# Chain of Custody, Shipping & Receiving Documents, Sample Condition Checklist

F&B Project 506270

506270

MP 06-12-15

AE6/V1/BOS

USEPA
DateShipped: 6/12/2015
CarrierName: Courier
AirbillNo:

**CHAIN OF CUSTODY RECORD**
Site #: 10PB
Contact Name: Eric Nuchims
Contact Phone: 206-624-9537

No: 10-061215-113845-0046
Cooler #: 48
Lab: Friedman & Bruya
Lab Phone: (206) 285-8282

| Lab # | Collected | Sample Time | Sample # | Location | Analyses | Matrix | Numb Cont | Container | Preservative | Lab QC |
|---|---|---|---|---|---|---|---|---|---|---|
| 01AB | 6/10/2015 | 19:45 | 15053153 | TP02GW | Oil Fingerprint | Water | 2 | 32 oz Amber | Wet Ice | Y |
| 02AC | 6/10/2015 | 19:45 | 15053153 | TP02GW | Oil Fingerprint | Water | 3 | 40 ml VOA | Wet Ice | Y |

Special Instructions: 24 hour TAT email results to enuchims@ene.com and mwoodke@ene.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|---|---|---|---|---|---|
| Samples | [signature] | 6/12/15 12:30 | [signature] | 6/12/15 12:33 pm | |
| | | | [signature] FEDEX | 06-12-15 13:58 | |
| | | | | | |
| | | | | | |

Samples received at 2 °C

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 506270 CLIENT Ecology Env INITIALS/ DATE: DV 06-12-15

If custody seals are present on cooler, are they intact? ☐ NA ☒ YES ☐ NO

Cooler/Sample temperature 3 °C

Were samples received on ice/cold packs? ☒ YES ☐ NO

Number of days samples have been sitting prior to receipt at laboratory 2 days

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO
*or other representative documents, letters, and/or shipping memos

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Is the following information provided on the COC* ? (explain "no" answer below)

| | | | | | |
|---|---|---|---|---|---|
| Sample ID's | ☒ Yes | ☐ No | # of Containers | ☒ Yes | ☐ No |
| Date Sampled | ☒ Yes | ☐ No | Relinquished | ☒ Yes | ☐ No |
| Time Sampled | ☒ Yes | ☐ No | Requested analysis | ☒ Yes | ☐ No |

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? (explain "no" answer below) ☒ YES ☐ NO

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Explain "no" items from above (use the back if needed)

note: no times sample marked on the label

Are samples for PCB testing? ☐ YES ☒ NO

Did samples originate out of the country? (if yes, put in APHIS refrigerator) ☐ YES ☒ NO

Was client notified of sample receipt? ☒ Over the Counter ☐ Picked up by F&BI
☐ YES ☐ NO (explain)

If Yes, name of person contacted _____ ☐ Left Message

Special Instructions from Client _____

# TPH DIESEL/HCID FOR OIL EXTRACTION WORKSHEET (WATER)

Project #: 506270
Client: E+E
QC Batch ID: 05-1104
Samples checked against COC: HN

Date Received: 6/12/15
Date Extracted: ✓
Date Analyzed:
GC ☐7 ☐4 ☐6, Seq. Date

**Analysis Method:**
- ☒ NWTPH-Dx
- ☐ 8015M
- ☐ AK102 [LCS/LCSD]
- ☐ AK103 [LCS/LCSD]
- ☐ Other

**Calculation Range/Requested Analyte(s):**
- ☒ $C_{10}$ to $C_{36}$ (Diesel Ext.)
- ☐ $C_{10}$ to $C_{36}$ (Diesel/Motor Oil)
- ☐ Other
- ☐ $C_{10}$ to $C_{25}$ (Diesel)
- ☐ $C_{25}$ to $C_{36}$ (Motor Oil)
- ☐ $C_8$ to $C_{11}$ (Stoddard Solvent)

Due Date: 6/15/15 @ 4PM.

☒ ve's not Acceptable
☒ Dilutions Only Not Acceptable
☐ Need EDF

**Clean Up:**
- ☐ Silica Gel
- ☐ Filtration
- ☐ Other
- ☐ Only if Detect
- ☐ With and Without

**Reporting Units:**
- ☒ µg/L (ppb)
- ☐ Other

**Extraction Method**
- ☐ 3510
- ☐ Other

| Sample ID | pH | Sample Volume (mL) | Extraction Solvent Volume | Final Volume | Dilutions Amt. Extract | Dilutions Amt. Solvent | Clean Up Silica | Clean Up Filter | Observations |
|---|---|---|---|---|---|---|---|---|---|
| 01A | <2 | 1,000 | 3 x 60 ml | 2.5 ml or 5 ml | | | | | EMULSION |
| ~~02~~ | MEL. HN | | | 6/12 | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Initials | | | | | | | | | |

| | ✓ | Volume | Conc. (ppm) | Compound(s) | Lot # | Initials | Date |
|---|---|---|---|---|---|---|---|
| **Solvent** | | NA | NA | Methylene chloride | 155-11 | HN | 6/12/15 |
| Other | | | | | | | |
| **Surrogate(s)** | | 25 µl | 1,000 | Pentacosane/o-terphenyl | | | |
| | | 50 µl | 1,000 | Pentacosane/o-terphenyl | 45-50 | HN | 6/12/15 |
| | | 25 µl | 1,000 | Triacontane/Pentacosane/o-terphenyl | | | |
| | | 50 µl | 1,000 | Triacontane/Pentacosane/o-terphenyl | | | |
| **Acid (HCl)** | | | | | | | |

Project Leader Initials: MG

NOTES: Cgrams

FORMS\LAB\EXTRACT\DIESEL_HCID

Rev. 09/30/14

# NWTPH-Dx
## Laboratory Worksheets

## F&B Project 506270

# BATCH ORGANIC EXTRACTION WORKSHEET

Date Extracted: 6-12-15 Technician: [illegible]

QA Batch: **O5-01104**

**Matrix**
- ☐ Soil
- ☒ Water
- ☐ Product
- ☐ Wipe
- ☐ Other_____

**Solvent**
- ☒ Methylene Chloride
- ☐ Acetone
- ☐ Methanol
- ☐ Hexane
- ☐ Other_____

2015 JUN 12 PM 1:52

Solvent Lot # 155-11

**Analysis**
- ☒ Diesel
- ☐ Gas/BTEX
- ☐ HCID
- ☐ 8270 SIM
- ☐ 8270
- ☐ 8260
- ☐ PCB
- ☐ Organic Lead
- ☐ Methamphetamine
- ☐ Other_____

**Clean Up:** ☐ FlorsiL (FL) ☐ Cupper (Cu) ☐ Silica ☐ Filtration ☐ $H_2SO_4$ ☐ Other_____

| Sample ID | pH Waters only | Sample Weight/ Volume ml | Extraction Solvent Volume | Final Volume | Dilutions Amt. Extract | Dilutions Amt. Solvent | Clean Up (Circle) Silica | Clean Up (Circle) FL Filter | Clean Up (Circle) Cu $H_2SO_4$ | Observations |
|---|---|---|---|---|---|---|---|---|---|---|
| MB | <2 | 500 | 3X60ml | 2.5ml | | | | | | |
| LCS | | 1,000 | | 5ml | | | | | | |
| LCSD | | 1,000 | | 5ml | | | | | | |
| | VW/[illegible] | [illegible] | [illegible] | (HN) 6/12 | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Initials | | | | | | | | | | |

## Samples in Batch

| | | | | |
|---|---|---|---|---|
| 506247-01 | 506261-03 | 506263-03 | | |
| 02 | 04 | 04 | | |
| 03 | 506263-01 | 506270-01 | | |
| 04 | 02 | | | |

Date/Initials

Matrix Spikes:
_____ µL of _____ ppm of _____ Lot # _____ _____
Amount Concentration Analytes and Solvent

Matrix Spikes:
25 µL of 100,000 ppm of WADF # 2 Lot # 45-121 [illegible] 6/12/15
Amount Concentration Analytes and Solvent

Surrogates:
25 µL of 1,000 ppm of Pentacosane/o-Terp. Lot # 45-50 _____
Amount Concentration Analytes and Solvent

Internal Standards:
_____ µL of _____ ppm of _____ Lot # _____ _____
Amount Concentration Analytes and Solvent

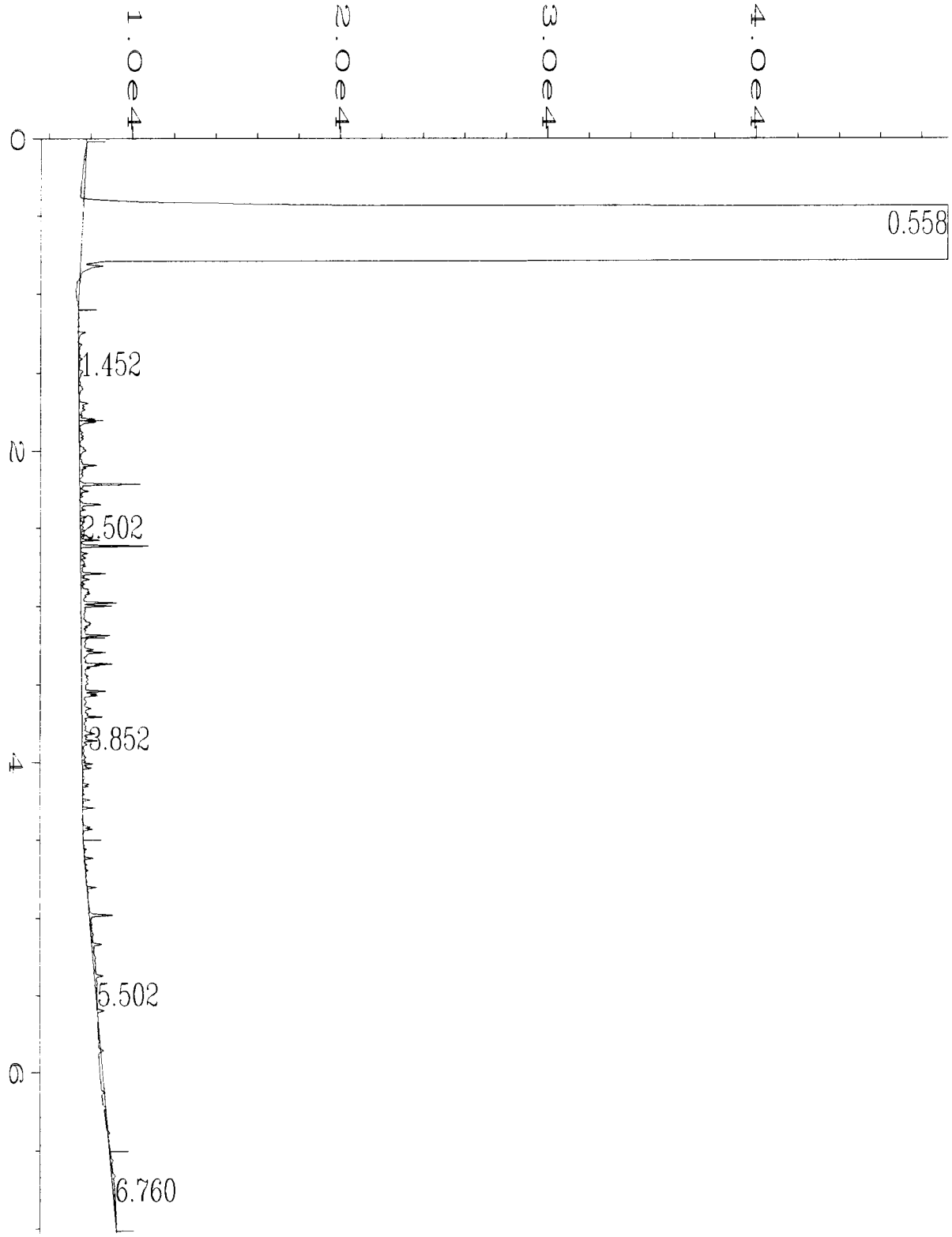
Notes: _____

# NWTPH-Dx
## Initial Calibrations

## F&B Project 506270

| GC - 1 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Seq. Date | 1/14/15 | | | | ICDSL.XLS | | | | | |
| Sample ID | 5ppm dx | 10ppm | 50ppm | 100ppm | 500ppm | 1000ppm | 5000ppm | 10000 dx 44-94 | | |
| Conc. | 5 | 10 | 50 | 100 | 500 | 1000 | 5000 | 10000 | | |
| Triacostane | 0 | 0 | 274 | 0 | 0 | 0 | 0.00E+00 | 0 | | |
| Pentacosane | 0 | 0 | 152 | 451 | 2111 | 4302 | 2.12E+04 | 40593 | | |
| Terphenyl | 0 | 0 | 525 | 1183 | 4119 | 12184 | 6.87E+04 | 8.07E+05 | | |
| Diesel C10-24 | 33918 | 69412 | 375519 | 734834 | 4083415 | 8206454 | 4.12E+07 | 8.06E+07 | | |
| D-Ex C10-C36 | 36147 | 69410 | 378697 | 734382 | 4081303 | 8253888 | 4.16E+07 | 8.15E+07 | | |
| Motor Oil | 2229 | -2 | 3178 | -452 | -2112 | 47434 | 4.24E+05 | 9.05E+05 | | |
| Heavy Oil | 17478 | 34092 | 192474 | 367361 | 2090699 | 4258608 | 2.20E+07 | 43646527 | | |
| Jet A | 33919 | 69413 | 375519 | 734834 | 4083415 | 8206454 | 4.12E+07 | 8.06E+07 | | |
| Stoddard | 22263 | 40138 | 203464 | 401374 | 2190166 | 4406748 | 2.18E+07 | 4.21E+07 | | |
| Kerosene | 37513 | 74233 | 392760 | 769187 | 4282977 | 8617922 | 4.33E+07 | 84806014 | | |
| Bunker C | 36150 | 69413 | 378971 | 734383 | 4081304 | 8253889 | 4.16E+07 | 81525128 | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| R.F. | | | | | | | | | Average | $RSD |
| Triacostane | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 6.85E-01 | 283% |
| Pentacosane | 0 | 0 | 3 | 5 | 4 | 4 | 4 | 4 | 3.05E+00 | 63% |
| Terphenyl | 0 | 0 | 11 | 12 | 8 | 12 | 14 | 81 | 1.72E+01 | 153% |
| Diesel C10-24 | 6784 | 6941 | 7510 | 7348 | 8167 | 8206 | 8243 | 8062 | 7.66E+03 | 8% |
| D-Ex C10-C36 | 7229 | 6941 | 7574 | 7344 | 8163 | 8254 | 8327 | 8153 | 7.75E+03 | 7% |
| Motor Oil | 446 | 0 | 64 | -5 | -4 | 47 | 85 | 90 | 9.04E+01 | 165% |
| Heavy Oil | 3496 | 3409 | 3849 | 3674 | 4181 | 4259 | 4392 | 4365 | 3.95E+03 | 10% |
| Jet A | 6784 | 6941 | 7510 | 7348 | 8167 | 8206 | 8243 | 8062 | 7.66E+03 | 8% |
| Stoddard | 4453 | 4014 | 4069 | 4014 | 4380 | 4407 | 4360 | 4206 | 4.24E+03 | 4% |
| Kerosene | 7503 | 7423 | 7855 | 7692 | 8566 | 8618 | 8667 | 8481 | 8.10E+03 | 7% |
| Bunker C | 7230 | 6941 | 7579 | 7344 | 8163 | 8254 | 8327 | 8153 | 7.75E+03 | 7% |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Analyte | 5 | 10 | 50 | 100 | 500 | 1000 | 5000 | 10000 | | |
| Triacostane | 0 | 0 | 400 | 0 | 0 | 0 | 0 | 0 | | |
| Pentacosane | 0 | 0 | 50 | 148 | 693 | 1412 | 6960 | 13323 | | |
| Terphenyl | 0 | 0 | 31 | 69 | 240 | 710 | 4006 | 47064 | | |
| Diesel C10-24 | 11 | 9 | 2 | 4 | -7 | -7 | -8 | -5 | | |
| D-Ex C10-C36 | 7 | 10 | 2 | 5 | -5 | -7 | -7 | -5 | | |
| Motor Oil | -393 | 100 | 30 | 105 | 105 | 48 | 6 | 0 | | |
| Heavy Oil | 12 | 14 | 3 | 7 | -6 | -8 | -11 | -10 | | |
| Jet A | 11 | 9 | 2 | 4 | -7 | -7 | -8 | -5 | | |
| Stoddard | -5 | 5 | 4 | 5 | -3 | -4 | -3 | 1 | | |
| Kerosene | 7 | 8 | 3 | 5 | -6 | -6 | -7 | -5 | | |
| Bunker C | 7 | 10 | 2 | 5 | -5 | -7 | -7 | -5 | | |
| Calculated by: | M | 1/15/15 | | Reviewed by | | | | | | |
| | Initials | Date/Time | | | | Initials | Date/Time | | | |
| Update circled values | | | | Excel TPHD sheet Updated | | | ✓ M | | | |
| | Initials | Date/Time | | | | | | | | |

| GC - 1 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Seq. Date | 1/14/15 | | | | ICDSL.XLS | | | | | |
| Sample ID | 10ppm m | 50ppm | 100ppm | 500ppm | 1000 mo | 2000 mo | 3000 mo | 44-151 | | |
| Conc. | 10 | 50 | 100 | 500 | 1000 | 2000 | 3000 | | | |
| Triacostane | 0 | 708 | 710 | 3267 | 4403 | 9647 | 2.72E+03 | | | |
| Pentacosane | 328 | 1810 | 2270 | 11810 | 9823 | 22867 | 5.75E+04 | | | |
| Terphenyl | 0 | 0 | 279 | 1094 | 2035 | 3805 | 4.96E+03 | | | |
| Diesel C10-24 | -1 | 81724 | 170868 | 880658 | 1673371 | 3291518 | 4.72E+06 | | | |
| D-Ex C10-C36 | -152 | 344405 | 710274 | 3582433 | 6880531 | 13656104 | 1.96E+07 | | | |
| Motor Oil | 47016 | 262681 | 539406 | 2701775 | 5207160 | 10364586 | 1.49E+07 | | | |
| Heavy Oil | 61832 | 344405 | 710274 | 3582433 | 6880531 | 13656104 | 1.96E+07 | | | |
| Jet A | 0 | 81725 | 170868 | 880658 | 1673371 | 3291518 | 4.72E+06 | | | |
| Stoddard | 0 | 1304 | 573 | 0 | 0 | 0 | 0.00E+00 | | | |
| Kerosene | 0 | 83029 | 171441 | 880658 | 1673371 | 3291518 | 4.72E+06 | | | |
| Bunker C | -150 | 345114 | 710984 | 3585700 | 6884934 | 13665751 | 1.96E+07 | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| R.F. | | | | | | | | | Average | $RSD |
| Triacostane | 0 | 14 | 7 | 7 | 4 | 5 | 1 | | 5.42E+00 | 86% |
| Pentacosane | 33 | 36 | 23 | 24 | 10 | 11 | 19 | | 2.22E+01 | 45% |
| Terphenyl | 0 | 0 | 3 | 2 | 2 | 2 | 2 | | 1.51E+00 | 72% |
| Diesel C10-24 | 0 | 1634 | 1709 | 1761 | 1673 | 1646 | 1575 | | 1.43E+03 | 44% |
| D-Ex C10-C36 | -15 | 6888 | 7103 | 7165 | 6881 | 6828 | 6548 | | 5.91E+03 | 44% |
| Motor Oil | 4702 | 5254 | 5394 | 5404 | 5207 | 5182 | 4973 | | 5.16E+03 | 5% |
| Heavy Oil | 6183 | 6888 | 7103 | 7165 | 6881 | 6828 | 6548 | | 6.80E+03 | 5% |
| Jet A | 0 | 1635 | 1709 | 1761 | 1673 | 1646 | 1575 | | 1.43E+03 | 44% |
| Stoddard | 0 | 26 | 6 | 0 | 0 | 0 | 0 | | 4.54E+00 | 214% |
| Kerosene | 0 | 1661 | 1714 | 1761 | 1673 | 1646 | 1575 | | 1.43E+03 | 44% |
| Bunker C | -15 | 6902 | 7110 | 7171 | 6885 | 6833 | 6549 | | 5.92E+03 | 44% |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Analyte | 10 | 50 | 100 | 500 | 1000 | 2000 | 3000 | 0 | | |
| Triacostane | 0 | 131 | 131 | 603 | 813 | 1781 | 502 | 0 | | |
| Pentacosane | 15 | 81 | 102 | 531 | 442 | 1028 | 2583 | 0 | | |
| Terphenyl | 0 | 0 | 185 | 725 | 1348 | 2520 | 3287 | 0 | | |
| Diesel C10-24 | 100 | -14 | -20 | -23 | -17 | -15 | -10 | #DIV/0! | | |
| D-Ex C10-C36 | 100 | -16 | -20 | -21 | -16 | -15 | -11 | #DIV/0! | | |
| Motor Oil | 9 | -2 | -5 | -5 | -1 | 0 | 4 | | | |
| Heavy Oil | 9 | -1 | -4 | -5 | -1 | 0 | 4 | | | |
| Jet A | 100 | -14 | -20 | -23 | -17 | -15 | -10 | #DIV/0! | | |
| Stoddard | 100 | -474 | -26 | 100 | 100 | 100 | 100 | #DIV/0! | | |
| Kerosene | 100 | -16 | -20 | -23 | -17 | -15 | -10 | #DIV/0! | | |
| Bunker C | 100 | -17 | -20 | -21 | -16 | -15 | -11 | #DIV/0! | | |
| | | | | | | | | | | |
| Calculated by: | M | 1/15/15 | | Reviewed by | | | | | | |
| | Initials | Date/Time | | | | Initials | Date/Time | | | |
| | | | | | | | | | | |
| Update circled values | | | | Excel TPHD sheet Updated | | | ✓ | | | |
| | Initials | Date/Time | | | | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\021F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 21 |
| Sample Name | : 5ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 04:49 PM | Instrument Method: | DX1.MTH |
| Report Created on: | 15 Jan 15 10:17 AM | Analysis Method | : DX1.MTH |

==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\021F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 5ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 04:49 PM
Report Created on: 15 Jan 15 10:17 AM

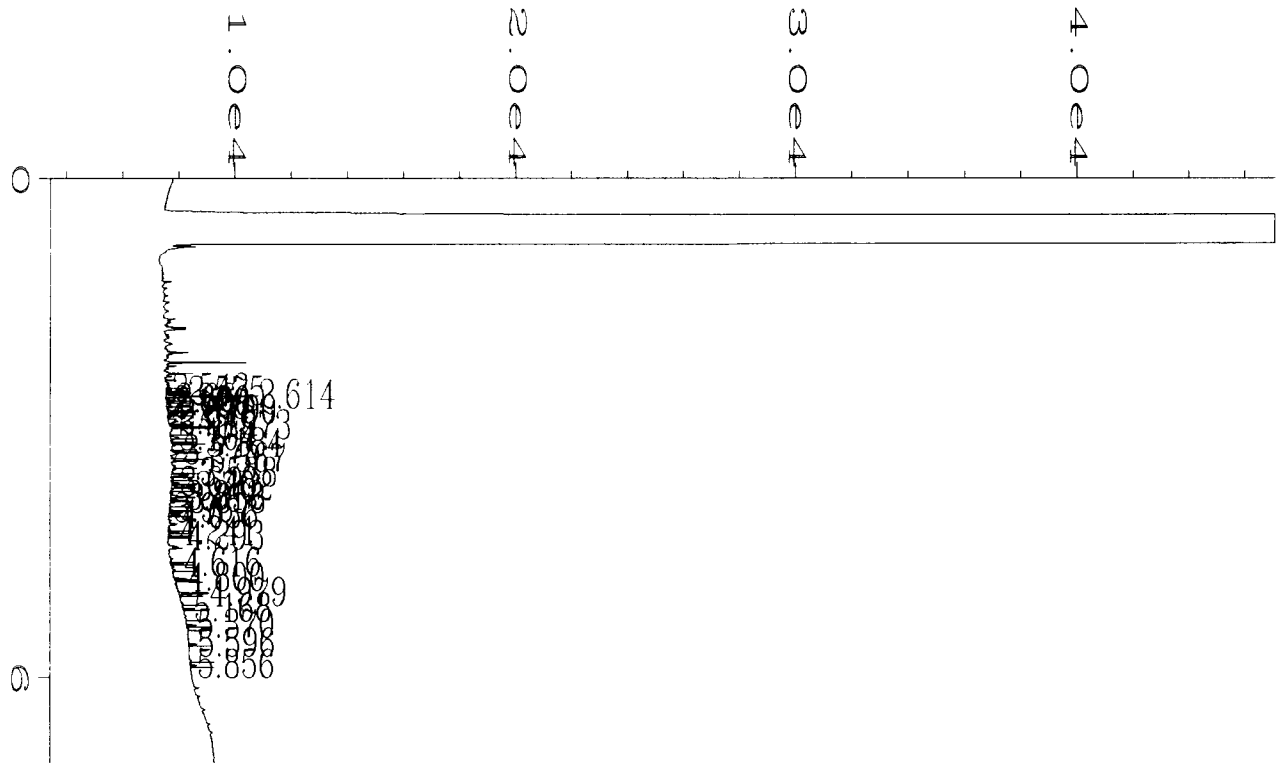
Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\021F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.10198E+009 | 8.10908E+007 | BB + | 0.000 | 99.9962 |
| 2 | 1.452 | 3594 | 836 | BVA | 0.072 | 0.0003 |
| 3 | 2.502 | 18669 | 3313 | VV + | 0.000 | 0.0017 |
| 4 | 3.852 | 15250 | 1459 | VV + | 0.000 | 0.0014 |
| 5 | 5.502 | 2231 | 807 | PV + | 0.000 | 0.0002 |
| 6 | 6.760 | 2195 | 179 | VB + | 0.000 | 0.0002 |

Total area = 1.10202E+009

==========




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\021R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 5ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 04:49 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\021R0701.D

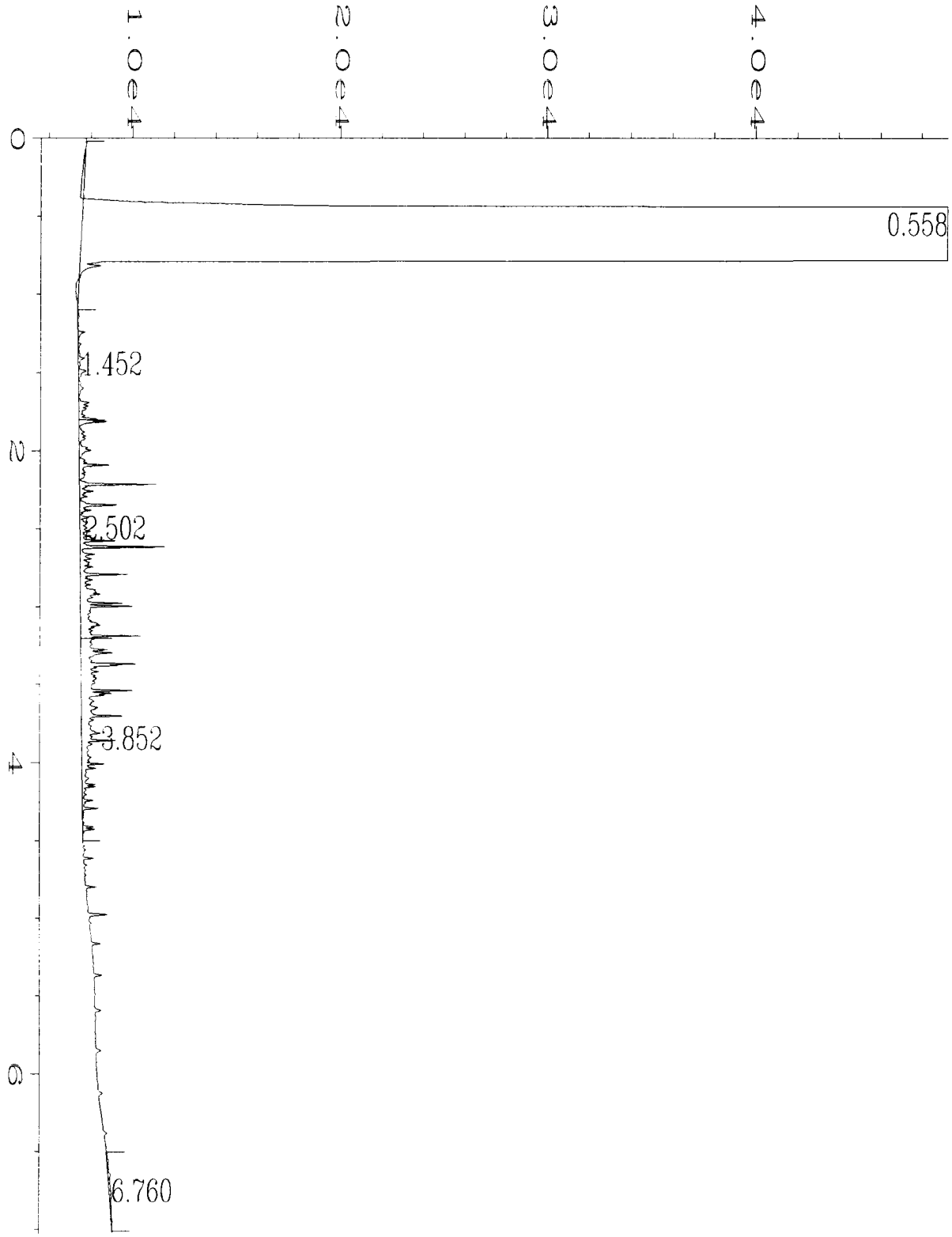
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.543 | 107 | 218 | BB | 0.008 | 0.7807 |
| 2 | 2.575 | 499 | 1003 | BB | 0.008 | 3.6450 |
| 3 | 2.614 | 1803 | 3470 | BB | 0.009 | 13.1610 |
| 4 | 2.661 | 179 | 340 | BB | 0.009 | 1.3085 |
| 5 | 2.690 | 139 | 230 | BB | 0.010 | 1.0144 |
| 6 | 2.728 | 215 | 163 | BB | 0.022 | 1.5680 |
| 7 | 2.790 | 676 | 1146 | BB | 0.010 | 4.9347 |
| 8 | 2.828 | 226 | 385 | BB | 0.010 | 1.6511 |
| 9 | 2.919 | 790 | 374 | BB | 0.035 | 5.7675 |
| 10 | 2.973 | 760 | 1616 | BB | 0.008 | 5.5483 |
| 11 | 3.104 | 466 | 307 | BB | 0.025 | 3.4042 |
| 12 | 3.184 | 540 | 1269 | BB | 0.007 | 3.9457 |
| 13 | 3.275 | 256 | 426 | BB | 0.010 | 1.8692 |
| 14 | 3.367 | 405 | 1247 | BB | 0.010 | 2.9575 |
| 15 | 3.538 | 1238 | 1102 | BB | 0.019 | 9.0368 |
| 16 | 3.648 | 190 | 291 | BB | 0.011 | 1.3901 |
| 17 | 3.702 | 518 | 928 | BB | 0.009 | 3.7832 |
| 18 | 3.812 | 554 | 561 | BB | 0.016 | 4.0424 |
| 19 | 3.858 | 444 | 703 | BB | 0.011 | 3.2402 |
| 20 | 3.967 | 140 | 138 | BB | 0.018 | 1.0218 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.036 | 623 | 463 | BB | 0.022 | 4.5520 |
| 22 | 4.241 | 200 | 398 | BB | 0.008 | 1.4621 |
| 23 | 4.293 | 365 | 667 | BB | 0.009 | 2.6622 |
| 24 | 4.616 | 261 | 486 | BB | 0.009 | 1.9060 |
| 25 | 4.800 | 262 | 480 | BB | 0.009 | 1.9147 |
| 26 | 4.979 | 759 | 1123 | BB | 0.015 | 5.5388 |
| 27 | 5.168 | 273 | 436 | BB | 0.010 | 1.9913 |
| 28 | 5.370 | 291 | 381 | BB | 0.013 | 2.1279 |
| 29 | 5.596 | 259 | 328 | BB | 0.013 | 1.8901 |
| 30 | 5.856 | 258 | 244 | BB | 0.018 | 1.8847 |

Total area = 13696

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\021F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 21 | |
| Sample Name | : 5ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 16:49 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:17 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 0 | >4.53 | <4.60 | 0 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 0 | >3.73 | <3.79 | 0 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 4 | >1.8 | <4.5 | 3.39E+04 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 5 | >1.8 | <6.5 | 36147 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 0 | >4.5 | <6.5 | 2229 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 3 | >3.2 | <6.5 | 17478 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 5 | >1.8 | <4.5 | 33919 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 4 | >1.1 | <3.2 | 22263 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 6 | >1.1 | <4.5 | 37513 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 8 | >1.8 | <6.5 | 36150 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 4 | | | | | |
| TPHD (8-36) | 2 | | | | | |
| TPHDX (8-36) | 2 | | | | | |
| Motor Oil (8-36 | 3 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\022F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 22 |
| Sample Name | : 10ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code | : | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 04:59 PM | Instrument Method | : DX1.MTH |
| Report Created on | : 15 Jan 15 10:17 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

