Acquisition Date/Time:** | 05-Nov-15, 23:58:29 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\022FB101.D | | |



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

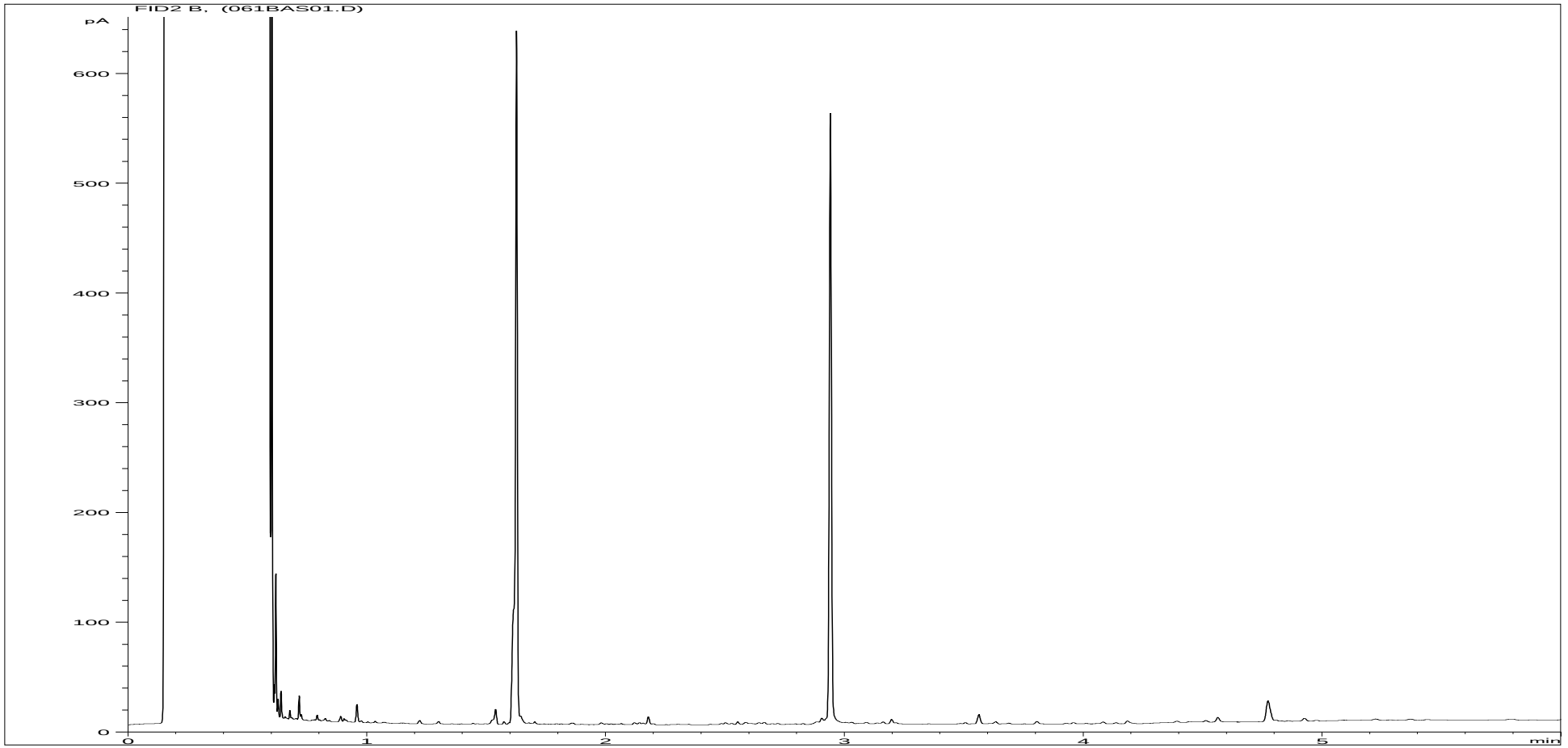
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568039ALI | **Job Number:** | S15_7445M |
| **Multiplier:** | 16 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS28 ES 2 3.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:59:44 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\015FAS01.D | | |


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

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




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1568039ARO | **Job Number:** | S15_7445M |
| **Multiplier:** | 11.52 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | 5UL_RUNF.M | **Client Sample Ref:** | WS28 ES 2 3.0 |
| **Acquisition Date/Time:** | 05-Nov-15, 21:59:44 | | |
| **Datafile:** | D:\TES\DATA\Y2015\110415TPH_GC4\110415 2015-11-04 09-25-08\061BAS01.D | | |


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

# Sample Analysis

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview

# S157445M

**Customer** **ESG Wokingham**
**Site** **Marsh Lane, Tottenham**
**Report No** **S157445M**

Consignment No S51558
Date Logged 02-Nov-2015
Report Due 09-Nov-2015

| ID Number | Description | MethodID | CustServ | GROHSA | MCertS | TMSS | TPHFID-SCU | TPHUSSI | WSLM59 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | GRO (AA) by HSA GC-FID | MCertS Analysis | Tot.Moisture @ 105C | TPH by GCFID (AR) SCU | TPH by GCFID (AR/Si) | Total Organic Carbon |
| | | | | ✓ | | ✓ | ✓ | ✓ | |
| CL/1568035 | WS26 3.8 | 29/10/15 | | | | | | | |
| CL/1568036 | WS27 0.8 | 29/10/15 | | | | | | | |
| CL/1568037 | WS27 3.0 | 29/10/15 | | | | | | | |
| CL/1568038 | WS28 1.0 | 29/10/15 | | | | | | | |
| CL/1568039 | WS28 3.0 | 29/10/15 | | | | | | | |

**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 |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

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

Where individual results are flagged see report notes for status.

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | GROHSA | As Received | Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID |
| Soil | TMSS | As Received | Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis (% based upon wet weight) |
| Soil | TPHFID-SCU | As Received | Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including cleanup of extract using activated silica |
| Soil | TPHUSSI | As Received | Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection including quantitation of Aromatic and Aliphatic fractions. |
| Soil | WSLM59 | Oven Dried @ < 35°C | Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection |



Where individual results are flagged see report notes for status.

# 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 105ºC 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$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**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
**N.F** No Flow
**NS** Information Not Supplied
**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
§ accreditation has been removed for this result as it is a non-accredited matrix

**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 :** ESG Wokingham

**Site :** Marsh Lane, Tottenham

**Report Number :** S15_7445

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1568035 | WS26 ES 3 3.8 (NVM) | Brown Sand STONE |
| CL/1568036 | WS27 ES 1 0.8 | Brown Stone CLAY |
| CL/1568037 | WS27 ES 2 3.0 | Brown Stone SAND |
| CL/1568038 | WS28 ES 1 1.0 | Brown Stone SILT |
| CL/1568039 | WS28 ES 2 3.0 | Brown Stone SAND |

# APPENDIX C2
# GROUNDWATER CHEMICAL TESTING RESULTS

Our Ref: EXR/209419 (Ver. 1)
Your Ref: R5123

November 20, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr M Gray
ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

For the attention of Mr M Gray

Dear Mr Gray

**Sample Analysis - Marsh Lane, Tottenham**

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 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 (Multi-Sector Services) 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

D Brassington
Project Co-ordinator
01283 554493

# TEST REPORT

1252

## Report No. EXR/209419 (Ver. 1)

ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

**Site: Marsh Lane, Tottenham**

The 8 samples described in this report were registered for analysis by ESG on 14-Nov-2015. This report supersedes any versions previously issued by the laboratory.

The analysis was completed by: 20-Nov-2015

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

The following tables are contained in this report:

Table 1 Main Analysis Results (Page 2)
Table of GRO Results (Page 3)
Table of TPH (Si) banding (0.01) (Page 4)
GC-FID Chromatograms (Pages 5 to 20)
Analytical and Deviating Sample Overview (Page 21)
Table of Method Descriptions (Page 22)
Table of Report Notes (Page 23)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 20-Nov-2015

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

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | pH units | mg/l | mg/l | | | | | | | | | | | | | |
| **Method Codes :** | | | WSLM3 | TPHFID-Si | GROHSA | | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | | 0.01 | 0.1 | | | | | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | Yes | No | | | | | | | | | | | | | |
| **LAB ID Number EX/** | **Client Sample Description** | **Sample Date** | **pH units w** | **TPH by GC(Si) o** | **GRO-HSA (AA)** | | | | | | | | | | | | | |
| 1639551 | WS20 | **11-Nov-15** | 8.3 | Req | Req | | | | | | | | | | | | | |
| 1639552 | WS21 | **11-Nov-15** | 6.8 | Req | Req | | | | | | | | | | | | | |
| 1639553 | WS22 | **11-Nov-15** | 7.1 | Req | Req | | | | | | | | | | | | | |
| 1639554 | WS23 | **11-Nov-15** | 7.3 | Req | Req | | | | | | | | | | | | | |
| 1639555 | WS24 | **11-Nov-15** | 7.1 | Req | Req | | | | | | | | | | | | | |
| 1639556 | WS25 | **11-Nov-15** | 7.2 | Req | Req | | | | | | | | | | | | | |
| 1639557 | WS27 | **11-Nov-15** | 7.2 | Req | Req | | | | | | | | | | | | | |
| 1639558 | WS28 | **11-Nov-15** | 6.9 | Req | Req | | | | | | | | | | | | | |


Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422


**Client Name** ESG Geoenvironmental Consulting

**Contact** Mr M Gray

# Marsh Lane, Tottenham

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **20-Nov-2015** |
| **Report Number** | **EXR/209419** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Gasoline Range Organics
# (BTEX and Aliphatic Carbon Ranges)

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W20_9419
**Directory:** C:\CHEM32\1\DATA\1116HSA_GC12\111615 2015-11-16 10-21-45\166B6601.D
**Method:** Headspace GCFID

**Matrix:** Water
**Date Booked in:** 14-Nov-15
**Date extracted:** 17-Nov-15
**Date Analysed:** 17-Nov-15, 07:2

*** Sample data with an asterisk are not UKAS accredited.**

| | | | Concentration, (mg/l) | | | | | Aliphatics | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Client ID | Benzene | Toluene | Ethyl benzene | m/p-Xylene | o-Xylene | C5 - C6 | >C6 - C7 | >C7 - C8 | >C8 - C10 | Total GRO |
| * EX1639551 | WS20 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1639552 | WS21 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | 0.2 | 0.2 |
| * EX1639553 | WS22 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1639554 | WS23 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1639555 | WS24 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1639556 | WS25 | <0.025 | <0.025 | 0.113 | 0.312 | 0.116 | <0.5 | <0.5 | <0.5 | 10.7 | 11.9 |
| * EX1639557 | WS27 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1639558 | WS28 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
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Where individual results are flagged see report notes for status.

# ALIPHATIC / AROMATIC FRACTION BY GC/FID

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W20_9419
**QC Batch Number:** 150770
**Directory:** D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\014B8401.D
**Method:** Bottle

**Separation:** Silica gel
**Eluents:** Hexane, DCM

**Matrix:** Water
**Date Booked ir** 14-Nov-15
**Date Extracted** 17-Nov-15
**Date Analysed** 18-Nov-15, 12:11:00

*** 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** |
| EX1639551 | WS20 | <0.01 | <0.01 | <0.01 | <0.01 | 0.06 | 0.01 | 0.122 | 0.058 | 0.314 | 0.119 | 0.525 | 0.191 |
| EX1639552 | WS21 | 0.017 | <0.01 | 0.178 | 0.02 | 1.52 | 0.486 | 2.03 | 1.1 | 5.05 | 1.84 | 9.1 | 3.55 |
| EX1639553 | WS22 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.017 |
| EX1639554 | WS23 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.049 | <0.01 | 0.053 | 0.013 |
| EX1639555 | WS24 | 0.94 | <0.01 | 2.35 | <0.01 | 3.47 | <0.01 | 0.607 | <0.01 | 1.95 | 0.023 | 9.3 | 0.032 |
| EX1639556 | WS25 | <0.01 | 0.338 | <0.01 | 0.888 | <0.01 | 1.28 | <0.01 | 0.417 | <0.01 | 1.29 | 0.011 | 4.23 |
| EX1639557 | WS27 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.013 | 0.01 | 0.021 |
| EX1639558 | WS28 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.029 | <0.01 | 0.042 | 0.013 |
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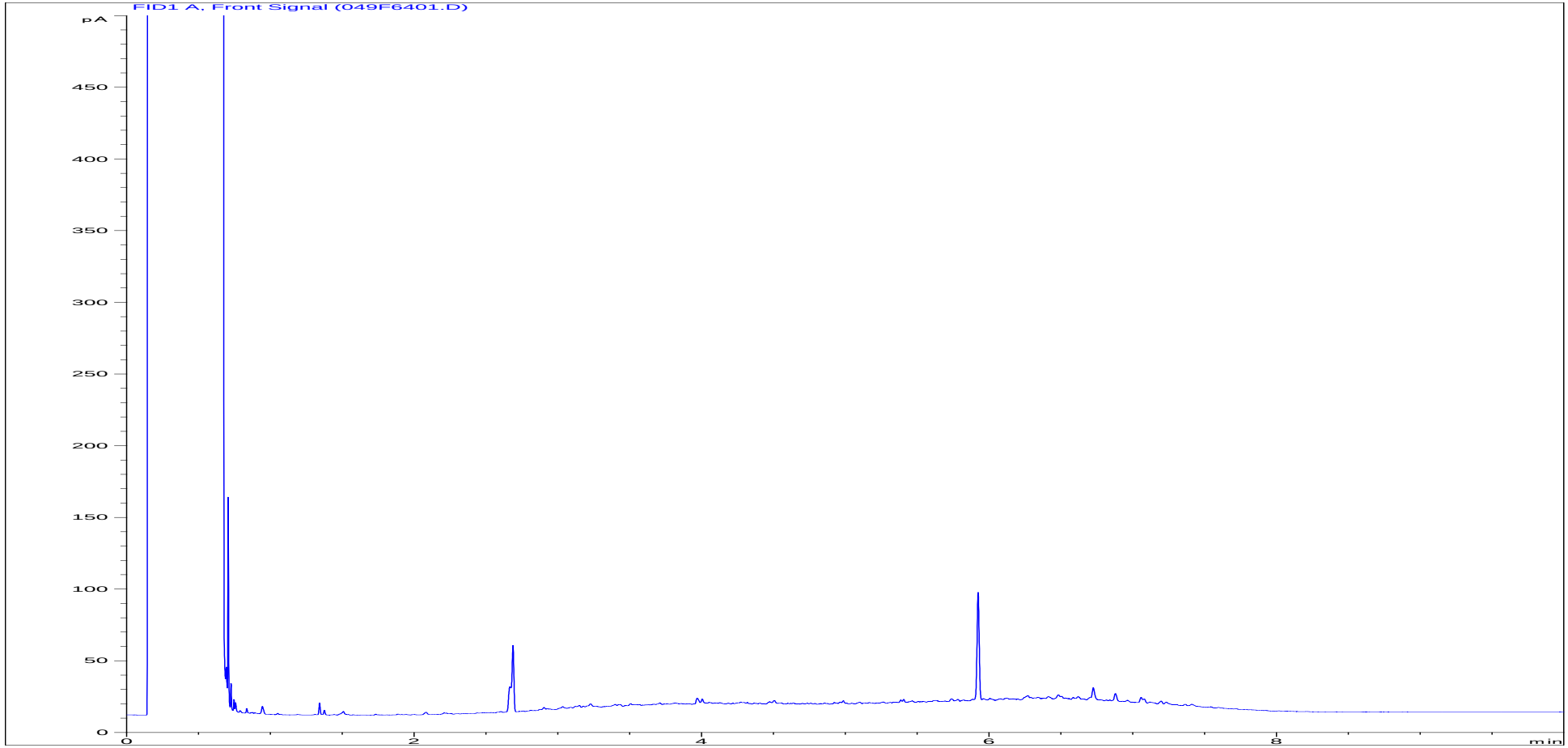
Where individual results are flagged see report notes for status.

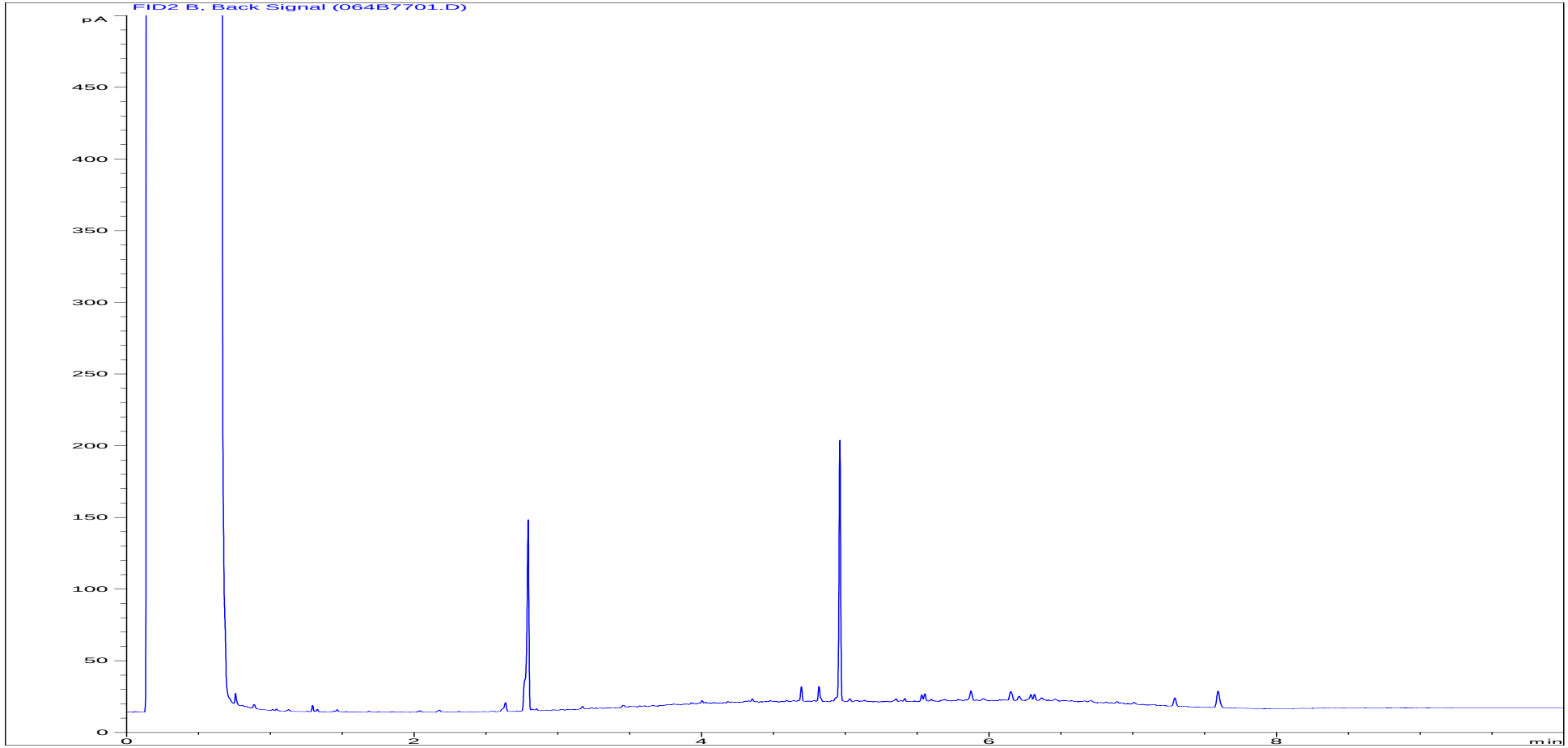
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639551ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0196 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS20 |
| **Acquisition Date/Time:** | 18-Nov-15, 05:54:44 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\049F6401.D | | |

Where individual results are flagged see report notes for status.