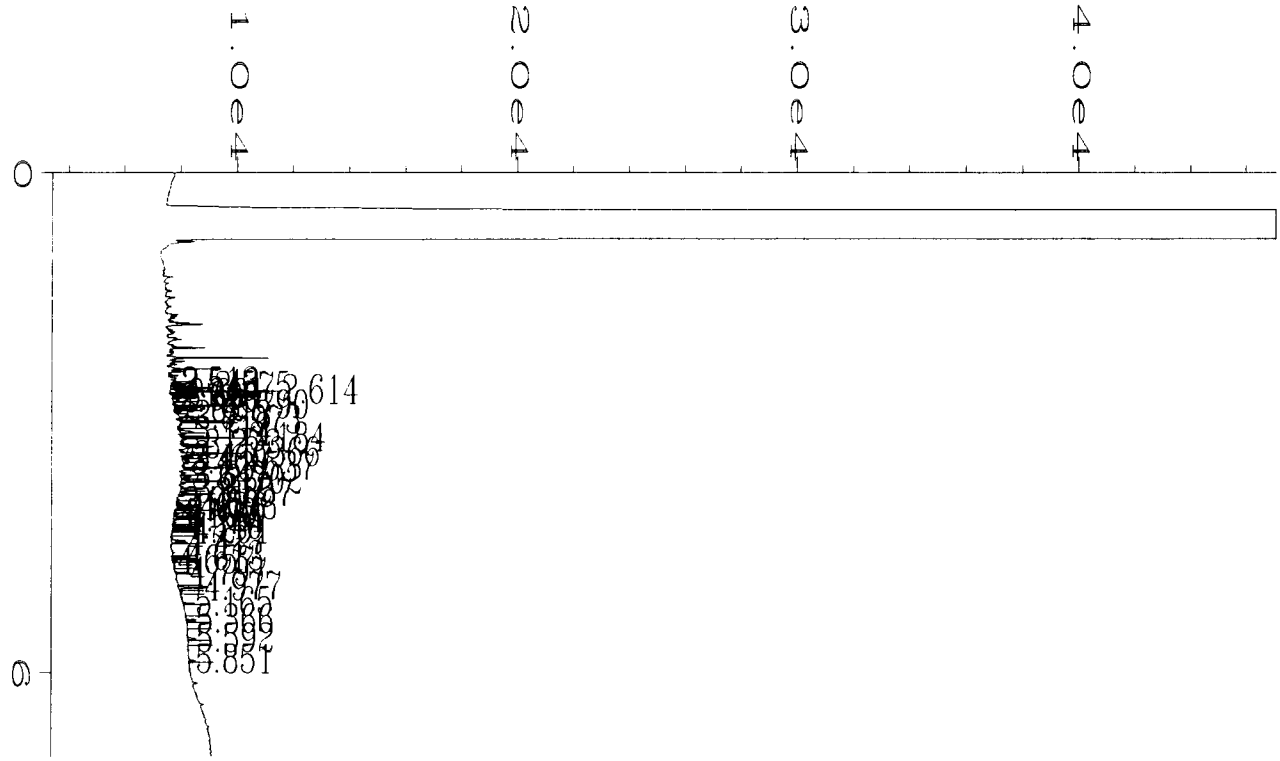
Data File Name : C:\HPCHEM\1\DATA\01-14-15\022F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 10ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 04:59 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\022F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.07766E+009 | 8.11611E+007 | BV + | 0.000 | 99.9929 |
| 2 | 1.452 | 4820 | 892 | PV + | 0.000 | 0.0004 |
| 3 | 2.502 | 35318 | 4086 | VV + | 0.000 | 0.0033 |
| 4 | 3.852 | 34095 | 2598 | VV + | 0.000 | 0.0032 |
| 5 | 6.760 | 1908 | 160 | VB + | 0.000 | 0.0002 |

Total area = 1.07774E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\022R0701.D
Operator : mwdl
Page Number : 1
Instrument : GC1
Vial Number : 22
Sample Name : 10ppm dx 44-94
Injection Number : 1
Run Time Bar Code:
Sequence Line : 7
Acquired on : 14 Jan 15 04:59 PM
Instrument Method: DX1.MTH
Report Created on: 15 Jan 15 10:17 AM
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\022R0701.D

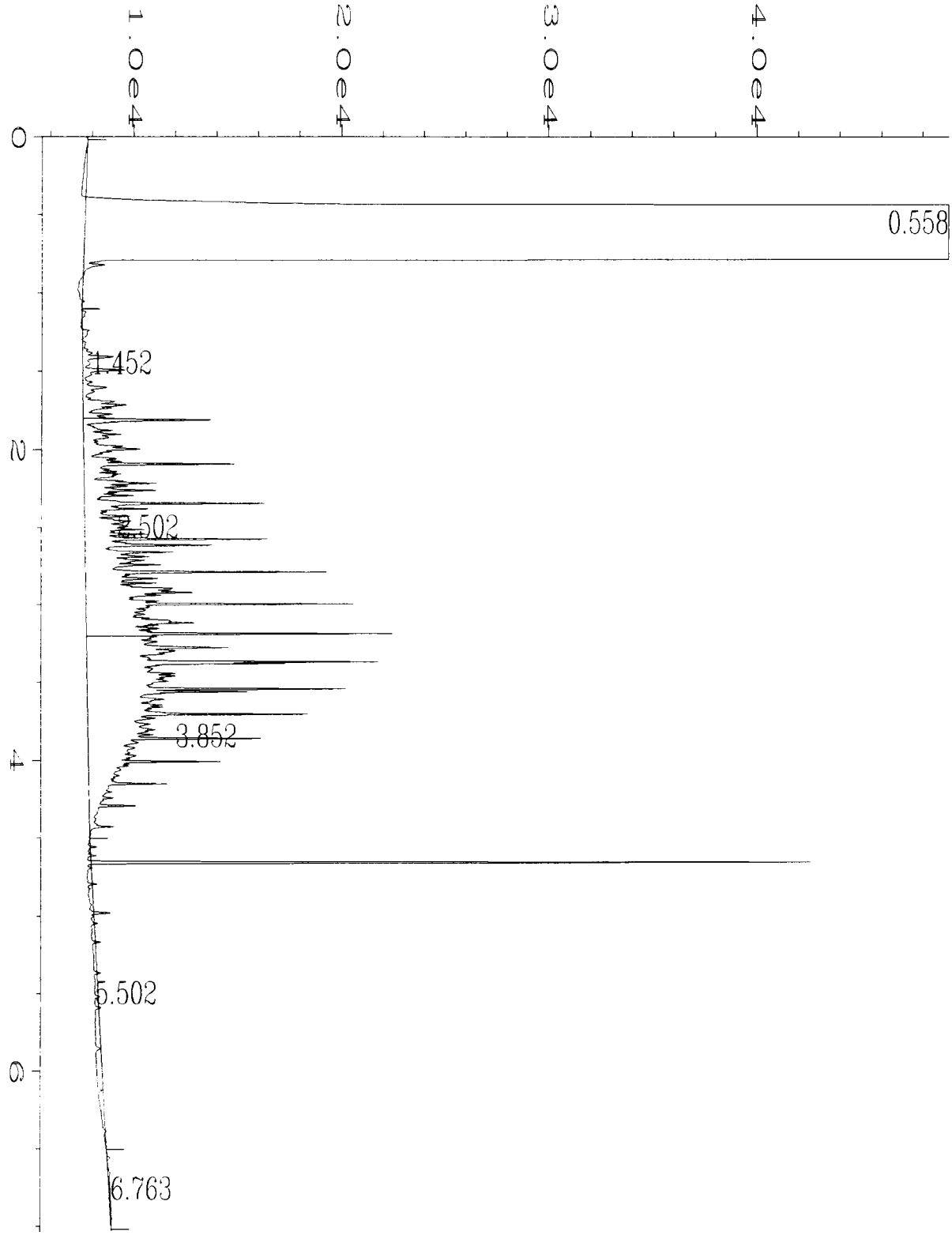
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.513 | 136 | 341 | BBAS | 0.007 | 0.7063 |
| 2 | 2.543 | 188 | 418 | BB | 0.008 | 0.9797 |
| 3 | 2.575 | 883 | 1679 | BB | 0.009 | 4.5957 |
| 4 | 2.614 | 2150 | 4115 | BB | 0.009 | 11.1859 |
| 5 | 2.661 | 324 | 567 | BB | 0.010 | 1.6860 |
| 6 | 2.690 | 218 | 368 | BB | 0.010 | 1.1331 |
| 7 | 2.715 | 311 | 235 | BB | 0.022 | 1.6182 |
| 8 | 2.790 | 1115 | 2096 | BB | 0.009 | 5.8004 |
| 9 | 2.827 | 214 | 336 | BB | 0.011 | 1.1125 |
| 10 | 2.918 | 834 | 554 | BB | 0.025 | 4.3418 |
| 11 | 2.973 | 629 | 1640 | BB | 0.006 | 3.2726 |
| 12 | 3.114 | 670 | 531 | BB | 0.021 | 3.4859 |
| 13 | 3.184 | 1029 | 2471 | BB | 0.007 | 5.3546 |
| 14 | 3.273 | 446 | 817 | BB | 0.009 | 2.3195 |
| 15 | 3.366 | 867 | 2098 | BB | 0.011 | 4.5102 |
| 16 | 3.417 | 112 | 375 | BB | 0.005 | 0.5814 |
| 17 | 3.460 | 385 | 237 | BB | 0.023 | 2.0051 |
| 18 | 3.537 | 848 | 2035 | BB | 0.007 | 4.4113 |
| 19 | 3.647 | 398 | 398 | BB | 0.016 | 2.0702 |
| 20 | 3.702 | 916 | 1716 | BB | 0.009 | 4.7682 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.812 | 433 | 549 | BB | 0.013 | 2.2527 |
| 22 | 3.857 | 737 | 1348 | BB | 0.009 | 3.8367 |
| 23 | 3.967 | 208 | 207 | BB | 0.017 | 1.0836 |
| 24 | 4.008 | 450 | 879 | BB | 0.009 | 2.3422 |
| 25 | 4.036 | 241 | 481 | BB | 0.008 | 1.2525 |
| 26 | 4.100 | 172 | 194 | BB | 0.016 | 0.8950 |
| 27 | 4.151 | 521 | 547 | BB | 0.016 | 2.7099 |
| 28 | 4.240 | 219 | 468 | BB | 0.008 | 1.1394 |
| 29 | 4.291 | 394 | 749 | BB | 0.009 | 2.0495 |
| 30 | 4.427 | 702 | 577 | BB | 0.020 | 3.6532 |
| 31 | 4.613 | 273 | 515 | BB | 0.009 | 1.4215 |
| 32 | 4.657 | 114 | 176 | BB | 0.013 | 0.5915 |
| 33 | 4.797 | 297 | 518 | BB | 0.010 | 1.5479 |
| 34 | 4.977 | 712 | 927 | BB | 0.016 | 3.7070 |
| 35 | 5.165 | 315 | 431 | BB | 0.012 | 1.6415 |
| 36 | 5.366 | 309 | 385 | BB | 0.013 | 1.6061 |
| 37 | 5.592 | 301 | 304 | BB | 0.017 | 1.5652 |
| 38 | 5.851 | 147 | 230 | BB | 0.012 | 0.7659 |

Total area = 19217

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\022F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 22 | |
| Sample Name | : 10ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 16:59 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:17 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 0 | >4.53 | <4.60 | 0 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 0 | >3.73 | <3.79 | 0 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 9 | >1.8 | <4.5 | 6.94E+04 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 9 | >1.8 | <6.5 | 69410 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 0 | >4.5 | <6.5 | -2 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 5 | >3.2 | <6.5 | 34092 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 11 | >1.8 | <4.5 | 69413 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 7 | >1.1 | <3.2 | 40138 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 12 | >1.1 | <4.5 | 74233 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 16 | >1.8 | <6.5 | 69413 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 7 | | | | | |
| TPHD (8-36) | 4 | | | | | |
| TPHDX (8-36) | 4 | | | | | |
| Motor Oil (8-36 | 7 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\023F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 23 |
| Sample Name | : 50ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 05:10 PM | Instrument Method: | DX1.MTH |
| Report Created on: | 15 Jan 15 10:17 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

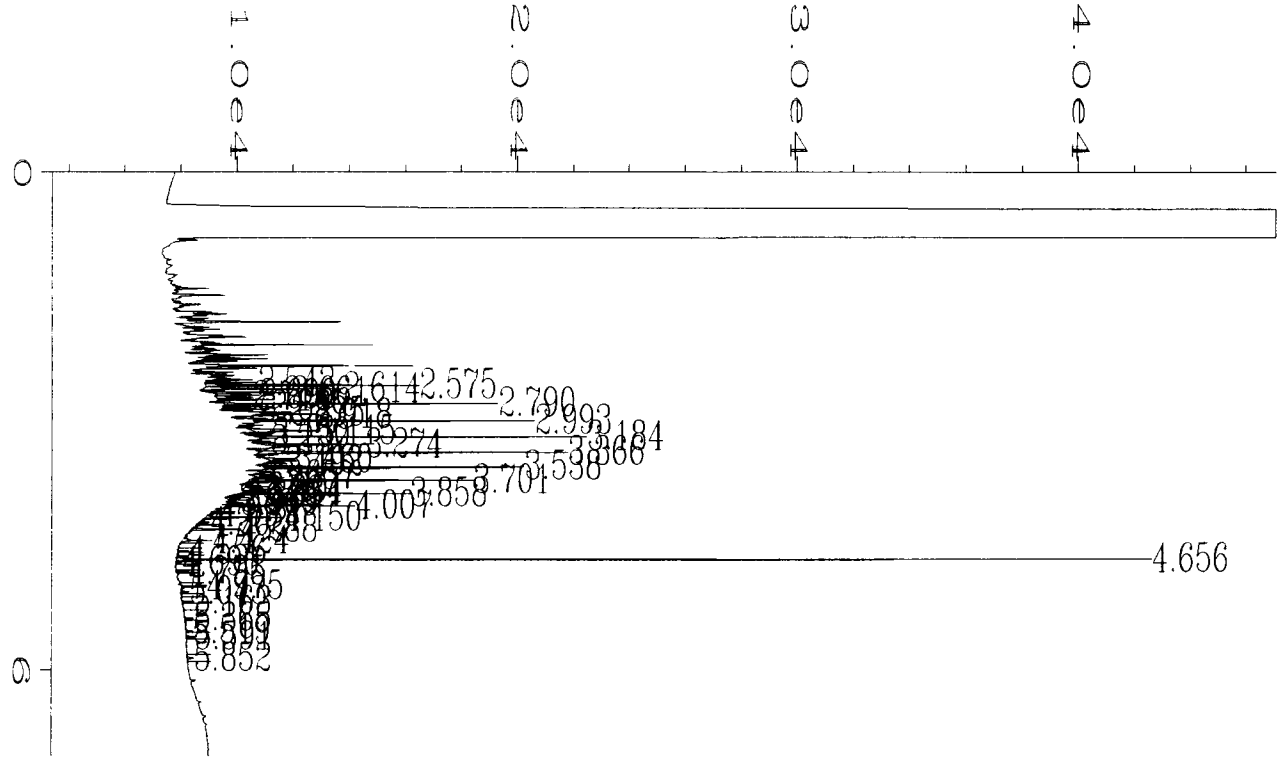
Data File Name : C:\HPCHEM\1\DATA\01-14-15\023F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 50ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:10 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\023F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.08904E+009 | 8.08045E+007 | BB + | 0.000 | 99.9634 |
| 2 | 1.452 | 17241 | 2121 | BV + | 0.000 | 0.0016 |
| 3 | 2.502 | 186223 | 14826 | VV + | 0.000 | 0.0171 |
| 4 | 3.852 | 189821 | 13970 | VV + | 0.000 | 0.0174 |
| 5 | 5.502 | 3604 | 34305 | PV + | 0.000 | 0.0003 |
| 6 | 6.763 | 1545 | 147 | PB + | 0.000 | 0.0001 |

Total area = 1.08944E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\023R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 50ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:10 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\023R0701.D

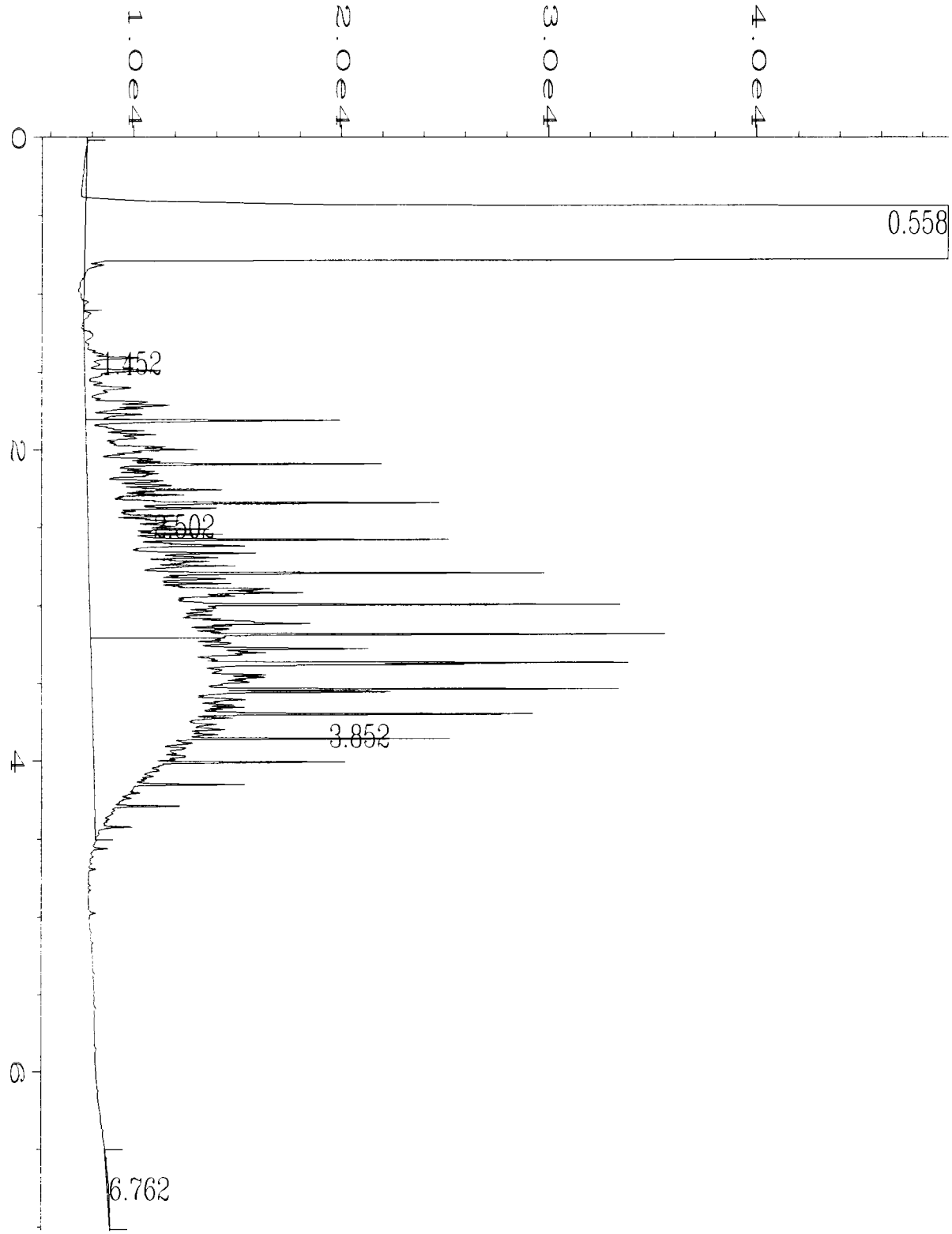
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.543 | 1457 | 1965 | BBAS | 0.012 | 1.6275 |
| 2 | 2.575 | 4399 | 8244 | BB | 0.009 | 4.9153 |
| 3 | 2.614 | 3856 | 5259 | BB | 0.016 | 4.3079 |
| 4 | 2.661 | 1731 | 2959 | BB | 0.010 | 1.9337 |
| 5 | 2.690 | 929 | 1596 | BB | 0.010 | 1.0375 |
| 6 | 2.714 | 1237 | 1345 | BB | 0.015 | 1.3818 |
| 7 | 2.790 | 5238 | 10116 | BB | 0.009 | 5.8518 |
| 8 | 2.827 | 1004 | 1673 | BB | 0.010 | 1.1221 |
| 9 | 2.895 | 445 | 891 | BB | 0.010 | 0.4971 |
| 10 | 2.918 | 1256 | 2221 | BB | 0.009 | 1.4038 |
| 11 | 2.993 | 4054 | 10580 | BB | 0.006 | 4.5295 |
| 12 | 3.115 | 2684 | 2519 | BB | 0.018 | 2.9992 |
| 13 | 3.150 | 483 | 885 | BB | 0.009 | 0.5394 |
| 14 | 3.184 | 5344 | 12326 | BB | 0.007 | 5.9711 |
| 15 | 3.237 | 394 | 582 | BB | 0.011 | 0.4401 |
| 16 | 3.274 | 2297 | 3890 | BB | 0.010 | 2.5659 |
| 17 | 3.366 | 8010 | 11336 | BB | 0.014 | 8.9492 |
| 18 | 3.460 | 1123 | 924 | BB | 0.020 | 1.2542 |
| 19 | 3.492 | 511 | 765 | BB | 0.011 | 0.5713 |
| 20 | 3.538 | 4355 | 10053 | BB | 0.007 | 4.8661 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.657 | 866 | 802 | BB | 0.018 | 0.9679 |
| 22 | 3.701 | 4381 | 8628 | BB | 0.008 | 4.8946 |
| 23 | 3.767 | 525 | 537 | BB | 0.016 | 0.5867 |
| 24 | 3.801 | 398 | 634 | BB | 0.010 | 0.4442 |
| 25 | 3.834 | 258 | 636 | BB | 0.007 | 0.2886 |
| 26 | 3.858 | 2965 | 6576 | BB | 0.008 | 3.3127 |
| 27 | 3.885 | 531 | 546 | BB | 0.016 | 0.5928 |
| 28 | 3.919 | 485 | 465 | BB | 0.017 | 0.5414 |
| 29 | 3.969 | 438 | 425 | BB | 0.017 | 0.4893 |
| 30 | 4.007 | 1907 | 4680 | BB | 0.007 | 2.1304 |
| 31 | 4.097 | 174 | 319 | BB | 0.009 | 0.1945 |
| 32 | 4.150 | 1518 | 2927 | BB | 0.009 | 1.6963 |
| 33 | 4.202 | 364 | 391 | BB | 0.016 | 0.4072 |
| 34 | 4.288 | 1052 | 1891 | BB | 0.009 | 1.1758 |
| 35 | 4.424 | 955 | 1090 | BB | 0.018 | 1.0669 |
| 36 | 4.556 | 152 | 395 | BB | 0.006 | 0.1701 |
| 37 | 4.656 | 19110 | 36778 | BB | 0.009 | 21.3508 |
| 38 | 4.690 | 136 | 228 | BB | 0.010 | 0.1523 |
| 39 | 4.795 | 285 | 489 | BB | 0.010 | 0.3186 |
| 40 | 4.975 | 629 | 975 | BB | 0.011 | 0.7031 |
| 41 | 5.043 | 299 | 316 | BB | 0.016 | 0.3343 |
| 42 | 5.163 | 224 | 418 | BB | 0.009 | 0.2507 |
| 43 | 5.365 | 265 | 344 | BB | 0.012 | 0.2962 |
| 44 | 5.519 | 274 | 241 | BB | 0.019 | 0.3060 |
| 45 | 5.591 | 236 | 300 | BB | 0.013 | 0.2639 |
| 46 | 5.852 | 269 | 245 | BB | 0.021 | 0.3003 |

Total area = 89503

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\023F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 23 | |
| Sample Name | : 50ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 17:10 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:17 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 274 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 0 | >4.53 | <4.60 | 152 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 1 | >3.73 | <3.79 | 525 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 49 | >1.8 | <4.5 | 3.76E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 49 | >1.8 | <6.5 | 378697 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 1 | >4.5 | <6.5 | 3178 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 28 | >3.2 | <6.5 | 192474 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 59 | >1.8 | <4.5 | 375519 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 33 | >1.1 | <3.2 | 203464 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 63 | >1.1 | <4.5 | 392760 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 89 | >1.8 | <6.5 | 378971 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 33 | | | | | |
| TPHD (8-36) | 25 | | | | | |
| TPHDX (8-36) | 25 | | | | | |
| Motor Oil (8-36 | 37 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\024F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 24 |
| Sample Name | : 100ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 05:21 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:17 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

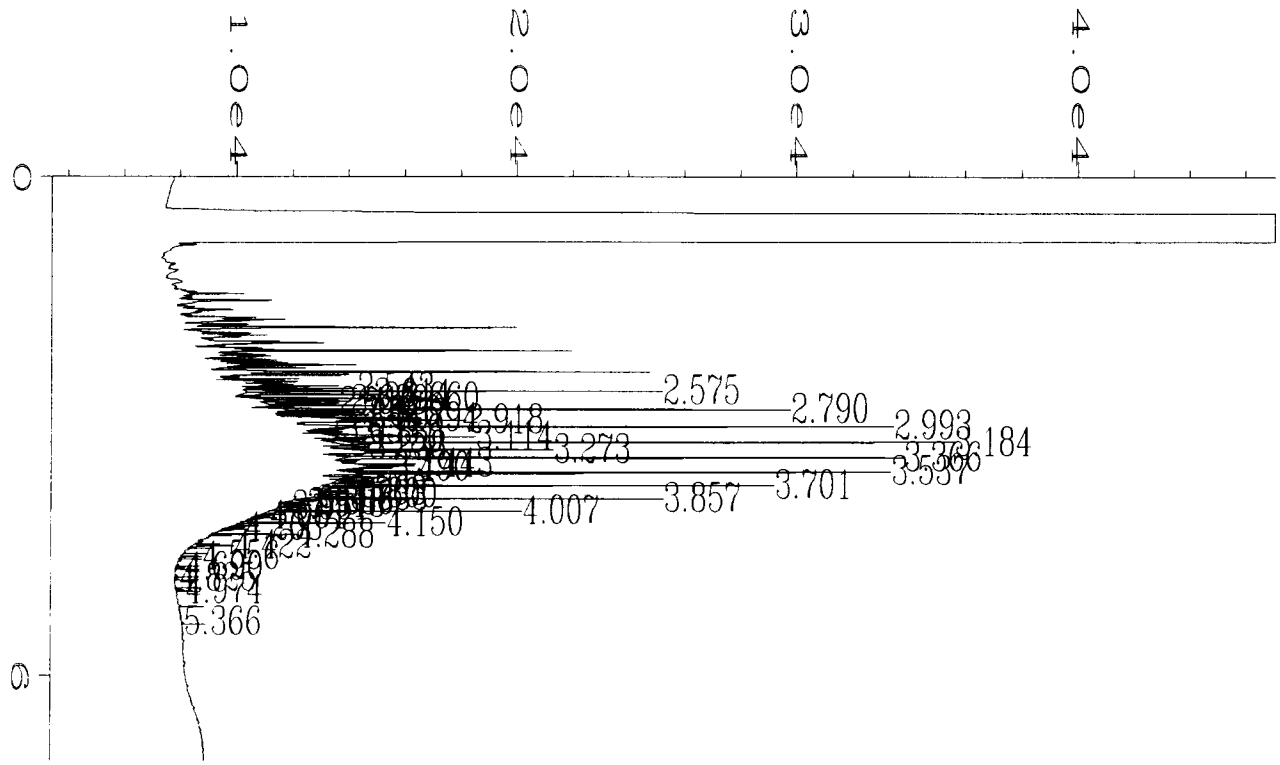
Data File Name : C:\HPCHEM\1\DATA\01-14-15\024F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 100ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:21 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\024F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06778E+009 | 8.03437E+007 | BVA | 0.222 | 99.9278 |
| 2 | 1.452 | 34353 | 4105 | PVA | 0.139 | 0.0032 |
| 3 | 2.502 | 367021 | 27824 | VVA | 0.220 | 0.0343 |
| 4 | 3.852 | 368996 | 25800 | VV + | 0.000 | 0.0345 |
| 5 | 6.762 | 1319 | 131 | PB + | 0.000 | 0.0001 |

Total area = 1.06855E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\024R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 100ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:21 PM
Report Created on: 15 Jan 15 10:17 AM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\024R0701.D

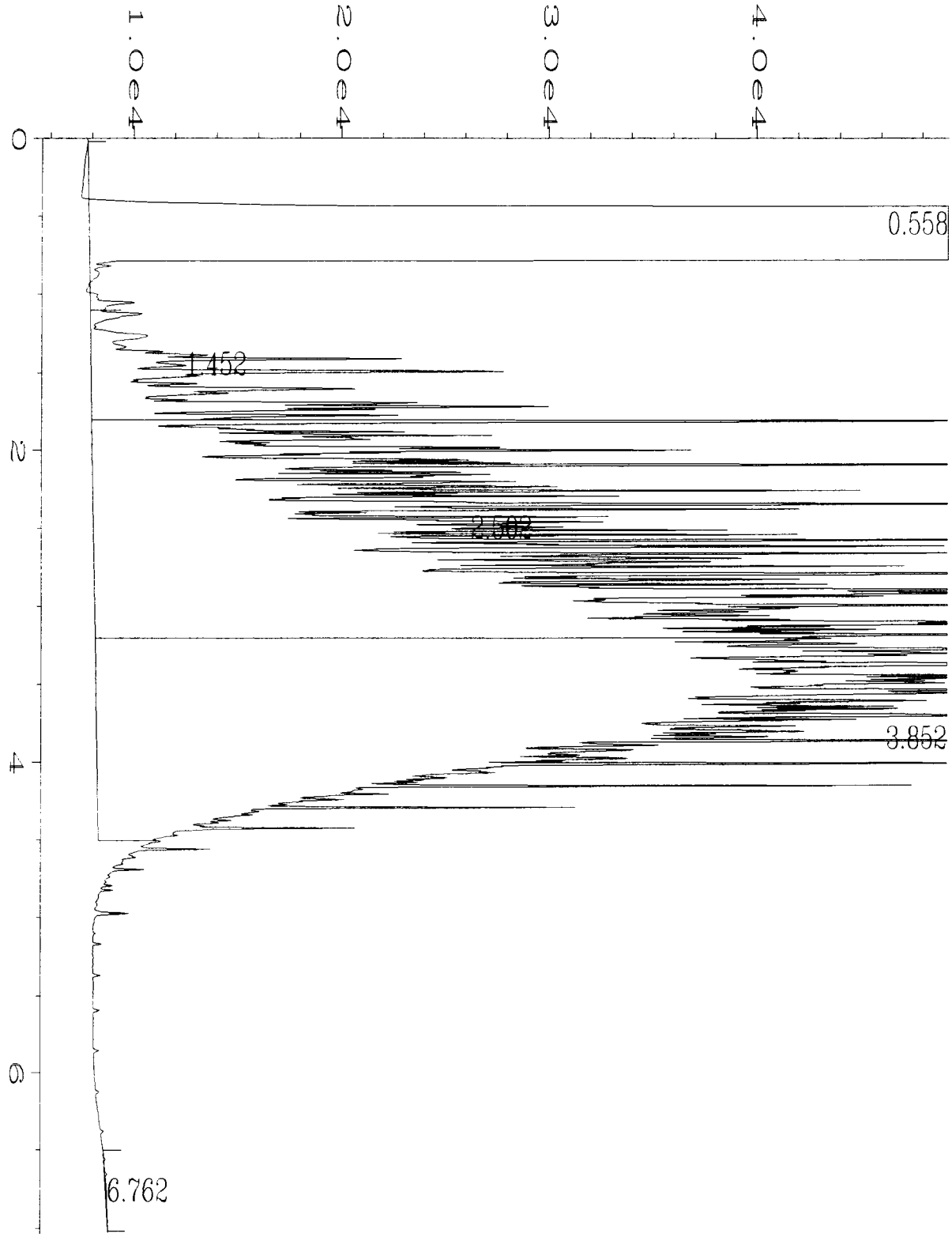
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.543 | 3001 | 4218 | BBAS | 0.012 | 2.2314 |
| 2 | 2.575 | 8479 | 15951 | BB | 0.009 | 6.3046 |
| 3 | 2.614 | 5021 | 5004 | BB | 0.017 | 3.7330 |
| 4 | 2.660 | 2899 | 5169 | BB | 0.009 | 2.1553 |
| 5 | 2.689 | 1833 | 3148 | BB | 0.010 | 1.3626 |
| 6 | 2.715 | 2591 | 2753 | BB | 0.016 | 1.9266 |
| 7 | 2.790 | 9847 | 18696 | BB | 0.009 | 7.3215 |
| 8 | 2.826 | 1543 | 2763 | BB | 0.009 | 1.1475 |
| 9 | 2.857 | 1346 | 3371 | BB | 0.007 | 1.0009 |
| 10 | 2.894 | 2081 | 2142 | BB | 0.016 | 1.5470 |
| 11 | 2.918 | 2602 | 4589 | BB | 0.009 | 1.9345 |
| 12 | 2.993 | 6363 | 20920 | BB | 0.005 | 4.7315 |
| 13 | 3.033 | 1085 | 916 | BB | 0.020 | 0.8070 |
| 14 | 3.114 | 5430 | 5301 | BB | 0.017 | 4.0377 |
| 15 | 3.150 | 901 | 1350 | BB | 0.011 | 0.6700 |
| 16 | 3.184 | 11432 | 23403 | BB | 0.008 | 8.5003 |
| 17 | 3.238 | 895 | 1195 | BB | 0.012 | 0.6657 |
| 18 | 3.273 | 4381 | 7435 | BB | 0.010 | 3.2577 |
| 19 | 3.366 | 15491 | 20990 | BB | 0.015 | 11.5183 |
| 20 | 3.443 | 2261 | 2065 | BB | 0.018 | 1.6814 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.490 | 1373 | 1262 | BB | 0.018 | 1.0212 |
| 22 | 3.537 | 8616 | 19926 | BB | 0.007 | 6.4061 |
| 23 | 3.701 | 10583 | 17025 | BB | 0.010 | 7.8690 |
| 24 | 3.768 | 1183 | 980 | BB | 0.020 | 0.8799 |
| 25 | 3.800 | 1043 | 1588 | BB | 0.011 | 0.7755 |
| 26 | 3.833 | 897 | 1316 | BB | 0.011 | 0.6668 |
| 27 | 3.857 | 5732 | 13396 | BB | 0.007 | 4.2620 |
| 28 | 3.886 | 937 | 1076 | BB | 0.015 | 0.6970 |
| 29 | 3.918 | 826 | 891 | BB | 0.015 | 0.6141 |
| 30 | 3.951 | 237 | 394 | BB | 0.010 | 0.1759 |
| 31 | 4.007 | 6027 | 9351 | BB | 0.011 | 4.4814 |
| 32 | 4.061 | 522 | 483 | BB | 0.018 | 0.3881 |
| 33 | 4.150 | 2718 | 5449 | BB | 0.012 | 2.0209 |
| 34 | 4.203 | 406 | 627 | BB | 0.011 | 0.3019 |
| 35 | 4.288 | 1838 | 3449 | BB | 0.009 | 1.3664 |
| 36 | 4.422 | 932 | 1569 | BB | 0.012 | 0.6931 |
| 37 | 4.556 | 451 | 798 | BB | 0.012 | 0.3356 |
| 38 | 4.690 | 206 | 359 | BB | 0.010 | 0.1534 |
| 39 | 4.825 | 119 | 160 | BB | 0.016 | 0.0883 |
| 40 | 4.974 | 248 | 338 | BB | 0.012 | 0.1841 |
| 41 | 5.366 | 114 | 84 | BB | 0.023 | 0.0848 |