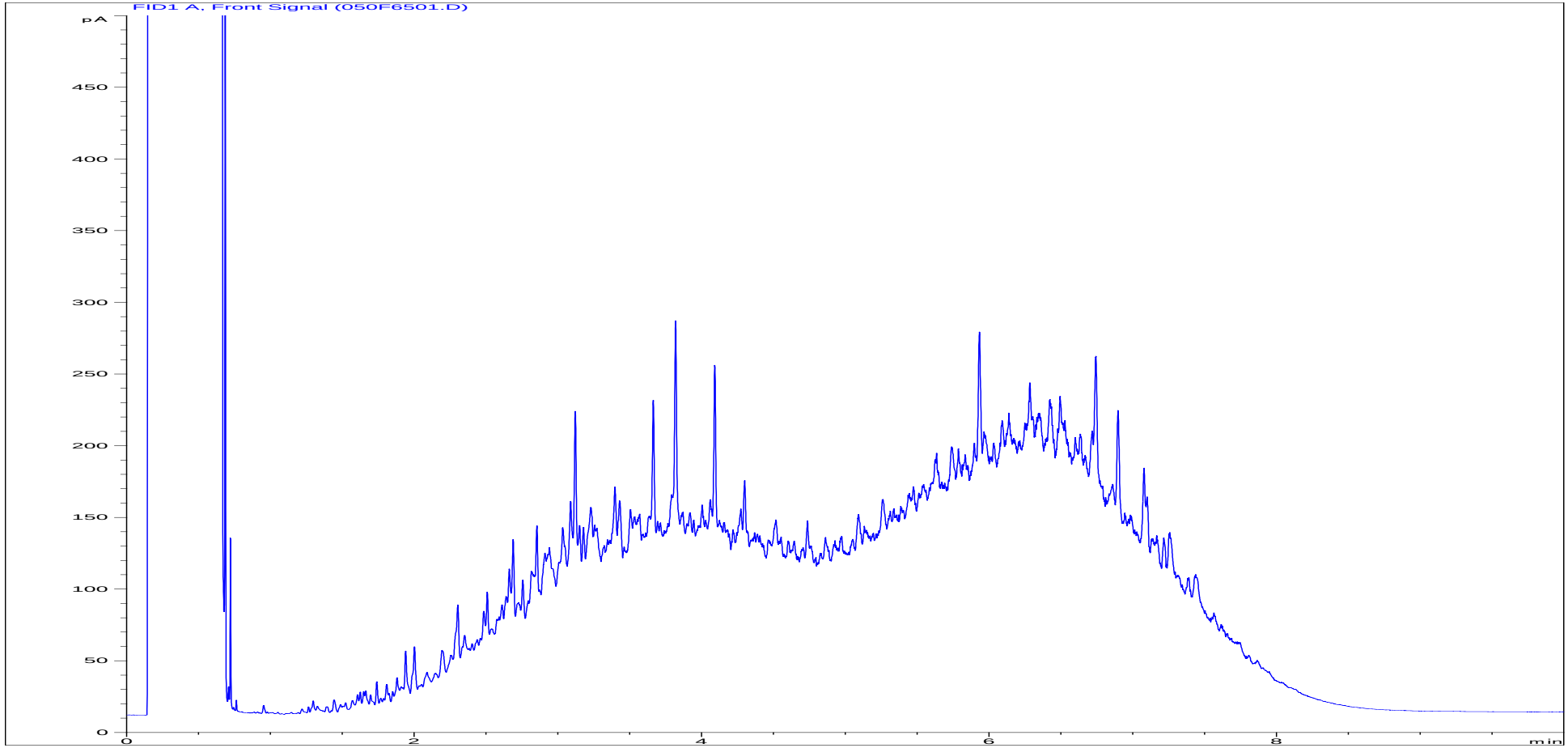
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639551ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0146 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS20 |
| **Acquisition Date/Time:** | 18-Nov-15, 09:57:04 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\064B7701.D | | |

Where individual results are flagged see report notes for status.

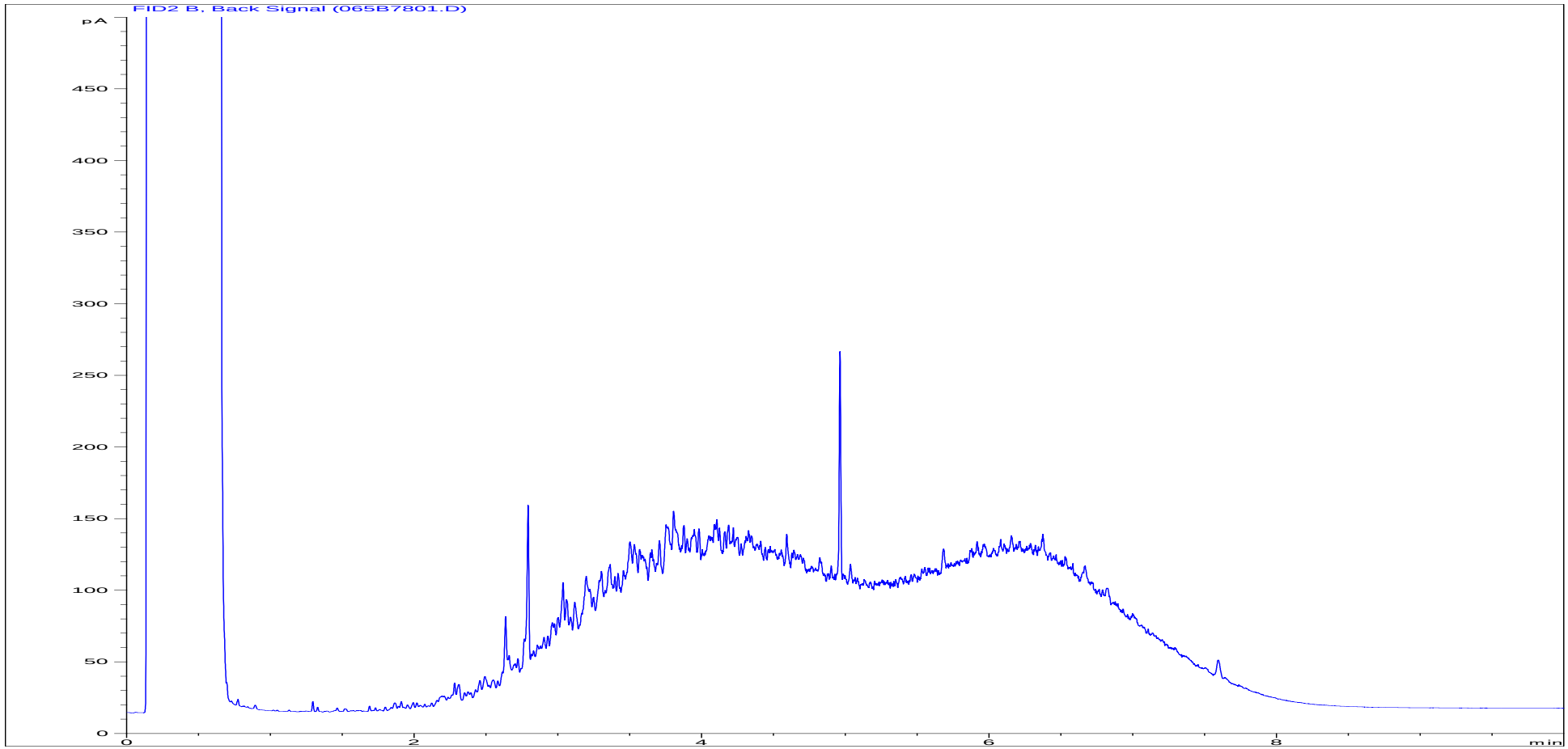
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639552ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS21 |
| **Acquisition Date/Time:** | 18-Nov-15, 06:12:55 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\050F6501.D | | |

Where individual results are flagged see report notes for status.

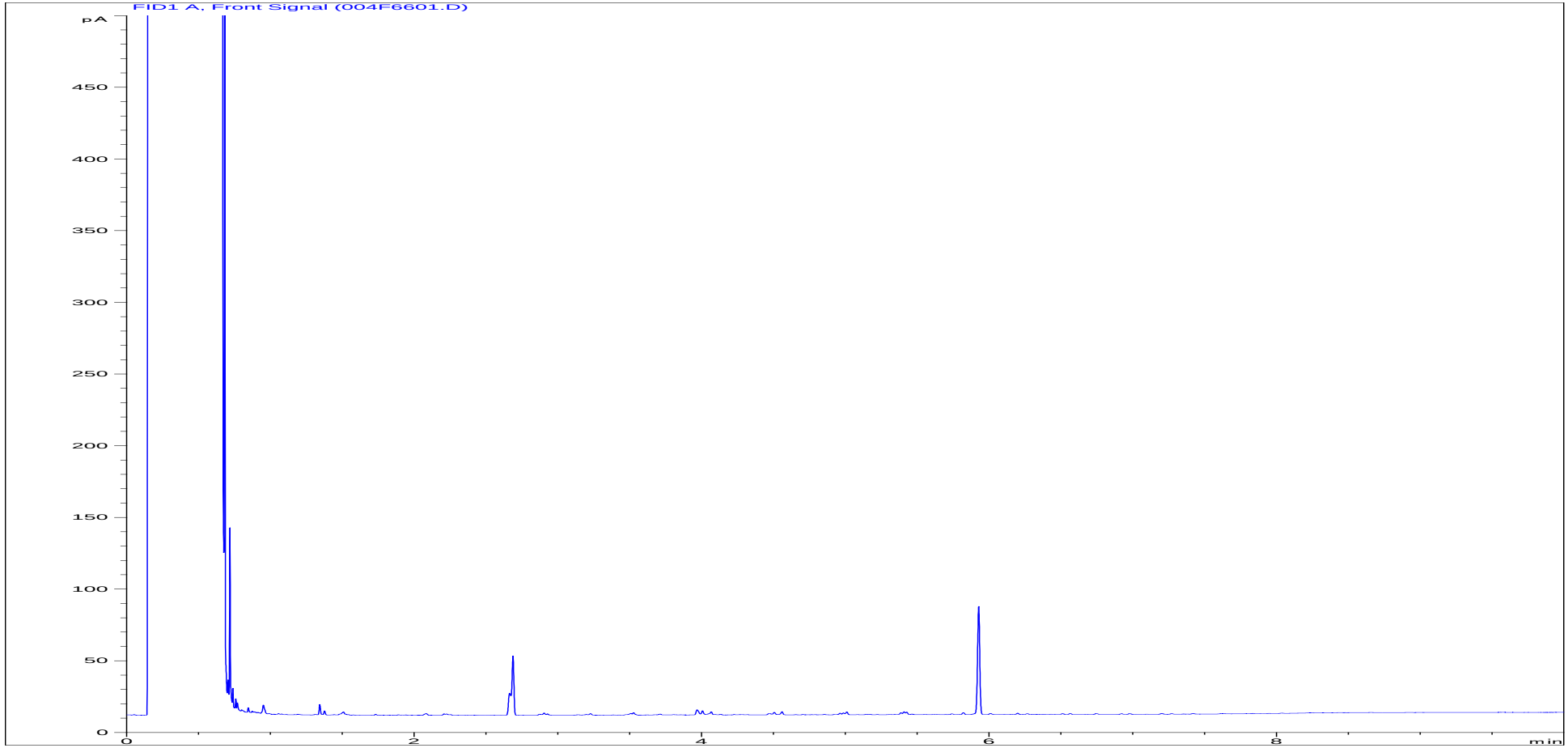
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639552ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0144 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS21 |
| **Acquisition Date/Time:** | 18-Nov-15, 10:16:02 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\065B7801.D | | |

Where individual results are flagged see report notes for status.

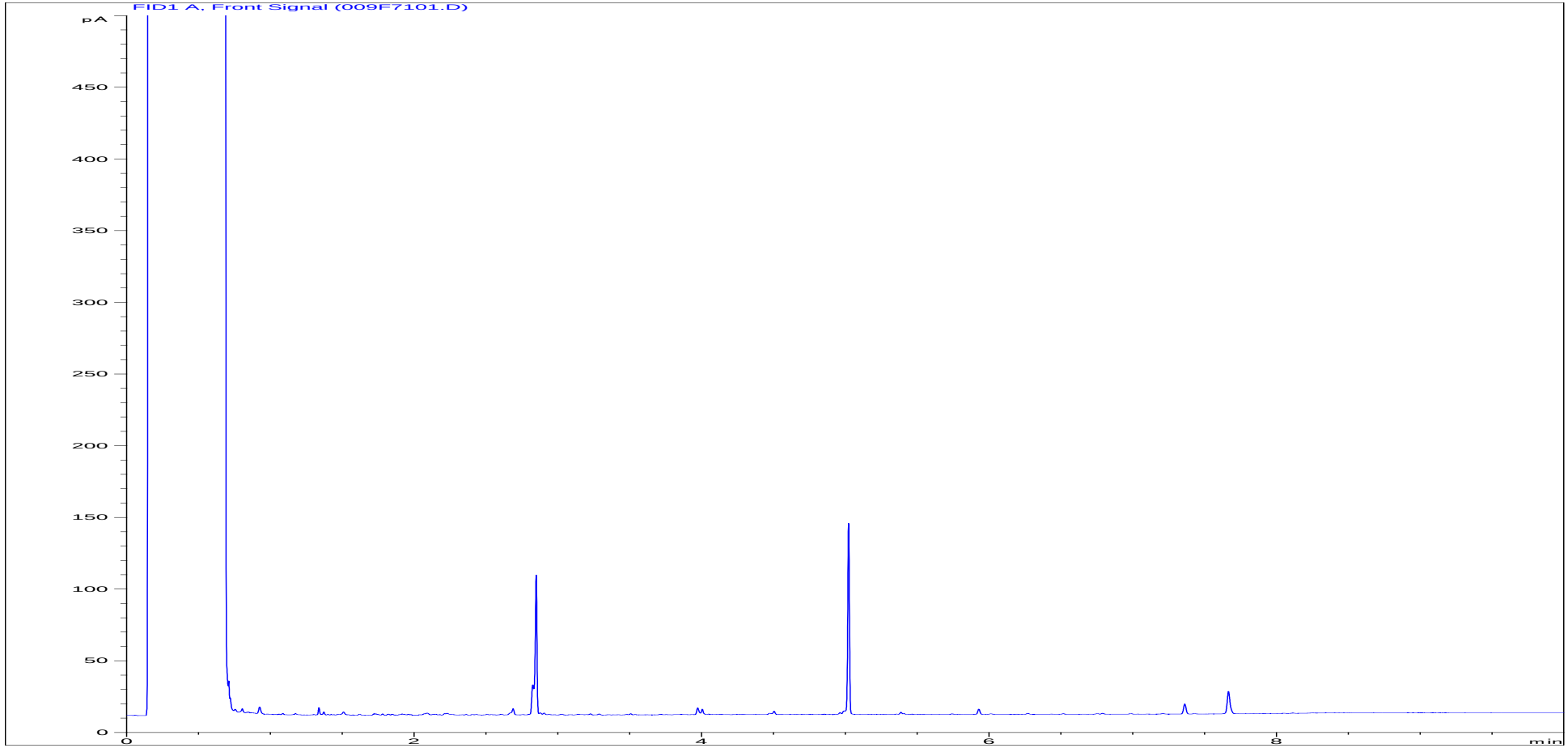
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639553ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS22 |
| **Acquisition Date/Time:** | 18-Nov-15, 06:31:06 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\004F6601.D | | |

Where individual results are flagged see report notes for status.

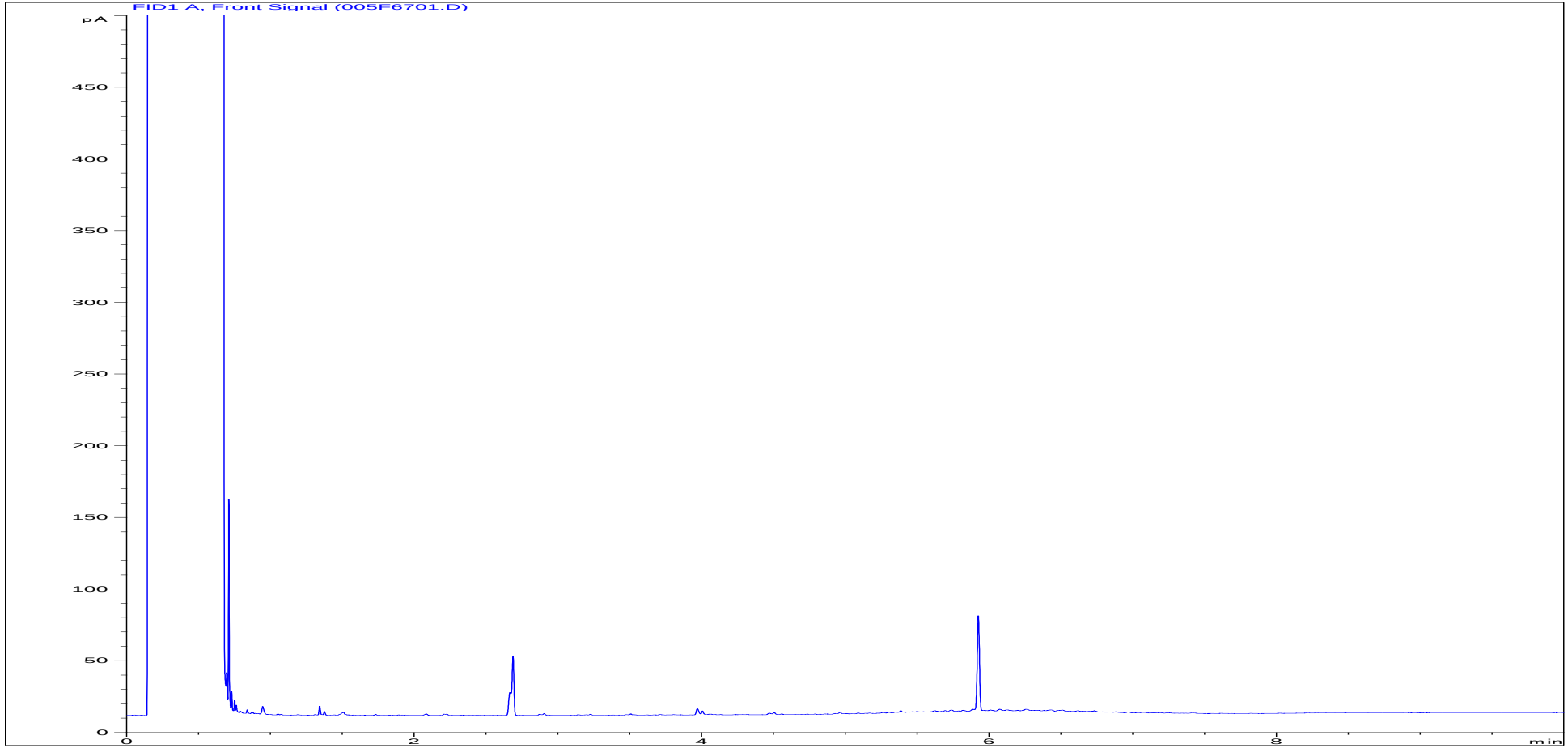
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639553ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0146 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS22 |
| **Acquisition Date/Time:** | 18-Nov-15, 08:06:10 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\009F7101.D | | |

Where individual results are flagged see report notes for status.

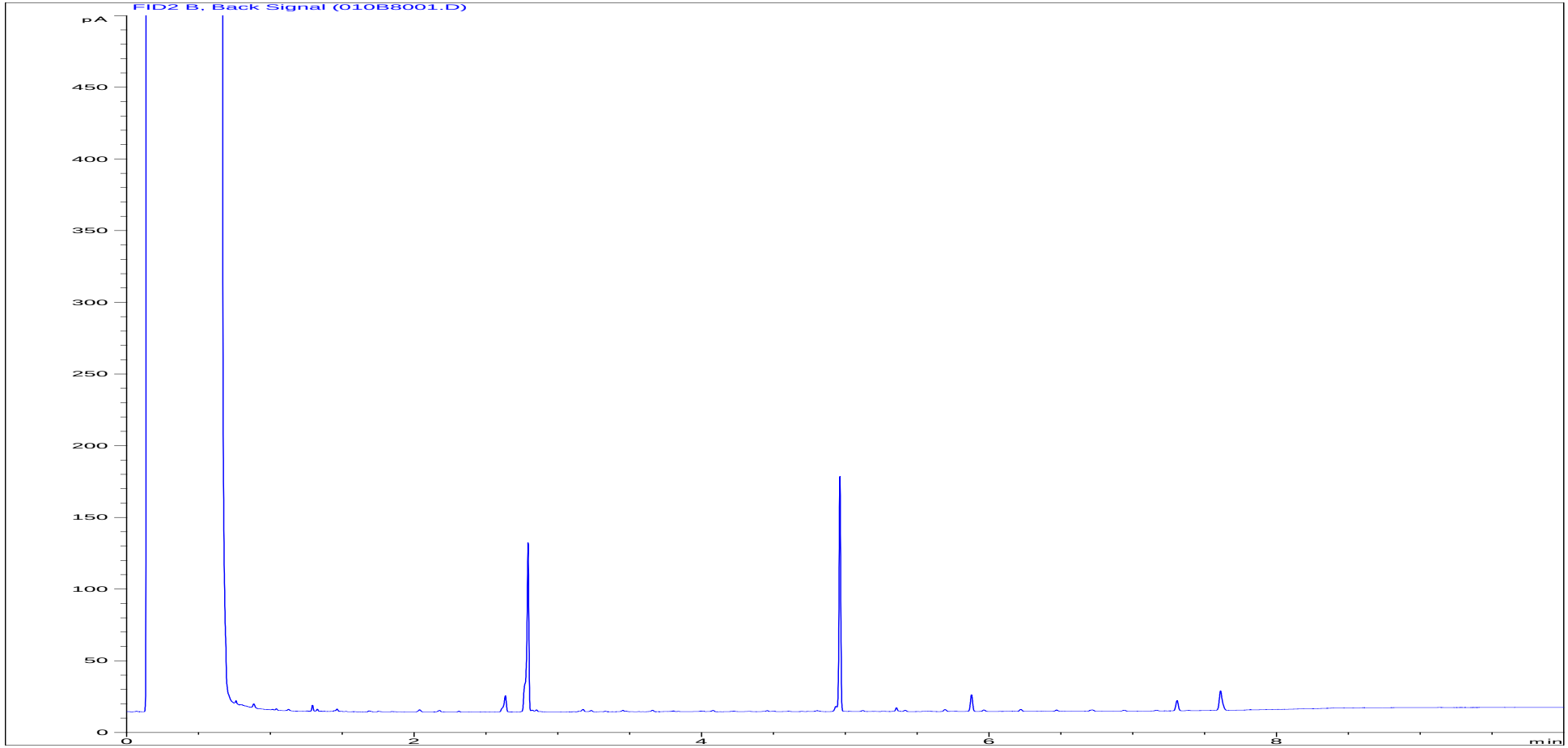
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639554ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS23 |
| **Acquisition Date/Time:** | 18-Nov-15, 06:49:57 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\005F6701.D | | |

Where individual results are flagged see report notes for status.