Total area = 134491

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\024F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 24 | |
| Sample Name | : 100ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 17:21 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:17 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 0 | >4.53 | <4.60 | 451 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 1 | >3.73 | <3.79 | 1183 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 96 | >1.8 | <4.5 | 7.35E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 95 | >1.8 | <6.5 | 734382 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 0 | >4.5 | <6.5 | -452 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 54 | >3.2 | <6.5 | 367361 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 115 | >1.8 | <4.5 | 734834 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 66 | >1.1 | <3.2 | 401374 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 123 | >1.1 | <4.5 | 769187 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 172 | >1.8 | <6.5 | 734383 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 66 | | | | | |
| TPHD (8-36) | 48 | | | | | |
| TPHDX (8-36) | 47 | | | | | |
| Motor Oil (8-36 | 71 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\025F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 25 |
| Sample Name | : 500ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 05:31 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:18 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

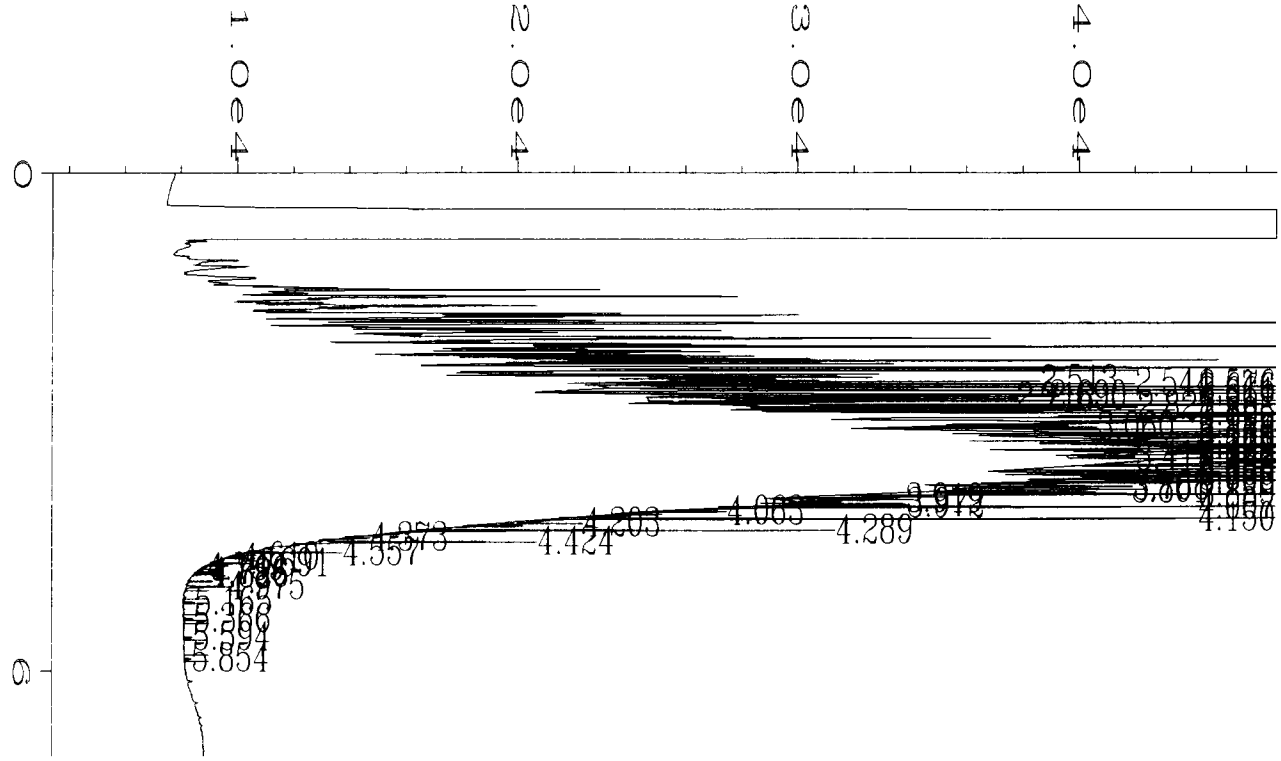
Data File Name : C:\HPCHEM\1\DATA\01-14-15\025F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 500ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:31 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\025F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.10508E+009 | 8.14456E+007 | BVA | 0.226 | 99.6134 |
| 2 | 1.452 | 199562 | 22092 | VVA | 0.151 | 0.0180 |
| 3 | 2.502 | 1990604 | 144037 | VV + | 0.000 | 0.1794 |
| 4 | 3.852 | 2096930 | 143320 | VV + | 0.000 | 0.1890 |
| 5 | 6.762 | 1190 | 125 | PB + | 0.000 | 0.0001 |

Total area = 1.10937E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\025R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 500ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:31 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\025R0701.D

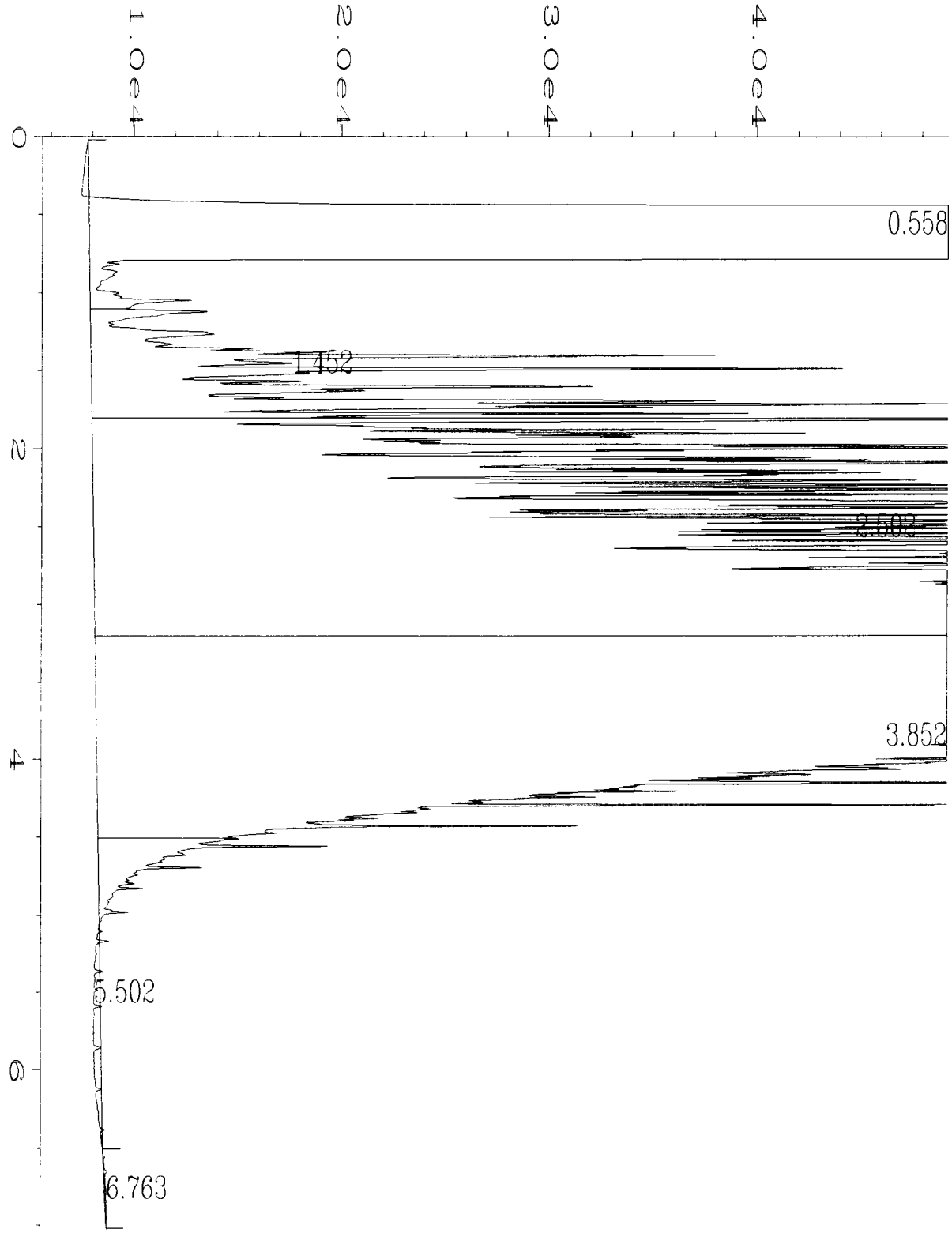
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.513 | 6354 | 15050 | BBAS | 0.007 | 0.9171 |
| 2 | 2.544 | 9455 | 20034 | BB | 0.008 | 1.3648 |
| 3 | 2.576 | 41288 | 90801 | BB | 0.008 | 5.9596 |
| 4 | 2.616 | 24747 | 28496 | BB | 0.014 | 3.5721 |
| 5 | 2.661 | 16314 | 27036 | BB | 0.010 | 2.3548 |
| 6 | 2.690 | 9872 | 13982 | BB | 0.012 | 1.4249 |
| 7 | 2.716 | 15550 | 13504 | BB | 0.020 | 2.2445 |
| 8 | 2.792 | 57160 | 86409 | BB | 0.011 | 8.2507 |
| 9 | 2.827 | 9206 | 13656 | BB | 0.011 | 1.3288 |
| 10 | 2.895 | 6671 | 12158 | BB | 0.010 | 0.9629 |
| 11 | 2.995 | 18216 | 98242 | BB | 0.003 | 2.6294 |
| 12 | 3.060 | 8432 | 7326 | BB | 0.019 | 1.2171 |
| 13 | 3.116 | 31497 | 29494 | BB | 0.018 | 4.5464 |
| 14 | 3.151 | 5248 | 8848 | BB | 0.010 | 0.7574 |
| 15 | 3.186 | 56501 | 122605 | BB | 0.008 | 8.1555 |
| 16 | 3.238 | 2538 | 5413 | BB | 0.008 | 0.3663 |
| 17 | 3.275 | 23380 | 37075 | BB | 0.011 | 3.3747 |
| 18 | 3.301 | 5258 | 8793 | BB | 0.010 | 0.7590 |
| 19 | 3.368 | 73338 | 114326 | BB | 0.011 | 10.5858 |
| 20 | 3.417 | 3072 | 2475 | BB | 0.021 | 0.4434 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.492 | 17775 | 8322 | BB | 0.036 | 2.5657 |
| 22 | 3.539 | 75700 | 102867 | BB | 0.019 | 10.9268 |
| 23 | 3.606 | 7400 | 9563 | BB | 0.013 | 1.0682 |
| 24 | 3.658 | 4008 | 6724 | BB | 0.010 | 0.5786 |
| 25 | 3.703 | 41485 | 86410 | BB | 0.008 | 5.9880 |
| 26 | 3.768 | 4119 | 5632 | BB | 0.012 | 0.5946 |
| 27 | 3.801 | 5222 | 6689 | BB | 0.013 | 0.7538 |
| 28 | 3.859 | 41625 | 65568 | BB | 0.011 | 6.0082 |
| 29 | 3.919 | 4451 | 4426 | BB | 0.017 | 0.6425 |
| 30 | 3.972 | 4104 | 4346 | BB | 0.016 | 0.5924 |
| 31 | 4.007 | 21686 | 45216 | BB | 0.008 | 3.1302 |
| 32 | 4.063 | 2720 | 3006 | BB | 0.015 | 0.3926 |
| 33 | 4.150 | 14630 | 27432 | BB | 0.009 | 2.1117 |
| 34 | 4.203 | 3530 | 3409 | BB | 0.017 | 0.5095 |
| 35 | 4.289 | 8208 | 16111 | BB | 0.008 | 1.1847 |
| 36 | 4.373 | 1001 | 797 | BB | 0.021 | 0.1445 |
| 37 | 4.424 | 4089 | 8167 | BB | 0.011 | 0.5902 |
| 38 | 4.557 | 2111 | 3641 | BB | 0.013 | 0.3047 |
| 39 | 4.610 | 448 | 522 | BB | 0.014 | 0.0647 |
| 40 | 4.691 | 1049 | 1546 | BB | 0.015 | 0.1515 |
| 41 | 4.739 | 149 | 196 | BB | 0.013 | 0.0215 |
| 42 | 4.796 | 409 | 539 | BB | 0.013 | 0.0591 |
| 43 | 4.826 | 412 | 663 | BB | 0.010 | 0.0595 |
| 44 | 4.975 | 1299 | 1701 | BB | 0.012 | 0.1875 |
| 45 | 5.165 | 291 | 430 | BB | 0.011 | 0.0421 |
| 46 | 5.366 | 285 | 368 | BB | 0.013 | 0.0411 |
| 47 | 5.594 | 248 | 314 | BB | 0.013 | 0.0357 |
| 48 | 5.854 | 245 | 260 | BB | 0.015 | 0.0353 |

Total area = 692798

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\025F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 25 | |
| Sample Name | : 500ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 17:31 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:18 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 2 | >4.53 | <4.60 | 2111 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 4 | >3.73 | <3.79 | 4119 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 533 | >1.8 | <4.5 | 4.08E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 527 | >1.8 | <6.5 | 4081303 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 0 | >4.5 | <6.5 | -2112 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 307 | >3.2 | <6.5 | 2090699 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 641 | >1.8 | <4.5 | 4083415 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 361 | >1.1 | <3.2 | 2190166 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 682 | >1.1 | <4.5 | 4282977 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 956 | >1.8 | <6.5 | 4081304 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 361 | | | | | |
| TPHD (8-36) | 273 | | | | | |
| TPHDX (8-36) | 270 | | | | | |
| Motor Oil (8-36 | 405 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\026F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 26 |
| Sample Name | : 1000ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 05:42 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:18 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

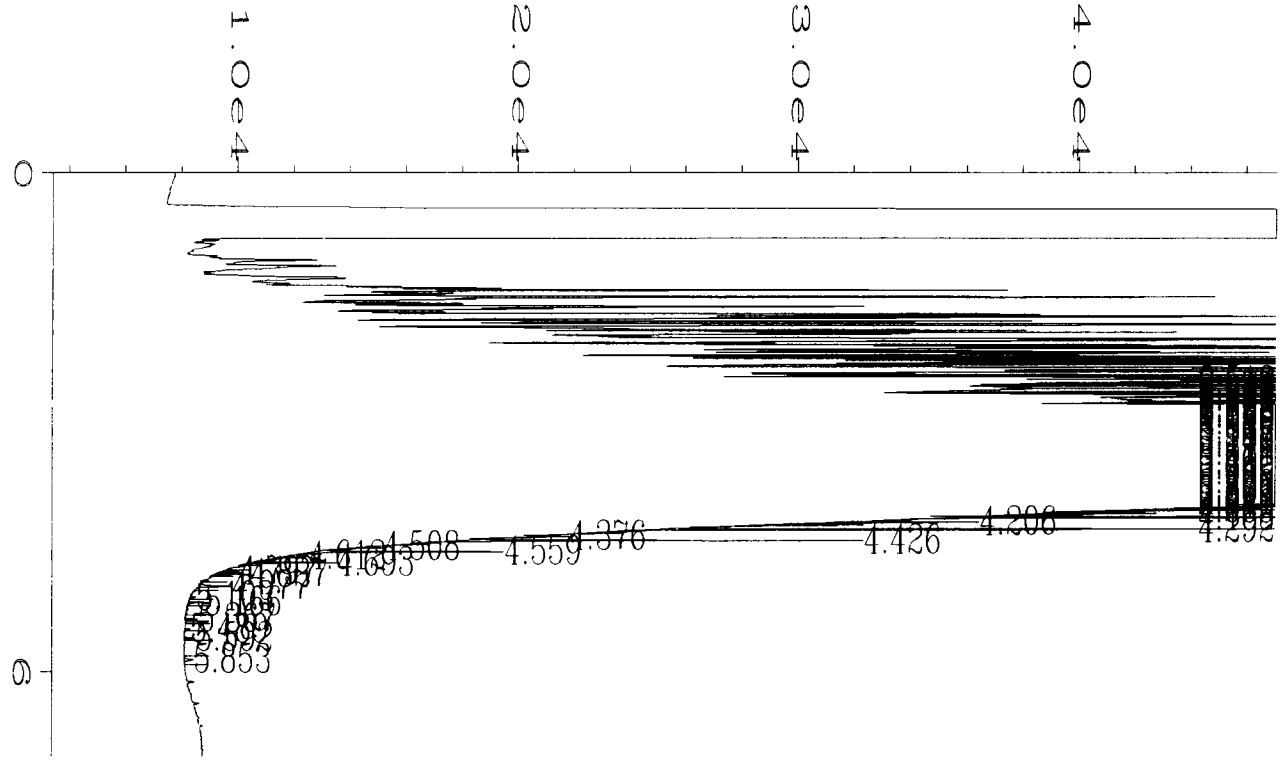
Data File Name : C:\HPCHEM\1\DATA\01-14-15\026F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:42 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\026F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.07294E+009 | 8.02888E+007 | BVA | 0.223 | 99.1972 |
| 2 | 1.452 | 411468 | 43443 | VV + | 0.000 | 0.0380 |
| 3 | 2.502 | 3995280 | 279766 | VV + | 0.000 | 0.3694 |
| 4 | 3.852 | 4223358 | 277986 | VVA | 0.253 | 0.3905 |
| 5 | 5.502 | 51737 | 10933 | VV + | 0.000 | 0.0048 |
| 6 | 6.763 | 1501 | 141 | PB + | 0.000 | 0.0001 |

Total area = 1.08162E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\026R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:42 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\026R0701.D

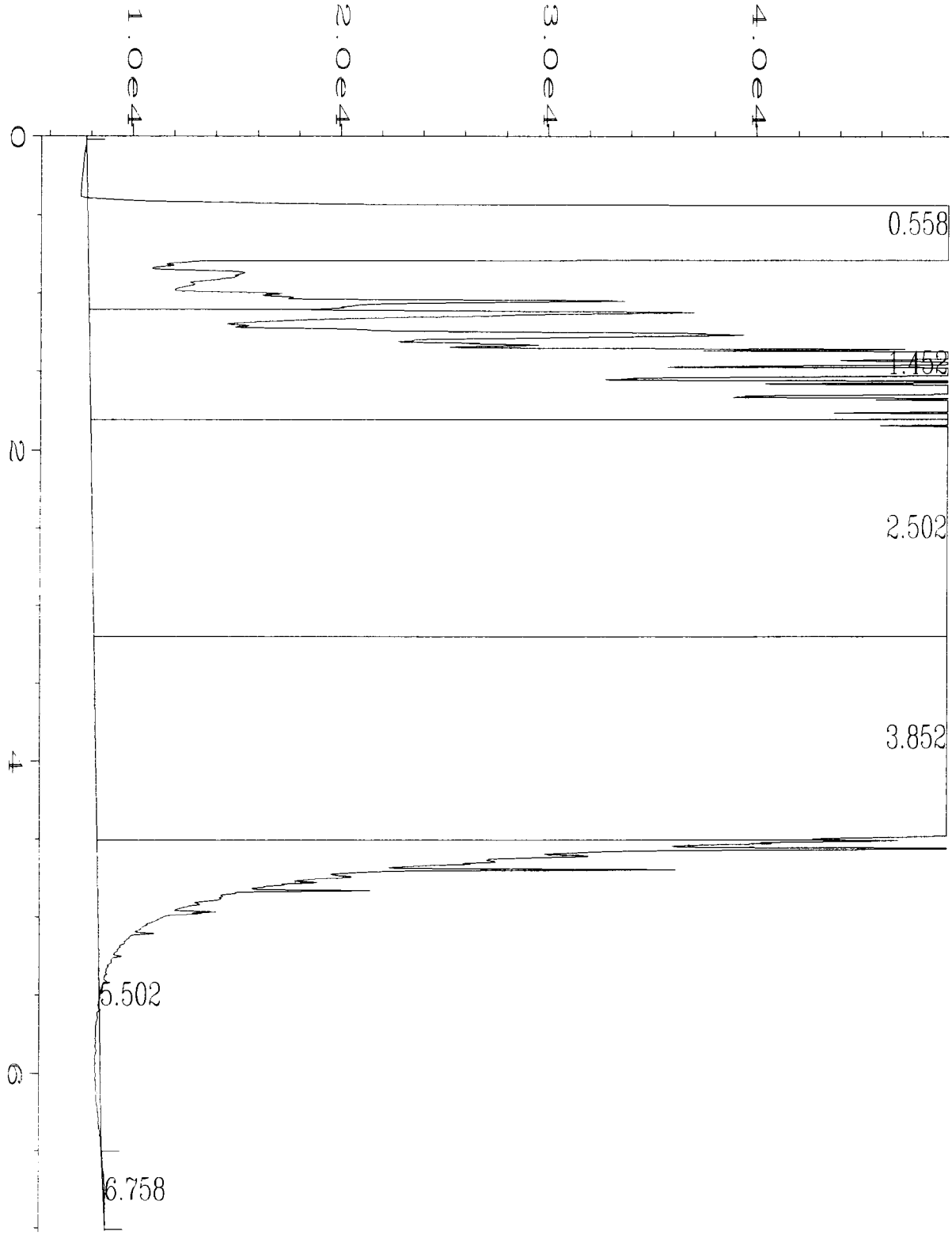
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.513 | 12834 | 30893 | BBAS | 0.007 | 0.9064 |
| 2 | 2.544 | 19200 | 39596 | BB | 0.008 | 1.3560 |
| 3 | 2.577 | 84185 | 167257 | BB | 0.008 | 5.9459 |
| 4 | 2.616 | 49807 | 53712 | BB | 0.019 | 3.5178 |
| 5 | 2.662 | 32138 | 50295 | BB | 0.011 | 2.2699 |
| 6 | 2.691 | 19259 | 29034 | BB | 0.011 | 1.3603 |
| 7 | 2.716 | 31511 | 27901 | BB | 0.018 | 2.2256 |
| 8 | 2.793 | 104053 | 186086 | BB | 0.009 | 7.3491 |
| 9 | 2.828 | 12905 | 25868 | BB | 0.008 | 0.9115 |
| 10 | 2.859 | 12600 | 30769 | BB | 0.007 | 0.8899 |
| 11 | 2.895 | 21118 | 30504 | BB | 0.012 | 1.4915 |
| 12 | 2.920 | 24453 | 49942 | BB | 0.008 | 1.7271 |
| 13 | 2.996 | 62983 | 206686 | BB | 0.005 | 4.4484 |
| 14 | 3.060 | 9043 | 9691 | BB | 0.016 | 0.6387 |
| 15 | 3.117 | 54773 | 53013 | BB | 0.017 | 3.8686 |
| 16 | 3.153 | 10830 | 18728 | BB | 0.010 | 0.7649 |
| 17 | 3.188 | 105031 | 215025 | BB | 0.008 | 7.4182 |
| 18 | 3.240 | 9847 | 12328 | BB | 0.013 | 0.6955 |
| 19 | 3.278 | 46102 | 70297 | BB | 0.011 | 3.2562 |
| 20 | 3.371 | 157370 | 213302 | BB | 0.014 | 11.1148 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.463 | 22393 | 17250 | BB | 0.022 | 1.5816 |
| 22 | 3.495 | 14079 | 12519 | BB | 0.019 | 0.9944 |
| 23 | 3.542 | 148894 | 199776 | BB | 0.020 | 10.5162 |
| 24 | 3.609 | 21925 | 20234 | BB | 0.018 | 1.5486 |
| 25 | 3.705 | 94145 | 171840 | BB | 0.009 | 6.6494 |
| 26 | 3.770 | 12184 | 9550 | BB | 0.019 | 0.8605 |
| 27 | 3.803 | 10542 | 13528 | BB | 0.013 | 0.7446 |
| 28 | 3.837 | 7635 | 12115 | BB | 0.011 | 0.5392 |
| 29 | 3.861 | 56124 | 121431 | BB | 0.008 | 3.9639 |
| 30 | 3.890 | 9726 | 10667 | BB | 0.015 | 0.6870 |
| 31 | 3.921 | 10117 | 9876 | BB | 0.017 | 0.7145 |
| 32 | 3.973 | 8577 | 8227 | BB | 0.017 | 0.6058 |
| 33 | 4.010 | 43316 | 89070 | BB | 0.008 | 3.0594 |
| 34 | 4.065 | 6296 | 6783 | BB | 0.016 | 0.4447 |
| 35 | 4.153 | 27584 | 56073 | BB | 0.012 | 1.9482 |
| 36 | 4.206 | 3287 | 5516 | BB | 0.010 | 0.2322 |
| 37 | 4.292 | 17346 | 30867 | BB | 0.009 | 1.2251 |
| 38 | 4.376 | 1606 | 1360 | BB | 0.020 | 0.1134 |
| 39 | 4.426 | 7550 | 14933 | BB | 0.011 | 0.5332 |
| 40 | 4.508 | 1287 | 717 | BB | 0.030 | 0.0909 |
| 41 | 4.559 | 4302 | 7172 | BB | 0.015 | 0.3039 |
| 42 | 4.612 | 704 | 785 | BB | 0.015 | 0.0497 |
| 43 | 4.693 | 2002 | 3116 | BB | 0.017 | 0.1414 |
| 44 | 4.797 | 442 | 650 | BB | 0.011 | 0.0312 |
| 45 | 4.827 | 762 | 1301 | BB | 0.010 | 0.0538 |
| 46 | 4.977 | 1058 | 1197 | BB | 0.017 | 0.0747 |
| 47 | 5.103 | 121 | 207 | BB | 0.010 | 0.0085 |
| 48 | 5.166 | 470 | 608 | BB | 0.015 | 0.0332 |
| 49 | 5.367 | 373 | 467 | BB | 0.013 | 0.0263 |
| 50 | 5.489 | 152 | 193 | BB | 0.013 | 0.0107 |
| 51 | 5.592 | 357 | 411 | BB | 0.014 | 0.0252 |
| 52 | 5.853 | 452 | 333 | BB | 0.021 | 0.0319 |

Total area = 1415853

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\026F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 26 | |
| Sample Name | : 1000ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 17:42 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:18 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 5 | >4.53 | <4.60 | 4302 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 12 | >3.73 | <3.79 | 12184 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 1072 | >1.8 | <4.5 | 8.21E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 1065 | >1.8 | <6.5 | 8253888 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 9 | >4.5 | <6.5 | 47434 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 626 | >3.2 | <6.5 | 4258608 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 1288 | >1.8 | <4.5 | 8206454 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 726 | >1.1 | <3.2 | 4406748 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 1372 | >1.1 | <4.5 | 8617922 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1934 | >1.8 | <6.5 | 8253889 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 726 | | | | | |
| TPHD (8-36) | 556 | | | | | |
| TPHDX (8-36) | 550 | | | | | |
| Motor Oil (8-36 | 825 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\027F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 27 |
| Sample Name | : 5000ppm dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 05:53 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:18 AM | Analysis Method | : DX1.MTH |

==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\027F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 5000ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:53 PM
Report Created on: 15 Jan 15 10:18 AM

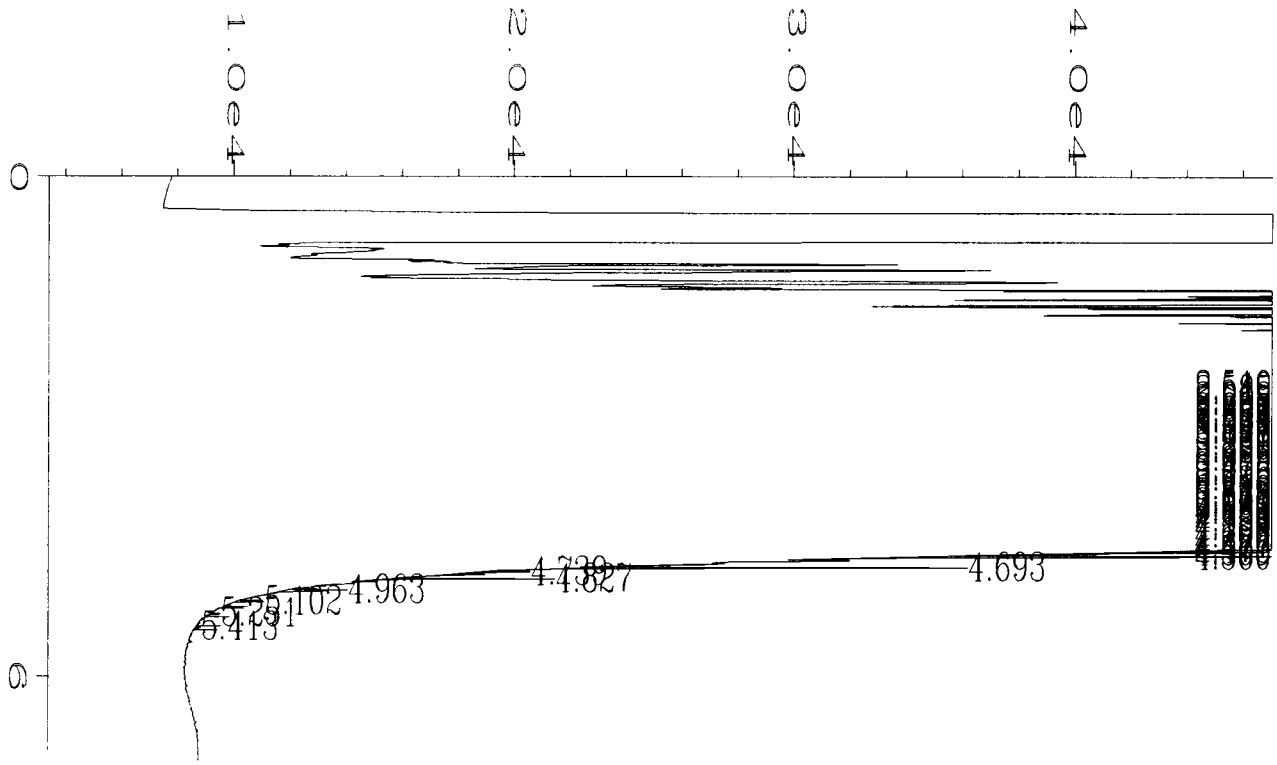
Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\027F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.10231E+009 | 8.19486E+007 | BVA | 0.224 | 96.1740 |
| 2 | 1.452 | 2124221 | 212407 | VVA | 0.167 | 0.1853 |
| 3 | 2.502 | 1.96772E+007 | 1020401 | VV + | 0.000 | 1.7168 |
| 4 | 3.852 | 2.16041E+007 | 1133379 | VVA | 0.318 | 1.8849 |
| 5 | 5.502 | 445076 | 59786 | VV + | 0.000 | 0.0388 |
| 6 | 6.758 | 1257 | 96 | PB + | 0.000 | 0.0001 |

Total area = 1.14616E+009

==========




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\027R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 5000ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:53 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\027R0701.D

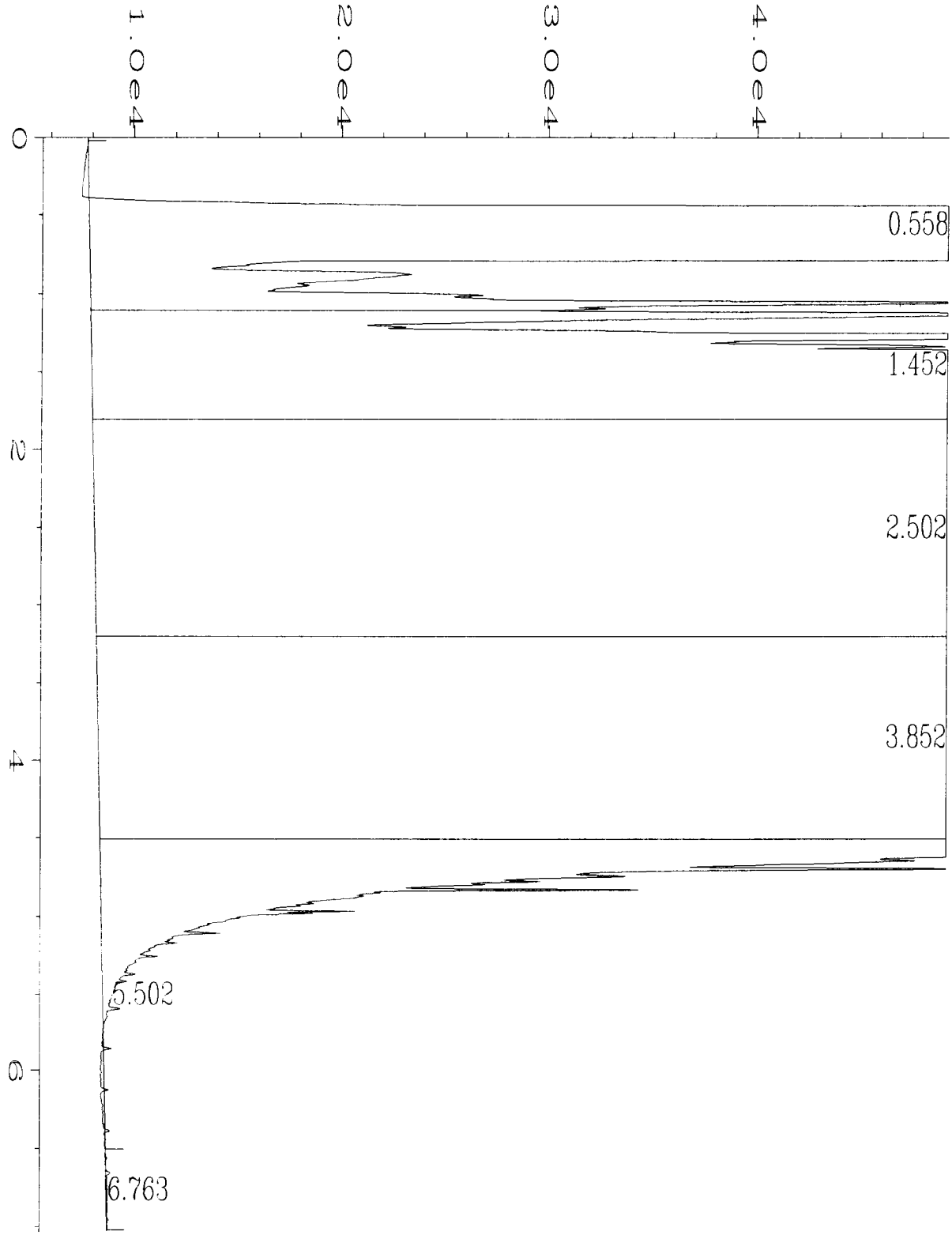
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.519 | 21353 | 130118 | BBAS | 0.003 | 0.3104 |
| 2 | 2.549 | 93120 | 202552 | BB | 0.008 | 1.3536 |
| 3 | 2.585 | 690816 | 773586 | BB | 0.015 | 10.0419 |
| 4 | 2.668 | 158183 | 227549 | BB | 0.012 | 2.2994 |
| 5 | 2.697 | 85700 | 130545 | BB | 0.011 | 1.2457 |
| 6 | 2.722 | 110698 | 105087 | BB | 0.018 | 1.6091 |
| 7 | 2.802 | 482680 | 825558 | BB | 0.010 | 7.0163 |
| 8 | 2.835 | 95506 | 138043 | BB | 0.012 | 1.3883 |
| 9 | 2.867 | 70380 | 147557 | BB | 0.008 | 1.0231 |
| 10 | 2.904 | 75940 | 94165 | BB | 0.014 | 1.1039 |
| 11 | 2.929 | 94175 | 210746 | BB | 0.007 | 1.3689 |
| 12 | 3.007 | 220852 | 731811 | BB | 0.005 | 3.2104 |
| 13 | 3.045 | 19194 | 41441 | BB | 0.008 | 0.2790 |
| 14 | 3.070 | 51344 | 76775 | BB | 0.011 | 0.7463 |
| 15 | 3.127 | 420366 | 285953 | BB | 0.022 | 6.1105 |
| 16 | 3.200 | 572017 | 811304 | BB | 0.012 | 8.3150 |
| 17 | 3.250 | 46159 | 43190 | BB | 0.018 | 0.6710 |
| 18 | 3.288 | 224652 | 317044 | BB | 0.012 | 3.2656 |
| 19 | 3.385 | 735146 | 711192 | BB | 0.016 | 10.6863 |
| 20 | 3.473 | 95982 | 100310 | BB | 0.016 | 1.3952 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.505 | 71423 | 50137 | BB | 0.024 | 1.0382 |
| 22 | 3.556 | 720596 | 791916 | BB | 0.021 | 10.4748 |
| 23 | 3.620 | 115053 | 105999 | BB | 0.018 | 1.6724 |
| 24 | 3.719 | 480113 | 748950 | BB | 0.011 | 6.9790 |
| 25 | 3.779 | 68724 | 50729 | BB | 0.023 | 0.9990 |
| 26 | 3.812 | 45820 | 60054 | BB | 0.013 | 0.6660 |
| 27 | 3.847 | 33991 | 48077 | BB | 0.012 | 0.4941 |
| 28 | 3.872 | 274667 | 568568 | BB | 0.008 | 3.9926 |
| 29 | 3.900 | 42937 | 49609 | BB | 0.014 | 0.6241 |
| 30 | 3.931 | 49282 | 50106 | BB | 0.016 | 0.7164 |
| 31 | 3.982 | 45521 | 44877 | BB | 0.017 | 0.6617 |
| 32 | 4.020 | 208017 | 407562 | BB | 0.012 | 3.0238 |
| 33 | 4.104 | 27499 | 12479 | BB | 0.037 | 0.3997 |
| 34 | 4.160 | 128048 | 266750 | BB | 0.008 | 1.8613 |
| 35 | 4.209 | 24812 | 30160 | BB | 0.015 | 0.3607 |
| 36 | 4.295 | 80805 | 143495 | BB | 0.009 | 1.1746 |
| 37 | 4.377 | 13409 | 6839 | BB | 0.033 | 0.1949 |
| 38 | 4.427 | 37604 | 75206 | BB | 0.011 | 0.5466 |
| 39 | 4.473 | 4409 | 5446 | BB | 0.013 | 0.0641 |
| 40 | 4.509 | 4955 | 6330 | BB | 0.013 | 0.0720 |
| 41 | 4.560 | 21205 | 35358 | BB | 0.016 | 0.3082 |
| 42 | 4.693 | 7214 | 14443 | BB | 0.008 | 0.1049 |
| 43 | 4.739 | 1837 | 1684 | BB | 0.017 | 0.0267 |
| 44 | 4.827 | 3959 | 6241 | BB | 0.014 | 0.0576 |
| 45 | 4.963 | 2210 | 2182 | BB | 0.017 | 0.0321 |
| 46 | 5.102 | 658 | 1066 | BB | 0.010 | 0.0096 |
| 47 | 5.251 | 161 | 392 | BB | 0.014 | 0.0023 |
| 48 | 5.413 | 171 | 198 | BB | 0.017 | 0.0025 |

Total area = 6879364

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\027F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 27 | |
| Sample Name | : 5000ppm dx 44-94 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 7 | |
| Acquired on | 1/14/15 | 17:53 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:18 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 23 | >4.53 | <4.60 | 21205 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 69 | >3.73 | <3.79 | 68724 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 5382 | >1.8 | <4.5 | 4.12E+07 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 5374 | >1.8 | <6.5 | 41636446 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 82 | >4.5 | <6.5 | 423870 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 3230 | >3.2 | <6.5 | 21959246 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 6467 | >1.8 | <4.5 | 41212576 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 3589 | >1.1 | <3.2 | 21801421 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 6902 | >1.1 | <4.5 | 43336797 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 9755 | >1.8 | <6.5 | 41636447 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 3589 | | | | | |
| TPHD (8-36) | 2868 | | | | | |
| TPHDX (8-36) | 2834 | | | | | |
| Motor Oil (8-36 | 4256 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\028F0701.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 28 |
| Sample Name | : 10000 dx 44-94 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 7 |
| Acquired on | : 14 Jan 15 06:03 PM | Instrument Method: | DX1.MTH |
| Report Created on: | 15 Jan 15 10:18 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

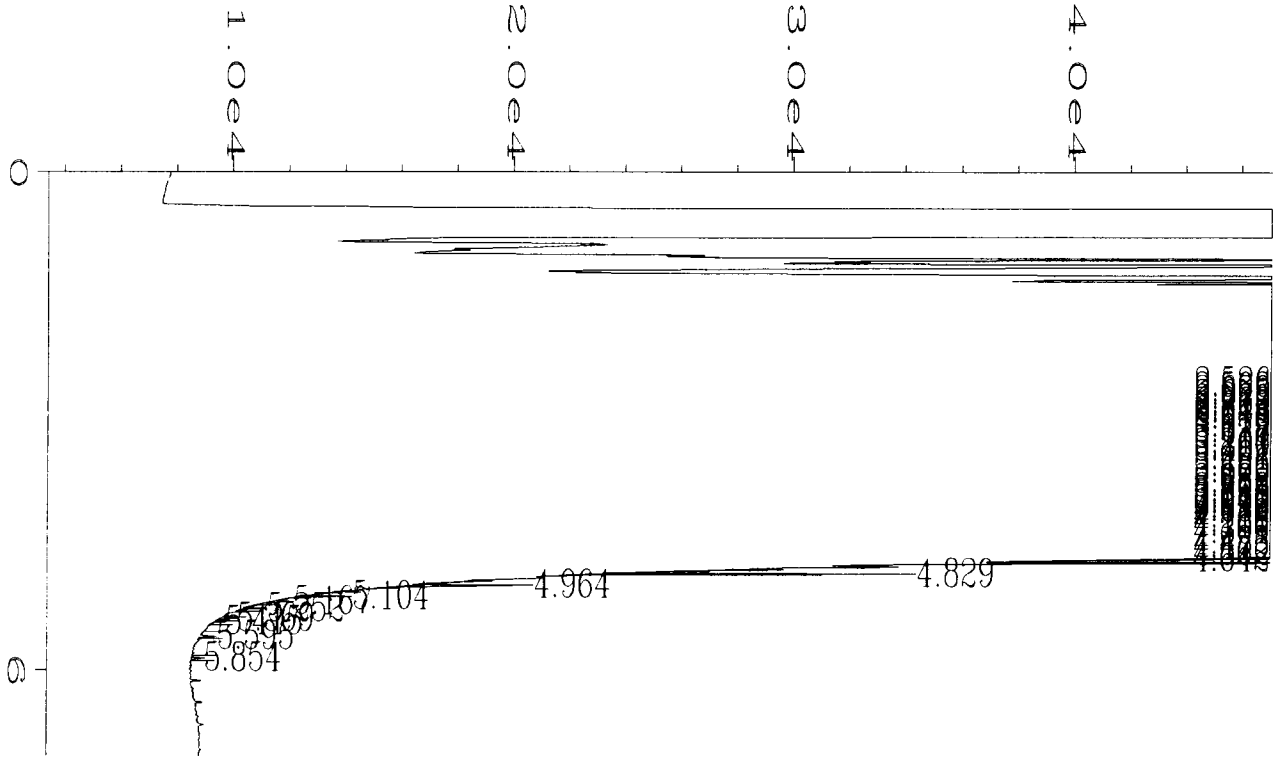
Data File Name : C:\HPCHEM\1\DATA\01-14-15\028F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 10000 dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 06:03 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\028F0701.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.10339E+009 | 8.23236E+007 | BVA | 0.223 | 92.7257 |
| 2 | 1.452 | 4185822 | 411434 | VVA | 0.170 | 0.3518 |
| 3 | 2.502 | 3.78786E+007 | 1809989 | VV + | 0.000 | 3.1832 |
| 4 | 3.852 | 4.35489E+007 | 1905955 | VVA | 0.381 | 3.6597 |
| 5 | 5.502 | 945529 | 116257 | VV + | 0.000 | 0.0795 |
| 6 | 6.763 | 1085 | 197 | VB + | 0.000 | 0.0001 |

Total area = 1.18995E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\028R0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 10000 dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 06:03 PM
Report Created on: 15 Jan 15 10:18 AM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 7
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\028R0701.D

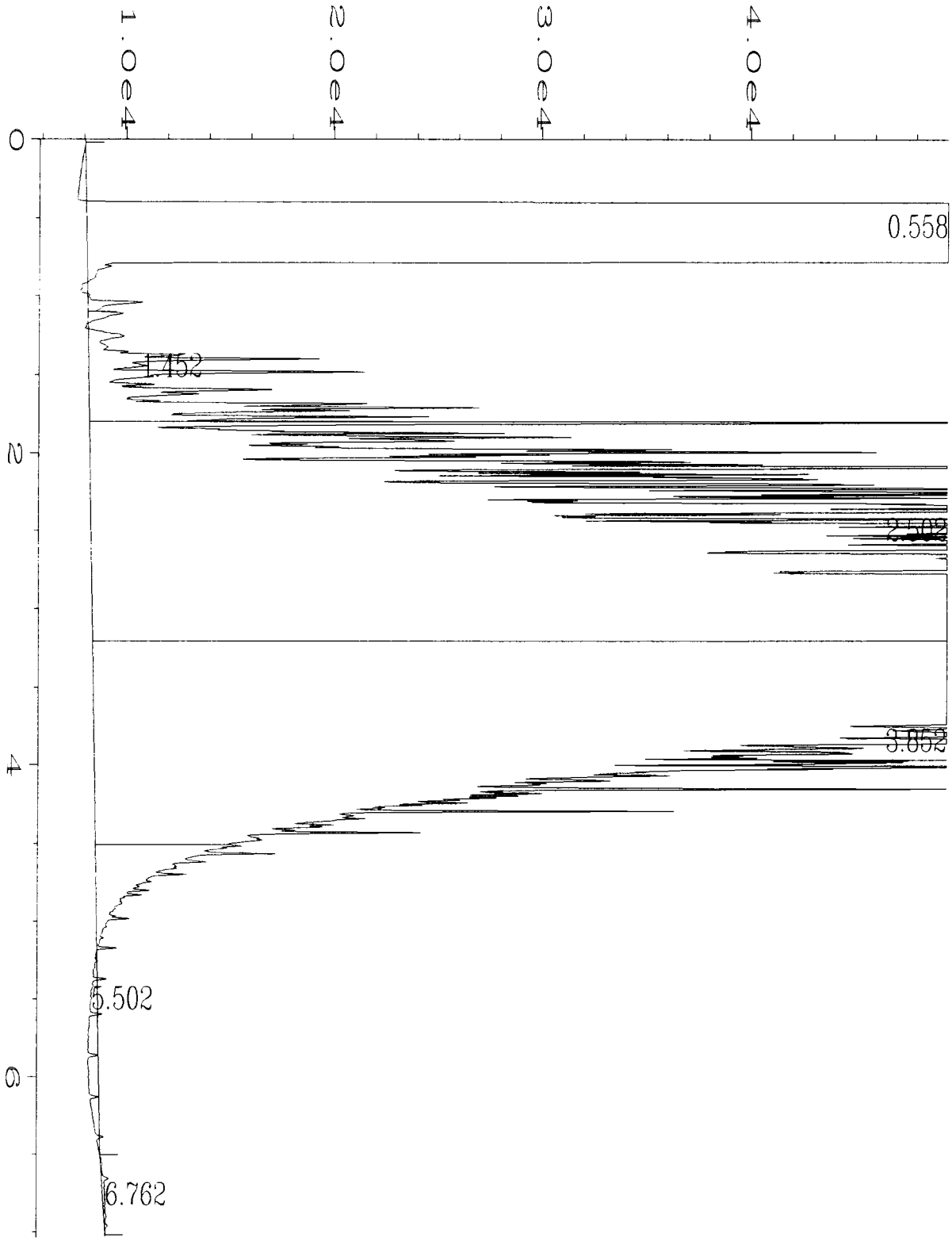
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.526 | 157789 | 222113 | BBAS | 0.012 | 1.3213 |
| 2 | 2.593 | 868940 | 1111732 | BB | 0.013 | 7.2761 |
| 3 | 2.629 | 409207 | 450325 | BB | 0.015 | 3.4265 |
| 4 | 2.675 | 325482 | 423467 | BB | 0.013 | 2.7254 |
| 5 | 2.730 | 274348 | 169930 | BB | 0.027 | 2.2973 |
| 6 | 2.760 | 214019 | 335019 | BB | 0.011 | 1.7921 |
| 7 | 2.813 | 935299 | 1319747 | BB | 0.012 | 7.8317 |
| 8 | 2.844 | 185421 | 242279 | BB | 0.013 | 1.5526 |
| 9 | 2.915 | 245063 | 191027 | BB | 0.022 | 2.0520 |
| 10 | 3.019 | 354968 | 1232842 | BB | 0.009 | 2.9723 |
| 11 | 3.078 | 51565 | 91633 | BB | 0.009 | 0.4318 |
| 12 | 3.137 | 757670 | 458949 | BB | 0.027 | 6.3444 |
| 13 | 3.214 | 1087152 | 1208379 | BB | 0.015 | 9.1033 |
| 14 | 3.260 | 62769 | 80040 | BB | 0.014 | 0.5256 |
| 15 | 3.301 | 379241 | 515045 | BB | 0.012 | 3.1756 |
| 16 | 3.401 | 1329448 | 1196167 | BB | 0.017 | 11.1322 |
| 17 | 3.486 | 671705 | 255136 | BB | 0.044 | 5.6245 |
| 18 | 3.570 | 597408 | 853632 | BB | 0.012 | 5.0024 |
| 19 | 3.682 | 190855 | 157805 | BB | 0.020 | 1.5981 |
| 20 | 3.732 | 807308 | 1156206 | BB | 0.012 | 6.7600 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.793 | 151115 | 73801 | BB | 0.034 | 1.2654 |
| 22 | 3.825 | 88369 | 113293 | BB | 0.013 | 0.7400 |
| 23 | 3.858 | 41051 | 74799 | BB | 0.009 | 0.3437 |
| 24 | 3.885 | 526819 | 775433 | BB | 0.011 | 4.4113 |
| 25 | 3.911 | 68564 | 84093 | BB | 0.014 | 0.5741 |
| 26 | 3.940 | 84795 | 89488 | BB | 0.016 | 0.7100 |
| 27 | 3.992 | 69700 | 85430 | BB | 0.014 | 0.5836 |
| 28 | 4.030 | 397360 | 661140 | BB | 0.014 | 3.3273 |
| 29 | 4.113 | 11339 | 24017 | BB | 0.008 | 0.0950 |
| 30 | 4.168 | 229485 | 426614 | BB | 0.009 | 1.9216 |
| 31 | 4.216 | 45664 | 58431 | BB | 0.015 | 0.3824 |
| 32 | 4.301 | 148656 | 273285 | BB | 0.009 | 1.2448 |
| 33 | 4.432 | 93739 | 143711 | BB | 0.011 | 0.7849 |
| 34 | 4.475 | 11689 | 11570 | BB | 0.017 | 0.0979 |
| 35 | 4.562 | 40593 | 67554 | BB | 0.017 | 0.3399 |
| 36 | 4.642 | 11221 | 3727 | BB | 0.041 | 0.0940 |
| 37 | 4.829 | 8329 | 12472 | BB | 0.011 | 0.0697 |
| 38 | 4.964 | 3940 | 4349 | BB | 0.015 | 0.0330 |
| 39 | 5.104 | 1331 | 1787 | BB | 0.012 | 0.0111 |
| 40 | 5.167 | 615 | 827 | BB | 0.012 | 0.0051 |
| 41 | 5.252 | 558 | 891 | BB | 0.015 | 0.0047 |
| 42 | 5.369 | 503 | 625 | BB | 0.013 | 0.0042 |
| 43 | 5.415 | 336 | 429 | BB | 0.013 | 0.0028 |
| 44 | 5.595 | 526 | 626 | BB | 0.014 | 0.0044 |
| 45 | 5.854 | 456 | 489 | BB | 0.016 | 0.0038 |

Total area = 1.19424E+007

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\028F0701.D | | | | | | | |
| Operator : mwdl | | | | Page Number : 1 | | | |
| Instrument : GC1 | | | | Vial Number : 28 | | | |
| Sample Name : 10000 dx 44-94 | | | | Injection Number : 1 | | | |
| Run Time Bar Code: | | | | Sequence Line : 7 | | | |
| Acquired on | 1/14/15 | 18:03 | | Instrume | DX1.MTH | | |
| Report Created on: 15 Jan 15 10:18 AM | | | | Analysis Method : DX1.MTH | | | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 45 | >4.53 | <4.60 | 40593 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 805 | >3.73 | <3.79 | 807308 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 10528 | >1.8 | <4.5 | 8.06E+07 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 10522 | >1.8 | <6.5 | 81525127 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 175 | >4.5 | <6.5 | 904935 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 6419 | >3.2 | <6.5 | 43646527 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 12651 | >1.8 | <4.5 | 80620192 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 6926 | >1.1 | <3.2 | 42064422 | 6.07E+03 | | 6/25/12 | |
| Kerosene C8-C20 | | | | | | | |
| 13506 | >1.1 | <4.5 | 84806014 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 19100 | >1.8 | <6.5 | 81525128 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 6926 | | | | | | |
| TPHD (8-36) | 5700 | | | | | | |
| TPHDX (8-36) | 5633 | | | | | | |
| Motor Oil (8-36 | 8460 | | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\029F0901.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 29 |
| Sample Name | : 1000 dx2' 43-120 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 9 |
| Acquired on | : 14 Jan 15 06:23 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:19 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

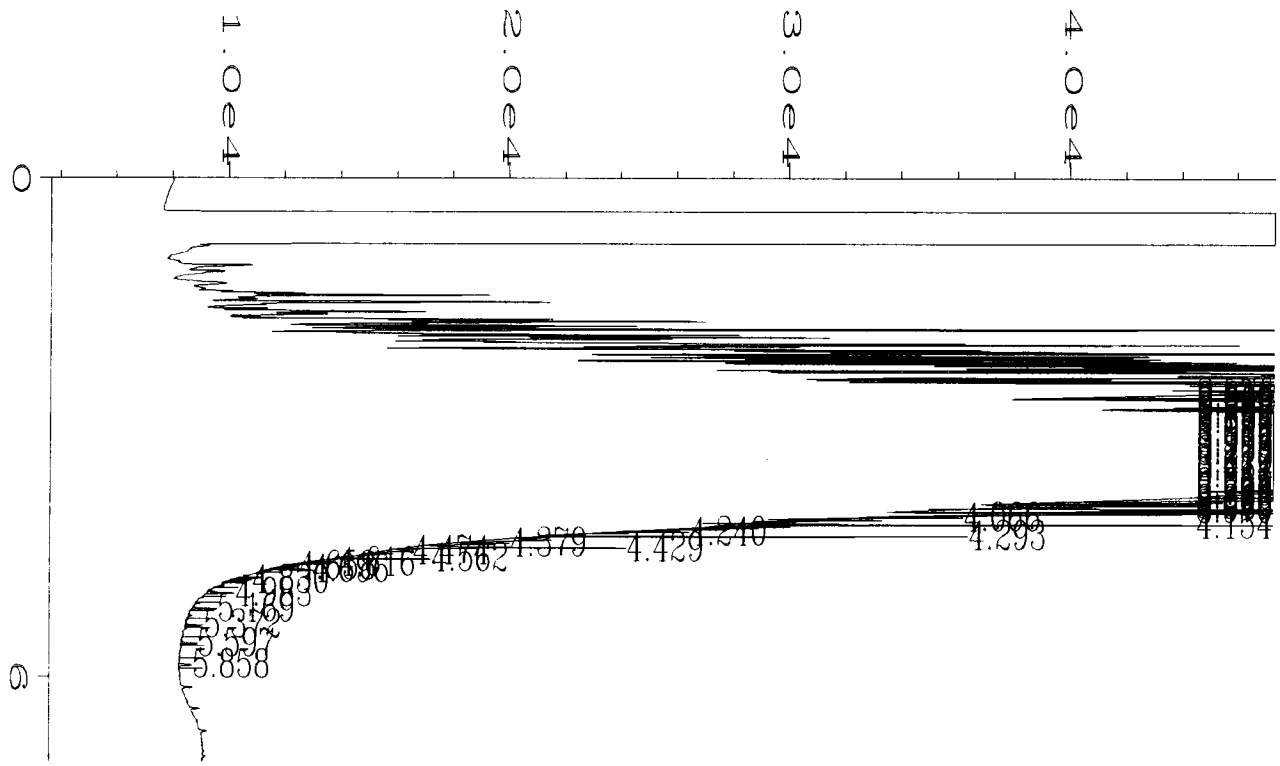
Data File Name : C:\HPCHEM\1\DATA\01-14-15\029F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 dx2' 43-120
Run Time Bar Code:
Acquired on : 14 Jan 15 06:23 PM
Report Created on: 15 Jan 15 10:19 AM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 9
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\029F0901.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.03677E+009 | 7.85301E+007 | BVA | 0.220 | 99.2226 |
| 2 | 1.452 | 154863 | 18816 | VV + | 0.000 | 0.0148 |
| 3 | 2.502 | 4479757 | 284572 | VVA | 0.262 | 0.4287 |
| 4 | 3.852 | 3422452 | 255837 | VVA | 0.223 | 0.3275 |
| 5 | 5.502 | 63104 | 8506 | VV + | 0.000 | 0.0060 |
| 6 | 6.762 | 2642 | 284 | PB + | 0.000 | 0.0003 |

Total area = 1.0449E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\029R0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 dx2' 43-120
Run Time Bar Code:
Acquired on : 14 Jan 15 06:23 PM
Report Created on: 15 Jan 15 10:19 AM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 9
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\029R0901.D

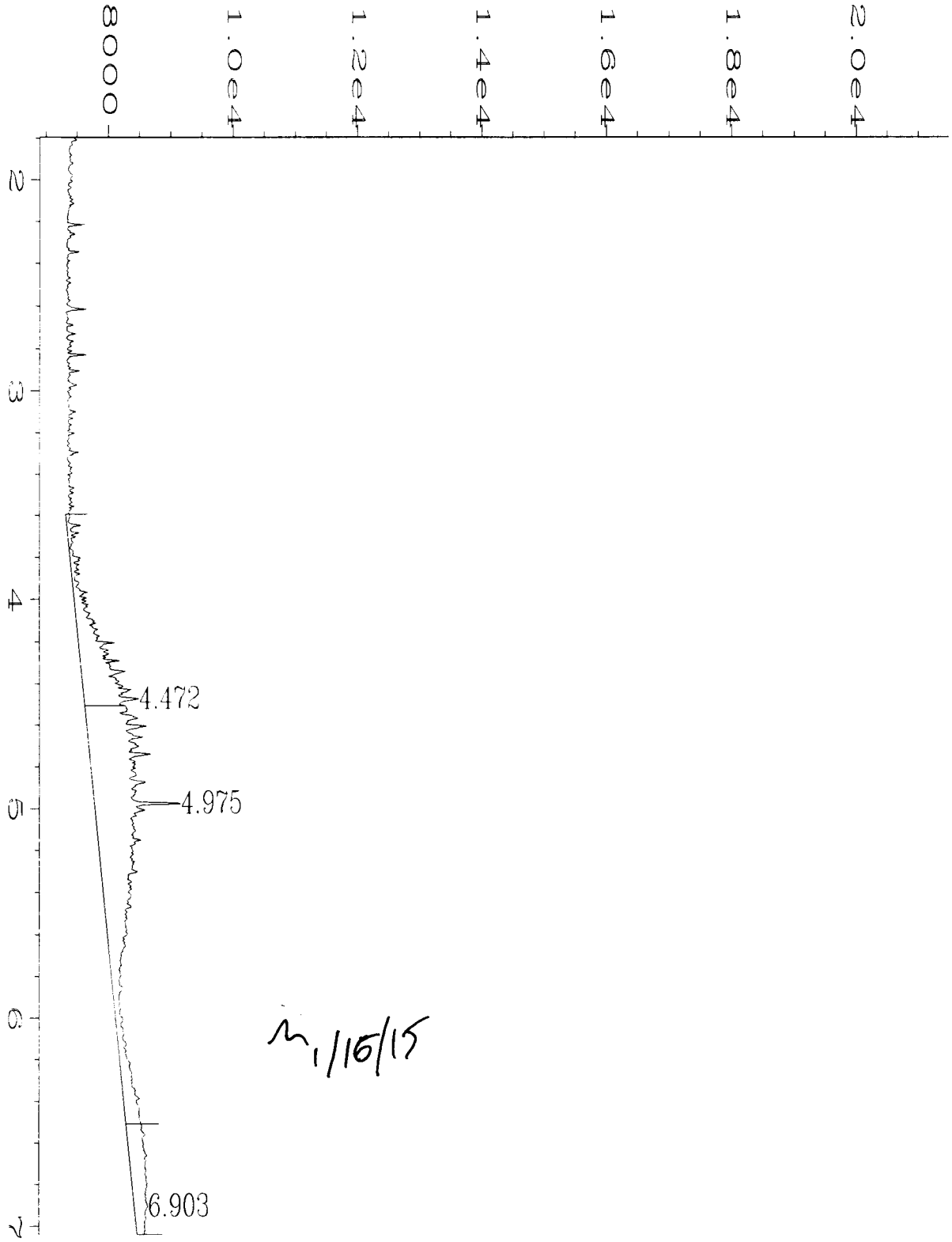
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.576 | 134728 | 233130 | BBAS | 0.010 | 8.3228 |
| 2 | 2.616 | 91810 | 157524 | BB | 0.010 | 5.6716 |
| 3 | 2.660 | 49504 | 86945 | BB | 0.009 | 3.0581 |
| 4 | 2.689 | 21497 | 37844 | BB | 0.009 | 1.3280 |
| 5 | 2.743 | 67837 | 66956 | BB | 0.020 | 4.1907 |
| 6 | 2.793 | 135974 | 243035 | BB | 0.013 | 8.3998 |
| 7 | 2.835 | 27024 | 37800 | BB | 0.012 | 1.6694 |
| 8 | 2.894 | 109914 | 122146 | BB | 0.015 | 6.7899 |
| 9 | 2.996 | 85500 | 230851 | BB | 0.006 | 5.2818 |
| 10 | 3.034 | 20733 | 12593 | BB | 0.027 | 1.2808 |
| 11 | 3.062 | 35441 | 57086 | BB | 0.010 | 2.1894 |
| 12 | 3.117 | 102494 | 89128 | BB | 0.019 | 6.3316 |
| 13 | 3.155 | 27720 | 50521 | BB | 0.009 | 1.7124 |
| 14 | 3.188 | 123171 | 241980 | BB | 0.008 | 7.6089 |
| 15 | 3.239 | 18870 | 22756 | BB | 0.014 | 1.1657 |
| 16 | 3.276 | 50831 | 66190 | BB | 0.013 | 3.1401 |
| 17 | 3.370 | 127917 | 204163 | BB | 0.012 | 7.9021 |
| 18 | 3.417 | 8843 | 10470 | BB | 0.014 | 0.5463 |
| 19 | 3.464 | 43066 | 34303 | BB | 0.020 | 2.6604 |
| 20 | 3.541 | 54825 | 142260 | BB | 0.006 | 3.3868 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.659 | 17447 | 19449 | BB | 0.015 | 1.0778 |
| 22 | 3.704 | 65307 | 123464 | BB | 0.009 | 4.0343 |
| 23 | 3.730 | 13494 | 20808 | BB | 0.011 | 0.8336 |
| 24 | 3.766 | 7715 | 10384 | BB | 0.012 | 0.4766 |
| 25 | 3.806 | 35397 | 35038 | BB | 0.020 | 2.1867 |
| 26 | 3.860 | 52551 | 81218 | BB | 0.011 | 3.2464 |
| 27 | 3.890 | 6573 | 7219 | BB | 0.014 | 0.4061 |
| 28 | 3.923 | 8314 | 7126 | BB | 0.019 | 0.5136 |
| 29 | 3.970 | 20757 | 14930 | BB | 0.023 | 1.2823 |
| 30 | 4.066 | 3486 | 3580 | BB | 0.016 | 0.2154 |
| 31 | 4.154 | 15131 | 26774 | BB | 0.009 | 0.9347 |
| 32 | 4.240 | 4911 | 2847 | BB | 0.029 | 0.3034 |
| 33 | 4.293 | 7736 | 15974 | BB | 0.008 | 0.4779 |
| 34 | 4.379 | 5192 | 2191 | BB | 0.040 | 0.3207 |
| 35 | 4.429 | 5506 | 8241 | BB | 0.011 | 0.3401 |
| 36 | 4.474 | 1536 | 1168 | BB | 0.019 | 0.0949 |
| 37 | 4.562 | 2764 | 3884 | BB | 0.017 | 0.1708 |
| 38 | 4.616 | 1147 | 1451 | BB | 0.013 | 0.0708 |
| 39 | 4.658 | 916 | 723 | BB | 0.021 | 0.0566 |
| 40 | 4.696 | 1054 | 1678 | BB | 0.010 | 0.0651 |
| 41 | 4.830 | 987 | 838 | BB | 0.019 | 0.0610 |
| 42 | 4.983 | 810 | 1032 | BB | 0.016 | 0.0500 |
| 43 | 5.169 | 670 | 948 | BB | 0.015 | 0.0414 |
| 44 | 5.372 | 537 | 689 | BB | 0.013 | 0.0332 |
| 45 | 5.597 | 605 | 624 | BB | 0.015 | 0.0374 |
| 46 | 5.858 | 536 | 472 | BB | 0.018 | 0.0331 |