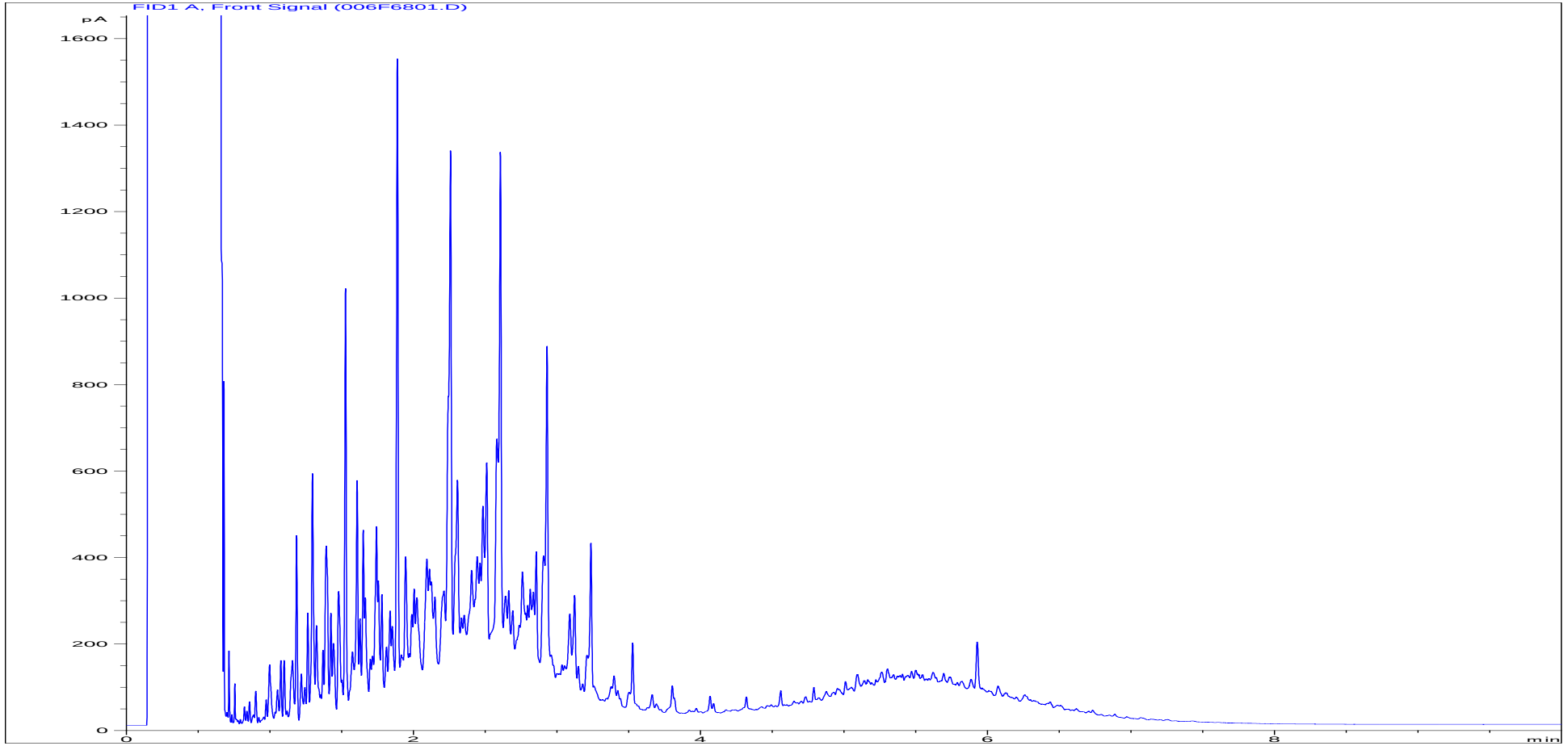
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639554ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.015 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS23 |
| **Acquisition Date/Time:** | 18-Nov-15, 10:53:58 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\010B8001.D | | |

Where individual results are flagged see report notes for status.

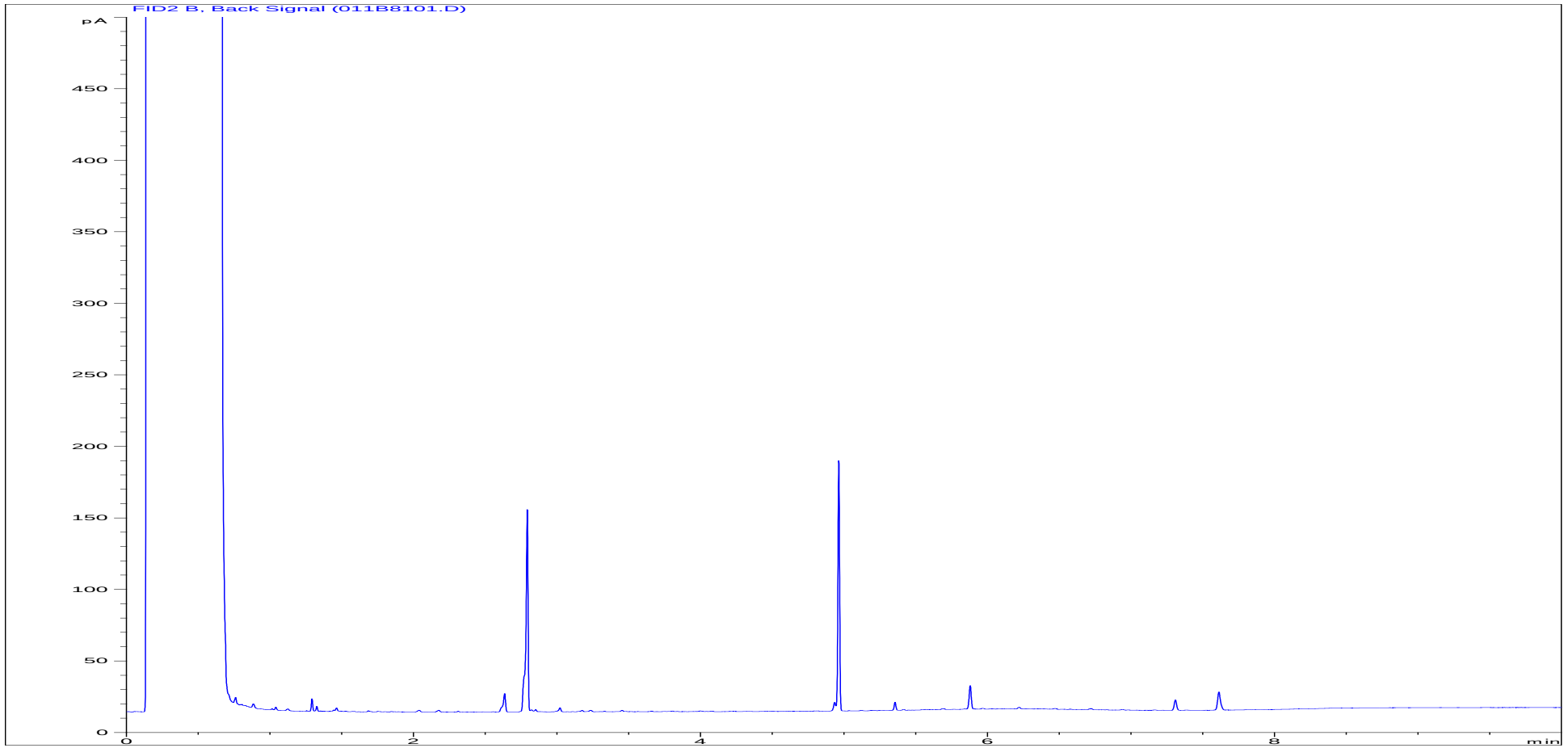
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639555ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0196 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS24 |
| **Acquisition Date/Time:** | 18-Nov-15, 07:08:48 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\006F6801.D | | |

Where individual results are flagged see report notes for status.

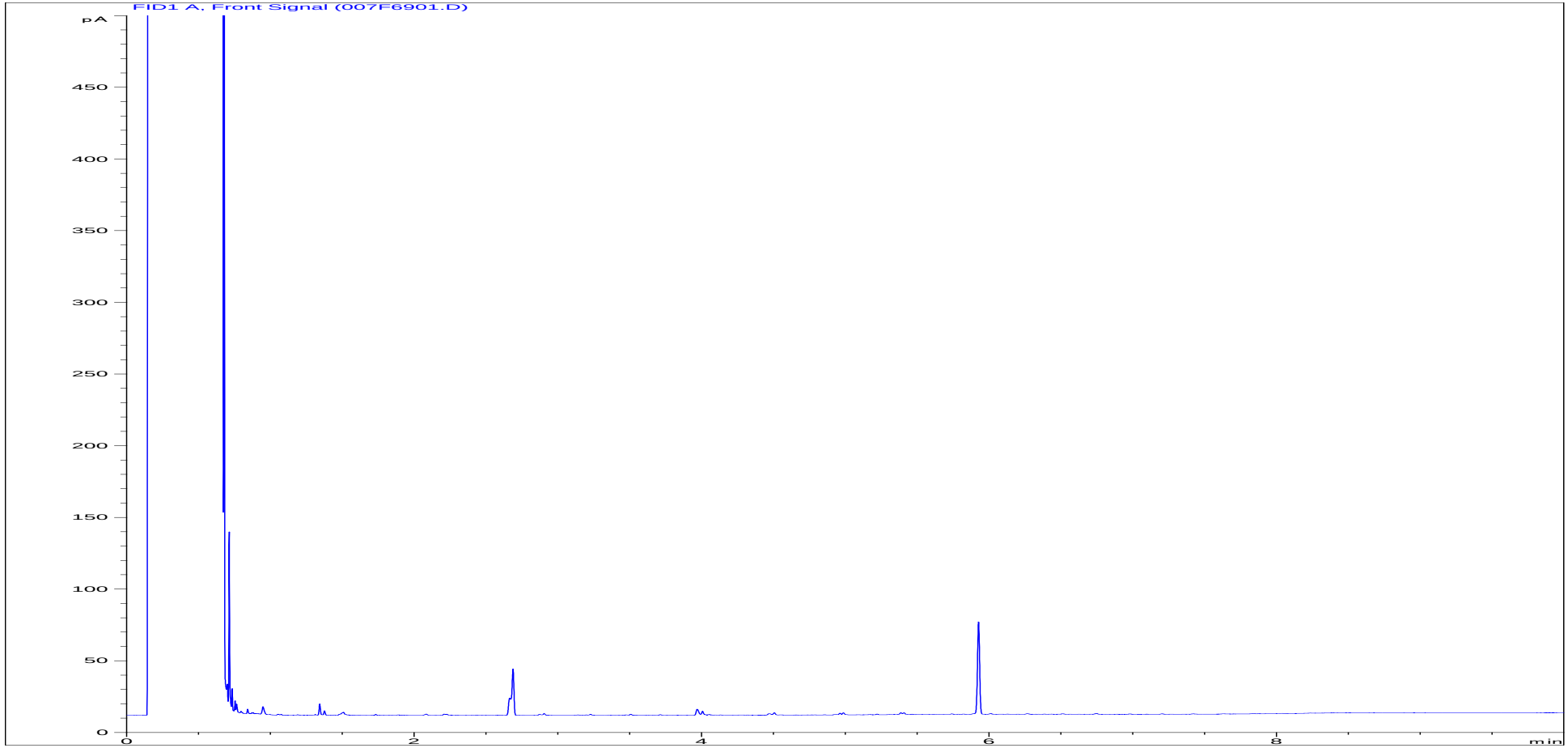
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639555ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.015 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS24 |
| **Acquisition Date/Time:** | 18-Nov-15, 11:13:08 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\011B8101.D | | |

Where individual results are flagged see report notes for status.

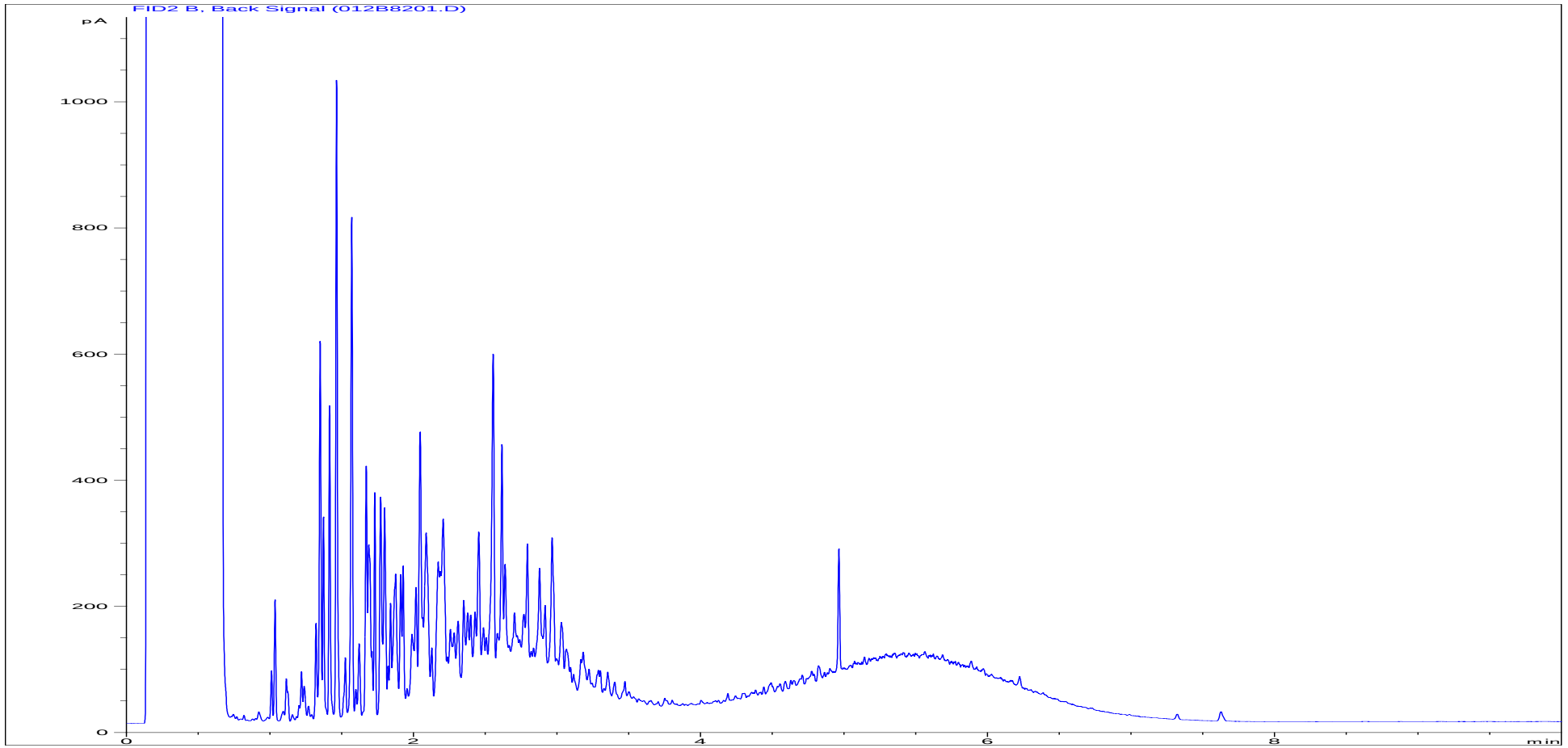
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639556ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0198 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS25 |
| **Acquisition Date/Time:** | 18-Nov-15, 07:27:48 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\007F6901.D | | |

Where individual results are flagged see report notes for status.

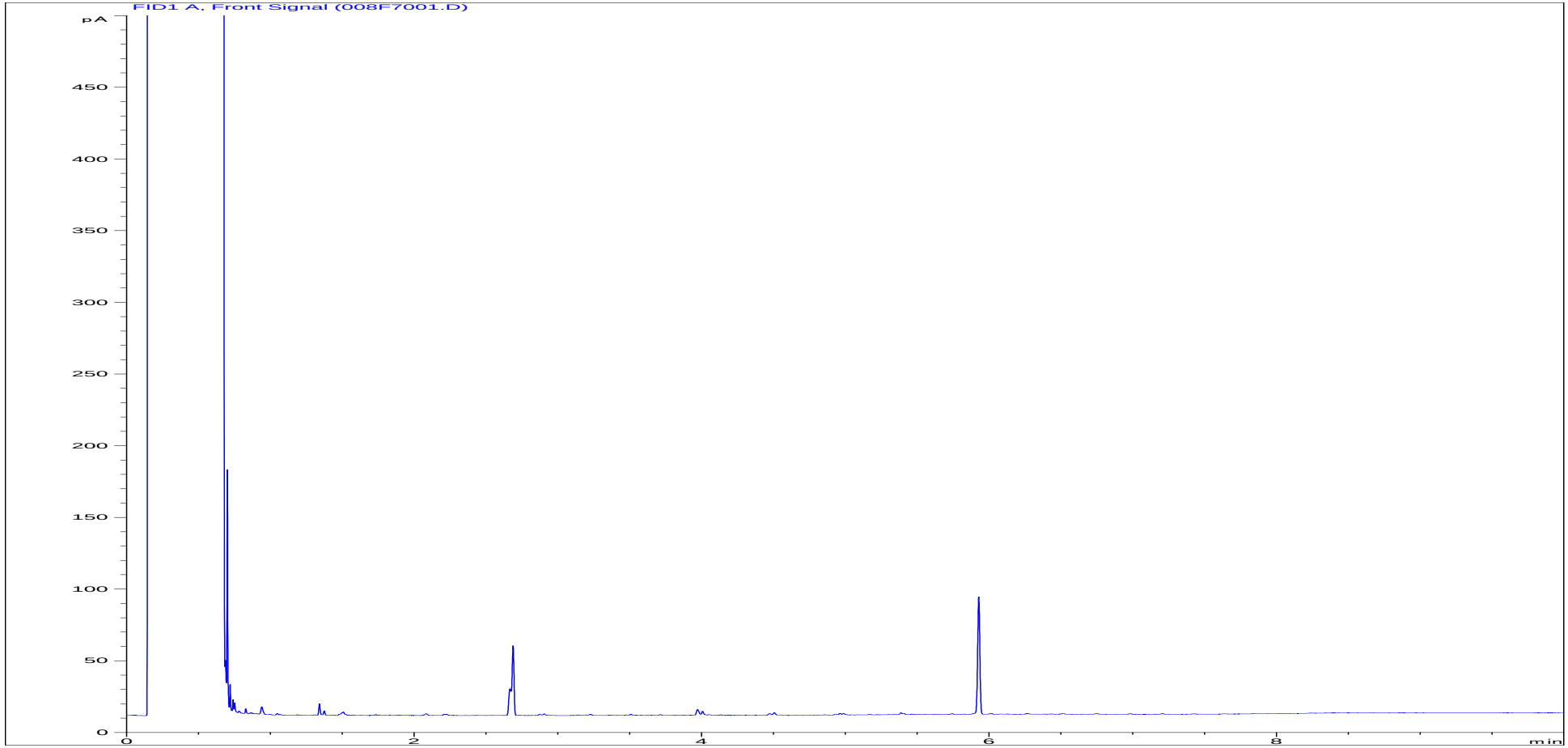
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639556ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0154 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS25 |
| **Acquisition Date/Time:** | 18-Nov-15, 11:32:46 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\012B8201.D | | |

Where individual results are flagged see report notes for status.

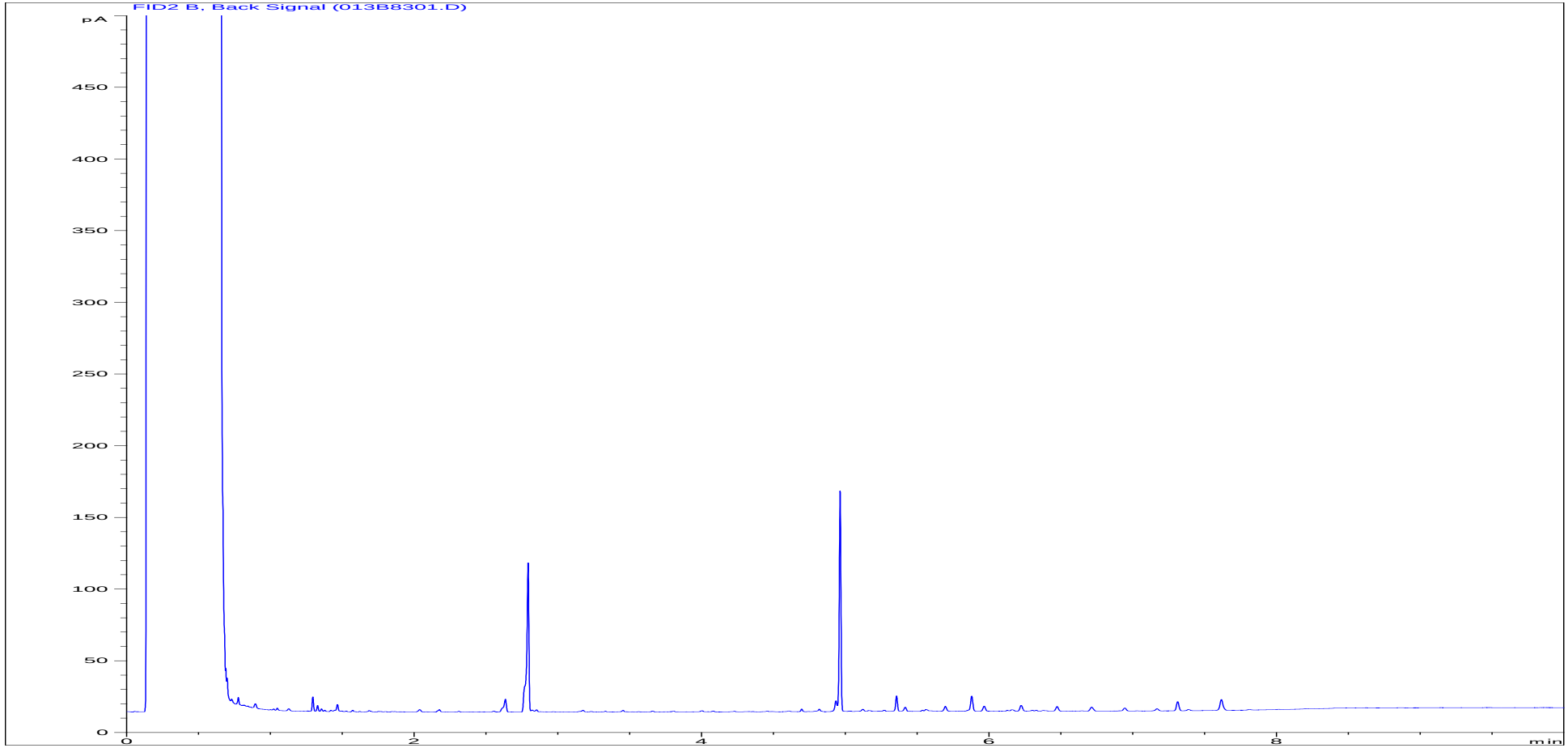
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639557ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0196 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS27 |
| **Acquisition Date/Time:** | 18-Nov-15, 07:46:53 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\008F7001.D | | |

Where individual results are flagged see report notes for status.

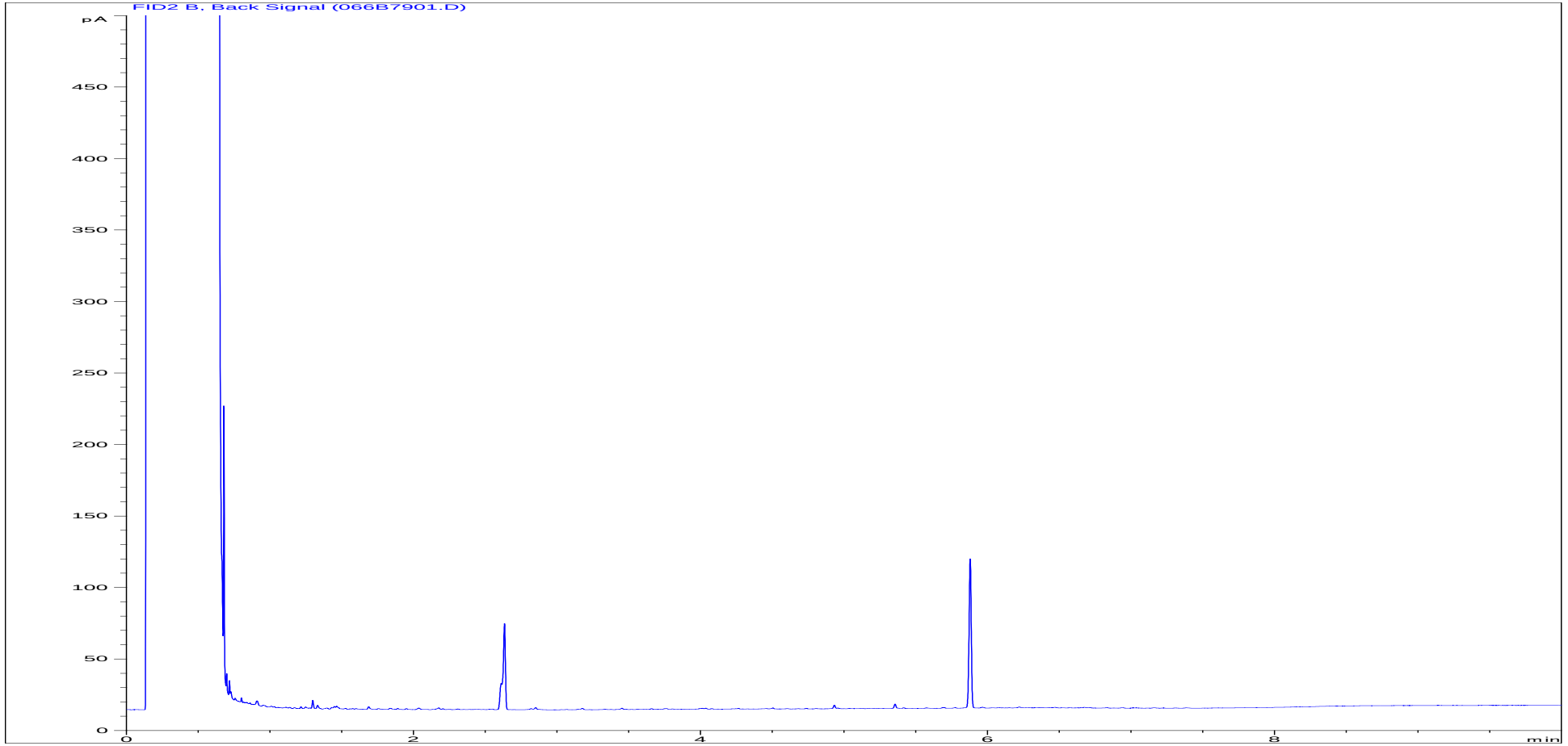
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639557ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0148 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS27 |
| **Acquisition Date/Time:** | 18-Nov-15, 11:51:48 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\013B8301.D | | |

Where individual results are flagged see report notes for status.

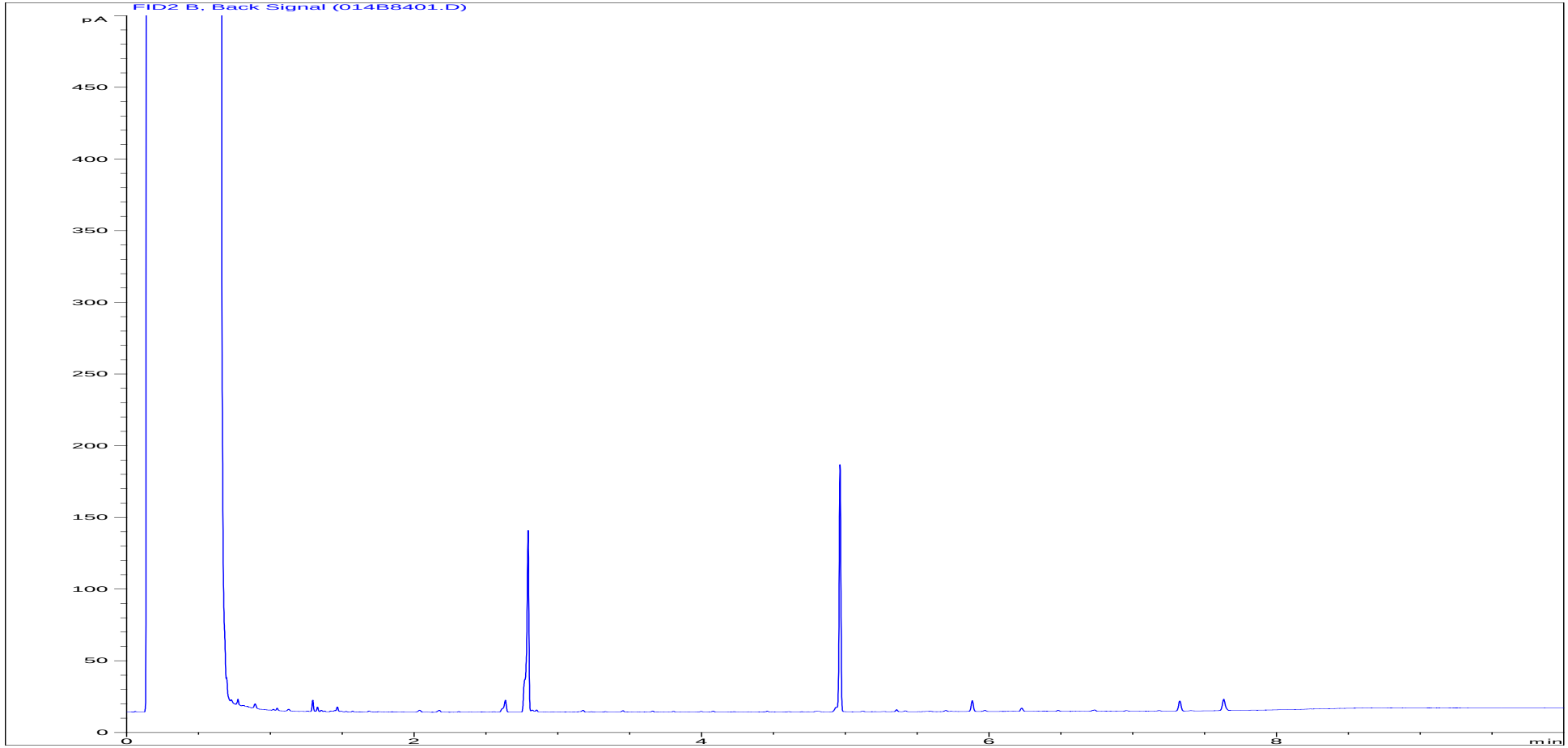
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639558ALI | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS28 |
| **Acquisition Date/Time:** | 18-Nov-15, 10:35:03 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\066B7901.D | | |

Where individual results are flagged see report notes for status.

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




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1639558ARO | **Job Number:** | W20_9419 |
| **Multiplier:** | 0.0146 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS28 |
| **Acquisition Date/Time:** | 18-Nov-15, 12:11:00 | | |
| **Datafile:** | D:\TES\DATA\Y2015\111715TPH_GC17\111715 2015-11-17 10-07-06\014B8401.D | | |

Where individual results are flagged see report notes for status.

# Sample Analysis

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview

W209419

**Customer** ESG Geoenvironmental Consulting
**Site** Marsh Lane, Tottenham
**Report No** W209419

Consignment No W95966
Date Logged 14-Nov-2015

Report Due 23-Nov-2015

| ID Number | Description | Matrix Type | Sampled | MethodID: CUSTSERV Report A | GROHSA GRO-HSA GCFID (AA) | TPHFID-SI TPH by GC(SI) | WSLM3 pH units |
|---|---|---|---|---|---|---|---|
| | | | | | | ✓ | ✓ |
| EX/1639551 | WS20 | Groundwater | 11/11/15 | | | | |
| EX/1639552 | WS21 | Groundwater | 11/11/15 | | | | |
| EX/1639553 | WS22 | Groundwater | 11/11/15 | | | | |
| EX/1639554 | WS23 | Groundwater | 11/11/15 | | | | |
| EX/1639555 | WS24 | Groundwater | 11/11/15 | | | | |
| EX/1639556 | WS25 | Groundwater | 11/11/15 | | | | |
| EX/1639557 | WS27 | Groundwater | 11/11/15 | | | | |
| EX/1639558 | WS28 | Groundwater | 11/11/15 | | | | |

**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 |
| F | Sample processing did not commence within the appropriate handling time |

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

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 | TPHFID-Si | As Received | Determination of speciated pentane extractable hydrocarbons in water by GCFID |
| 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 105ºC 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$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**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
**N.F** No Flow
**NS** Information Not Supplied
**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
§ accreditation has been removed for this result as it is a non-accredited matrix

**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 :** ESG Geoenvironmental Consulting

**Site :** Marsh Lane, Tottenham

**Report Number :** W20_9419

| Lab ID Number | Client ID | Description |
|---|---|---|
| EX/1639551 | WS20 | Groundwater |
| EX/1639552 | WS21 | Groundwater |
| EX/1639553 | WS22 | Groundwater |
| EX/1639554 | WS23 | Groundwater |
| EX/1639555 | WS24 | Groundwater |
| EX/1639556 | WS25 | Groundwater |
| EX/1639557 | WS27 | Groundwater |
| EX/1639558 | WS28 | Groundwater |

Our Ref: EXR/209546 (Ver. 1)
Your Ref: R5123

November 24, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr M Gray
ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

For the attention of Mr M Gray

Dear Mr Gray

**Sample Analysis - Marsh Lane, Tottenham**

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 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 (Multi-Sector Services) 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

D Brassington
Project Co-ordinator
01283 554493

# TEST REPORT

## Report No. EXR/209546 (Ver. 1)

ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

**Site: Marsh Lane, Tottenham**

The 1 sample described in this report were registered for analysis by ESG on 18-Nov-2015. This report supersedes any versions previously issued by the laboratory.

The analysis was completed by: 24-Nov-2015

The following tables are contained in this report:

Table 1 Main Analysis Results (Page 2)
Table of GRO Results (Page 3)
Table of TPH (Si) banding (0.01) (Page 4)
GC-FID Chromatograms (Pages 5 to 6)
Analytical and Deviating Sample Overview (Page 7)
Table of Method Descriptions (Page 8)
Table of Report Notes (Page 9)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 24-Nov-2015

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

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | pH units | mg/l | mg/l | | | | | | | | | | | | | |
| **Method Codes :** | | | WSLM3 | TPHFID-Si | GROHSA | | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | | 0.01 | 0.1 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| **LAB ID Number EX/** | **Client Sample Description** | **Sample Date** | **pH units w** | **TPH by GC(Si) o** | **GRO-HSA (AA)** | | | | | | | | | | | | | |
| 1640092 | WS26 | **16-Nov-15** | 7.4 | Req | Req | | | | | | | | | | | | | |


ESG

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422


| | |
|---|---|
| **Client Name** | **ESG Geoenvironmental Consulting** |
| **Contact** | Mr M Gray |

# Marsh Lane, Tottenham

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **24-Nov-2015** |
| **Report Number** | **EXR/209546** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Gasoline Range Organics
# (BTEX and Aliphatic Carbon Ranges)

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W20_9546
**Directory:** C:\CHEM32\1\DATA\1119HSA_GC12\111915 2015-11-19 09-53-28\009F0901.D
**Method:** Headspace GCFID

**Matrix:** Water
**Date Booked in:** 18-Nov-15
**Date extracted:** 19-Nov-15
**Date Analysed:** 19-Nov-15, 12:4

*** Sample data with an asterisk are not UKAS accredited.**

| | | Concentration, (mg/l) | | | | | Aliphatics | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Client ID | Benzene | Toluene | Ethyl benzene | m/p-Xylene | o-Xylene | C5 - C6 | >C6 - C7 | >C7 - C8 | >C8 - C10 | Total GRO |
| * EX1640092 | WS26 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |

Where individual results are flagged see report notes for status.

# ALIPHATIC / AROMATIC FRACTION BY GC/FID

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W20_9546
**QC Batch Number:** 150777
**Directory:** D:\TES\DATA\Y2015\112315TPH_GC15\112315 2015-11-23 14-28-50\056B0901.D
**Method:** Bottle

**Separation:** Silica gel
**Eluents:** Hexane, DCM

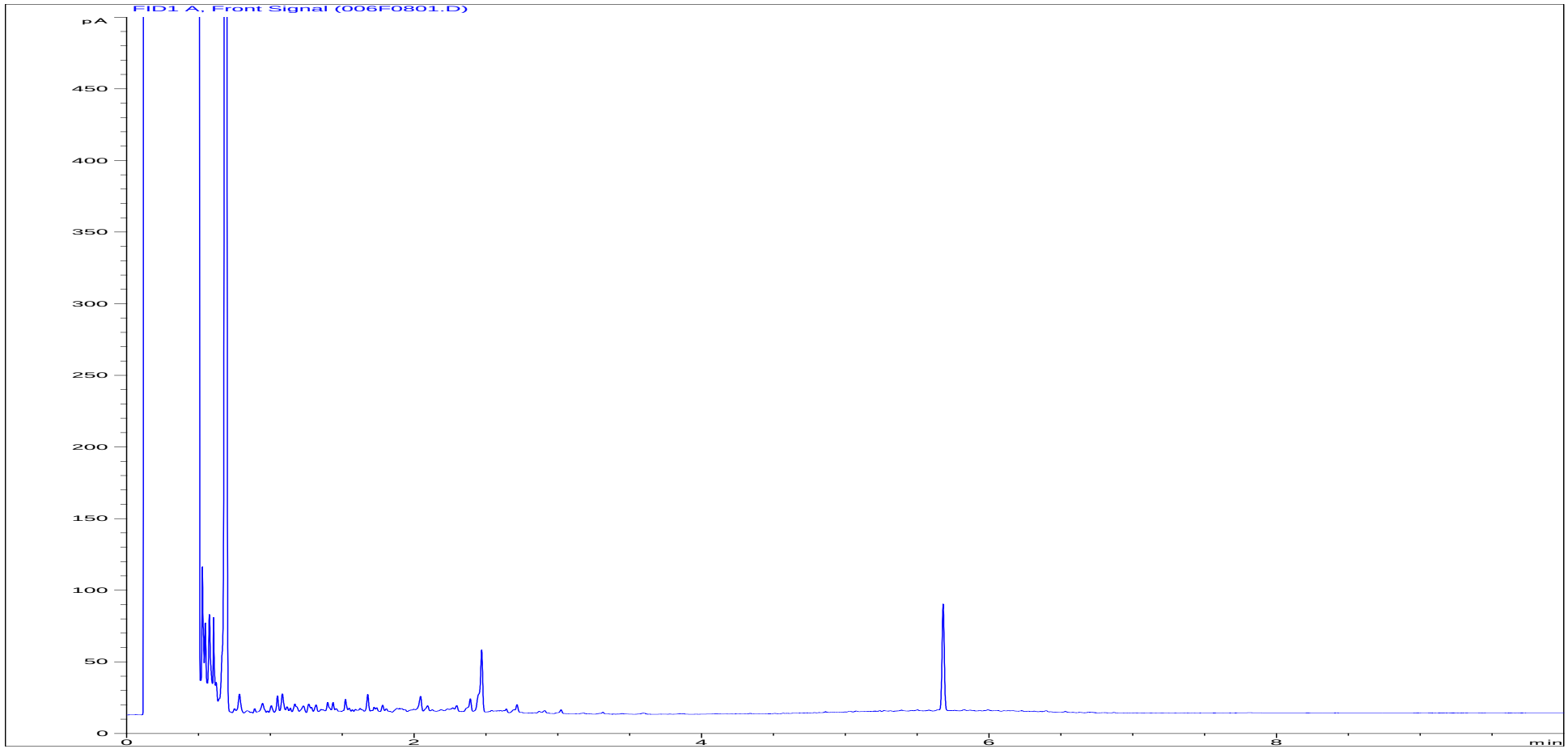
**Matrix:** Water
**Date Booked in** 18-Nov-15
**Date Extracted** 19-Nov-15
**Date Analysed** 23-Nov-15, 16:53:01

*** 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 |
| * EX1640092 | WS26 | 0.025 | 0.018 | 0.03 | 0.081 | 0.028 | 0.058 | <0.01 | 0.011 | 0.062 | 0.035 | 0.153 | 0.21 |

Where individual results are flagged see report notes for status.