Total area = 1618777

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\029F0901.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 29 | |
| Sample Name | : 1000 dx2' 43-120 | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 9 | |
| Acquired on | 1/14/15 | 18:23 | | Instrume | DX1.MTH | | |
| Report Created on: 15 Jan 15 10:19 AM | | | | Analysis Method | | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 3 | >4.53 | <4.60 | 2764 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 8 | >3.73 | <3.79 | 7715 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 1031 | >1.8 | <4.5 | 7.89E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 1027 | >1.8 | <6.5 | 7954833 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 12 | >4.5 | <6.5 | 60339 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 511 | >3.2 | <6.5 | 3475076 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 1239 | >1.8 | <4.5 | 7894494 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 763 | >1.1 | <3.2 | 4634620 | 6.07E+03 | | 6/25/12 | |
| Kerosene C8-C20 | | | | | | | |
| 1282 | >1.1 | <4.5 | 8049357 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 1864 | >1.8 | <6.5 | 7954834 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 763 | | | | | | |
| TPHD (8-36) | 454 | | | | | | |
| TPHDX (8-36) | 449 | | | | | | |
| Motor Oil (8-36 | 674 | | | | | | |




user modified

M 1/16/15

| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\030F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 30 |
| Sample Name | : 10ppm mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 06:45 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:13 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\01-14-15\030F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 10ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 06:45 PM
Report Created on: 15 Jan 15 10:13 AM

Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

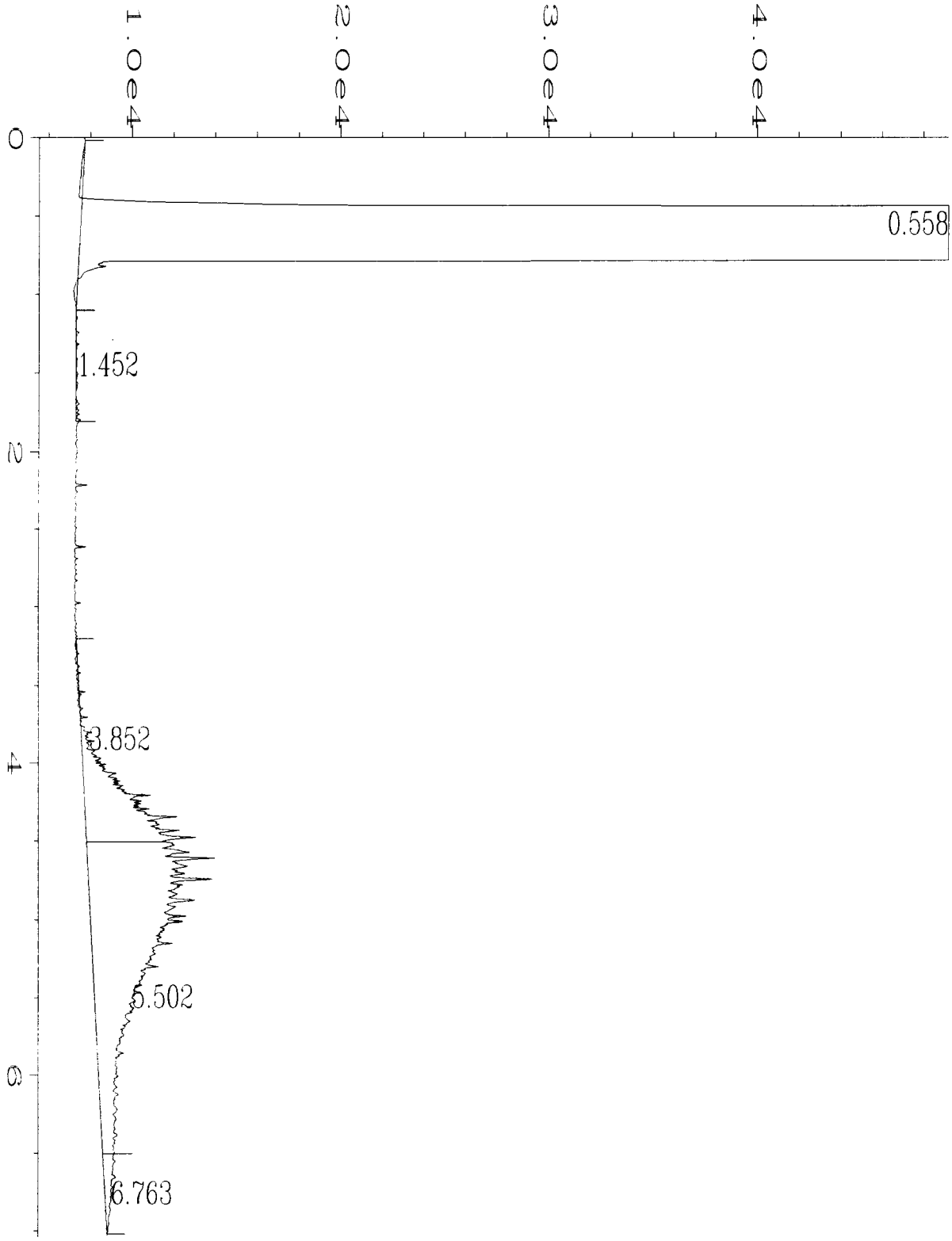
Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\030F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 4.472 | 14816 | 881 | MF | 0.280 | 21.5884 |
| 2 | 4.975 | 47016 | 1430 | FF | 0.548 | 68.5062 |
| 3 | 6.903 | 6798 | 224 | FM | 0.507 | 9.9053 |

Total area = 68630

User Modified m 1/15/15

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\030F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 30 | |
| Sample Name | : 10ppm mo 44-151 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 18:45 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:19 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 0 | >4.53 | <4.60 | 328 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 0 | >3.73 | <3.79 | 0 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 0 | >1.8 | <4.5 | ######## | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 0 | >1.8 | <6.5 | -152 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | 47016 | | M 1/15/15 | |
| 9.1 0 | >4.5 | <6.5 | -151 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | 61832 | | | |
| 9.1 0 | >3.2 | <6.5 | -152 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 0 | >1.8 | <4.5 | 0 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 0 | >1.1 | <4.5 | 0 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 0 | >1.8 | <6.5 | -150 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 0 | | | | | |
| TPHDX (8-36) | 0 | | | | | |
| Motor Oil (8-36 | 0 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\031F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 31 |
| Sample Name | : 50ppm mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 06:56 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:19 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

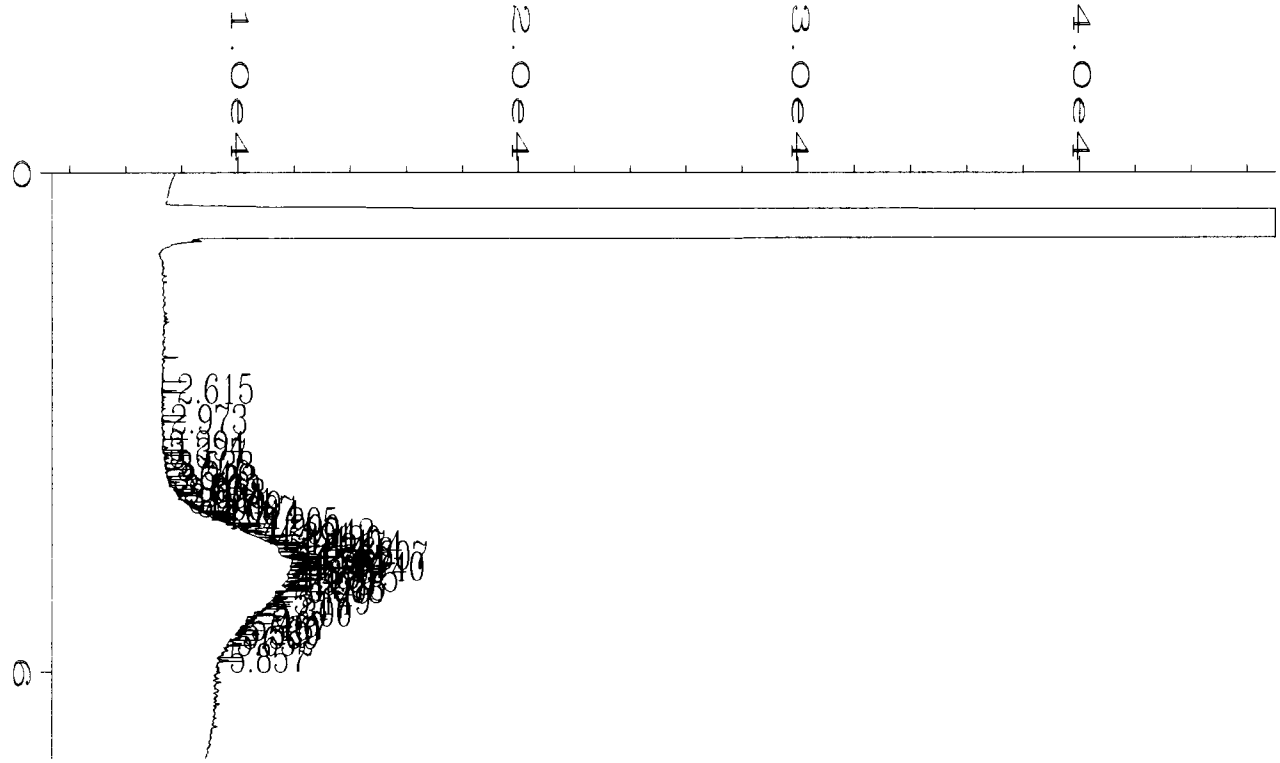
Data File Name : C:\HPCHEM\1\DATA\01-14-15\031F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 50ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 06:56 PM
Report Created on: 15 Jan 15 10:19 AM

Page Number : 1
Vial Number : 31
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\031F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.12052E+009 | 8.20791E+007 | BB + | 0.000 | 99.9681 |
| 2 | 1.452 | 1304 | 231 | BVA | 0.094 | 0.0001 |
| 3 | 3.852 | 81725 | 5510 | PVA | 0.247 | 0.0073 |
| 4 | 5.502 | 265199 | 5748 | VV + | 0.000 | 0.0237 |
| 5 | 6.763 | 9047 | 512 | VB + | 0.000 | 0.0008 |

Total area = 1.12088E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\031R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 50ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 06:56 PM
Report Created on: 15 Jan 15 10:19 AM

Page Number : 1
Vial Number : 31
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\031R1101.D

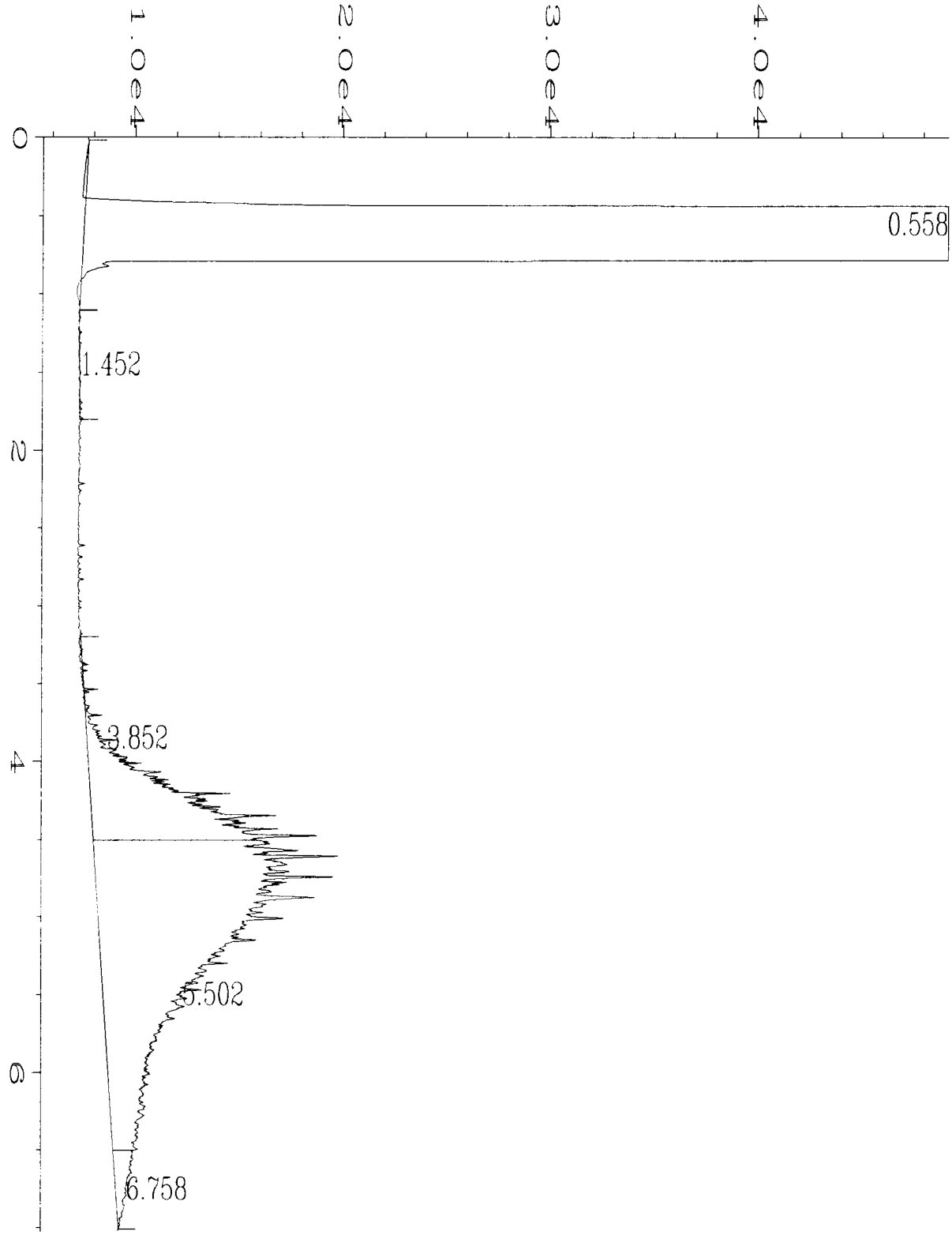
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.615 | 344 | 571 | BBAS | 0.010 | 1.2008 |
| 2 | 2.973 | 136 | 304 | BB | 0.007 | 0.4734 |
| 3 | 3.294 | 227 | 202 | BB | 0.018 | 0.7912 |
| 4 | 3.377 | 107 | 151 | BB | 0.012 | 0.3721 |
| 5 | 3.538 | 222 | 417 | BB | 0.009 | 0.7743 |
| 6 | 3.646 | 171 | 205 | BB | 0.014 | 0.5962 |
| 7 | 3.703 | 281 | 413 | BB | 0.011 | 0.9800 |
| 8 | 3.803 | 292 | 317 | BB | 0.015 | 1.0202 |
| 9 | 3.858 | 199 | 439 | BB | 0.008 | 0.6927 |
| 10 | 3.921 | 151 | 215 | BB | 0.013 | 0.5280 |
| 11 | 3.971 | 396 | 321 | BB | 0.019 | 1.3809 |
| 12 | 4.009 | 478 | 415 | BB | 0.019 | 1.6674 |
| 13 | 4.067 | 431 | 521 | BB | 0.015 | 1.5048 |
| 14 | 4.114 | 643 | 469 | BB | 0.023 | 2.2424 |
| 15 | 4.205 | 1542 | 1292 | BB | 0.020 | 5.3806 |
| 16 | 4.290 | 924 | 720 | BB | 0.021 | 3.2224 |
| 17 | 4.342 | 2204 | 1595 | BB | 0.021 | 7.6893 |
| 18 | 4.391 | 734 | 493 | BB | 0.025 | 2.5598 |
| 19 | 4.430 | 981 | 1174 | BB | 0.014 | 3.4234 |
| 20 | 4.474 | 1781 | 1743 | BB | 0.017 | 6.2115 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.524 | 926 | 636 | BB | 0.024 | 3.2310 |
| 22 | 4.568 | 1810 | 1268 | BB | 0.024 | 6.3142 |
| 23 | 4.607 | 1893 | 2307 | BB | 0.014 | 6.6037 |
| 24 | 4.657 | 1102 | 775 | BB | 0.021 | 3.8426 |
| 25 | 4.704 | 787 | 672 | BB | 0.020 | 2.7444 |
| 26 | 4.740 | 1730 | 2047 | BB | 0.014 | 6.0340 |
| 27 | 4.776 | 953 | 636 | BB | 0.025 | 3.3254 |
| 28 | 4.835 | 563 | 428 | BB | 0.019 | 1.9654 |
| 29 | 4.875 | 1303 | 1308 | BB | 0.016 | 4.5439 |
| 30 | 4.919 | 622 | 386 | BB | 0.027 | 2.1689 |
| 31 | 4.975 | 728 | 1010 | BB | 0.012 | 2.5384 |
| 32 | 5.008 | 555 | 827 | BB | 0.011 | 1.9351 |
| 33 | 5.149 | 888 | 893 | BB | 0.018 | 3.0989 |
| 34 | 5.217 | 165 | 240 | BB | 0.011 | 0.5739 |
| 35 | 5.300 | 483 | 654 | BB | 0.012 | 1.6853 |
| 36 | 5.467 | 150 | 340 | BB | 0.011 | 0.5227 |
| 37 | 5.520 | 295 | 212 | BB | 0.021 | 1.0306 |
| 38 | 5.569 | 708 | 322 | BB | 0.037 | 2.4713 |
| 39 | 5.652 | 507 | 320 | BB | 0.024 | 1.7686 |
| 40 | 5.857 | 255 | 344 | BB | 0.012 | 0.8903 |

Total area = 28666

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\031F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 31 | |
| Sample Name | : 50ppm mo 44-151 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 18:56 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:19 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 1 | >5.51 | <5.57 | 708 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 2 | >4.53 | <4.60 | 1810 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 0 | >3.73 | <3.79 | 0 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 11 | >1.8 | <4.5 | 8.17E+04 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 44 | >1.8 | <6.5 | 344405 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 51 | >4.5 | <6.5 | 262681 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 51 | >3.2 | <6.5 | 344405 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 13 | >1.8 | <4.5 | 81725 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 1304 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 13 | >1.1 | <4.5 | 83029 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 81 | >1.8 | <6.5 | 345114 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 45 | | | | | |
| TPHDX (8-36) | 44 | | | | | |
| Motor Oil (8-36 | 67 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\032F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 32 |
| Sample Name | : 100ppm mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 07:06 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:20 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

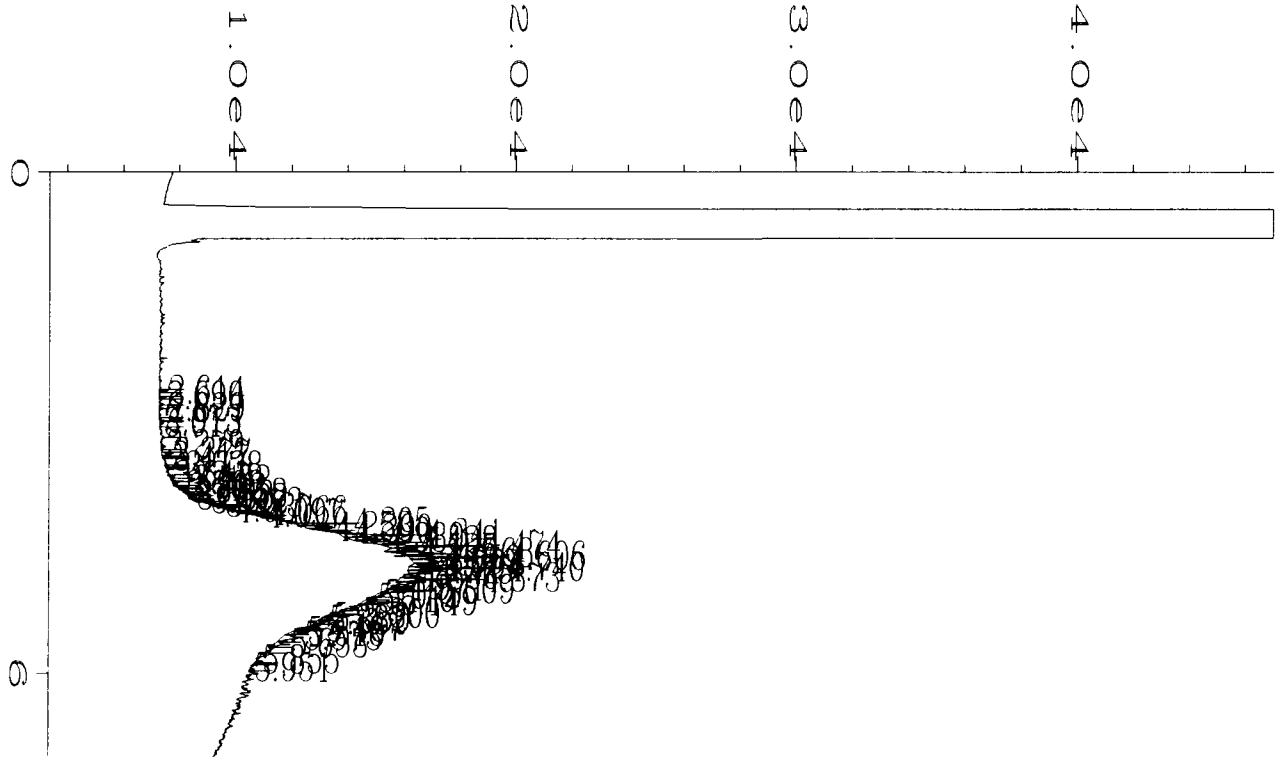
Data File Name : C:\HPCHEM\1\DATA\01-14-15\032F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 100ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:06 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\032F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.12284E+009 | 8.23164E+007 | BB + | 0.000 | 99.9351 |
| 2 | 1.452 | 573 | 156 | BV + | 0.000 | 0.0001 |
| 3 | 3.852 | 171147 | 11122 | PV + | 0.000 | 0.0152 |
| 4 | 5.502 | 542386 | 11318 | VV + | 0.000 | 0.0483 |
| 5 | 6.758 | 15279 | 862 | VB + | 0.000 | 0.0014 |

Total area = 1.12357E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\032R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 100ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:06 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\032R1101.D

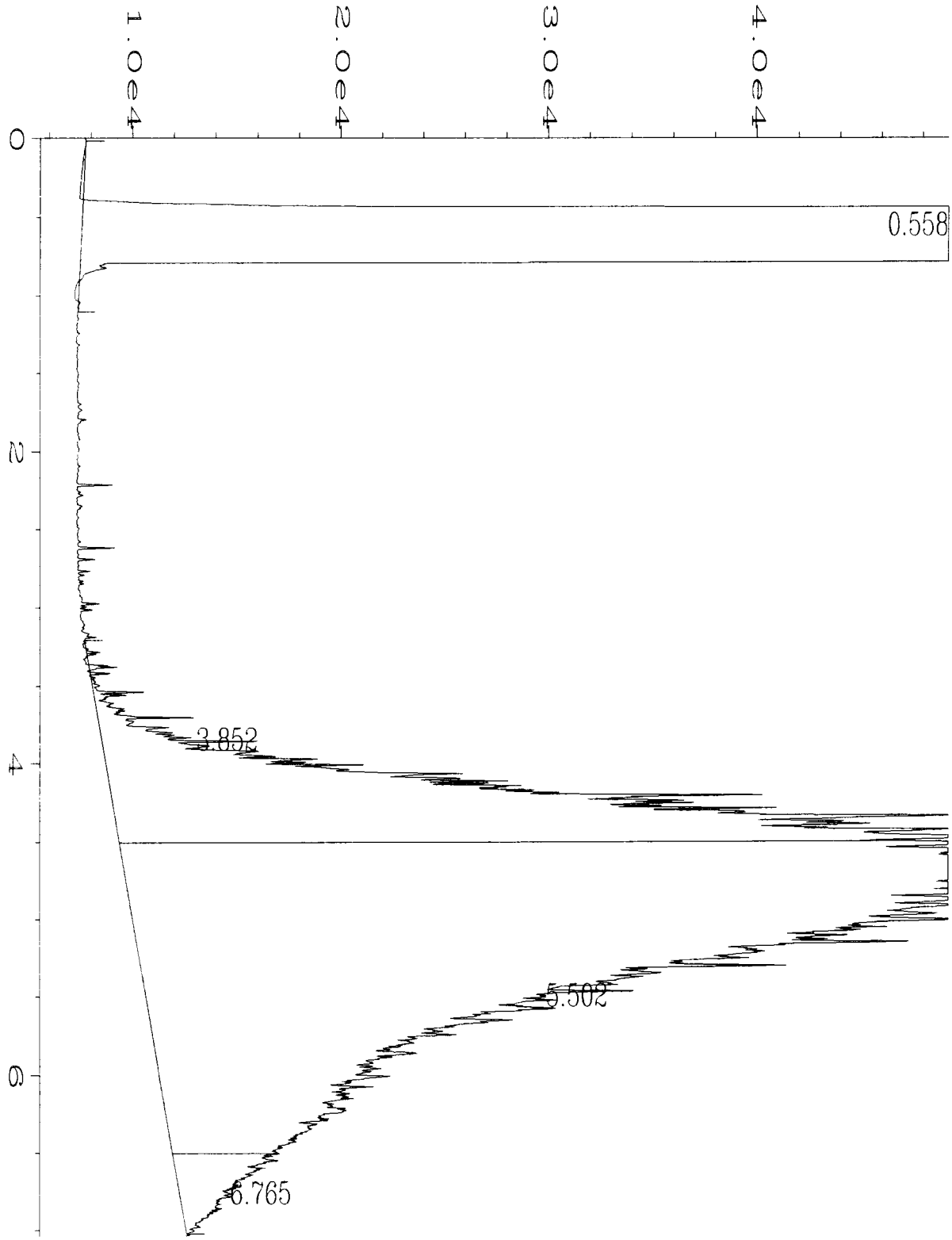
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.614 | 192 | 339 | BB | 0.009 | 0.3788 |
| 2 | 2.690 | 133 | 255 | BB | 0.009 | 0.2622 |
| 3 | 2.829 | 290 | 306 | BB | 0.044 | 0.5721 |
| 4 | 2.973 | 105 | 166 | BB | 0.011 | 0.2069 |
| 5 | 3.013 | 160 | 160 | BB | 0.017 | 0.3164 |
| 6 | 3.279 | 183 | 190 | BB | 0.020 | 0.3610 |
| 7 | 3.377 | 409 | 427 | BB | 0.016 | 0.8068 |
| 8 | 3.417 | 194 | 354 | BB | 0.009 | 0.3821 |
| 9 | 3.538 | 360 | 727 | BB | 0.008 | 0.7098 |
| 10 | 3.647 | 195 | 203 | BB | 0.017 | 0.3842 |
| 11 | 3.702 | 563 | 807 | BB | 0.020 | 1.1102 |
| 12 | 3.768 | 279 | 394 | BB | 0.012 | 0.5501 |
| 13 | 3.802 | 314 | 316 | BB | 0.017 | 0.6200 |
| 14 | 3.858 | 564 | 922 | BB | 0.010 | 1.1130 |
| 15 | 3.888 | 372 | 291 | BB | 0.021 | 0.7335 |
| 16 | 3.922 | 635 | 645 | BB | 0.016 | 1.2535 |
| 17 | 3.973 | 797 | 542 | BB | 0.022 | 1.5725 |
| 18 | 4.037 | 679 | 315 | BB | 0.036 | 1.3397 |
| 19 | 4.066 | 859 | 1114 | BB | 0.013 | 1.6947 |
| 20 | 4.097 | 380 | 503 | BB | 0.013 | 0.7501 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.205 | 1400 | 2485 | BB | 0.017 | 2.7622 |
| 22 | 4.253 | 1226 | 1085 | BB | 0.019 | 2.4181 |
| 23 | 4.290 | 1176 | 1231 | BB | 0.016 | 2.3204 |
| 24 | 4.341 | 3024 | 3131 | BB | 0.016 | 5.9655 |
| 25 | 4.389 | 1761 | 1339 | BB | 0.022 | 3.4734 |
| 26 | 4.428 | 2102 | 1985 | BB | 0.017 | 4.1462 |
| 27 | 4.474 | 3031 | 3568 | BB | 0.014 | 5.9788 |
| 28 | 4.525 | 1736 | 1241 | BB | 0.020 | 3.4239 |
| 29 | 4.568 | 2270 | 2006 | BB | 0.019 | 4.4778 |
| 30 | 4.606 | 2921 | 3657 | BB | 0.013 | 5.7623 |
| 31 | 4.659 | 1851 | 1168 | BB | 0.023 | 3.6504 |
| 32 | 4.704 | 1351 | 1247 | BB | 0.017 | 2.6644 |
| 33 | 4.740 | 2918 | 3569 | BB | 0.014 | 5.7556 |
| 34 | 4.775 | 1134 | 1006 | BB | 0.019 | 2.2376 |
| 35 | 4.836 | 659 | 666 | BB | 0.016 | 1.3005 |
| 36 | 4.873 | 3151 | 3061 | BB | 0.021 | 6.2142 |
| 37 | 4.971 | 607 | 729 | BB | 0.014 | 1.1979 |
| 38 | 5.009 | 1817 | 1951 | BB | 0.016 | 3.5842 |
| 39 | 5.075 | 572 | 408 | BB | 0.023 | 1.1288 |
| 40 | 5.110 | 204 | 361 | BB | 0.009 | 0.4029 |
| 41 | 5.149 | 1398 | 1392 | BB | 0.017 | 2.7577 |
| 42 | 5.300 | 1130 | 1255 | BB | 0.015 | 2.2297 |
| 43 | 5.350 | 530 | 459 | BB | 0.020 | 1.0458 |
| 44 | 5.382 | 494 | 473 | BB | 0.018 | 0.9740 |
| 45 | 5.467 | 543 | 917 | BB | 0.013 | 1.0710 |
| 46 | 5.518 | 710 | 675 | BB | 0.017 | 1.4001 |
| 47 | 5.573 | 1715 | 803 | BB | 0.031 | 3.3824 |
| 48 | 5.653 | 960 | 628 | BB | 0.023 | 1.8941 |
| 49 | 5.855 | 438 | 239 | BB | 0.027 | 0.8639 |
| 50 | 5.951 | 202 | 187 | BB | 0.018 | 0.3988 |