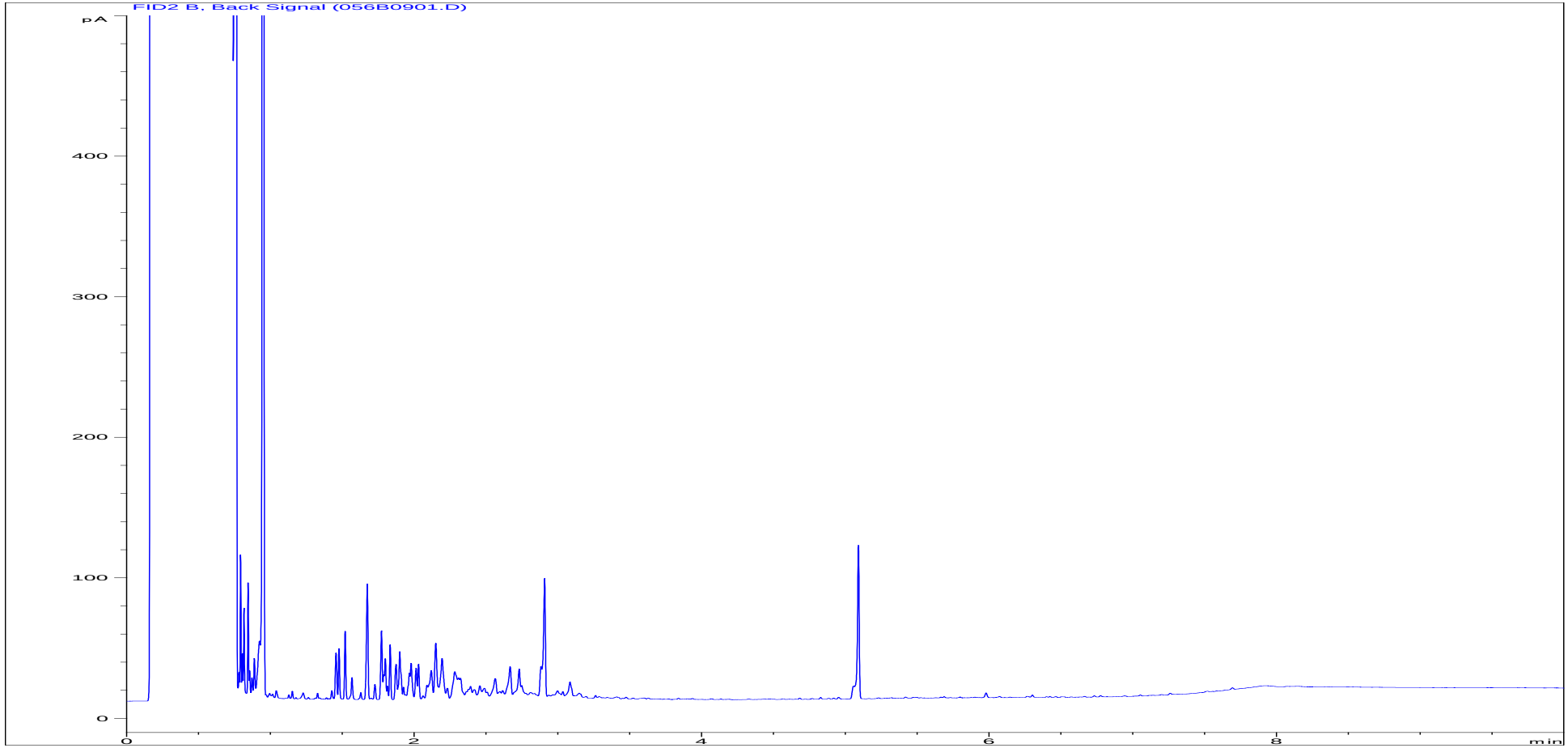
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1640092ALI | **Job Number:** | W20_9546 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS26 |
| **Acquisition Date/Time:** | 23-Nov-15, 16:35:03 | | |
| **Datafile:** | D:\TES\DATA\Y2015\112315TPH_GC15\112315 2015-11-23 14-28-50\006F0801.D | | |

Where individual results are flagged see report notes for status.

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




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1640092ARO | **Job Number:** | W20_9546 |
| **Multiplier:** | 0.0136 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS26 |
| **Acquisition Date/Time:** | 23-Nov-15, 16:53:01 | | |
| **Datafile:** | D:\TES\DATA\Y2015\112315TPH_GC15\112315 2015-11-23 14-28-50\056B0901.D | | |

Where individual results are flagged see report notes for status.

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview



**Customer** ESG Geoenvironmental Consulting
**Site** Marsh Lane, Tottenham
**Report No** W209546

Consignment No W96054
Date Logged 18-Nov-2015

Report Due 25-Nov-2015

| ID Number | Description | Matrix Type | Sampled | MethodID: CUSTSERV Report A | GROHSA GRO-HSA GCFID (AA) | TPHFID-SI TPH by GC(SI) | WSLM3 pH units |
|---|---|---|---|---|---|---|---|
| EX/1640092 | WS26 | Unclassified | 16/11/15 | | | | |

**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 |
| F | Sample processing did not commence within the appropriate handling time |

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

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 | TPHFID-Si | As Received | Determination of speciated pentane extractable hydrocarbons in water by GCFID |
| 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 105ºC 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$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**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
**N.F** No Flow
**NS** Information Not Supplied
**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
§ accreditation has been removed for this result as it is a non-accredited matrix

**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 :** ESG Geoenvironmental Consulting
**Site :** Marsh Lane, Tottenham
**Report Number :** W20_9546

| Lab ID Number | Client ID | Description |
|---|---|---|
| EX/1640092 | WS26 | Unclassified |

Our Ref: EXR/210179 (Ver. 1)
Your Ref: R5123

December 4, 2015

Environmental Chemistry
ESG
Bretby Business Park
Ashby Road
Burton-on-Trent
Staffordshire
DE15 0YZ

Telephone: 01283 554400
Facsimile: 01283 554422

Mr M Gray
ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

For the attention of Mr M Gray

Dear Mr Gray

**Sample Analysis - Marsh Lane, Tottenham**

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 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 (Multi-Sector Services) 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

J. Brassington

D Brassington
Project Co-ordinator
01283 554493

# TEST REPORT

1252

## Report No. EXR/210179 (Ver. 1)

ESG Geoenvironmental Consulting
Glossop House
Hogwood Lane
Wokingham
RG40 4QW

**Site: Marsh Lane, Tottenham**

The 9 samples described in this report were registered for analysis by ESG on 27-Nov-2015. This report supersedes any versions previously issued by the laboratory.

The analysis was completed by: 04-Dec-2015

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

The following tables are contained in this report:


Table 1 Main Analysis Results (Page 2)
Table of GRO Results (Page 3)
Table of TPH (Si) banding (0.01) (Page 4)
GC-FID Chromatograms (Pages 5 to 22)
Analytical and Deviating Sample Overview (Page 23)
Table of Method Descriptions (Page 24)
Table of Report Notes (Page 25)
Table of Sample Descriptions (Appendix A Page 1 of 1)


On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 04-Dec-2015

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

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/l | mg/l | | | | | | | | | | | | | | |
| **Method Codes :** | | | TPHFID-Si | GROHSA | | | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 0.01 | 0.1 | | | | | | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | No | | | | | | | | | | | | | | |
| **LAB ID Number EX/** | **Client Sample Description** | **Sample Date** | **TPH by GC(Si) o** | **GRO-HSA (AA)** | | | | | | | | | | | | | | |
| 1642971 | WS20 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642972 | WS21 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642973 | WS22 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642974 | WS23 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642975 | WS24 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642976 | WS25 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642977 | WS26 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642978 | WS27 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |
| 1642979 | WS28 | 25-Nov-15 | Req | Req | | | | | | | | | | | | | | |


ESG

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

Fax +44 (0) 1283 554422


**Client Name** ESG Geoenvironmental Consulting

**Contact** Mr M Gray

# Marsh Lane, Tottenham

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **03-Dec-2015** |
| **Report Number** | **EXR/210179** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Gasoline Range Organics
# (BTEX and Aliphatic Carbon Ranges)

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W21_0179
**Directory:** C:\CHEM32\1\DATA\1201HSA_GC12\120115 2015-12-01 09-58-49\018F1801.D
**Method:** Headspace GCFID

**Matrix:** Water
**Date Booked in:** 27-Nov-15
**Date extracted:** 01-Dec-15
**Date Analysed:** 01-Dec-15, 15:4

*** Sample data with an asterisk are not UKAS accredited.**

| | | | Concentration, (mg/l) | | | | | Aliphatics | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Client ID | Benzene | Toluene | Ethyl benzene | m/p-Xylene | o-Xylene | C5 - C6 | >C6 - C7 | >C7 - C8 | >C8 - C10 | Total GRO |
| * EX1642971 | WS20 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642972 | WS21 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642973 | WS22 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642974 | WS23 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642975 | WS24 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642976 | WS25 | <0.005 | <0.005 | <0.005 | <0.005 | 0.006 | 0.2 | <0.1 | <0.1 | <0.1 | 0.2 |
| * EX1642977 | WS26 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642978 | WS27 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| * EX1642979 | WS28 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
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Where individual results are flagged see report notes for status.

# ALIPHATIC / AROMATIC FRACTION BY GC/FID

**Customer and Site Details:** ESG Geoenvironmental Consulting : Marsh Lane, Tottenham
**Job Number:** W21_0179
**QC Batch Number:** 150809
**Directory:** D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\076B3601.D
**Method:** Bottle

**Separation:** Silica gel
**Eluents:** Hexane, DCM

**Matrix:** Water
**Date Booked in** 27-Nov-15
**Date Extracted** 30-Nov-15
**Date Analysed** 02-Dec-15, 20:35:12

*** 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** |
| EX1642971 | WS20 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.012 | <0.01 | 0.076 | <0.01 | 0.107 |
| EX1642972 | WS21 | <0.01 | <0.01 | 0.029 | <0.01 | 0.308 | 0.126 | 0.426 | 0.254 | 0.99 | 0.468 | 1.84 | 0.91 |
| EX1642973 | WS22 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.011 | <0.01 | 0.032 | 0.014 | 0.053 |
| EX1642974 | WS23 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| EX1642975 | WS24 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.032 | <0.01 | 0.037 | 0.01 |
| EX1642976 | WS25 | 0.107 | 0.062 | 0.209 | 0.24 | 0.281 | 0.176 | 0.056 | 0.041 | 0.211 | 0.14 | 0.865 | 0.664 |
| EX1642977 | WS26 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.026 | <0.01 | 0.05 |
| EX1642978 | WS27 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| EX1642979 | WS28 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
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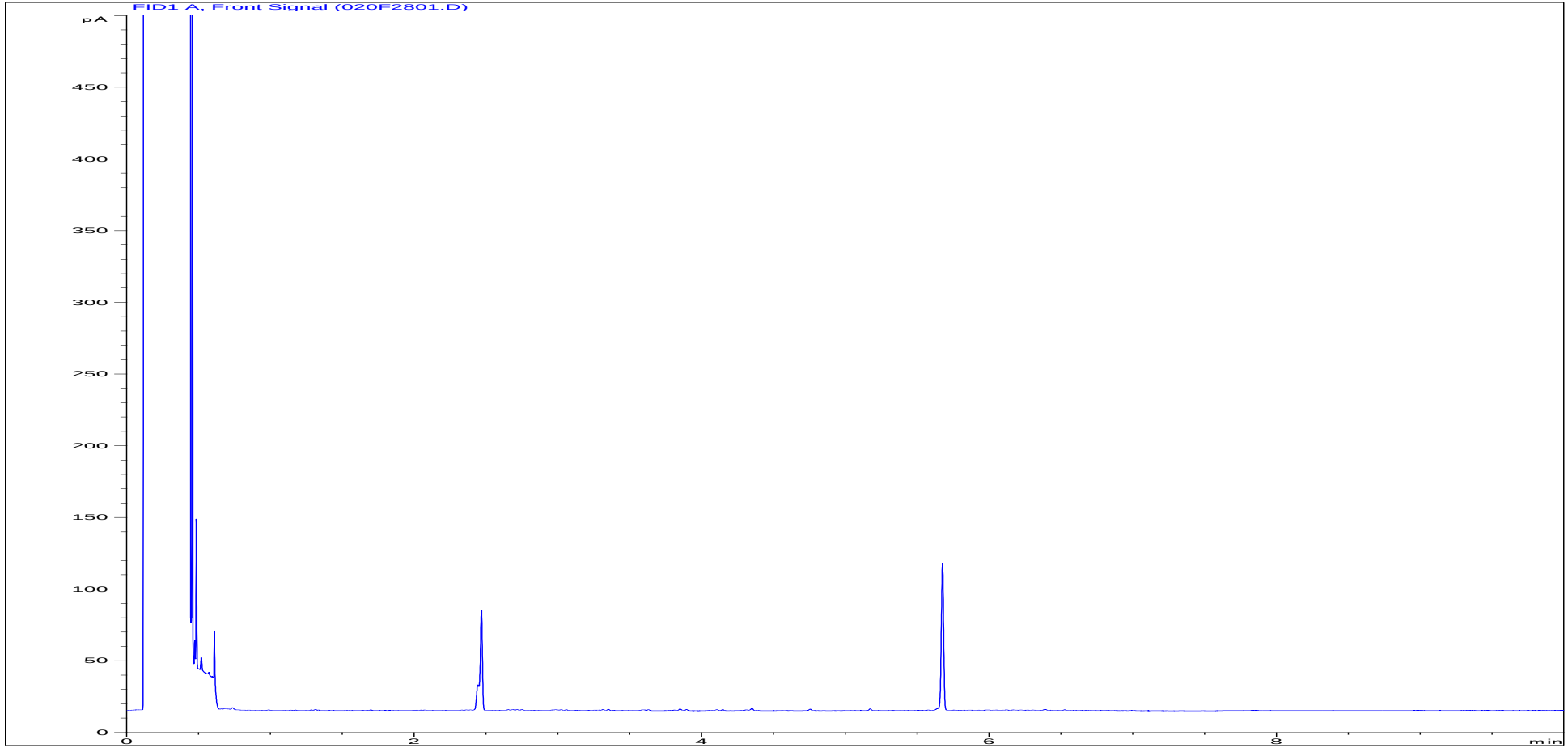
Where individual results are flagged see report notes for status.

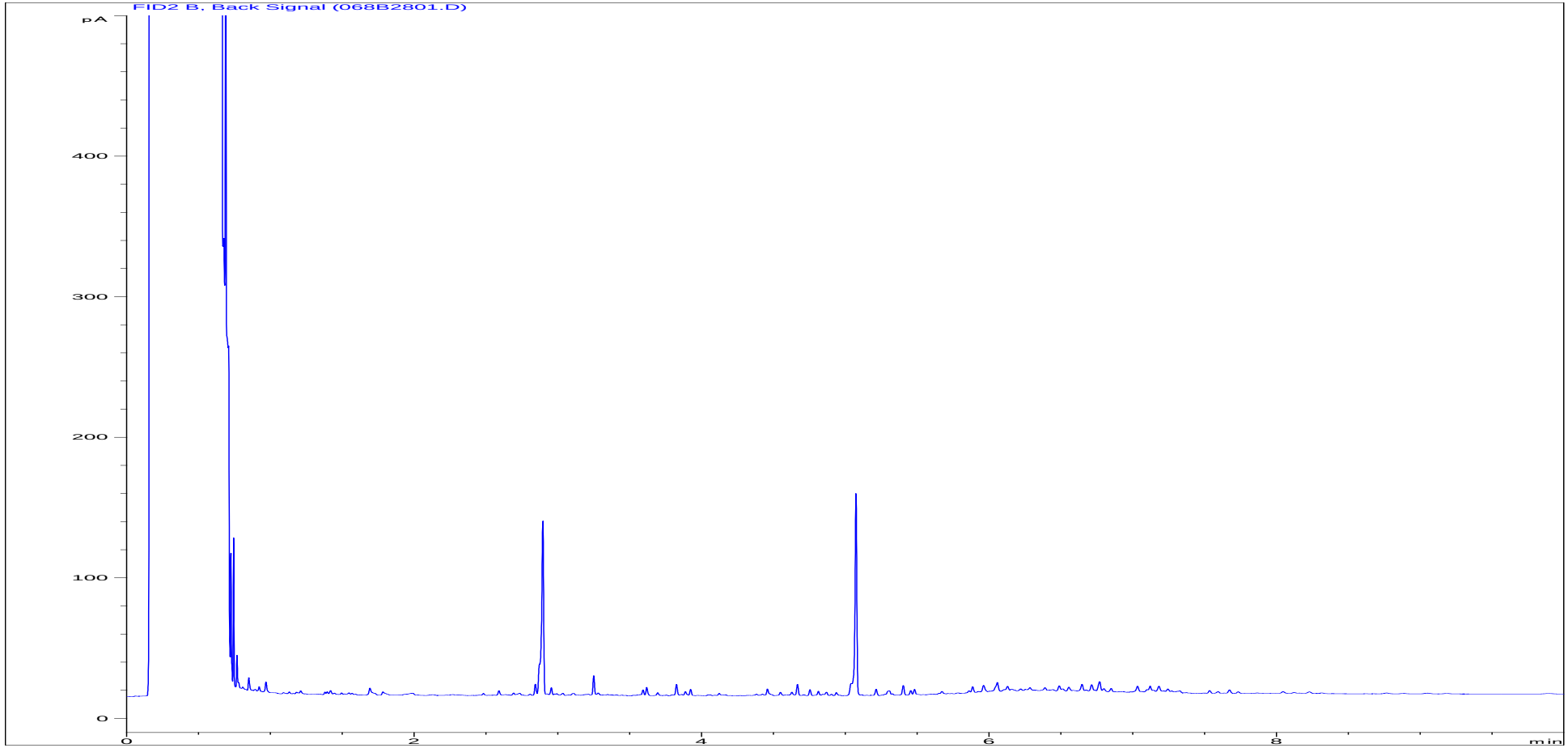
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642971ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.02 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS20 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:19:52 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\020F2801.D | | |

Where individual results are flagged see report notes for status.

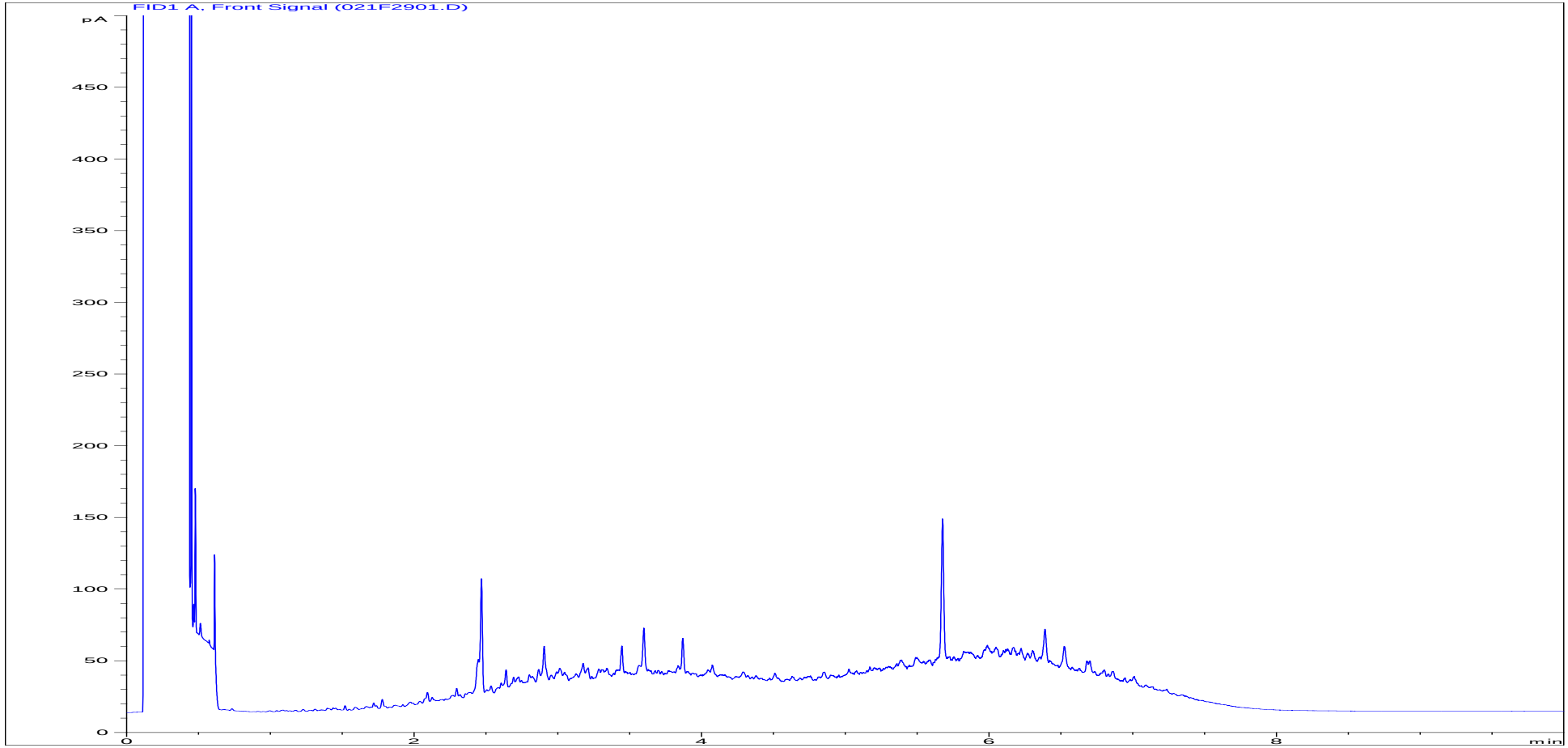
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642971ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0146 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS20 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:19:52 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\068B2801.D | | |

Where individual results are flagged see report notes for status.

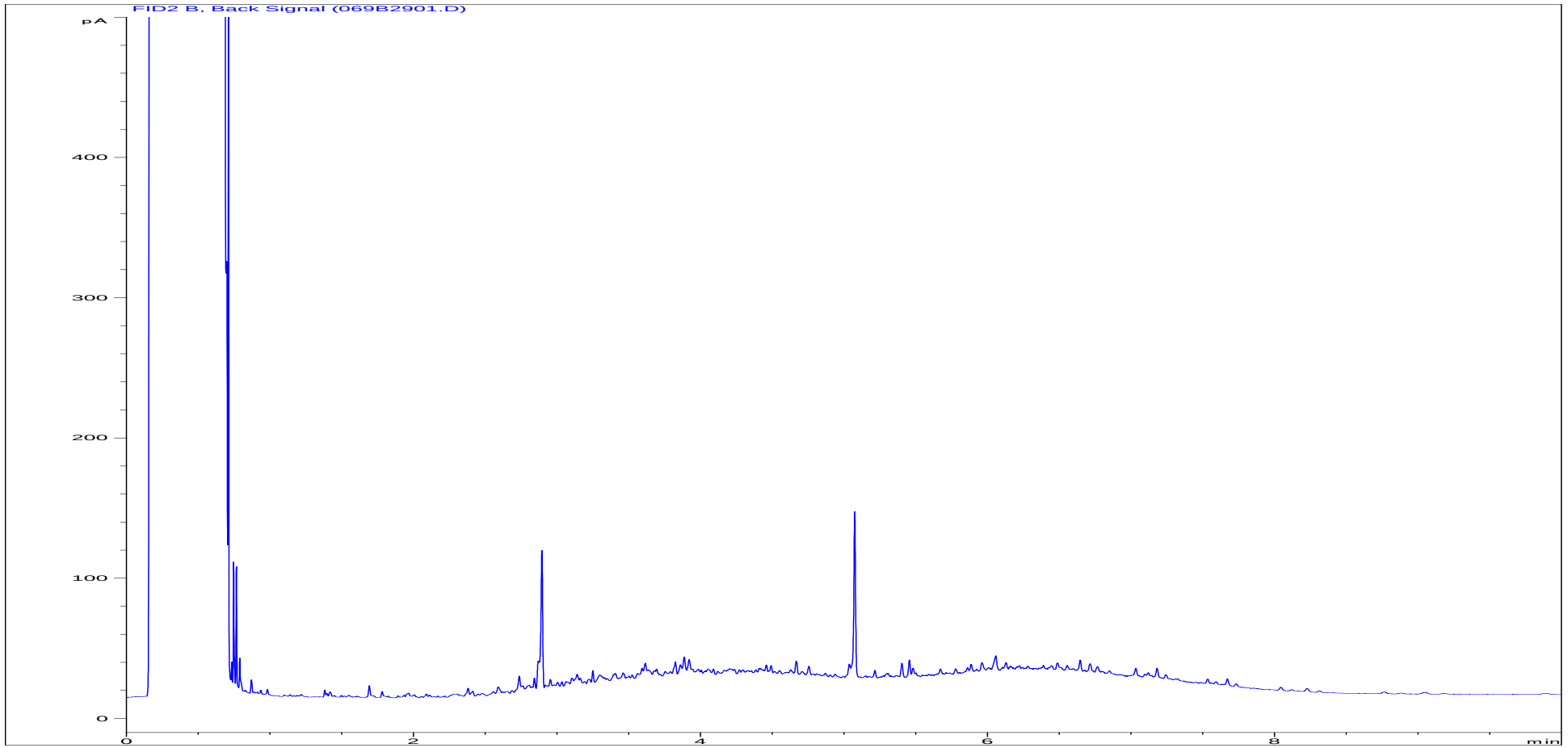
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642972ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0198 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS21 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:36:43 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\021F2901.D | | |

Where individual results are flagged see report notes for status.

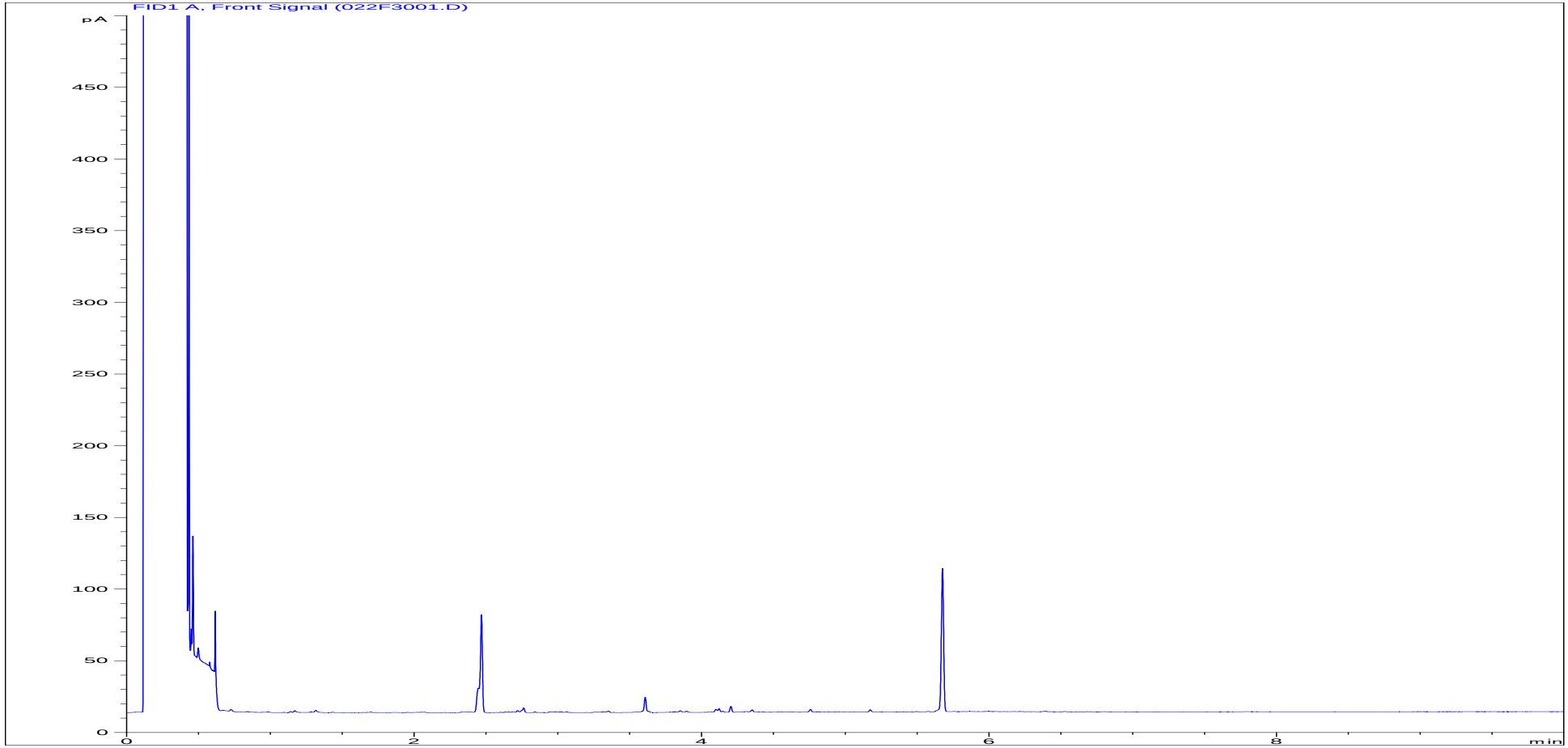
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642972ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0156 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS21 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:36:43 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\069B2901.D | | |

Where individual results are flagged see report notes for status.

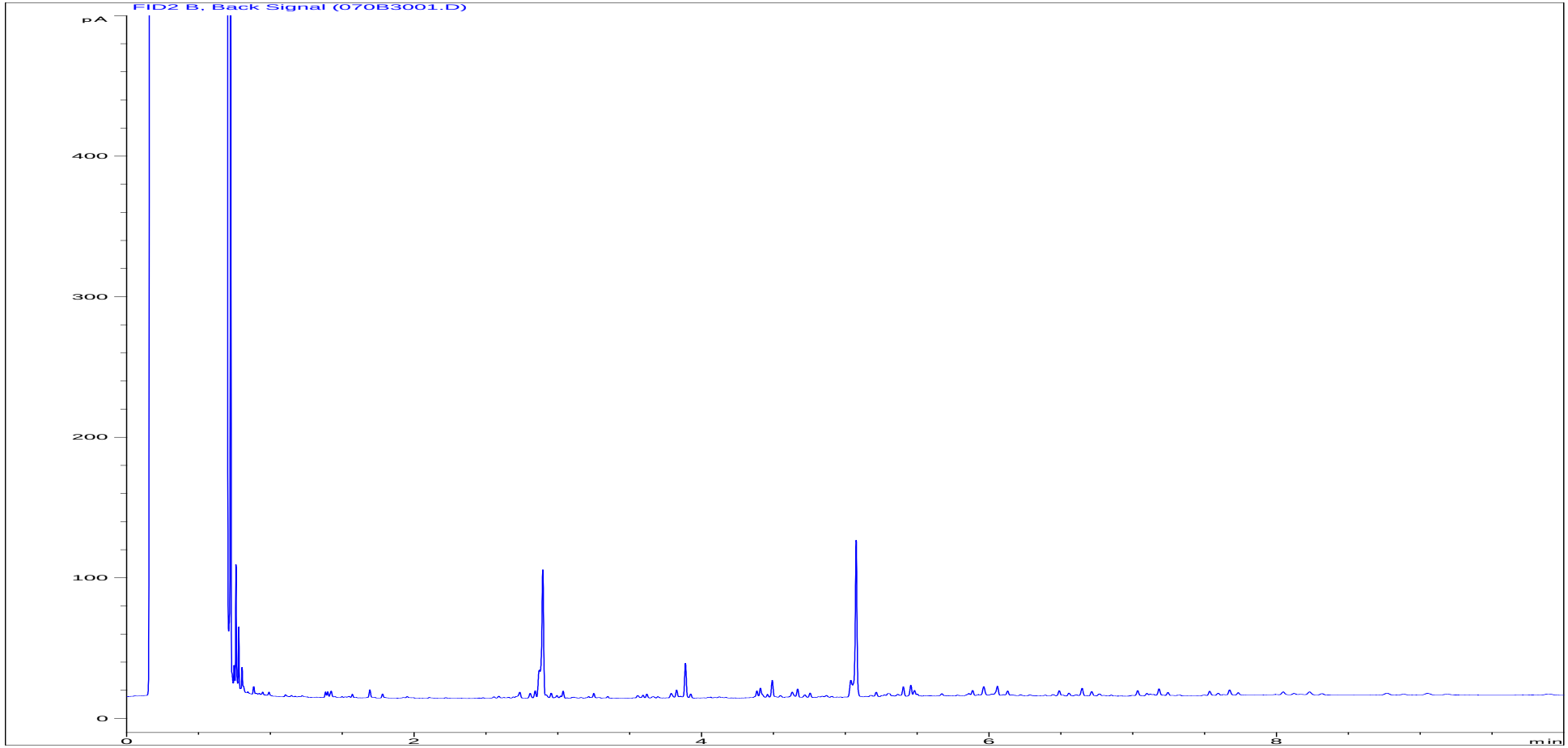
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642973ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0208 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS22 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:53:38 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\022F3001.D | | |

Where individual results are flagged see report notes for status.

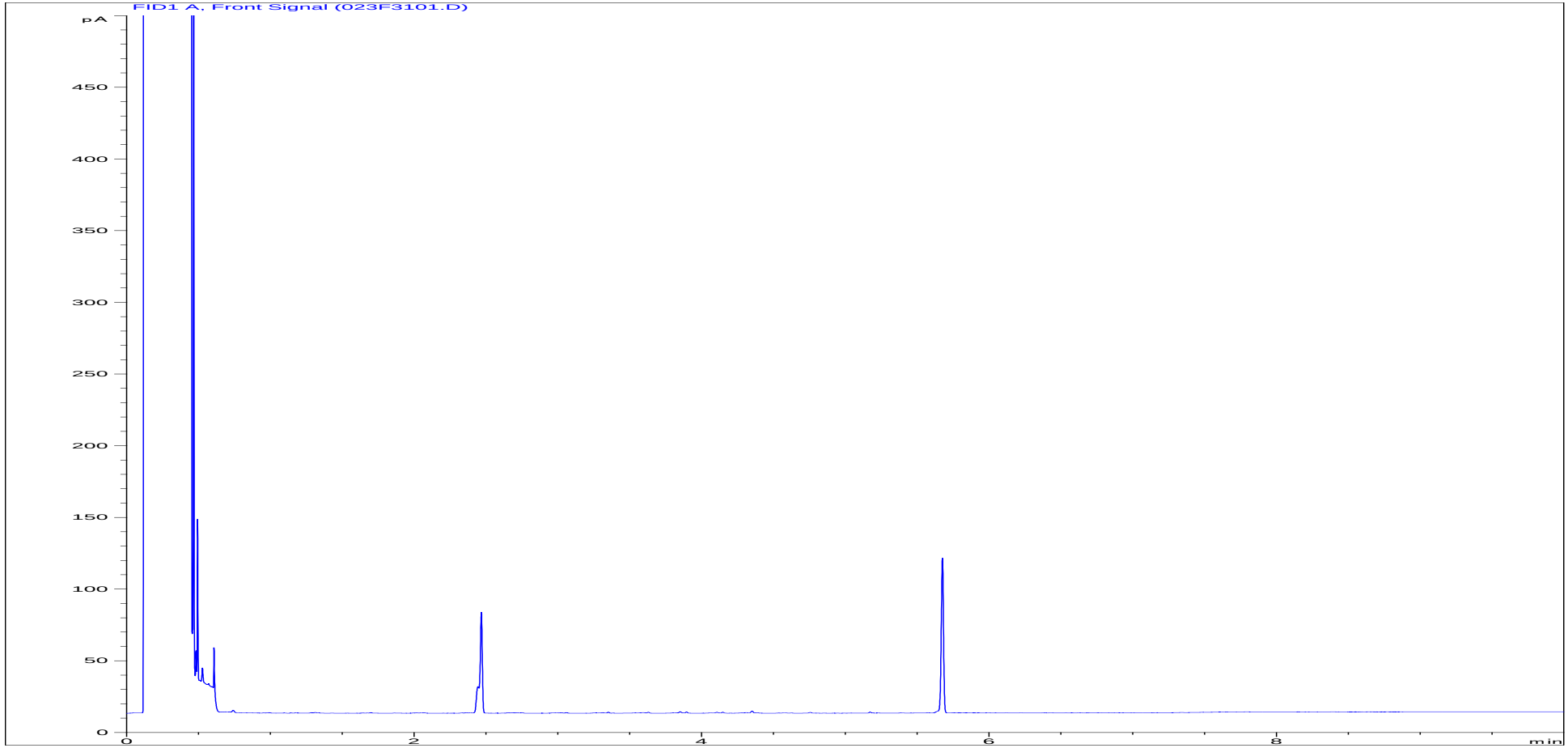
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642973ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0156 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS22 |
| **Acquisition Date/Time:** | 02-Dec-15, 18:53:38 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\070B3001.D | | |

Where individual results are flagged see report notes for status.

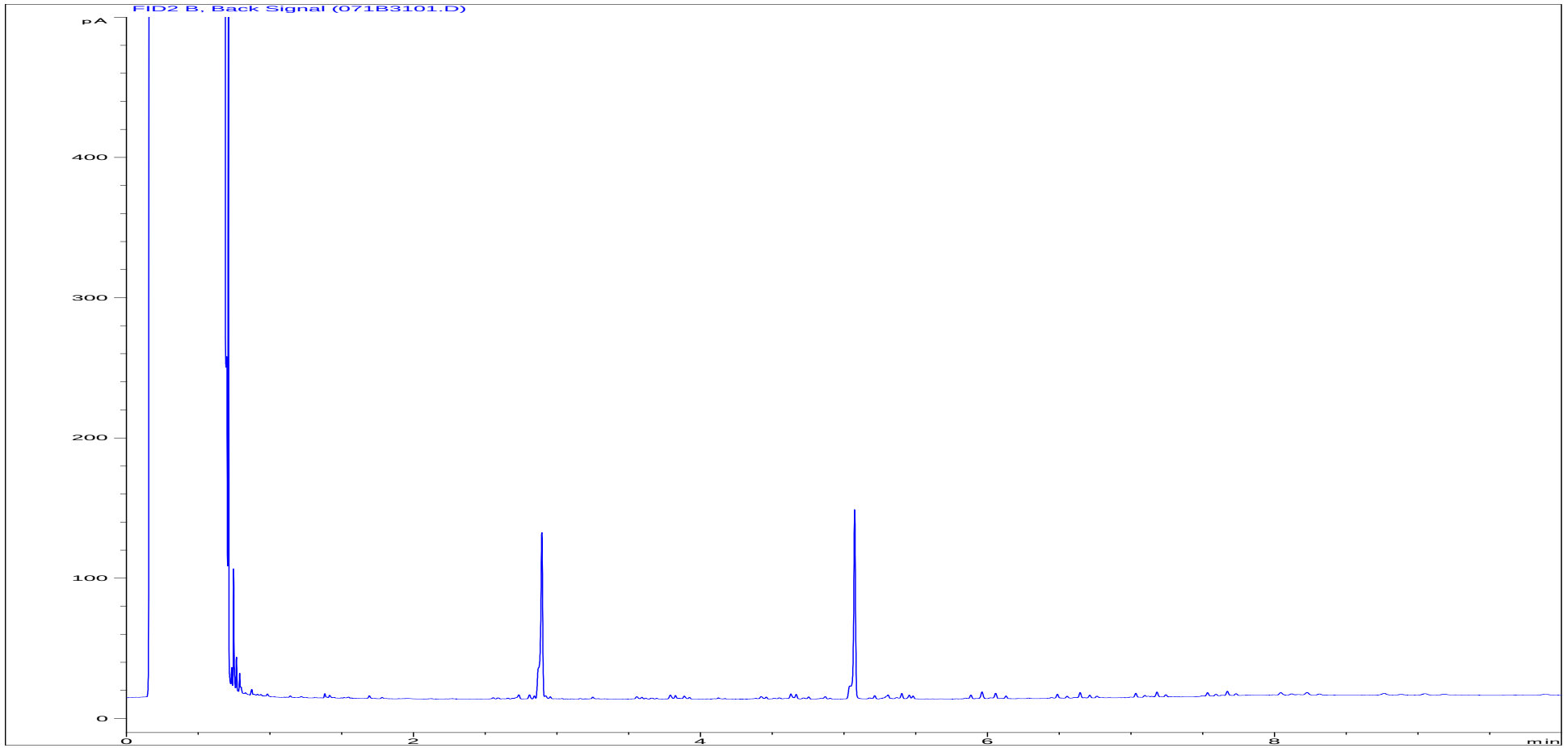
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642974ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0208 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS23 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:10:29 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\023F3101.D | | |

Where individual results are flagged see report notes for status.