Total area = 50699

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\032F1101.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 32 | |
| Sample Name : 100ppm mo 44-151 | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 19:06 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:20 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 1 | >5.51 | <5.57 | 710 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 2 | >4.53 | <4.60 | 2270 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 0 | >3.73 | <3.79 | 279 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 22 | >1.8 | <4.5 | 1.71E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 92 | >1.8 | <6.5 | 710274 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 105 | >4.5 | <6.5 | 539406 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 104 | >3.2 | <6.5 | 710274 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 27 | >1.8 | <4.5 | 170868 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 573 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 27 | >1.1 | <4.5 | 171441 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 167 | >1.8 | <6.5 | 710984 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 93 | | | | | |
| TPHDX (8-36) | 92 | | | | | |
| Motor Oil (8-36 | 138 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\033F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 33 |
| Sample Name | : 500ppm mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 07:17 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:20 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

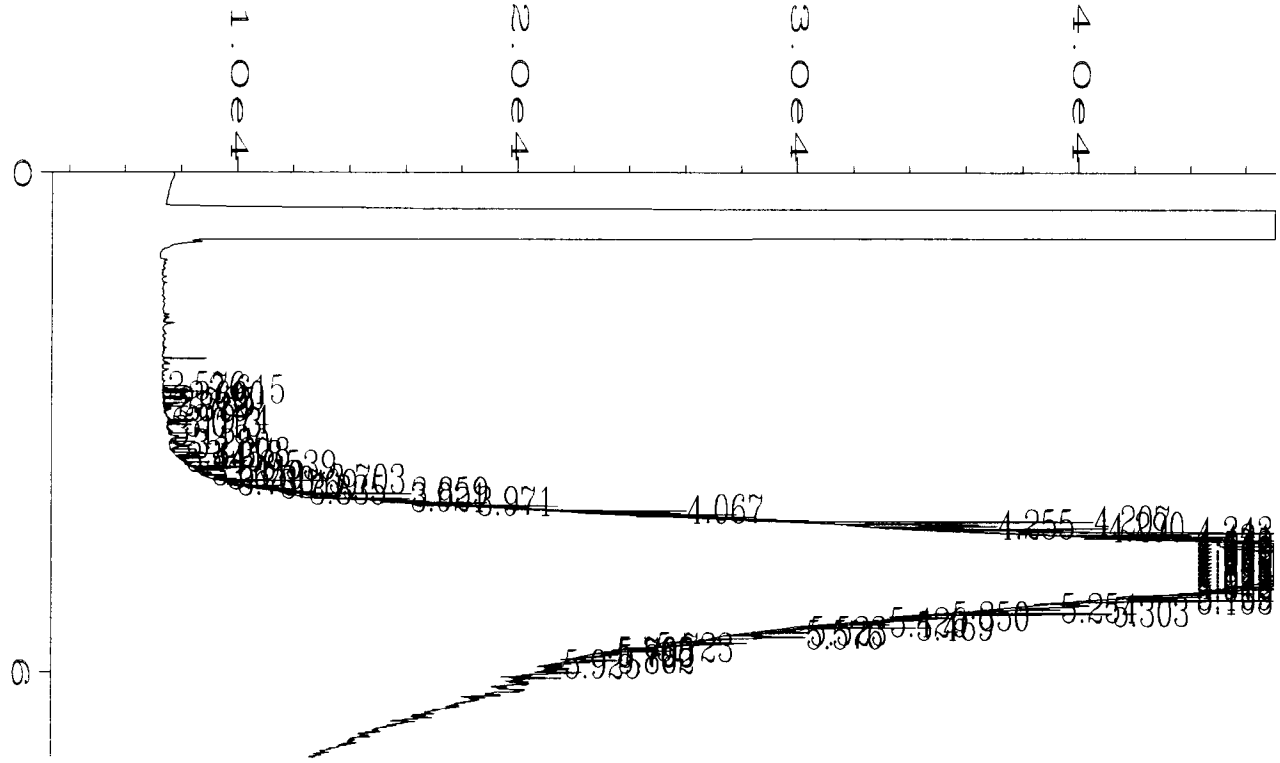
Data File Name : C:\HPCHEM\1\DATA\01-14-15\033F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:17 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\033F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.10451E+009 | 8.16881E+007 | BVA | 0.225 | 99.6686 |
| 2 | 3.852 | 881752 | 53903 | PVA | 0.273 | 0.0796 |
| 3 | 5.502 | 2716852 | 56962 | VV + | 0.000 | 0.2452 |
| 4 | 6.765 | 74006 | 4787 | VB + | 0.000 | 0.0067 |

Total area = 1.10818E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\033R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500ppm mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:17 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\033R1101.D

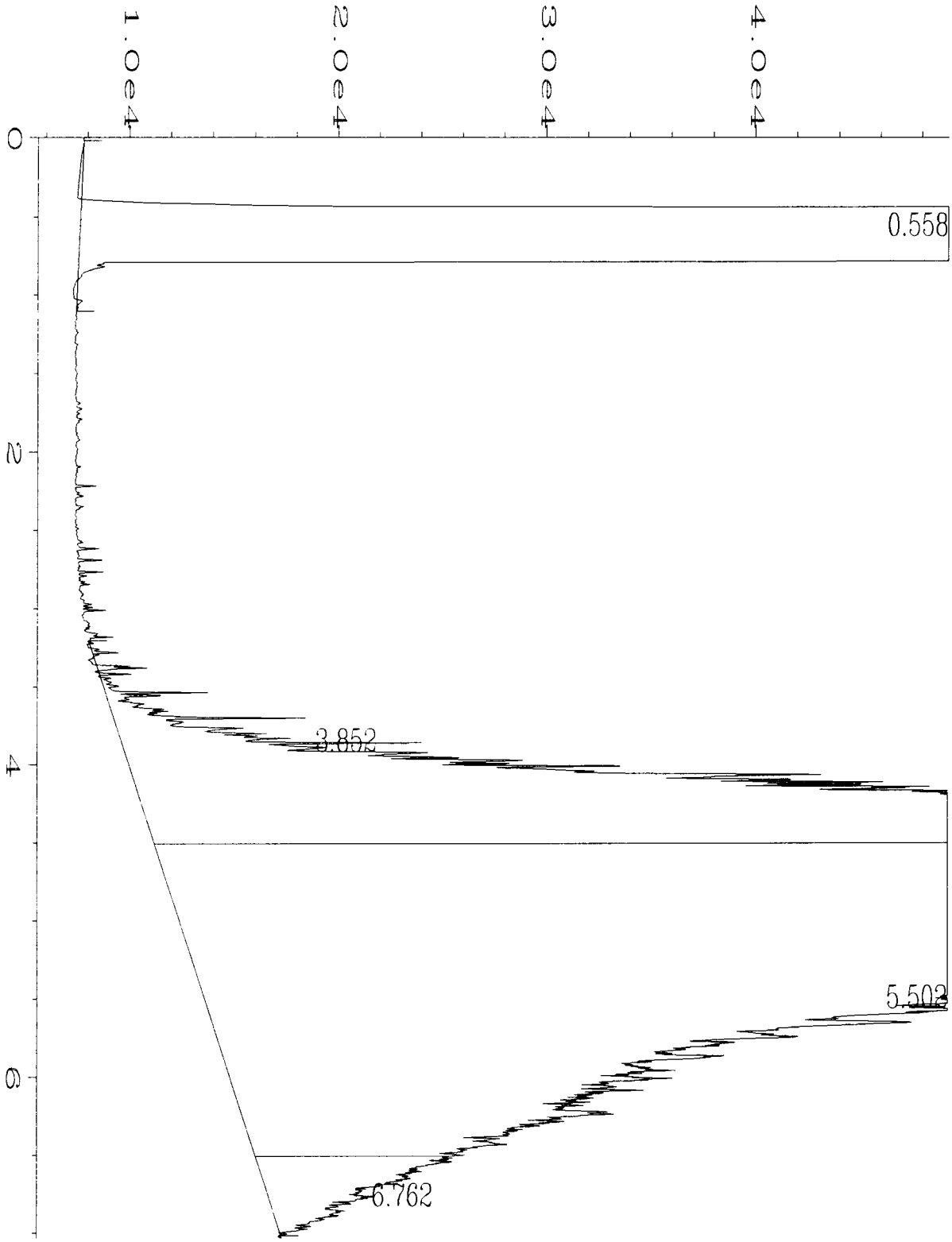
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.576 | 119 | 187 | BB | 0.011 | 0.0457 |
| 2 | 2.615 | 935 | 1805 | BB | 0.009 | 0.3600 |
| 3 | 2.690 | 414 | 905 | BB | 0.008 | 0.1594 |
| 4 | 2.765 | 455 | 605 | BB | 0.013 | 0.1752 |
| 5 | 2.829 | 206 | 263 | BB | 0.013 | 0.0794 |
| 6 | 2.974 | 419 | 924 | BB | 0.008 | 0.1613 |
| 7 | 3.013 | 356 | 629 | BB | 0.009 | 0.1371 |
| 8 | 3.115 | 187 | 155 | BB | 0.021 | 0.0721 |
| 9 | 3.280 | 1306 | 835 | BB | 0.030 | 0.5028 |
| 10 | 3.378 | 1701 | 1504 | BB | 0.021 | 0.6549 |
| 11 | 3.418 | 591 | 1109 | BB | 0.009 | 0.2274 |
| 12 | 3.445 | 309 | 219 | BB | 0.024 | 0.1188 |
| 13 | 3.539 | 1824 | 2532 | BB | 0.019 | 0.7019 |
| 14 | 3.611 | 297 | 436 | BB | 0.013 | 0.1144 |
| 15 | 3.659 | 1121 | 766 | BB | 0.024 | 0.4315 |
| 16 | 3.703 | 2034 | 3951 | BB | 0.009 | 0.7827 |
| 17 | 3.730 | 382 | 310 | BB | 0.021 | 0.1469 |
| 18 | 3.769 | 1094 | 1408 | BB | 0.013 | 0.4210 |
| 19 | 3.835 | 1668 | 1292 | BB | 0.022 | 0.6421 |
| 20 | 3.859 | 3977 | 4617 | BB | 0.014 | 1.5306 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.921 | 2158 | 2515 | BB | 0.014 | 0.8306 |
| 22 | 3.971 | 2259 | 2794 | BB | 0.013 | 0.8693 |
| 23 | 4.067 | 5371 | 4888 | BB | 0.018 | 2.0672 |
| 24 | 4.207 | 14995 | 10510 | BB | 0.022 | 5.7712 |
| 25 | 4.255 | 5882 | 5051 | BB | 0.019 | 2.2637 |
| 26 | 4.290 | 4277 | 7134 | BB | 0.010 | 1.6463 |
| 27 | 4.343 | 19852 | 14838 | BB | 0.021 | 7.6408 |
| 28 | 4.431 | 10479 | 8401 | BB | 0.019 | 4.0331 |
| 29 | 4.475 | 17384 | 16373 | BB | 0.018 | 6.6909 |
| 30 | 4.513 | 8766 | 5436 | BB | 0.027 | 3.3738 |
| 31 | 4.569 | 11810 | 12172 | BB | 0.018 | 4.5453 |
| 32 | 4.608 | 15502 | 18722 | BB | 0.014 | 5.9666 |
| 33 | 4.659 | 7302 | 5317 | BB | 0.021 | 2.8103 |
| 34 | 4.707 | 6356 | 7296 | BB | 0.015 | 2.4463 |
| 35 | 4.742 | 15070 | 16980 | BB | 0.015 | 5.8001 |
| 36 | 4.791 | 9193 | 5461 | BB | 0.028 | 3.5384 |
| 37 | 4.837 | 5956 | 4109 | BB | 0.021 | 2.2924 |
| 38 | 4.877 | 16013 | 14101 | BB | 0.018 | 6.1633 |
| 39 | 4.919 | 4593 | 3861 | BB | 0.020 | 1.7679 |
| 40 | 4.972 | 2992 | 2624 | BB | 0.019 | 1.1514 |
| 41 | 5.012 | 7883 | 10492 | BB | 0.013 | 3.0342 |
| 42 | 5.109 | 2482 | 2402 | BB | 0.017 | 0.9551 |
| 43 | 5.153 | 8423 | 7402 | BB | 0.020 | 3.2417 |
| 44 | 5.254 | 6017 | 2633 | BB | 0.038 | 2.3157 |
| 45 | 5.303 | 5296 | 6661 | BB | 0.013 | 2.0384 |
| 46 | 5.350 | 2329 | 2079 | BB | 0.017 | 0.8962 |
| 47 | 5.426 | 3771 | 2272 | BB | 0.023 | 1.4513 |
| 48 | 5.469 | 2960 | 4779 | BB | 0.010 | 1.1393 |
| 49 | 5.523 | 3267 | 2246 | BB | 0.024 | 1.2575 |
| 50 | 5.576 | 4552 | 3217 | BB | 0.022 | 1.7521 |
| 51 | 5.723 | 642 | 806 | BB | 0.013 | 0.2472 |
| 52 | 5.768 | 1604 | 609 | BB | 0.044 | 0.6175 |
| 53 | 5.795 | 1270 | 1184 | BB | 0.018 | 0.4888 |
| 54 | 5.862 | 2335 | 1824 | BB | 0.021 | 0.8987 |
| 55 | 5.925 | 1383 | 883 | BB | 0.026 | 0.5324 |

Total area = 259818

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\033F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 33 | |
| Sample Name | : 500ppm mo 44-151 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 19:17 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:20 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 4 | >5.51 | <5.57 | 3267 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 13 | >4.53 | <4.60 | 11810 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 1 | >3.73 | <3.79 | 1094 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 115 | >1.8 | <4.5 | 8.81E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 462 | >1.8 | <6.5 | 3582433 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 524 | >4.5 | <6.5 | 2701775 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 527 | >3.2 | <6.5 | 3582433 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 138 | >1.8 | <4.5 | 880658 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 140 | >1.1 | <4.5 | 880658 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 840 | >1.8 | <6.5 | 3585700 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 468 | | | | | |
| TPHDX (8-36) | 462 | | | | | |
| Motor Oil (8-36 | 694 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\034F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 34 |
| Sample Name | : 1000 mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 07:28 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:20 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

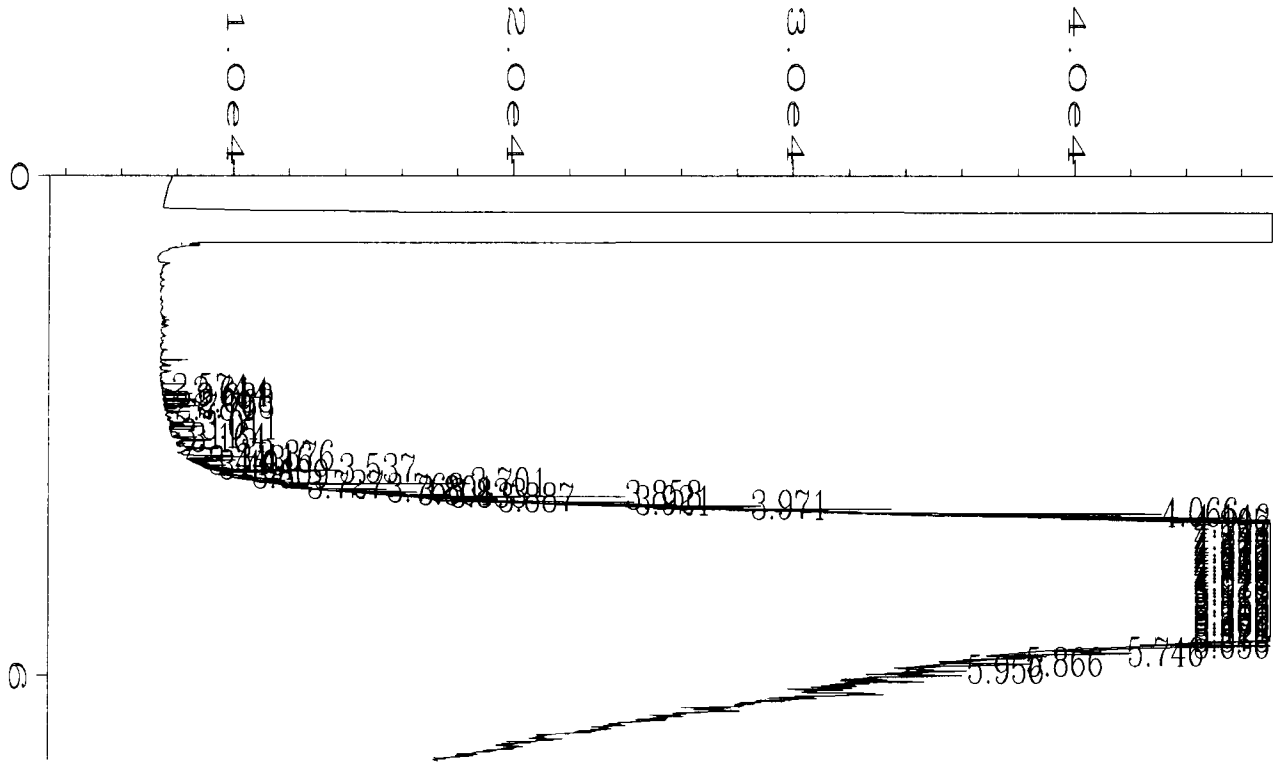
Data File Name : C:\HPCHEM\1\DATA\01-14-15\034F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:28 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\034F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.07104E+009 | 7.93048E+007 | BVA | 0.225 | 99.3473 |
| 2 | 3.852 | 1675406 | 101784 | PVA | 0.274 | 0.1554 |
| 3 | 5.502 | 5221386 | 110159 | VVA | 0.790 | 0.4843 |
| 4 | 6.762 | 139644 | 8856 | VB + | 0.000 | 0.0130 |

Total area = 1.07808E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\034R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:28 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\034R1101.D

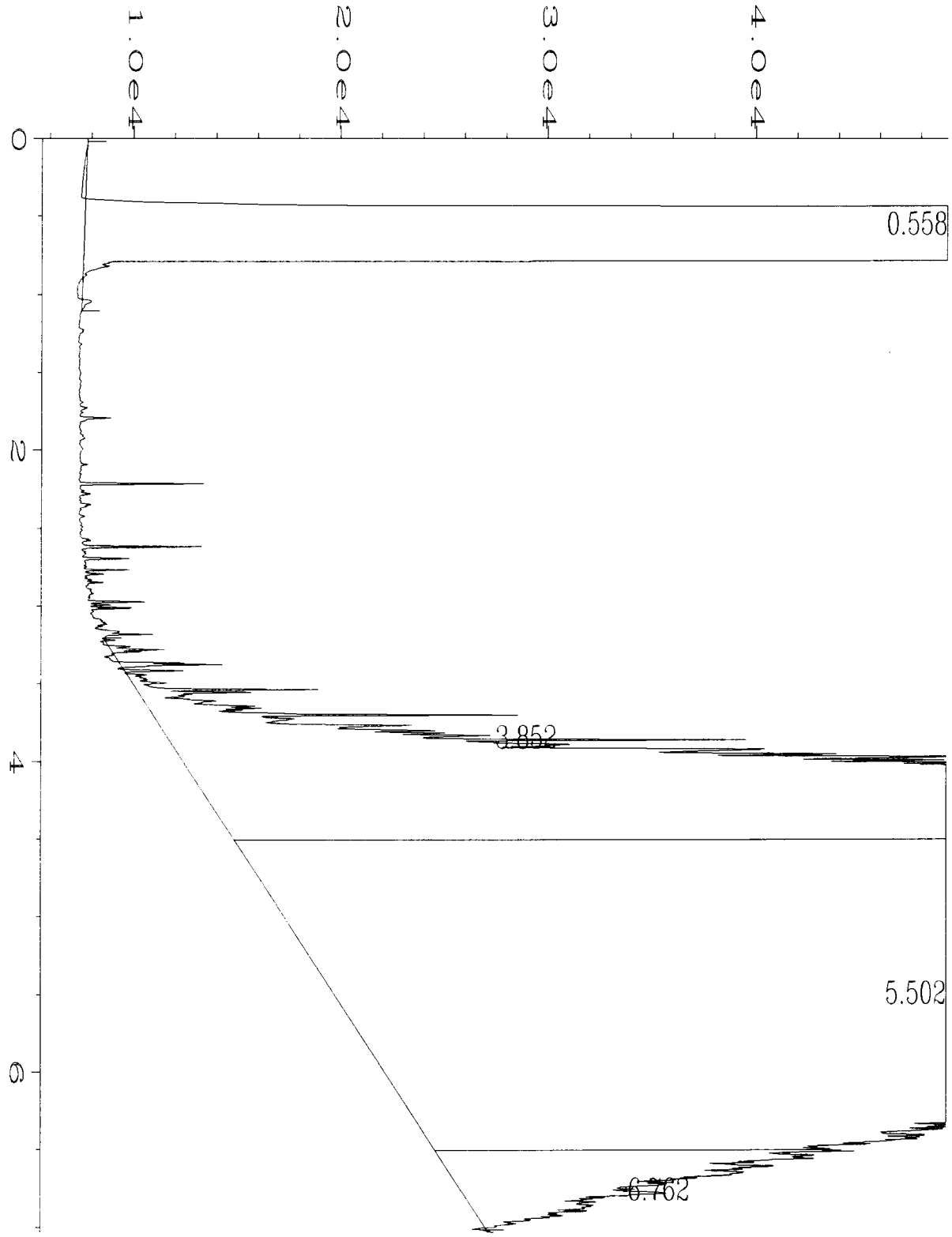
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.574 | 343 | 318 | BBAS | 0.018 | 0.0860 |
| 2 | 2.614 | 651 | 1091 | BB | 0.010 | 0.1634 |
| 3 | 2.688 | 665 | 1257 | BB | 0.009 | 0.1669 |
| 4 | 2.763 | 493 | 1217 | BB | 0.007 | 0.1239 |
| 5 | 2.789 | 294 | 419 | BB | 0.012 | 0.0737 |
| 6 | 3.011 | 1132 | 1175 | BB | 0.016 | 0.2843 |
| 7 | 3.115 | 798 | 344 | BB | 0.039 | 0.2003 |
| 8 | 3.164 | 257 | 268 | BB | 0.016 | 0.0644 |
| 9 | 3.376 | 1580 | 2581 | BB | 0.012 | 0.3967 |
| 10 | 3.416 | 936 | 1710 | BB | 0.009 | 0.2351 |
| 11 | 3.443 | 676 | 511 | BB | 0.019 | 0.1697 |
| 12 | 3.494 | 415 | 560 | BB | 0.012 | 0.1041 |
| 13 | 3.537 | 1927 | 4502 | BB | 0.007 | 0.4837 |
| 14 | 3.609 | 1704 | 701 | BB | 0.034 | 0.4278 |
| 15 | 3.701 | 5155 | 7266 | BB | 0.012 | 1.2942 |
| 16 | 3.727 | 700 | 732 | BB | 0.016 | 0.1759 |
| 17 | 3.768 | 2035 | 2670 | BB | 0.013 | 0.5110 |
| 18 | 3.801 | 1414 | 2574 | BB | 0.009 | 0.3550 |
| 19 | 3.833 | 1952 | 2580 | BB | 0.013 | 0.4900 |
| 20 | 3.858 | 3725 | 8362 | BB | 0.007 | 0.9353 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.887 | 2593 | 2322 | BB | 0.017 | 0.6511 |
| 22 | 3.921 | 4764 | 4983 | BB | 0.015 | 1.1961 |
| 23 | 3.971 | 5933 | 4892 | BB | 0.018 | 1.4898 |
| 24 | 4.066 | 11712 | 9699 | BB | 0.019 | 2.9408 |
| 25 | 4.146 | 7070 | 4187 | BB | 0.028 | 1.7751 |
| 26 | 4.207 | 21199 | 20607 | BB | 0.017 | 5.3228 |
| 27 | 4.344 | 27196 | 28002 | BB | 0.016 | 6.8286 |
| 28 | 4.432 | 10389 | 16331 | BB | 0.013 | 2.6085 |
| 29 | 4.478 | 34964 | 33260 | BB | 0.016 | 8.7790 |
| 30 | 4.515 | 4814 | 8301 | BB | 0.010 | 1.2087 |
| 31 | 4.572 | 9823 | 18116 | BB | 0.012 | 2.4663 |
| 32 | 4.611 | 29155 | 37478 | BB | 0.013 | 7.3204 |
| 33 | 4.663 | 16392 | 10675 | BB | 0.022 | 4.1158 |
| 34 | 4.709 | 11442 | 12562 | BB | 0.015 | 2.8730 |
| 35 | 4.744 | 28973 | 32841 | BB | 0.014 | 7.2747 |
| 36 | 4.840 | 13904 | 6623 | BB | 0.030 | 3.4912 |
| 37 | 4.879 | 29543 | 29075 | BB | 0.017 | 7.4179 |
| 38 | 4.922 | 8777 | 7431 | BB | 0.024 | 2.2039 |
| 39 | 4.976 | 5017 | 5025 | BB | 0.018 | 1.2597 |
| 40 | 5.015 | 15491 | 20127 | BB | 0.013 | 3.8896 |
| 41 | 5.111 | 7880 | 5100 | BB | 0.026 | 1.9786 |
| 42 | 5.155 | 13231 | 14234 | BB | 0.017 | 3.3221 |
| 43 | 5.256 | 1736 | 2383 | BB | 0.012 | 0.4358 |
| 44 | 5.306 | 8261 | 10199 | BB | 0.014 | 2.0743 |
| 45 | 5.352 | 3658 | 4380 | BB | 0.014 | 0.9185 |
| 46 | 5.386 | 2011 | 2452 | BB | 0.013 | 0.5051 |
| 47 | 5.471 | 5004 | 5834 | BB | 0.014 | 1.2563 |
| 48 | 5.526 | 4403 | 2924 | BB | 0.023 | 1.1055 |
| 49 | 5.578 | 5050 | 4925 | BB | 0.017 | 1.2679 |
| 50 | 5.656 | 8563 | 4995 | BB | 0.025 | 2.1501 |
| 51 | 5.746 | 7265 | 4161 | BB | 0.025 | 1.8241 |
| 52 | 5.866 | 3708 | 2879 | BB | 0.023 | 0.9311 |
| 53 | 5.956 | 1498 | 2221 | BB | 0.012 | 0.3760 |

Total area = 398271

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\034F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 34 | |
| Sample Name | : 1000 mo 44-151 | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 19:28 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:20 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 5 | >5.51 | <5.57 | 4403 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 11 | >4.53 | <4.60 | 9823 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 2 | >3.73 | <3.79 | 2035 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 219 | >1.8 | <4.5 | 1.67E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 888 | >1.8 | <6.5 | 6880531 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 1009 | >4.5 | <6.5 | 5207160 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 1012 | >3.2 | <6.5 | 6880531 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 263 | >1.8 | <4.5 | 1673371 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 267 | >1.1 | <4.5 | 1673371 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1613 | >1.8 | <6.5 | 6884934 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 899 | | | | | |
| TPHDX (8-36) | 888 | | | | | |
| Motor Oil (8-36 | 1334 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\035F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 35 |
| Sample Name | : 2000 mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 07:38 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:20 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

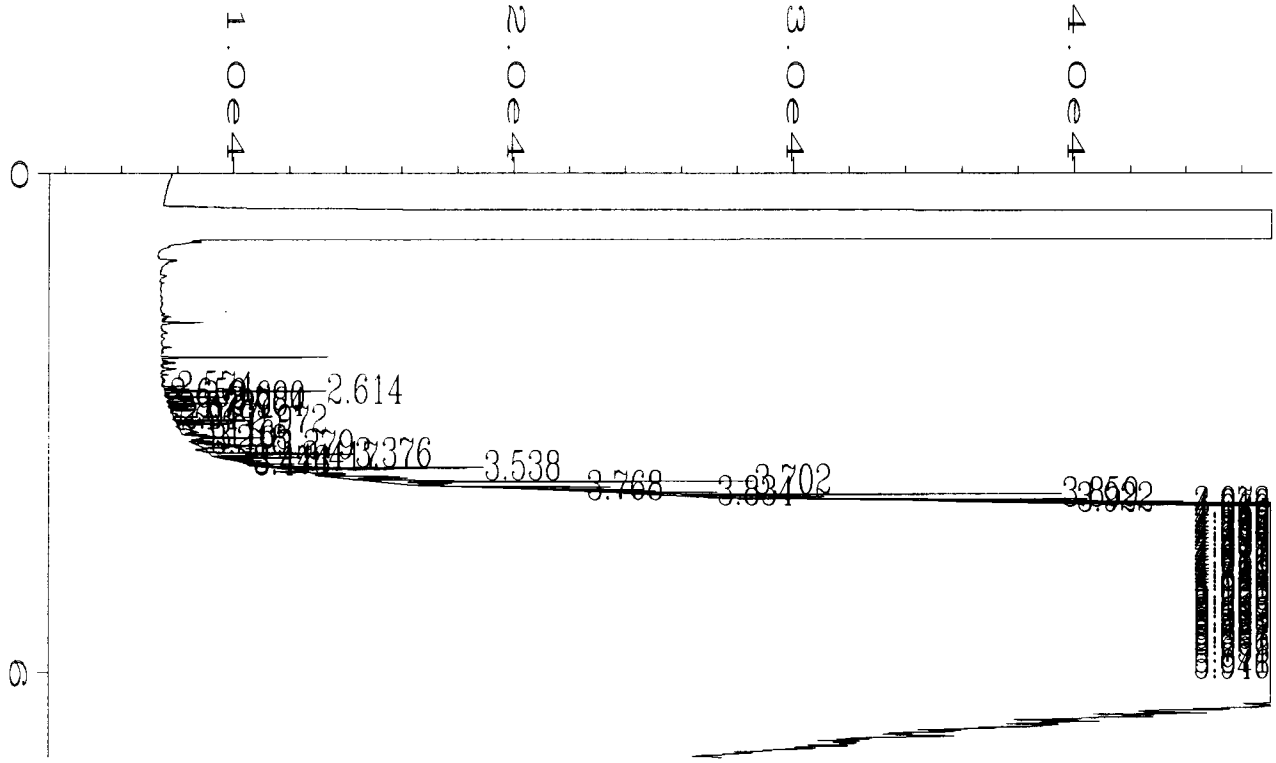
Data File Name : C:\HPCHEM\1\DATA\01-14-15\035F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 2000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:38 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\035F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.08816E+009 | 7.96462E+007 | BVA | 0.228 | 98.7331 |
| 2 | 3.852 | 3295323 | 199689 | PVA | 0.275 | 0.2990 |
| 3 | 5.502 | 1.03971E+007 | 213102 | VVA | 0.813 | 0.9434 |
| 4 | 6.762 | 270706 | 18909 | VB + | 0.000 | 0.0246 |

Total area = 1.10212E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\035R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 2000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:38 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\035R1101.D