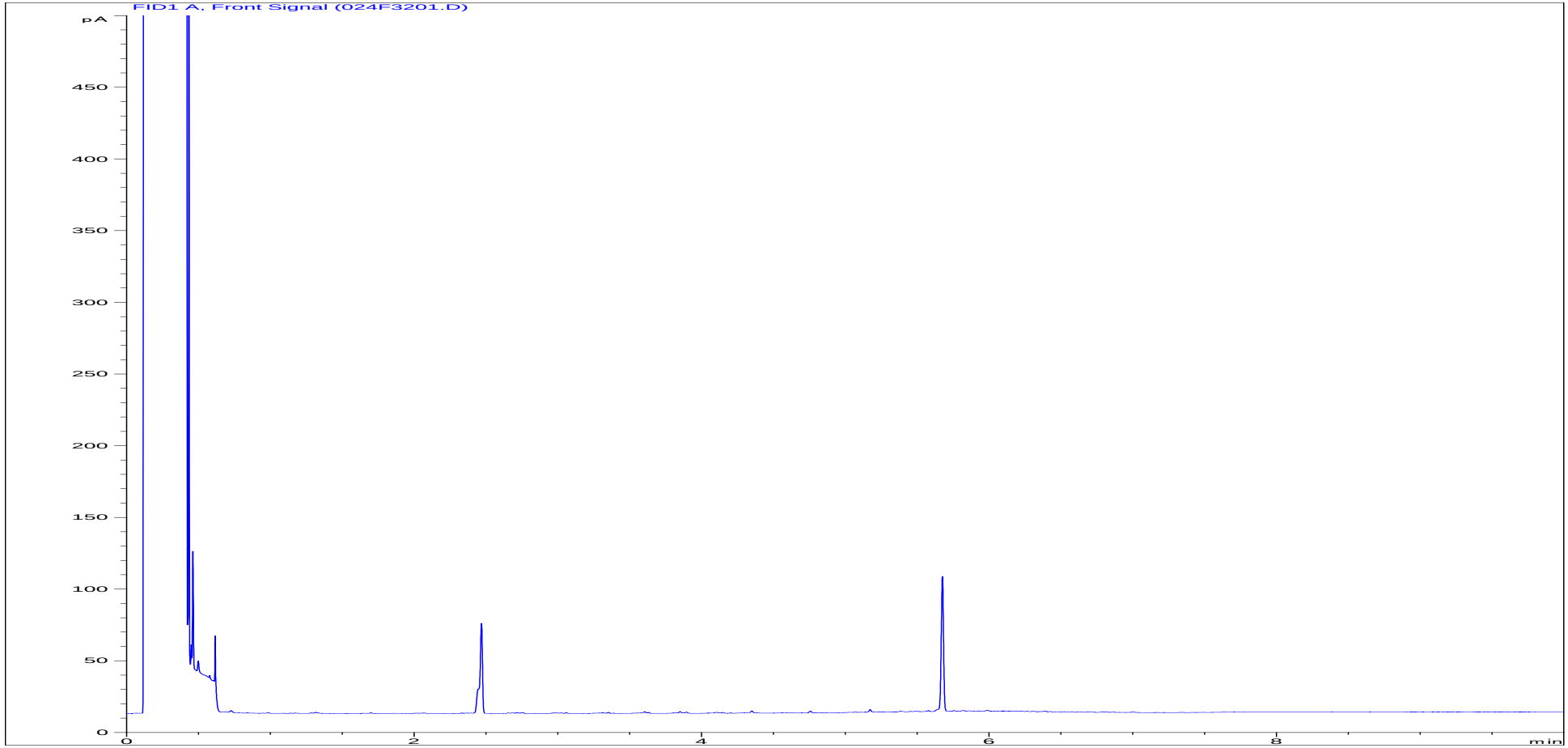
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642974ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0148 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS23 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:10:29 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\071B3101.D | | |

Where individual results are flagged see report notes for status.

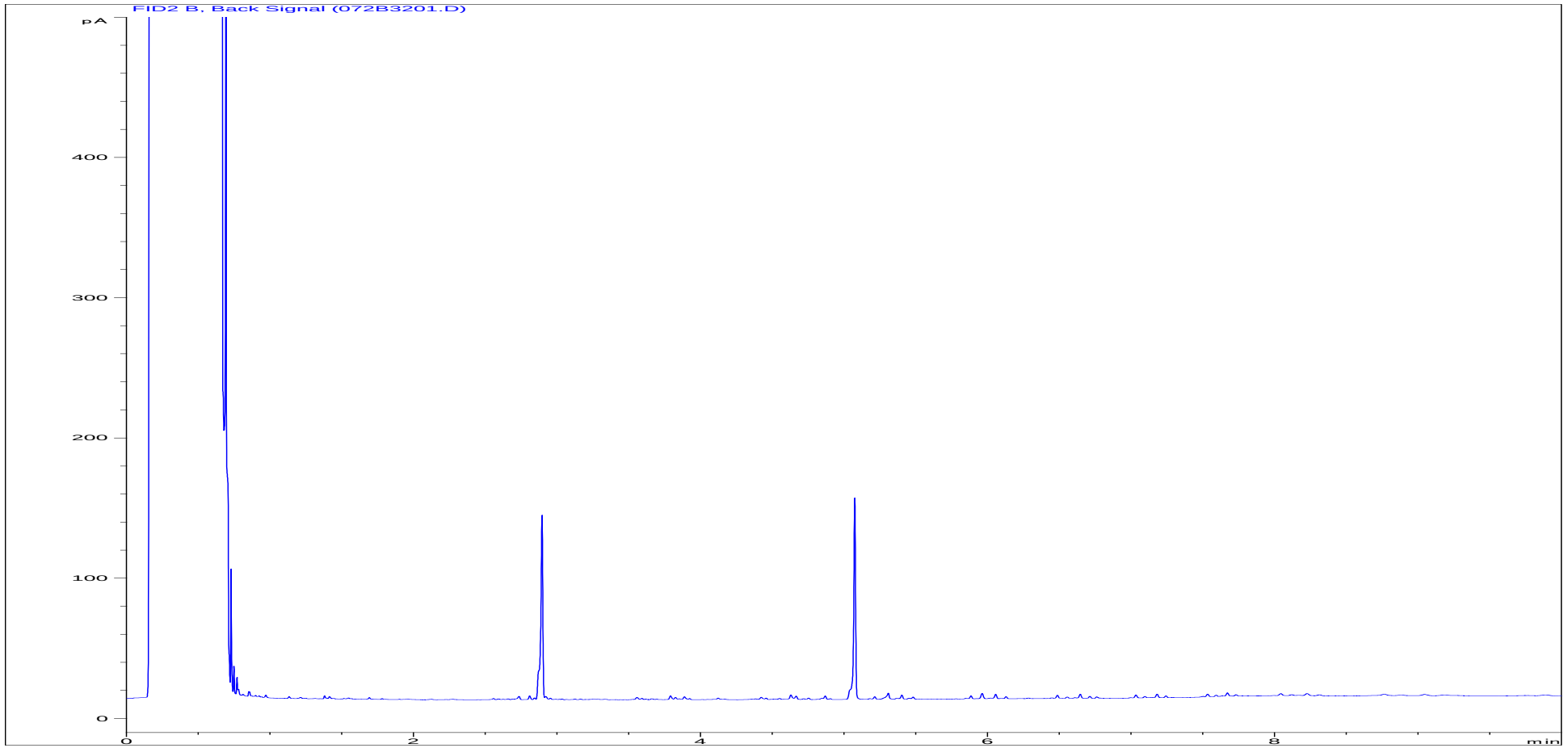
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642975ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0198 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS24 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:27:30 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\024F3201.D | | |

Where individual results are flagged see report notes for status.

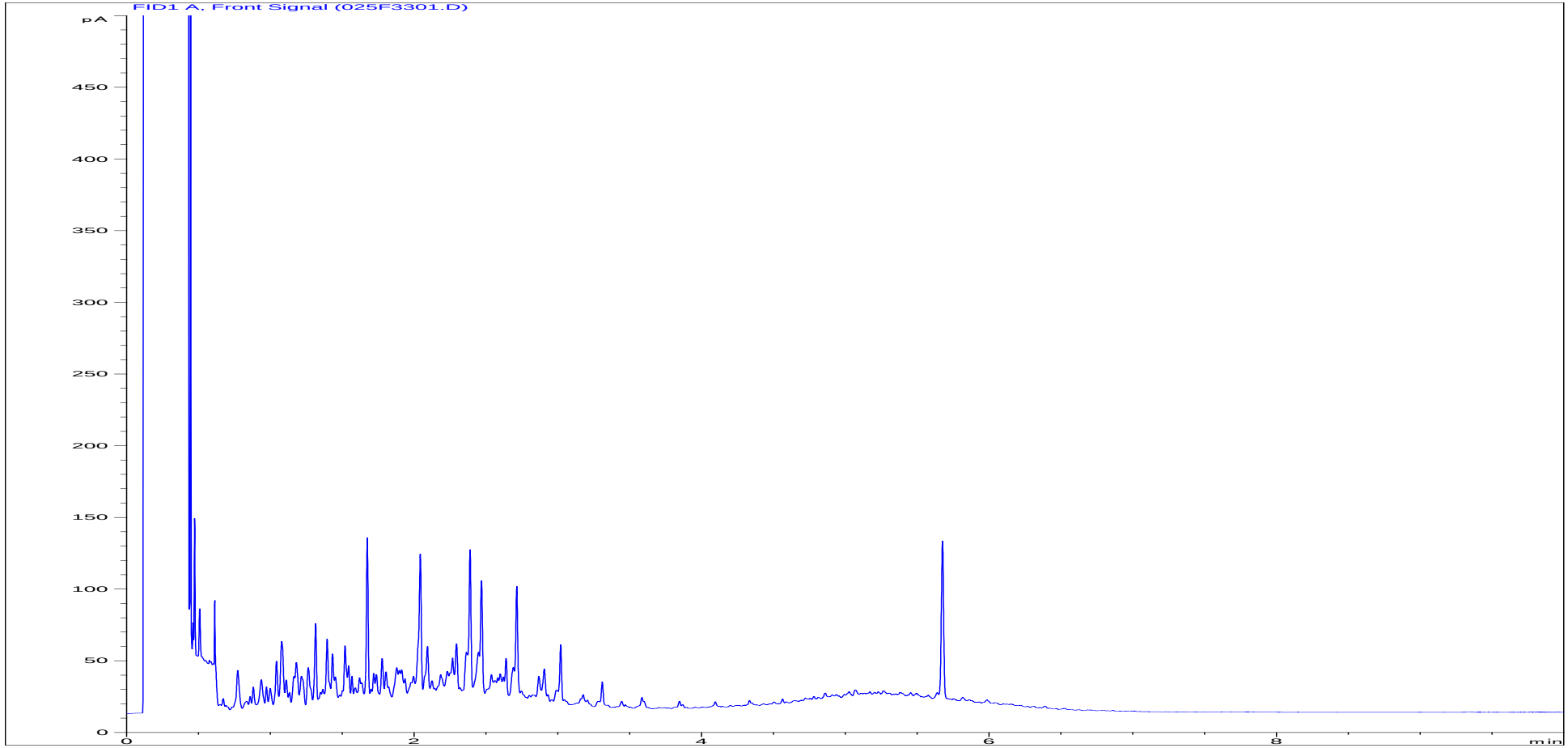
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642975ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0144 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS24 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:27:30 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\072B3201.D | | |

Where individual results are flagged see report notes for status.

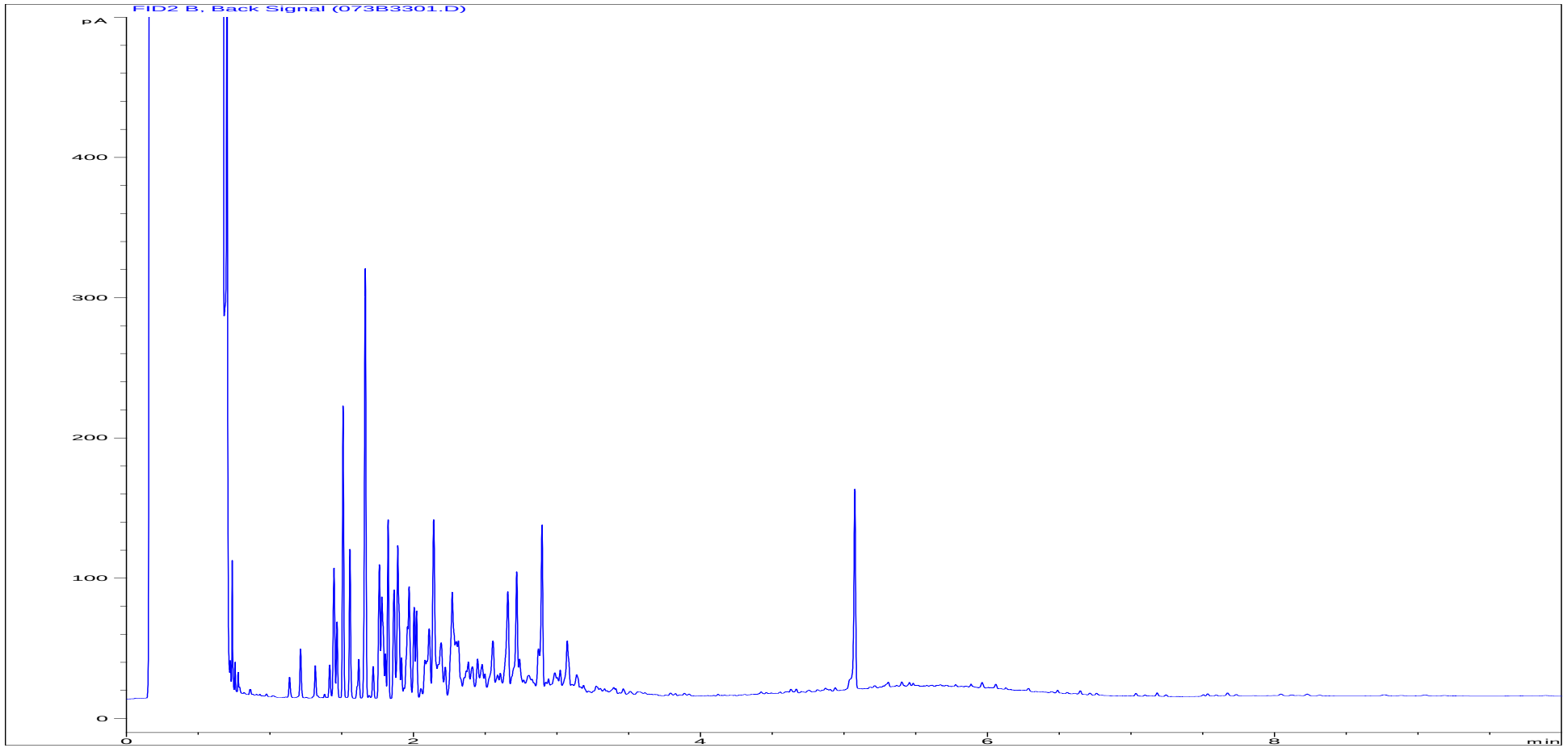
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642976ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0198 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS25 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:44:27 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\025F3301.D | | |

Where individual results are flagged see report notes for status.

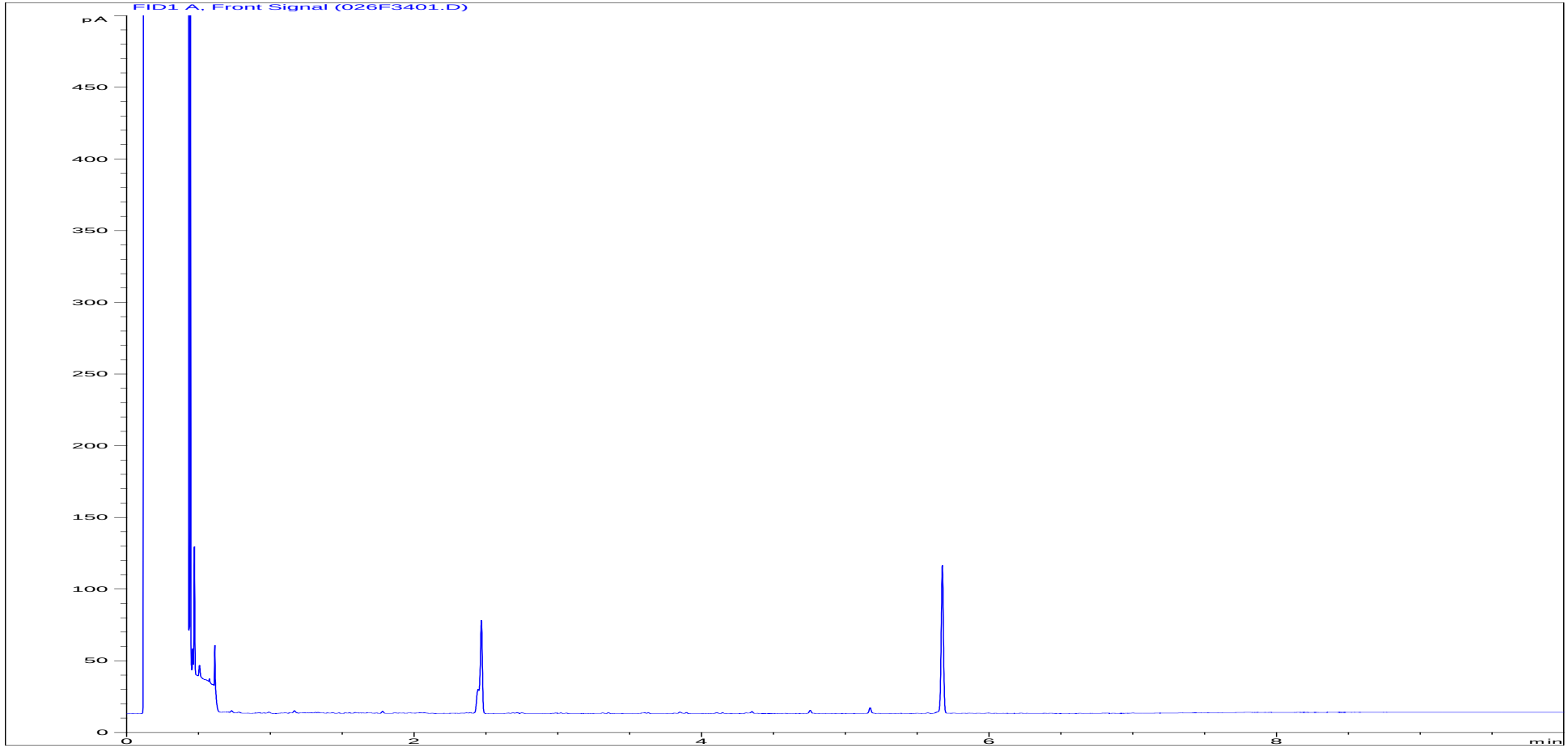
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642976ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0148 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS25 |
| **Acquisition Date/Time:** | 02-Dec-15, 19:44:27 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\073B3301.D | | |

Where individual results are flagged see report notes for status.

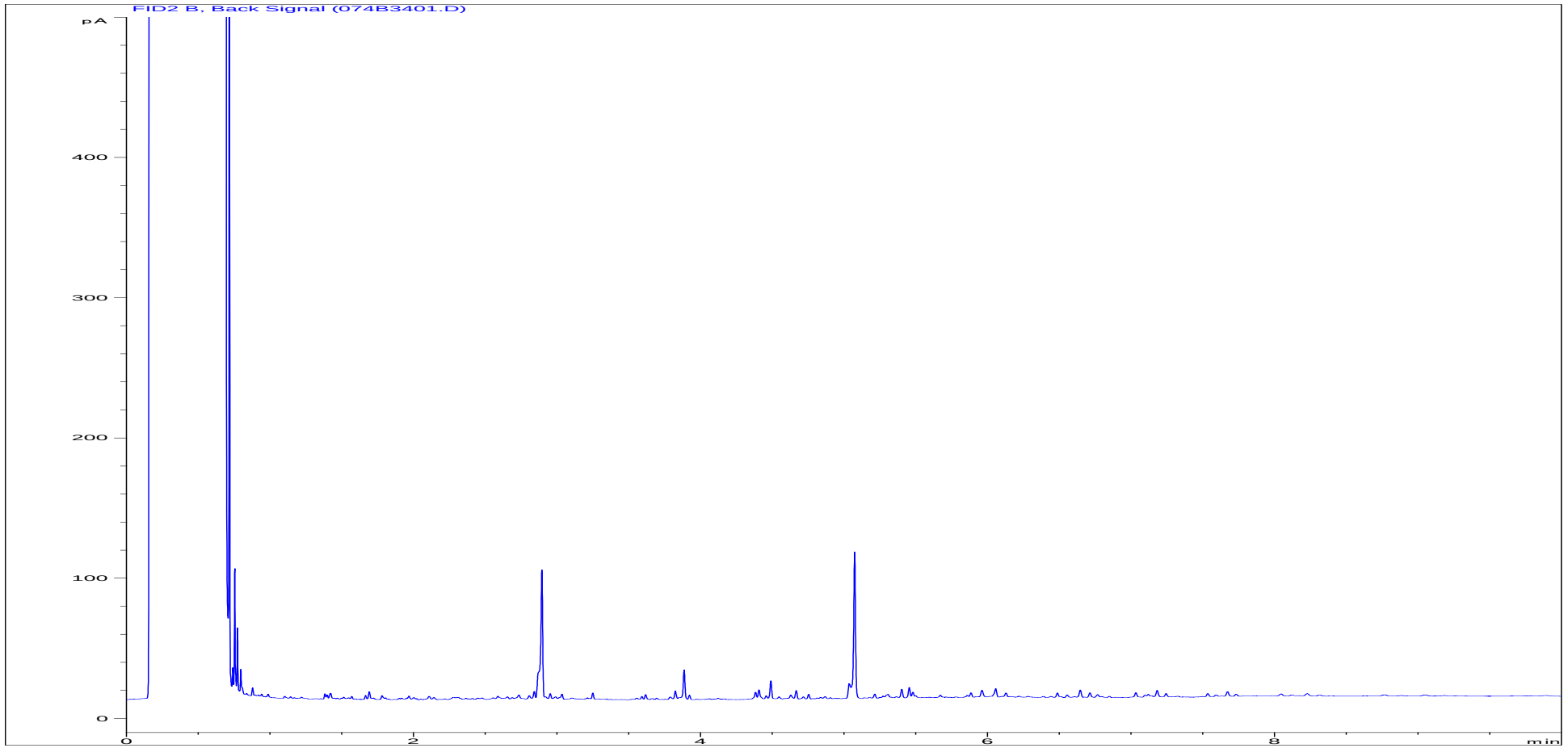
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642977ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0194 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS26 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:01:17 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\026F3401.D | | |

Where individual results are flagged see report notes for status.

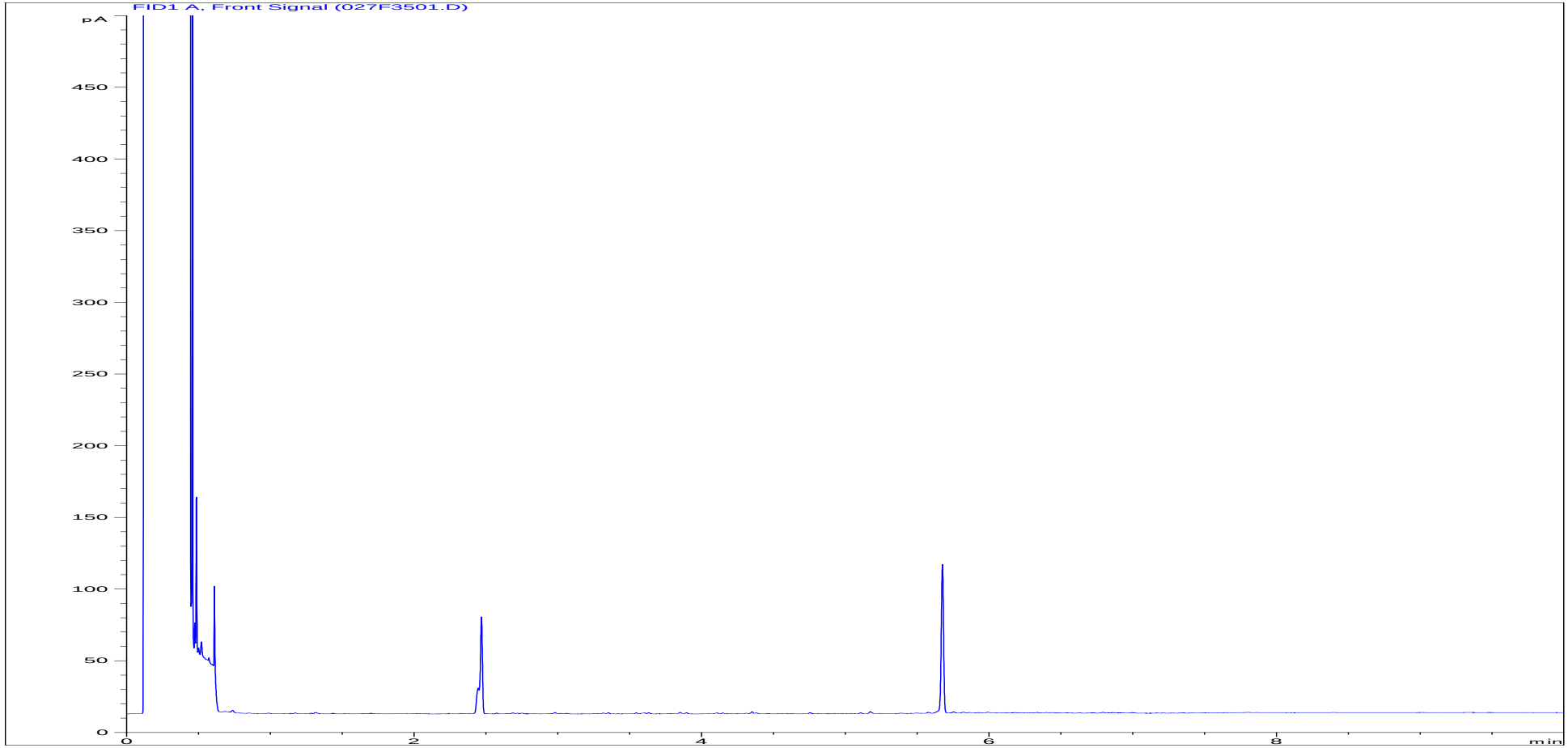
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642977ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0148 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS26 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:01:17 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\074B3401.D | | |

Where individual results are flagged see report notes for status.

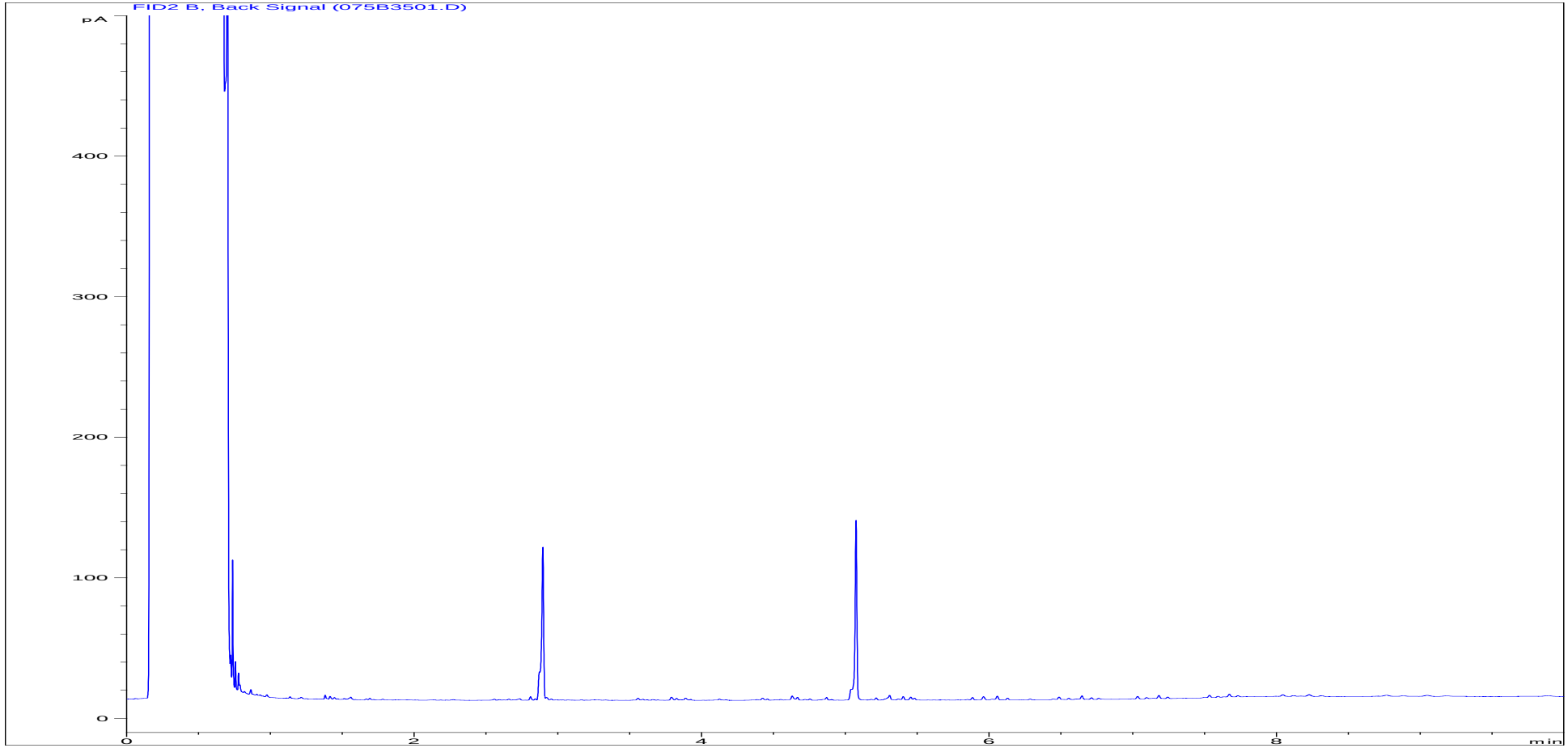
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642978ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0215 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS27 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:18:07 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\027F3501.D | | |

Where individual results are flagged see report notes for status.

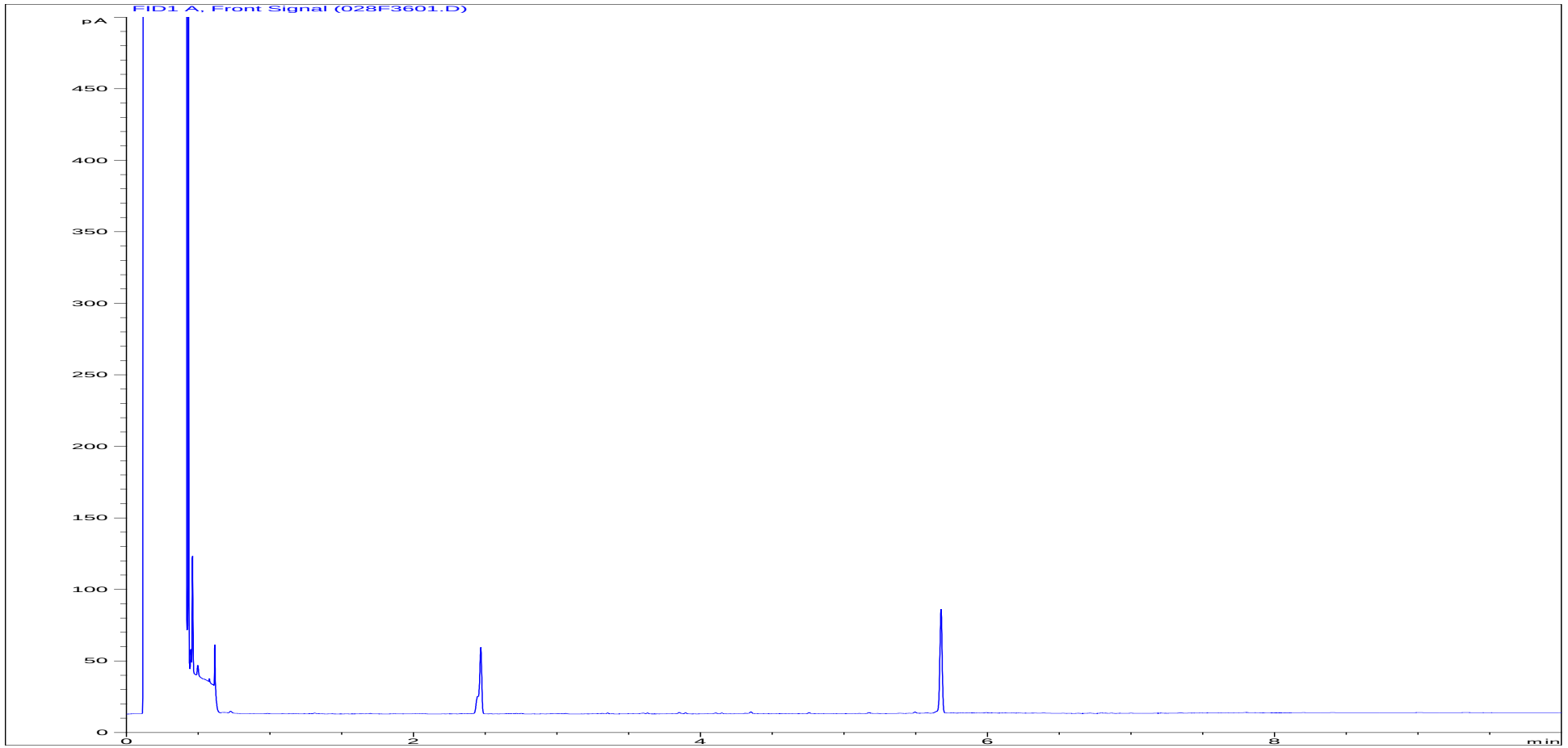
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aromatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642978ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0164 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS27 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:18:07 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\075B3501.D | | |

Where individual results are flagged see report notes for status.

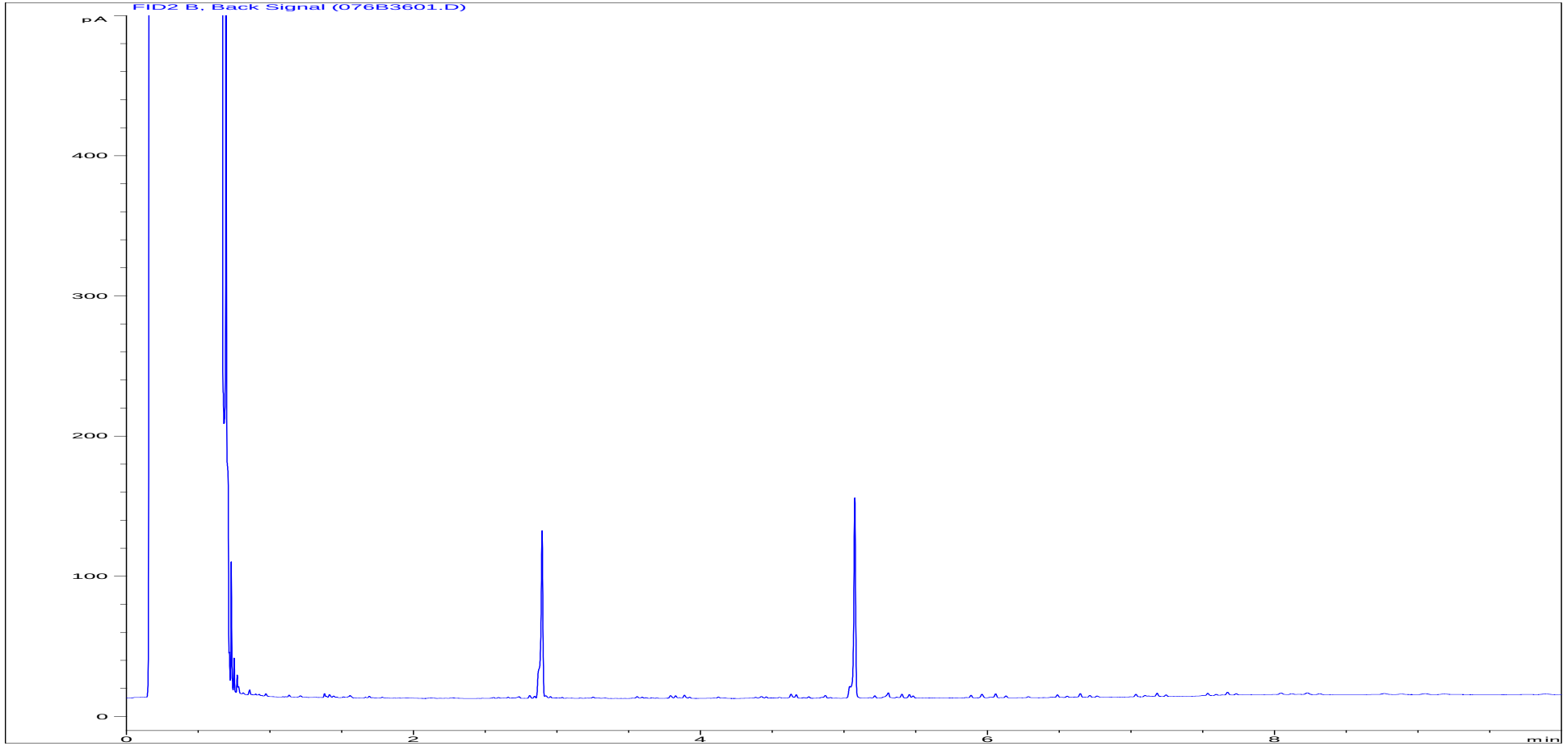
**Petroleum Hydrocarbons (C8 to C40) by GC/FID Aliphatics Fraction.**




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642979ALI | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.022 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS28 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:35:12 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\028F3601.D | | |

Where individual results are flagged see report notes for status.

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




| | | | |
|---|---|---|---|
| **Sample ID:** | EX1642979ARO | **Job Number:** | W21_0179 |
| **Multiplier:** | 0.0167 | **Client:** | ESG Geoenvironmental Consulting |
| **Dilution:** | 1 | **Site:** | Marsh Lane, Tottenham |
| **Acquisition Method:** | TPH_RUNF.M | **Client Sample Ref:** | WS28 |
| **Acquisition Date/Time:** | 02-Dec-15, 20:35:12 | | |
| **Datafile:** | D:\TES\DATA\Y2015\120215TPH_GC15\120215 2015-12-02 10-37-14\076B3601.D | | |

Where individual results are flagged see report notes for status.

# Sample Analysis

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview

W210179

**Customer** ESG Geoenvironmental Consulting
**Site** Marsh Lane, Tottenham
**Report No** W210179

Consignment No W96543
Date Logged 27-Nov-2015

Report Due 04-Dec-2015

| ID Number | Description | Matrix Type | Sampled | MethodID: CUSTSERV Report A | GROHSA GRO-HSA GCFID (AA) | TPHFRD-SI TPH by GC(SI) |
|---|---|---|---|---|---|---|
| | | | | | | ✓ |
| EX/1642971 | WS20 | Groundwater | 25/11/15 | | | |
| EX/1642972 | WS21 | Groundwater | 25/11/15 | | | |
| EX/1642973 | WS22 | Groundwater | 25/11/15 | | | |
| EX/1642974 | WS23 | Groundwater | 25/11/15 | | | |
| EX/1642975 | WS24 | Groundwater | 25/11/15 | | | |
| EX/1642976 | WS25 | Groundwater | 25/11/15 | | | |
| EX/1642977 | WS26 | Groundwater | 25/11/15 | | | |
| EX/1642978 | WS27 | Groundwater | 25/11/15 | | | |
| EX/1642979 | WS28 | Groundwater | 25/11/15 | | | |

**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 |
| F | Sample processing did not commence within the appropriate handling time |

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

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 | TPHFID-Si | As Received | Determination of speciated pentane extractable hydrocarbons in water by GCFID |

# 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 105ºC 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$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**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
**N.F** No Flow
**NS** Information Not Supplied
**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
§ accreditation has been removed for this result as it is a non-accredited matrix

**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 :** ESG Geoenvironmental Consulting

**Site :** Marsh Lane, Tottenham

**Report Number :** W21_0179

| Lab ID Number | Client ID | Description |
|---|---|---|
| EX/1642971 | WS20 | Groundwater |
| EX/1642972 | WS21 | Groundwater |
| EX/1642973 | WS22 | Groundwater |
| EX/1642974 | WS23 | Groundwater |
| EX/1642975 | WS24 | Groundwater |
| EX/1642976 | WS25 | Groundwater |
| EX/1642977 | WS26 | Groundwater |
| EX/1642978 | WS27 | Groundwater |
| EX/1642979 | WS28 | Groundwater |