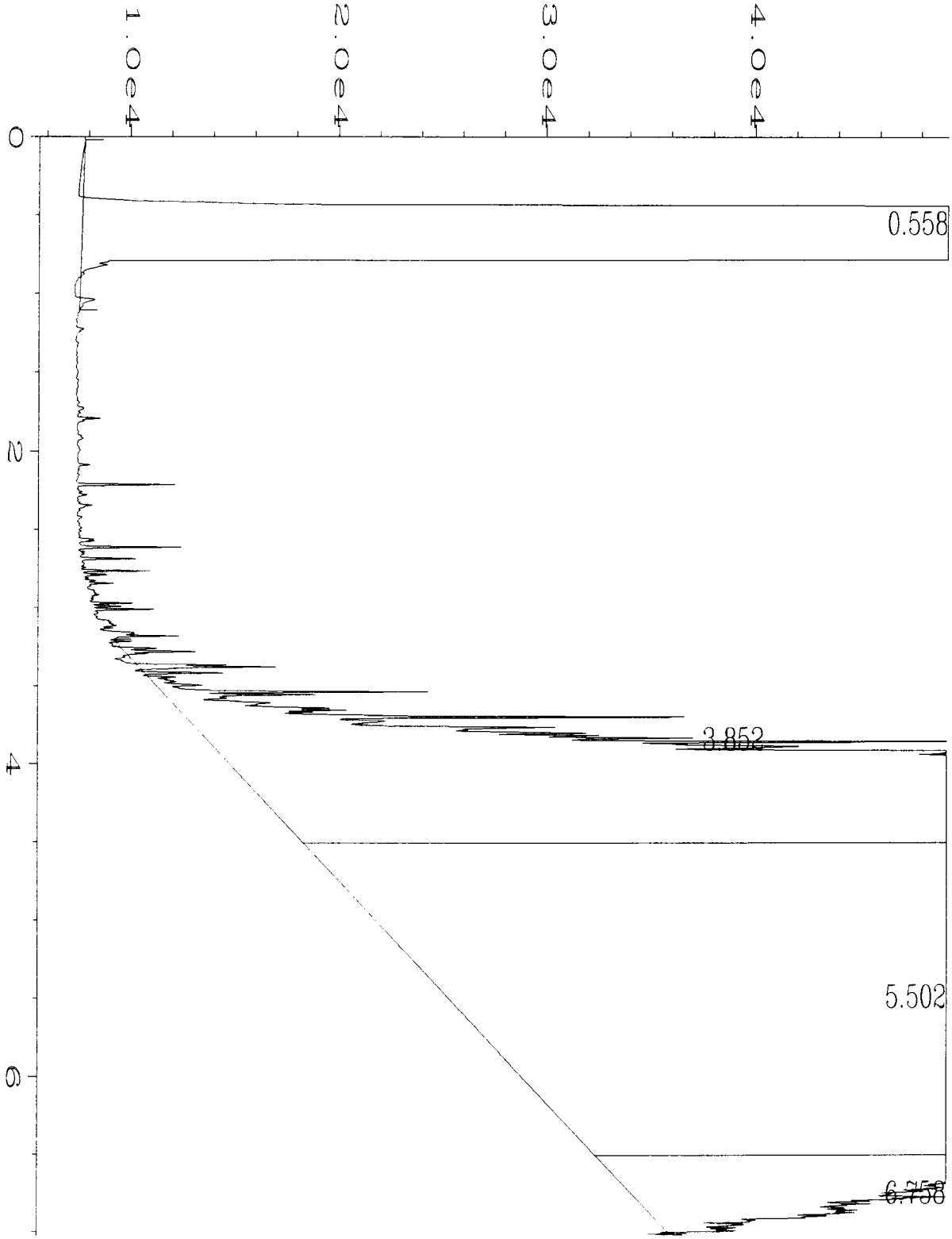
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.574 | 422 | 486 | BB | 0.014 | 0.0480 |
| 2 | 2.614 | 3073 | 6092 | BB | 0.008 | 0.3497 |
| 3 | 2.659 | 259 | 181 | BB | 0.024 | 0.0294 |
| 4 | 2.690 | 1149 | 2302 | BB | 0.008 | 0.1307 |
| 5 | 2.764 | 1009 | 2269 | BB | 0.007 | 0.1148 |
| 6 | 2.789 | 502 | 991 | BB | 0.008 | 0.0571 |
| 7 | 2.828 | 199 | 309 | BB | 0.011 | 0.0226 |
| 8 | 2.917 | 703 | 269 | BB | 0.044 | 0.0800 |
| 9 | 2.972 | 2741 | 2861 | BB | 0.016 | 0.3119 |
| 10 | 3.115 | 1336 | 687 | BB | 0.032 | 0.1520 |
| 11 | 3.165 | 476 | 499 | BB | 0.016 | 0.0542 |
| 12 | 3.218 | 828 | 686 | BB | 0.020 | 0.0943 |
| 13 | 3.279 | 3560 | 2961 | BB | 0.020 | 0.4051 |
| 14 | 3.376 | 4776 | 5356 | BB | 0.015 | 0.5434 |
| 15 | 3.417 | 1760 | 3048 | BB | 0.010 | 0.2003 |
| 16 | 3.444 | 357 | 783 | BB | 0.008 | 0.0406 |
| 17 | 3.473 | 438 | 458 | BB | 0.016 | 0.0498 |
| 18 | 3.538 | 3737 | 7903 | BB | 0.008 | 0.4253 |
| 19 | 3.702 | 14413 | 14688 | BB | 0.023 | 1.6401 |
| 20 | 3.768 | 3805 | 5449 | BB | 0.012 | 0.4330 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.834 | 5651 | 4181 | BB | 0.023 | 0.6431 |
| 22 | 3.859 | 12958 | 15880 | BB | 0.014 | 1.4745 |
| 23 | 3.922 | 8843 | 8853 | BB | 0.017 | 1.0063 |
| 24 | 3.973 | 12516 | 10221 | BB | 0.018 | 1.4242 |
| 25 | 4.010 | 7694 | 13355 | BB | 0.010 | 0.8755 |
| 26 | 4.069 | 13859 | 17341 | BB | 0.013 | 1.5771 |
| 27 | 4.149 | 22790 | 9037 | BB | 0.042 | 2.5933 |
| 28 | 4.209 | 34232 | 39237 | BB | 0.015 | 3.8953 |
| 29 | 4.259 | 19371 | 17064 | BB | 0.019 | 2.2043 |
| 30 | 4.294 | 17190 | 23442 | BB | 0.012 | 1.9561 |
| 31 | 4.348 | 69863 | 49091 | BB | 0.023 | 7.9498 |
| 32 | 4.397 | 26221 | 20905 | BB | 0.021 | 2.9837 |
| 33 | 4.437 | 29862 | 36560 | BB | 0.014 | 3.3980 |
| 34 | 4.483 | 70155 | 64255 | BB | 0.018 | 7.9830 |
| 35 | 4.577 | 22867 | 33440 | BB | 0.011 | 2.6020 |
| 36 | 4.617 | 47187 | 62227 | BB | 0.013 | 5.3695 |
| 37 | 4.670 | 31991 | 24443 | BB | 0.022 | 3.6403 |
| 38 | 4.713 | 24045 | 23778 | BB | 0.016 | 2.7361 |
| 39 | 4.751 | 53735 | 68494 | BB | 0.013 | 6.1146 |
| 40 | 4.799 | 26476 | 15361 | BB | 0.029 | 3.0128 |
| 41 | 4.846 | 16237 | 14404 | BB | 0.019 | 1.8476 |
| 42 | 4.887 | 56004 | 47802 | BB | 0.019 | 6.3728 |
| 43 | 4.981 | 10031 | 7057 | BB | 0.020 | 1.1414 |
| 44 | 5.020 | 35304 | 35775 | BB | 0.018 | 4.0173 |
| 45 | 5.065 | 3940 | 2148 | BB | 0.031 | 0.4483 |
| 46 | 5.120 | 6670 | 11324 | BB | 0.010 | 0.7590 |
| 47 | 5.163 | 27637 | 28385 | BB | 0.016 | 3.1448 |
| 48 | 5.223 | 8962 | 8339 | BB | 0.018 | 1.0198 |
| 49 | 5.313 | 22103 | 20314 | BB | 0.018 | 2.5152 |
| 50 | 5.363 | 4119 | 6896 | BB | 0.012 | 0.4687 |
| 51 | 5.393 | 5054 | 7181 | BB | 0.012 | 0.5751 |
| 52 | 5.481 | 12764 | 14257 | BB | 0.014 | 1.4524 |
| 53 | 5.527 | 9647 | 5525 | BB | 0.029 | 1.0978 |
| 54 | 5.587 | 22671 | 13494 | BB | 0.025 | 2.5798 |
| 55 | 5.666 | 14381 | 8213 | BB | 0.028 | 1.6364 |
| 56 | 5.753 | 12579 | 8720 | BB | 0.024 | 1.4314 |
| 57 | 5.871 | 5014 | 3704 | BB | 0.021 | 0.5706 |
| 58 | 5.946 | 2632 | 4941 | BB | 0.016 | 0.2995 |

Total area = 878800

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\035F1101.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 35 | |
| Sample Name : 2000 mo 44-151 | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 1/14/15 | 19:38 | | Instrume | DX1.MTH | |
| Report Created on: 15 Jan 15 10:20 AM | | | | Analysis Method | : DX1.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 12 | >5.51 | <5.57 | 9647 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 25 | >4.53 | <4.60 | 22867 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 4 | >3.73 | <3.79 | 3805 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 430 | >1.8 | <4.5 | 3.29E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 1763 | >1.8 | <6.5 | 13656104 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 2009 | >4.5 | <6.5 | 10364586 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 2008 | >3.2 | <6.5 | 13656104 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 516 | >1.8 | <4.5 | 3291518 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 |
| Kerosene C8-C20 | | | | | | |
| 524 | >1.1 | <4.5 | 3291518 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 3202 | >1.8 | <6.5 | 13665751 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 1783 | | | | | |
| TPHDX (8-36) | 1763 | | | | | |
| Motor Oil (8-36 | 2647 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\036F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 36 |
| Sample Name | : 3000 mo 44-151 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 14 Jan 15 07:49 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:20 AM | Analysis Method | : DX1.MTH |

# Area Percent Report

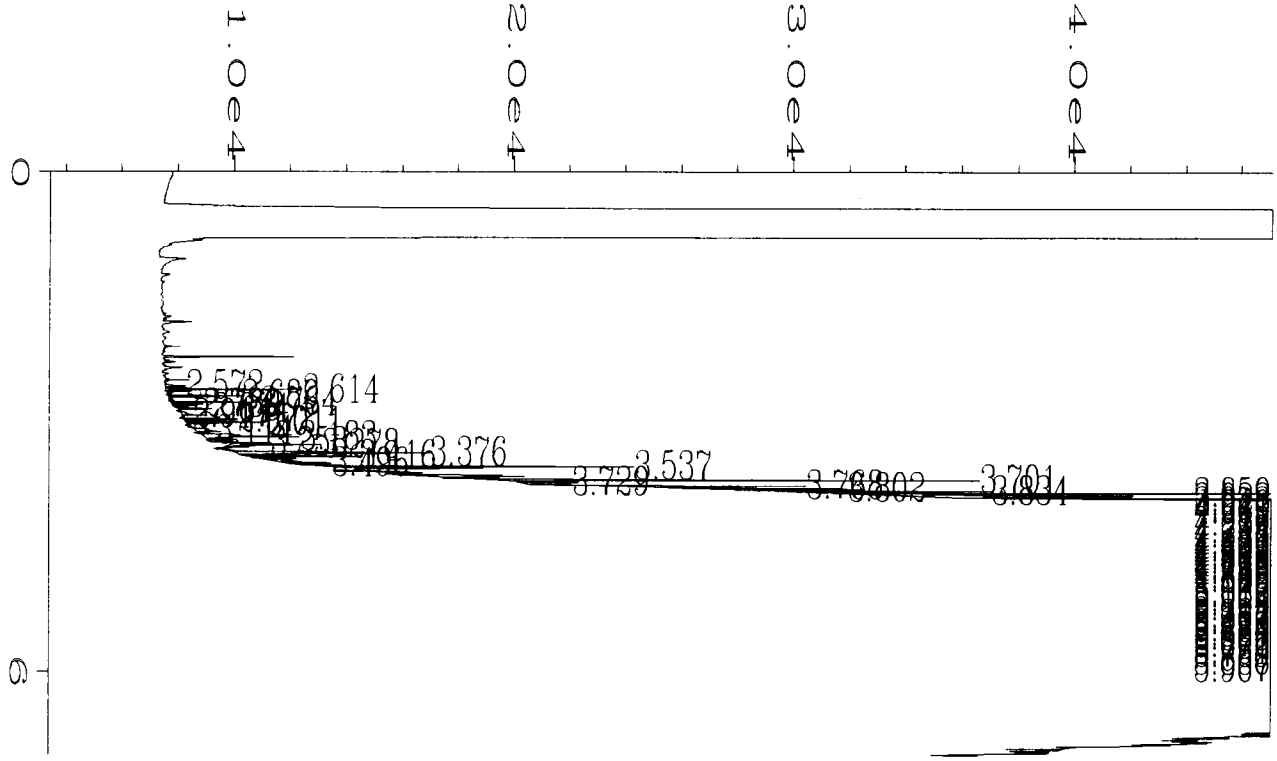
Data File Name : C:\HPCHEM\1\DATA\01-14-15\036F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 3000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:49 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\036F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06319E+009 | 7.93042E+007 | BVA | 0.223 | 98.1425 |
| 2 | 3.852 | 4729551 | 278884 | PVA | 0.283 | 0.4366 |
| 3 | 5.502 | 1.49785E+007 | 296630 | VVA | 0.842 | 1.3827 |
| 4 | 6.758 | 414918 | 27519 | VB + | 0.000 | 0.0383 |

Total area = 1.08332E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\036R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 3000 mo 44-151
Run Time Bar Code:
Acquired on : 14 Jan 15 07:49 PM
Report Created on: 15 Jan 15 10:20 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 11
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\036R1101.D

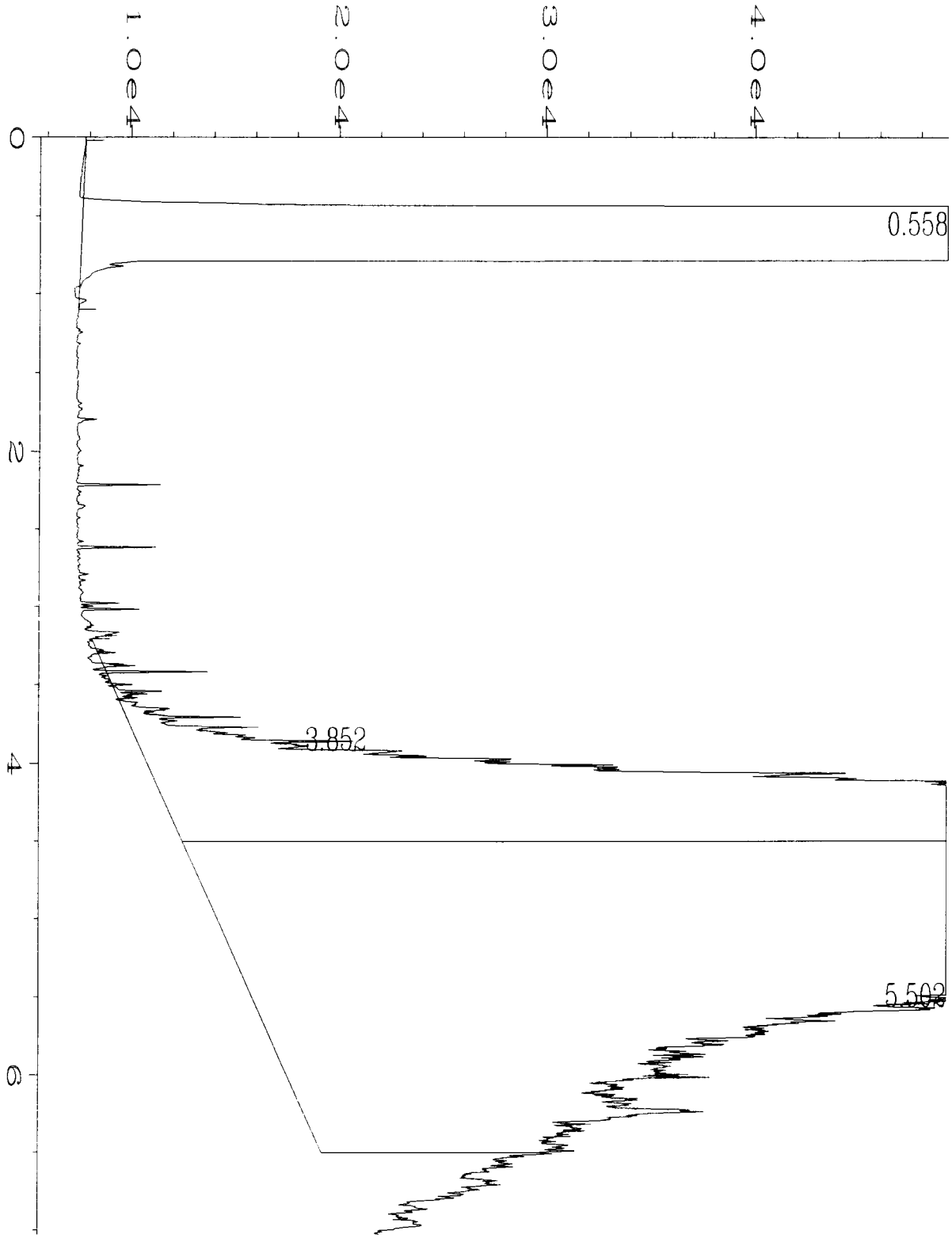
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.572 | 767 | 810 | BBAS | 0.016 | 0.0598 |
| 2 | 2.614 | 2514 | 5057 | BB | 0.008 | 0.1959 |
| 3 | 2.689 | 1418 | 2792 | BB | 0.008 | 0.1105 |
| 4 | 2.764 | 1513 | 3334 | BB | 0.008 | 0.1179 |
| 5 | 2.789 | 632 | 1218 | BB | 0.009 | 0.0493 |
| 6 | 2.844 | 809 | 1263 | BB | 0.011 | 0.0630 |
| 7 | 2.917 | 298 | 400 | BB | 0.012 | 0.0232 |
| 8 | 2.972 | 919 | 2090 | BB | 0.007 | 0.0716 |
| 9 | 3.011 | 2090 | 3088 | BB | 0.011 | 0.1629 |
| 10 | 3.114 | 1113 | 746 | BB | 0.025 | 0.0868 |
| 11 | 3.183 | 3498 | 3581 | BB | 0.017 | 0.2725 |
| 12 | 3.258 | 491 | 1515 | BB | 0.005 | 0.0383 |
| 13 | 3.278 | 2405 | 3614 | BB | 0.011 | 0.1874 |
| 14 | 3.376 | 6692 | 7229 | BB | 0.015 | 0.5215 |
| 15 | 3.416 | 2419 | 4197 | BB | 0.010 | 0.1885 |
| 16 | 3.496 | 2791 | 1740 | BB | 0.027 | 0.2175 |
| 17 | 3.537 | 5148 | 11382 | BB | 0.008 | 0.4011 |
| 18 | 3.701 | 14689 | 18845 | BB | 0.013 | 1.1446 |
| 19 | 3.729 | 1986 | 1764 | BB | 0.019 | 0.1548 |
| 20 | 3.768 | 4963 | 7176 | BB | 0.014 | 0.3867 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.802 | 3229 | 5263 | BB | 0.010 | 0.2516 |
| 22 | 3.834 | 5866 | 7313 | BB | 0.013 | 0.4571 |
| 23 | 3.859 | 21034 | 22610 | BB | 0.016 | 1.6389 |
| 24 | 3.922 | 13826 | 13439 | BB | 0.017 | 1.0773 |
| 25 | 3.973 | 15022 | 12524 | BB | 0.020 | 1.1705 |
| 26 | 4.010 | 8870 | 18925 | BB | 0.008 | 0.6911 |
| 27 | 4.041 | 4172 | 5717 | BB | 0.012 | 0.3251 |
| 28 | 4.069 | 22722 | 26212 | BB | 0.016 | 1.7705 |
| 29 | 4.210 | 86590 | 58075 | BB | 0.022 | 6.7471 |
| 30 | 4.294 | 4654 | 25619 | BB | 0.003 | 0.3626 |
| 31 | 4.348 | 93559 | 72183 | BB | 0.020 | 7.2901 |
| 32 | 4.436 | 73269 | 49165 | BB | 0.023 | 5.7091 |
| 33 | 4.483 | 90251 | 84387 | BB | 0.018 | 7.0323 |
| 34 | 4.521 | 50674 | 34307 | BB | 0.025 | 3.9485 |
| 35 | 4.578 | 57453 | 54662 | BB | 0.018 | 4.4768 |
| 36 | 4.618 | 74349 | 87987 | BB | 0.014 | 5.7933 |
| 37 | 4.668 | 51751 | 37892 | BB | 0.020 | 4.0324 |
| 38 | 4.716 | 40420 | 39868 | BB | 0.017 | 3.1495 |
| 39 | 4.753 | 71904 | 85331 | BB | 0.014 | 5.6028 |
| 40 | 4.788 | 32082 | 23645 | BB | 0.023 | 2.4998 |
| 41 | 4.848 | 17541 | 16869 | BB | 0.017 | 1.3668 |
| 42 | 4.888 | 77163 | 68503 | BB | 0.017 | 6.0125 |
| 43 | 5.023 | 59094 | 55422 | BB | 0.020 | 4.6046 |
| 44 | 5.069 | 8443 | 9848 | BB | 0.014 | 0.6579 |
| 45 | 5.119 | 9630 | 8300 | BB | 0.019 | 0.7503 |
| 46 | 5.164 | 45864 | 38669 | BB | 0.020 | 3.5737 |
| 47 | 5.225 | 16304 | 12043 | BB | 0.023 | 1.2704 |
| 48 | 5.317 | 35538 | 34197 | BB | 0.019 | 2.7691 |
| 49 | 5.365 | 14469 | 16458 | BB | 0.014 | 1.1274 |
| 50 | 5.400 | 6161 | 8893 | BB | 0.012 | 0.4801 |
| 51 | 5.484 | 8203 | 23376 | BB | 0.006 | 0.6392 |
| 52 | 5.539 | 2719 | 6121 | BB | 0.007 | 0.2119 |
| 53 | 5.588 | 28864 | 14850 | BB | 0.026 | 2.2491 |
| 54 | 5.673 | 18627 | 14736 | BB | 0.021 | 1.4514 |
| 55 | 5.751 | 26126 | 12138 | BB | 0.036 | 2.0357 |
| 56 | 5.789 | 12990 | 6820 | BB | 0.032 | 1.0122 |
| 57 | 5.886 | 11761 | 7394 | BB | 0.023 | 0.9164 |
| 58 | 5.967 | 5017 | 3841 | BB | 0.022 | 0.3909 |

Total area = 1283365

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\036F1101.D | | | | | | | |
| Operator : mwdl | | | | Page Number : 1 | | | |
| Instrument : GC1 | | | | Vial Number : 36 | | | |
| Sample Name : 3000 mo 44-151 | | | | Injection Number : 1 | | | |
| Run Time Bar Code: | | | | Sequence Line : 11 | | | |
| Acquired on | 1/14/15 | 19:49 | | Instrume | DX1.MTH | | |
| Report Created on: 15 Jan 15 10:20 AM | | | | Analysis Method : DX1.MTH | | | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 3 | >5.51 | <5.57 | 2719 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 63 | >4.53 | <4.60 | 57453 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 5 | >3.73 | <3.79 | 4963 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 617 | >1.8 | <4.5 | 4.72E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 2535 | >1.8 | <6.5 | 19642916 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 2892 | >4.5 | <6.5 | 14918328 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 2889 | >3.2 | <6.5 | 19642916 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 741 | >1.8 | <4.5 | 4724588 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 | |
| Kerosene C8-C20 | | | | | | | |
| 752 | >1.1 | <4.5 | 4724588 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 4603 | >1.8 | <6.5 | 19645635 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 0 | | | | | | |
| TPHD (8-36) | 2565 | | | | | | |
| TPHDX (8-36) | 2535 | | | | | | |
| Motor Oil (8-36 | 3807 | | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\037F1301.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 37 |
| Sample Name | : 1000 mo2' 43-58 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 13 |
| Acquired on | : 14 Jan 15 08:11 PM | Instrument Method | : DX1.MTH |
| Report Created on: | 15 Jan 15 10:21 AM | Analysis Method | : DX1.MTH |

==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\037F1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 mo2' 43-58
Run Time Bar Code:
Acquired on : 14 Jan 15 08:11 PM
Report Created on: 15 Jan 15 10:21 AM

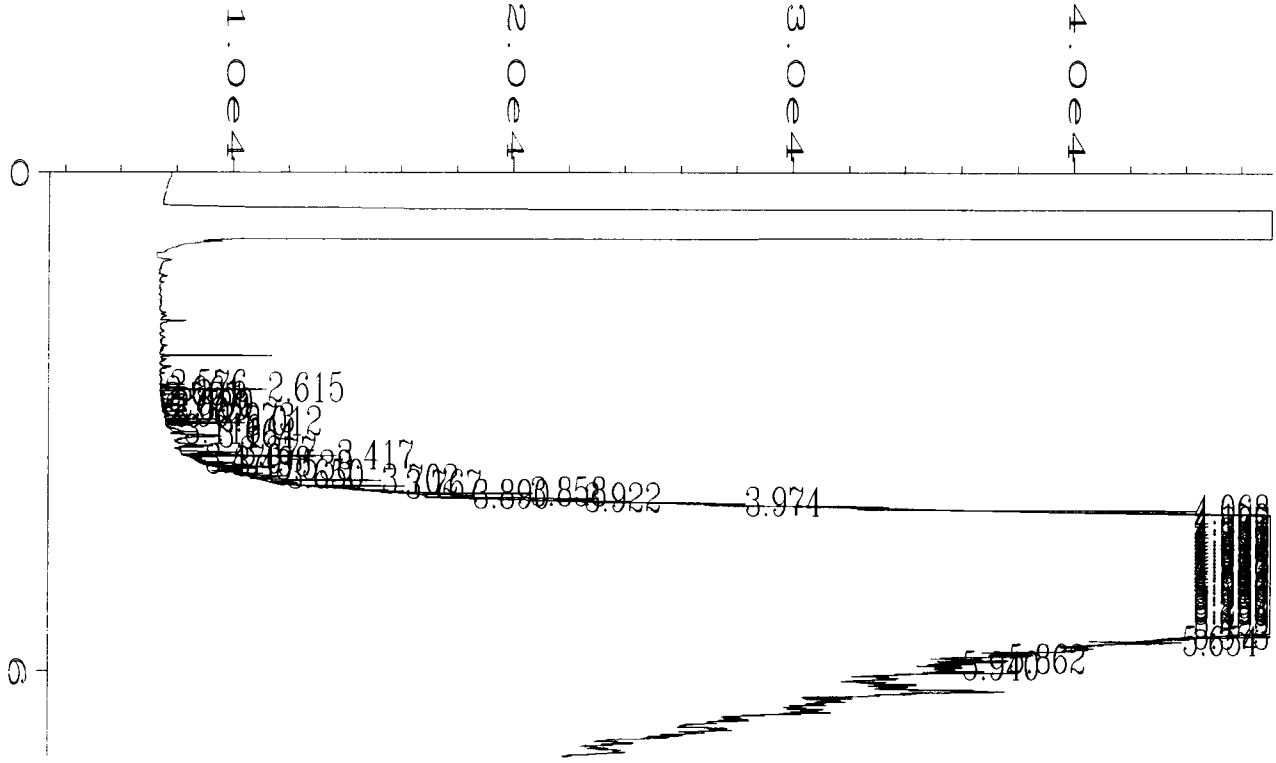
Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 13
Instrument Method: DX1.MTH
Analysis Method : DX1.MTH

Sig. 1 in C:\HPCHEM\1\DATA\01-14-15\037F1301.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.09683E+009 | 8.0749E+007 | BVA | 0.226 | 99.3768 |
| 2 | 3.852 | 1900717 | 97722 | PVA | 0.324 | 0.1722 |
| 3 | 5.502 | 4977604 | 92054 | VB + | 0.000 | 0.4510 |

Total area = 1.10371E+009

==========




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\01-14-15\037R1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 mo2' 43-58
Run Time Bar Code:
Acquired on : 14 Jan 15 08:11 PM
Report Created on: 15 Jan 15 10:21 AM

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 13
Instrument Method: DX1.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\01-14-15\037R1301.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.576 | 209 | 348 | BB | 0.010 | 0.0579 |
| 2 | 2.615 | 2071 | 4079 | BB | 0.008 | 0.5724 |
| 3 | 2.661 | 188 | 158 | BB | 0.018 | 0.0519 |
| 4 | 2.727 | 263 | 110 | BB | 0.040 | 0.0727 |
| 5 | 2.790 | 419 | 540 | BB | 0.013 | 0.1157 |
| 6 | 2.829 | 421 | 393 | BB | 0.028 | 0.1164 |
| 7 | 2.907 | 289 | 209 | BB | 0.021 | 0.0798 |
| 8 | 2.973 | 919 | 1970 | BB | 0.008 | 0.2540 |
| 9 | 3.012 | 1773 | 2995 | BB | 0.015 | 0.4900 |
| 10 | 3.116 | 804 | 445 | BB | 0.030 | 0.2222 |
| 11 | 3.164 | 617 | 979 | BB | 0.012 | 0.1704 |
| 12 | 3.377 | 2136 | 2138 | BB | 0.020 | 0.5904 |
| 13 | 3.417 | 3022 | 5538 | BB | 0.009 | 0.8352 |
| 14 | 3.470 | 505 | 282 | BB | 0.025 | 0.1395 |
| 15 | 3.498 | 778 | 1310 | BB | 0.010 | 0.2149 |
| 16 | 3.538 | 1468 | 2384 | BB | 0.010 | 0.4057 |
| 17 | 3.650 | 1207 | 1394 | BB | 0.015 | 0.3336 |
| 18 | 3.702 | 3308 | 4557 | BB | 0.012 | 0.9143 |
| 19 | 3.767 | 2189 | 3776 | BB | 0.013 | 0.6050 |
| 20 | 3.858 | 4233 | 4847 | BB | 0.015 | 1.1699 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.890 | 2236 | 1747 | BB | 0.019 | 0.6181 |
| 22 | 3.922 | 4244 | 3525 | BB | 0.020 | 1.1728 |
| 23 | 3.974 | 3447 | 3017 | BB | 0.019 | 0.9527 |
| 24 | 4.068 | 6040 | 7143 | BB | 0.015 | 1.6693 |
| 25 | 4.170 | 15901 | 7081 | BB | 0.037 | 4.3944 |
| 26 | 4.207 | 18626 | 21297 | BB | 0.015 | 5.1474 |
| 27 | 4.307 | 34025 | 12648 | BB | 0.052 | 9.4031 |
| 28 | 4.341 | 26669 | 28698 | BB | 0.016 | 7.3700 |
| 29 | 4.392 | 11476 | 12229 | BB | 0.016 | 3.1715 |
| 30 | 4.439 | 12910 | 12350 | BB | 0.017 | 3.5678 |
| 31 | 4.477 | 16650 | 16280 | BB | 0.017 | 4.6013 |
| 32 | 4.528 | 15540 | 11640 | BB | 0.022 | 4.2946 |
| 33 | 4.574 | 20990 | 14116 | BB | 0.025 | 5.8008 |
| 34 | 4.611 | 15192 | 19477 | BB | 0.014 | 4.1985 |
| 35 | 4.661 | 11435 | 7041 | BB | 0.026 | 3.1600 |
| 36 | 4.708 | 13907 | 12340 | BB | 0.019 | 3.8434 |
| 37 | 4.747 | 14327 | 14888 | BB | 0.016 | 3.9593 |
| 38 | 4.780 | 4772 | 7762 | BB | 0.010 | 1.3187 |
| 39 | 4.843 | 1682 | 4939 | BB | 0.007 | 0.4647 |
| 40 | 4.881 | 14779 | 12070 | BB | 0.019 | 4.0843 |
| 41 | 4.924 | 9790 | 8448 | BB | 0.019 | 2.7056 |
| 42 | 4.980 | 4616 | 5458 | BB | 0.014 | 1.2756 |
| 43 | 5.016 | 10064 | 7188 | BB | 0.023 | 2.7812 |
| 44 | 5.059 | 5677 | 4802 | BB | 0.019 | 1.5689 |
| 45 | 5.156 | 12045 | 7265 | BB | 0.028 | 3.3287 |
| 46 | 5.200 | 1179 | 1881 | BB | 0.010 | 0.3257 |
| 47 | 5.250 | 6061 | 3368 | BB | 0.026 | 1.6751 |
| 48 | 5.284 | 4218 | 7063 | BB | 0.010 | 1.1657 |
| 49 | 5.429 | 6772 | 3121 | BB | 0.036 | 1.8716 |
| 50 | 5.573 | 6653 | 3479 | BB | 0.029 | 1.8385 |
| 51 | 5.654 | 147 | 1888 | BB | 0.001 | 0.0407 |
| 52 | 5.862 | 1937 | 2054 | BB | 0.016 | 0.5352 |
| 53 | 5.940 | 1025 | 964 | BB | 0.018 | 0.2832 |

Total area = 361852

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\037F1301.D | | | | | | | |
| Operator : mwdl | | | | Page Number : 1 | | | |
| Instrument : GC1 | | | | Vial Number : 37 | | | |
| Sample Name : 1000 mo2' 43-58 | | | | Injection Number : 1 | | | |
| Run Time Bar Code: | | | | Sequence Line : 13 | | | |
| Acquired on | 1/14/15 | 20:11 | | Instrume | DX1.MTH | | |
| Report Created on: 15 Jan 15 10:21 AM | | | | Analysis Method : DX1.MTH | | | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.51 | <5.57 | 0 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 23 | >4.53 | <4.60 | 20990 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 2 | >3.73 | <3.79 | 2189 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 248 | >1.8 | <4.5 | 1.90E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 885 | >1.8 | <6.5 | 6855141 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 961 | >4.5 | <6.5 | 4956613 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 1008 | >3.2 | <6.5 | 6855141 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 298 | >1.8 | <4.5 | 1898528 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 0 | >1.1 | <3.2 | 0 | 6.07E+03 | | 6/25/12 | |
| Kerosene C8-C20 | | | | | | | |
| 302 | >1.1 | <4.5 | 1898528 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 1606 | >1.8 | <6.5 | 6855142 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 0 | | | | | | |
| TPHD (8-36) | 895 | | | | | | |
| TPHDX (8-36) | 885 | | | | | | |
| Motor Oil (8-36 | 1329 | | | | | | |

# NWTPH-Dx
## MDLs

F&B Project 506270

## MDL Results GC1

**SUMMARY**

(Analyst: Do not enter anything in this worksheet. See instructions.)

**SOIL**

2 grams of soil extracted into 10 mL solvent no concentration

| Analyte | (StdDev*2.998) MDL | (2*MDL) PQL | (5*MDL) PQL | Std Dev | Mean | Spike Level | % Rec. | Date Calculated | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Diesel | 4.75 | 9.5 | 23.8 | 1.59 | 13.3 | 13 | 106 | 02/09/15 | 50 |
| Diesel extended | 5.15 | 10.3 | 25.7 | 1.72 | 15.0 | 13 | 120 | 02/09/15 | 50 |
| Motor Oil | 9.9 | 19.8 | 49.6 | 3.31 | 42.7 | 50 | 85 | 02/09/15 | 250 |
| Heavy Oil | 13.7 | 27.4 | 68.4 | 4.56 | 44.4 | 50 | 89 | 02/09/15 | 250 |
| Stoddard solvent | 5.91 | 11.8 | 29.5 | 1.97 | 13.5 | 13 | 108 | 02/09/15 | 50 |

20 grams of soil extracted and concentrated into 10 mL solvent

| Analyte | (StdDev*2.998) MDL | (2*MDL) PQL | (5*MDL) PQL | Std Dev | Mean | Spike Level | % Rec. | Date Calculated | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Diesel | 0.62 | 1.24 | 3.09 | 0.21 | 2.31 | 2.5 | 92 | 01/27/15 | 10 |
| Diesel extended | 0.75 | 1.50 | 3.74 | 0.25 | 2.85 | 2.5 | 114 | 01/27/15 | 10 |
| Motor Oil | 0.78 | 1.55 | 3.89 | 0.26 | 4.4 | 5.0 | 88 | 02/09/15 | 25 |
| Heavy Oil | 1.03 | 2.06 | 5.15 | 0.34 | 4.9 | 5.0 | 99 | 02/09/15 | 25 |
| Stoddard Solvent | 1.44 | 2.88 | 7.19 | 0.48 | 1.1 | 1 | 91 | 02/09/15 | 10 |

**WATER**

| Analyte | (StdDev*2.998) MDL | (2*MDL) PQL | (5*MDL) PQL | Std Dev | Mean | Spike Level | % Rec. | Date Calculated | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Diesel | 7.4 | 14.7 | 36.8 | 2.46 | 33.8 | 25 | 135 | 01/26/15 | 50 |
| Diesel extended | 9.5 | 18.9 | 47.4 | 3.16 | 37.8 | 25 | 151 | 01/26/15 | 250 |
| Motor Oil | 8.4 | 16.8 | 42.1 | 2.81 | 82.8 | 100 | 83 | 02/09/15 | 250 |
| Heavy Oil | 10.8 | 21.6 | 54.0 | 3.60 | 88.5 | 100 | 89 | 02/09/15 | 250 |
| Stoddard solvent | 6.5 | 13.0 | 32.6 | 2.17 | 26.7 | 25 | 107 | 02/09/15 | 50 |

# NWTPH-Dx
## Sequence Tables

F&B Project 506270

Sequence: C:\HPCHEM\1\SEQUENCE\06-12-15.SEQ

## Sequence Table

| Inj. | Seq. Line | Cal. Line | Method Name | From Vial | To Vial | Inj/ Vial |
|---|---|---|---|---|---|---|
| FRONT | | | | | | |
| | 1 | | BAKEOUT | 1 | 1 | 1 |
| | 2 | | DX | 96 | 97 | 1 |
| | 3 | | DX | 6 | 10 | 1 |
| | 4 | | DX | 2 | 3 | 1 |
| | 5 | | DX | 11 | 23 | 1 |
| | 6 | | DX | 4 | 5 | 1 |
| | 7 | | DX | 24 | 41 | 1 |
| | 8 | | DX | 81 | 81 | 1 |
| | 9 | | DX | 4 | 5 | 1 |
| | 10 | | DX | 50 | 60 | 1 |
| | 11 | | DX | 92 | 93 | 1 |
| | 12 | | DX | 61 | 66 | 1 |
| | 13 | | DX | 92 | 93 | 1 |
| | 14 | | DX | 42 | 49 | 1 |
| | 15 | | END | 1 | 1 | 1 |
| REAR | | | | | | |
| | 1 | | | | | |

M 6/13

GC1 6/12/15 2 of 2

## Sample Table

| Vial Num. | Sample Name | Sample Amount | Multiplier | ISTD Amount |
|---|---|---|---|---|
| 1 | MeCl2 | | | |
| 2 | 500 MO 44-50D | | | |
| 3 | 500 Dx 44-94C | | | |
| 4 | 1000 MO 44-151B | | | |
| 5 | 1000 Dx 44-172C | | | |
| 6 | 506245-01 | | | |
| 7 | 506245-02 | | | |
| 8 | 506245-03 | | | |
| 9 | 05-1086 mb | | | |
| 10 | 506245-01 dup | | | |
| 11 | 506252-01 | | | |
| 12 | 506252-02 | | | |
| 13 | 506252-03 | | | |
| 14 | 506252-04 | | | |
| 15 | 506252-05 | | | |
| 16 | 506253-01 | | | |
| 17 | 506253-02 | | | |
| 18 | 506253-03 | | | |
| 19 | 506254-01 | | | |
| 20 | 506254-02 | | | |
| 21 | 506254-03 | | | |
| 22 | 506255-01 | | | |
| 23 | 506255-02 | | | |
| 24 | 05-1103 mb | | | |
| 25 | 05-1103 lcs | | | |
| 26 | 506264-01 ms | | | |
| 27 | 506264-01 md | | | |
| 28 | 506264-01 | | | |
| 29 | 506264-02 | | | |
| 30 | 506264-03 | | | |

Sample Table

| Vial Num. | Sample Name | Sample Amount | Multiplier | ISTD Amount |
|---|---|---|---|---|
| 31 | 506264-04 | | | |
| 32 | 506264-05 | | | |
| 33 | 506264-06 | | | |
| 34 | 506264-07 | | | |
| 35 | 506264-08 | | | |
| 36 | 506264-09 | | | |
| 37 | 506264-10 | | | |
| 38 | 506264-11 | | | |
| 39 | 506264-12 | | | |
| 40 | 506264-13 | | | |
| 41 | 506264-14 | | | |
| 42 | 506246-01 | | | |
| 43 | 506246-02 | | | |
| 44 | 506246-03 | | | |
| 45 | 506246-04 | | | |
| 46 | 506246-05 | | | |
| 47 | 506246-06 | | | |
| 48 | 506246-07 | | | |
| 49 | 506246-08 | | | |
| 50 | 05-1104 mb | | | |
| 51 | 05-1104 lcs | | | |
| 52 | 05-1104 lcsd | | | |
| 53 | 506247-01 | | | |
| 54 | 506247-02 | | | |
| 55 | 506247-03 | | | |
| 56 | 506247-04 | | | |
| 57 | 506263-01 | | | |
| 58 | 506263-02 | | | |
| 59 | 506263-03 | | | |
| 60 | 506263-04 | | | |
| 61 | 05-1084 mb sg | | | |
| 62 | 05-1084 lcs sg | | | |
| 63 | 05-1084 lcsd sg | | | |
| 64 | 506236-09 sg | | | |
| 65 | 506236-13 sg | | | |
| 66 | 506270-01 | | | |
| 81 | 506272-01 | | | |
| 92 | 500 MO 44-50B | | | |
| 93 | 500 Dx 43-199B | | | |
| 94 | 1000 MO 41-165C | | | |
| 95 | 1000 Dx 41-155C | | | |
| 96 | HCIDs G/M 39-144 | | | |
| 97 | HCIDs Dx 39-46 | | | |
| 98 | HCIDw G/M 35-175 | | | |
| 99 | HCIDw Dx 35-174 | | | |
| 100 | WADF RT 35-139 | | | |

# NWTPH-Dx
## Checklists

## F&B Project 506270

**Diesel Summary Checklist for GC** 1 **Date** 6/12

| Day of Analysis/Morning Checklist | CCVs (Check if passed) | | |
|---|---|---|---|
| ☐ QA 1 Processed ____ ☐ QA 2 Processed ____ | ☑ ☑ CCV 1 | mo | dx |
| ☐ QA 3 Processed ____ ☐ QA 4 Processed ____ | ☑ ☑ CCV 2 | mo | dx |
| ☑ Same Day Rush samples processed | ☑ ☑ CCV 3 | ~~mo~~ 10a | dx |
| M 6/13 ☑ Pull/Check vials | ☑ ☑ CCV 4 | mo | dx |
| ☑ Check/Fill rinse vials and solvent | ☑ ☑ CCV 5 | mo | dx |
| Y N Did all Surrogates pass | ☐ ☐ CCV 6 ____ | ____ | |

| Data Processing | Data Review |
|---|---|
| Y / N Were all CCVs within 12 hours | Y / N Reintegrations calculated correctly |
| ☐ Reintegrations marked and done | Y / N Excel Sheet Filled out correctly |
| ☐ Cgrams printed | Y / N Headers Correct |
| ☐ Excel Sheet filled out | Y / N Correct Matrix/Units |
| ☐ Macro Run | Y / N Was EDD info added |
| ☑ Part Reports finished/Ready for Review | Y / N Was QC calculated correctly |

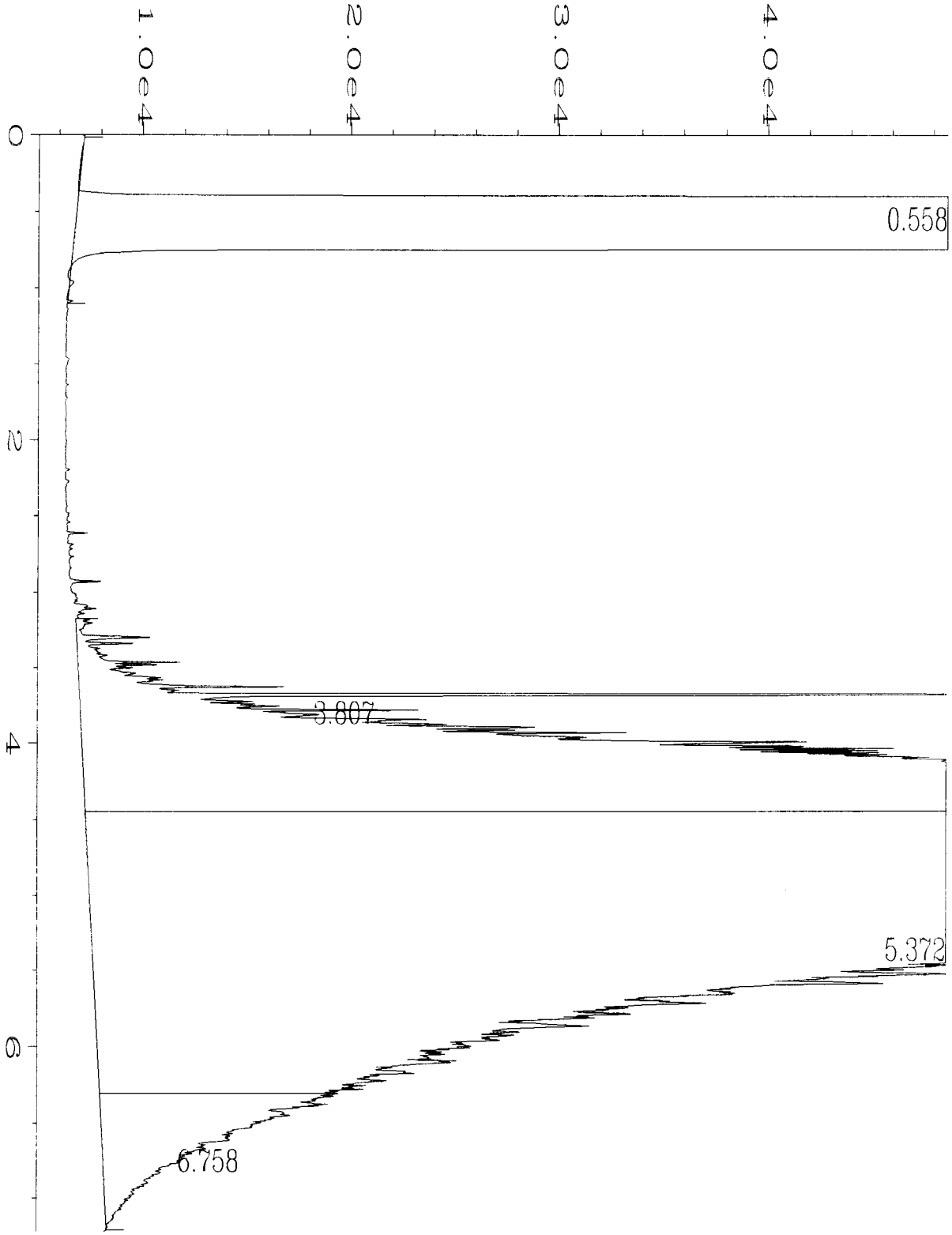
| Same-Day Rush Samples | Samples to be Reanalyzed | Maintenance to be Done |
|---|---|---|
| ____ | ____ | ☐ Change Liner |
| ____ | ____ | ☐ Change Septa |
| ____ | ____ | ☐ Clip Column |
| ____ | ____ | ☐ ____ |
| ____ | ____ | Symptom ____ |
| ____ | ____ | ____ |

Date/Time Finished Processing Data Pack 10:30a 6/13/15 [illegible]

Date/Time Finished Reviewing Data Pack 9:20 6/13/15 [illegible]

# NWTPH-Dx
## CCVs

## F&B Project 506270




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\004F0601.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 4 |
| Sample Name | : 1000 MO 44-151B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 6 |
| Acquired on | : 12 Jun 15 01:04 PM | Instrument Method: | DX.MTH |
| Report Created on: | 15 Jun 15 10:05 AM | Analysis Method | : DX.MTH |

# Area Percent Report

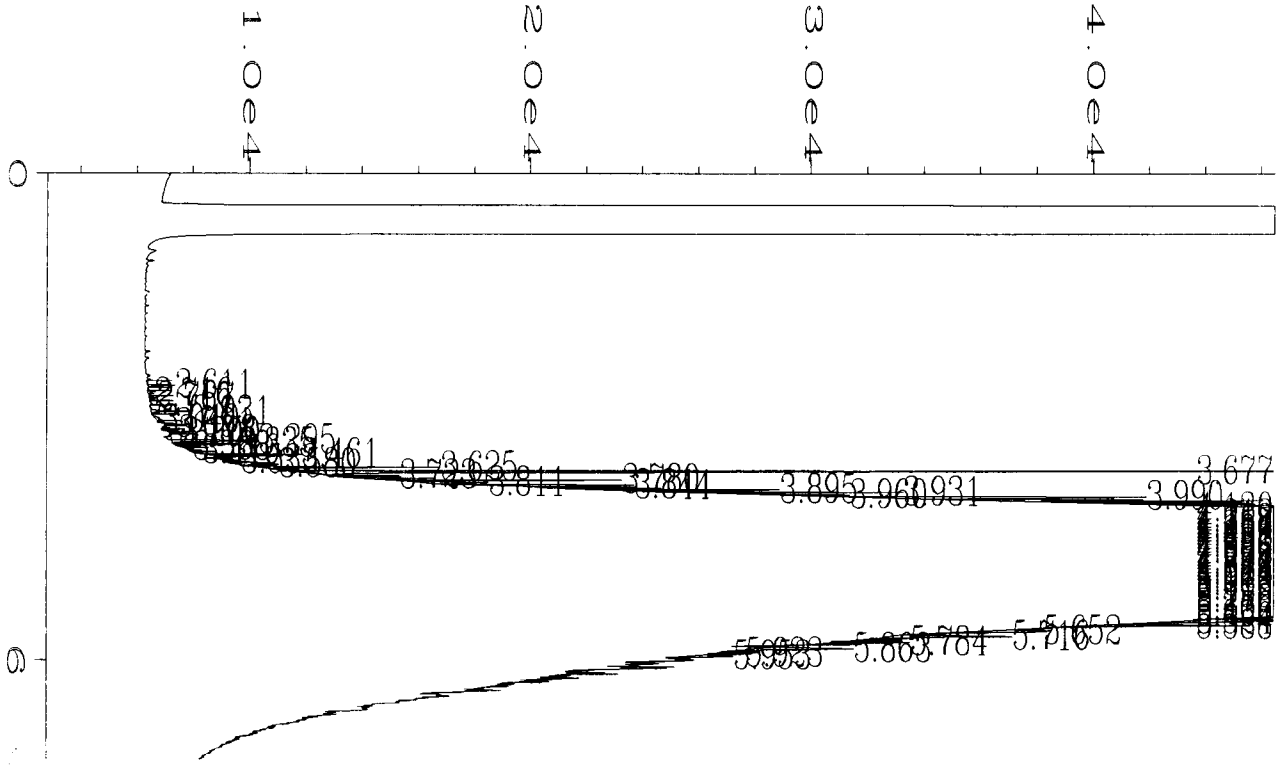
Data File Name : C:\HPCHEM\1\DATA\06-12-15\004F0601.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 MO 44-151B
Run Time Bar Code:
Acquired on : 12 Jun 15 01:04 PM
Report Created on: 15 Jun 15 10:05 AM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\004F0601.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06818E+009 | 8.58016E+007 | BVA | 0.207 | 99.2646 |
| 2 | 3.807 | 2024388 | 246045 | VVA | 0.137 | 0.1881 |
| 3 | 5.372 | 5658811 | 287063 | VV + | 0.000 | 0.5259 |
| 4 | 6.758 | 229894 | 11288 | VB + | 0.000 | 0.0214 |

Total area = 1.0761E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\004R0601.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 MO 44-151B
Run Time Bar Code:
Acquired on : 12 Jun 15 01:04 PM
Report Created on: 15 Jun 15 10:05 AM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\004R0601.D

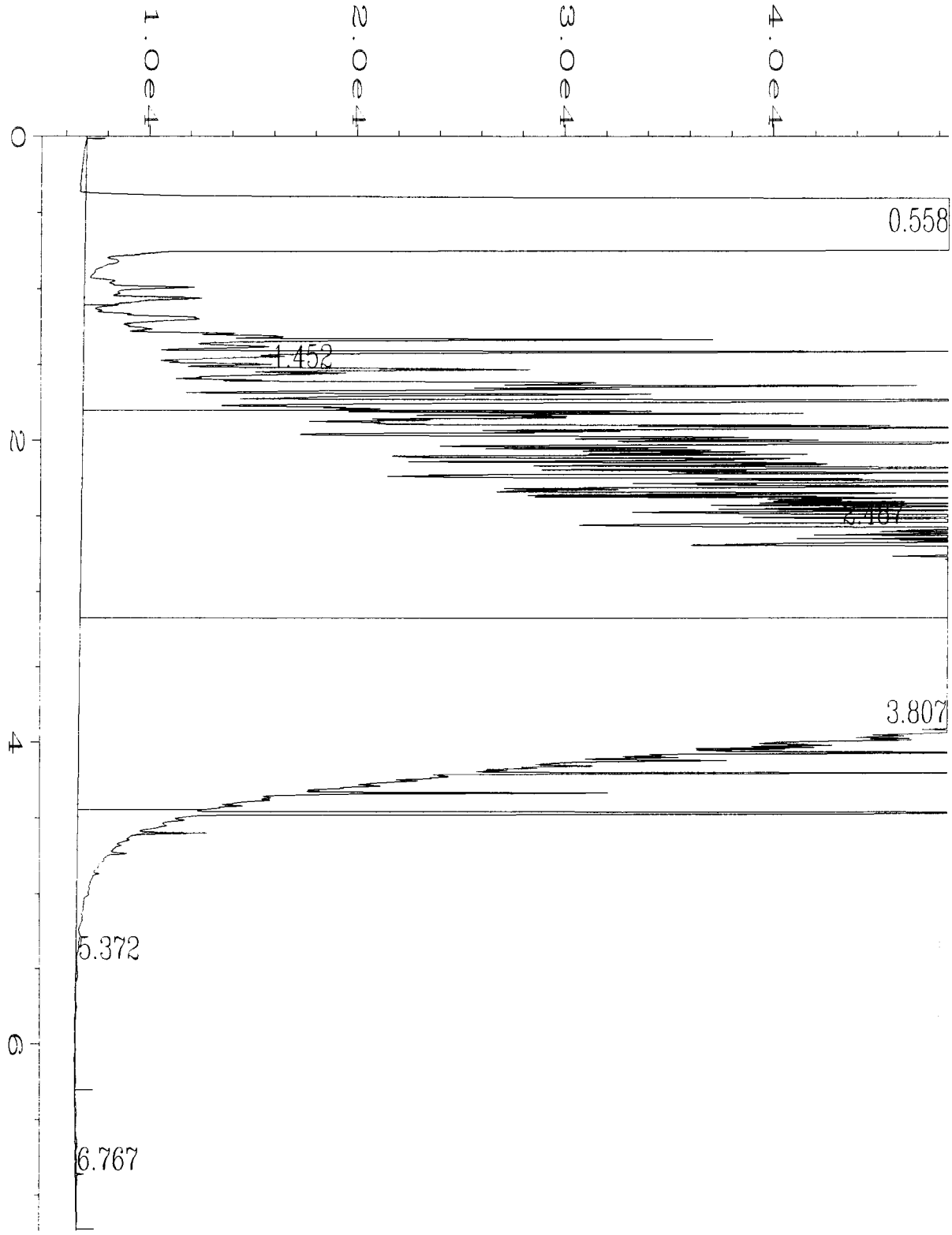
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.611 | 538 | 979 | BB | 0.009 | 0.0714 |
| 2 | 2.716 | 413 | 216 | BB | 0.032 | 0.0549 |
| 3 | 2.767 | 195 | 251 | BB | 0.014 | 0.0259 |
| 4 | 2.931 | 1023 | 1559 | BB | 0.018 | 0.1358 |
| 5 | 3.040 | 337 | 184 | BB | 0.031 | 0.0447 |
| 6 | 3.091 | 112 | 276 | BB | 0.007 | 0.0149 |
| 7 | 3.178 | 250 | 446 | BB | 0.009 | 0.0333 |
| 8 | 3.200 | 276 | 481 | BB | 0.010 | 0.0367 |
| 9 | 3.295 | 2476 | 3206 | BB | 0.013 | 0.3287 |
| 10 | 3.335 | 1373 | 2395 | BB | 0.010 | 0.1822 |
| 11 | 3.368 | 202 | 424 | BB | 0.008 | 0.0268 |
| 12 | 3.416 | 438 | 460 | BB | 0.016 | 0.0581 |
| 13 | 3.461 | 1572 | 3656 | BB | 0.007 | 0.2087 |
| 14 | 3.533 | 135 | 592 | BB | 0.008 | 0.0179 |
| 15 | 3.580 | 2294 | 1565 | BB | 0.024 | 0.3046 |
| 16 | 3.625 | 3800 | 6818 | BB | 0.009 | 0.5045 |
| 17 | 3.677 | 118308 | 250567 | BB | 0.008 | 15.7065 |
| 18 | 3.723 | 1437 | 2457 | BB | 0.010 | 0.1908 |
| 19 | 3.780 | 6110 | 8192 | BB | 0.012 | 0.8111 |
| 20 | 3.811 | 2557 | 2279 | BB | 0.018 | 0.3394 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.844 | 5304 | 5333 | BB | 0.017 | 0.7042 |
| 22 | 3.895 | 7071 | 6180 | BB | 0.019 | 0.9388 |
| 23 | 3.931 | 4365 | 7442 | BB | 0.010 | 0.5795 |
| 24 | 3.960 | 1702 | 2372 | BB | 0.012 | 0.2260 |
| 25 | 3.990 | 9504 | 9529 | BB | 0.017 | 1.2617 |
| 26 | 4.130 | 44432 | 22683 | BB | 0.028 | 5.8988 |
| 27 | 4.213 | 21871 | 9379 | BB | 0.039 | 2.9036 |
| 28 | 4.268 | 36709 | 24492 | BB | 0.024 | 4.8734 |
| 29 | 4.317 | 14023 | 9642 | BB | 0.024 | 1.8617 |
| 30 | 4.354 | 15408 | 19345 | BB | 0.013 | 2.0455 |
| 31 | 4.401 | 36702 | 36797 | BB | 0.017 | 4.8725 |
| 32 | 4.452 | 17440 | 12103 | BB | 0.024 | 2.3153 |
| 33 | 4.488 | 127688 | 218356 | BB | 0.010 | 16.9517 |
| 34 | 4.532 | 29171 | 35993 | BB | 0.014 | 3.8727 |
| 35 | 4.580 | 20194 | 16357 | BB | 0.021 | 2.6809 |
| 36 | 4.626 | 12676 | 16797 | BB | 0.013 | 1.6829 |
| 37 | 4.662 | 28333 | 34930 | BB | 0.014 | 3.7615 |
| 38 | 4.759 | 13176 | 7677 | BB | 0.024 | 1.7492 |
| 39 | 4.794 | 26427 | 29908 | BB | 0.017 | 3.5084 |
| 40 | 4.841 | 8309 | 6762 | BB | 0.020 | 1.1031 |
| 41 | 4.882 | 5600 | 6522 | BB | 0.014 | 0.7435 |
| 42 | 4.924 | 26434 | 23832 | BB | 0.019 | 3.5093 |
| 43 | 4.976 | 8720 | 6107 | BB | 0.021 | 1.1577 |
| 44 | 5.012 | 1707 | 2756 | BB | 0.010 | 0.2266 |
| 45 | 5.060 | 14599 | 15010 | BB | 0.016 | 1.9382 |
| 46 | 5.115 | 8612 | 4441 | BB | 0.028 | 1.1434 |
| 47 | 5.199 | 12277 | 9954 | BB | 0.021 | 1.6298 |
| 48 | 5.270 | 6962 | 3033 | BB | 0.038 | 0.9243 |
| 49 | 5.356 | 4491 | 6874 | BB | 0.011 | 0.5962 |
| 50 | 5.403 | 741 | 1037 | BB | 0.012 | 0.0984 |
| 51 | 5.430 | 4788 | 3575 | BB | 0.022 | 0.6357 |
| 52 | 5.524 | 7483 | 5564 | BB | 0.023 | 0.9934 |
| 53 | 5.588 | 6679 | 5729 | BB | 0.017 | 0.8867 |
| 54 | 5.652 | 4377 | 2396 | BB | 0.025 | 0.5811 |
| 55 | 5.716 | 5716 | 4462 | BB | 0.021 | 0.7589 |
| 56 | 5.784 | 3197 | 2637 | BB | 0.018 | 0.4244 |
| 57 | 5.863 | 3343 | 3582 | BB | 0.016 | 0.4438 |
| 58 | 5.923 | 1455 | 1164 | BB | 0.021 | 0.1932 |
| 59 | 5.953 | 1711 | 1822 | BB | 0.016 | 0.2272 |

Total area = 753245

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\004F0601.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 4 | |
| Sample Name | : 1000 MO 44-151B | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 6 | |
| Acquired on | 6/12/15 | 13:04 | | Instrume | DX.MTH | |
| Report Created on: 15 Jun 15 10:05 AM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.22 | <5.26 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 140 | >4.44 | <4.53 | 127688 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 118 | >3.63 | <3.72 | 118308 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 249 | >1.8 | <4.44 | 1.91E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 960 | >1.8 | <6.3 | 7437202 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 1072 | >4.44 | <6.3 | 5531122 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 1094 | >3.17 | <6.3 | 7437202 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 299 | >1.8 | <4.44 | 1906080 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.17 | 0 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 304 | >1.1 | <4.44 | 1906080 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1742 | >1.8 | <6.3 | 7437203 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 971 | | | | | |
| TPHDX (8-36) | 960 | | | | | |
| Motor Oil (8-36 | 1442 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\005F0601.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 5 |
| Sample Name | : 1000 Dx 44-172C | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 6 |
| Acquired on | : 12 Jun 15 01:35 PM | Instrument Method | : DX.MTH |
| Report Created on: | 15 Jun 15 10:05 AM | Analysis Method | : DX.MTH |

# Area Percent Report

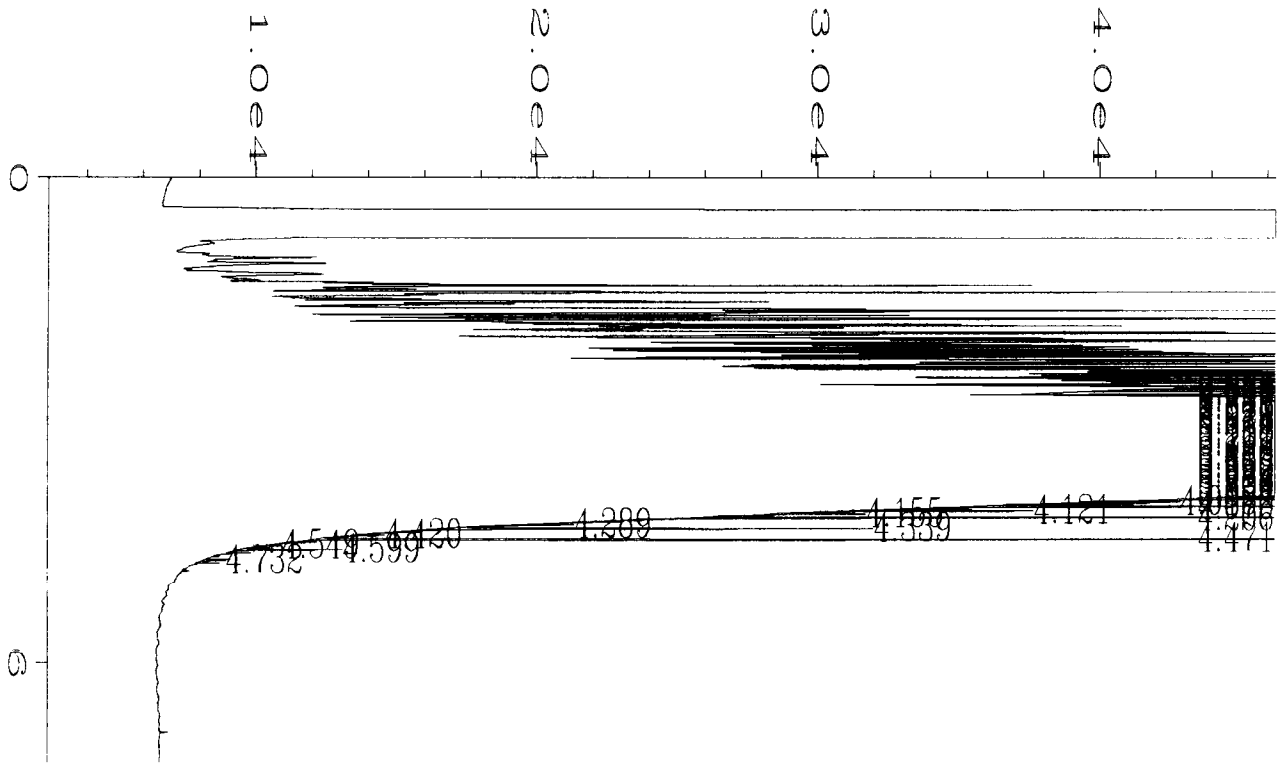
Data File Name : C:\HPCHEM\1\DATA\06-12-15\005F0601.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 12 Jun 15 01:35 PM
Report Created on: 15 Jun 15 10:05 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\005F0601.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.08943E+009 | 8.51396E+007 | BVA | 0.213 | 99.1858 |
| 2 | 1.452 | 470232 | 121450 | VV + | 0.000 | 0.0428 |
| 3 | 2.487 | 3994687 | 285870 | VVA | 0.233 | 0.3637 |
| 4 | 3.807 | 4284507 | 288871 | VVA | 0.247 | 0.3901 |
| 5 | 5.372 | 191212 | 212795 | VV + | 0.000 | 0.0174 |
| 6 | 6.767 | 2139 | 422 | PB + | 0.000 | 0.0002 |

Total area = 1.09837E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\005R0601.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 12 Jun 15 01:35 PM
Report Created on: 15 Jun 15 10:05 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\005R0601.D

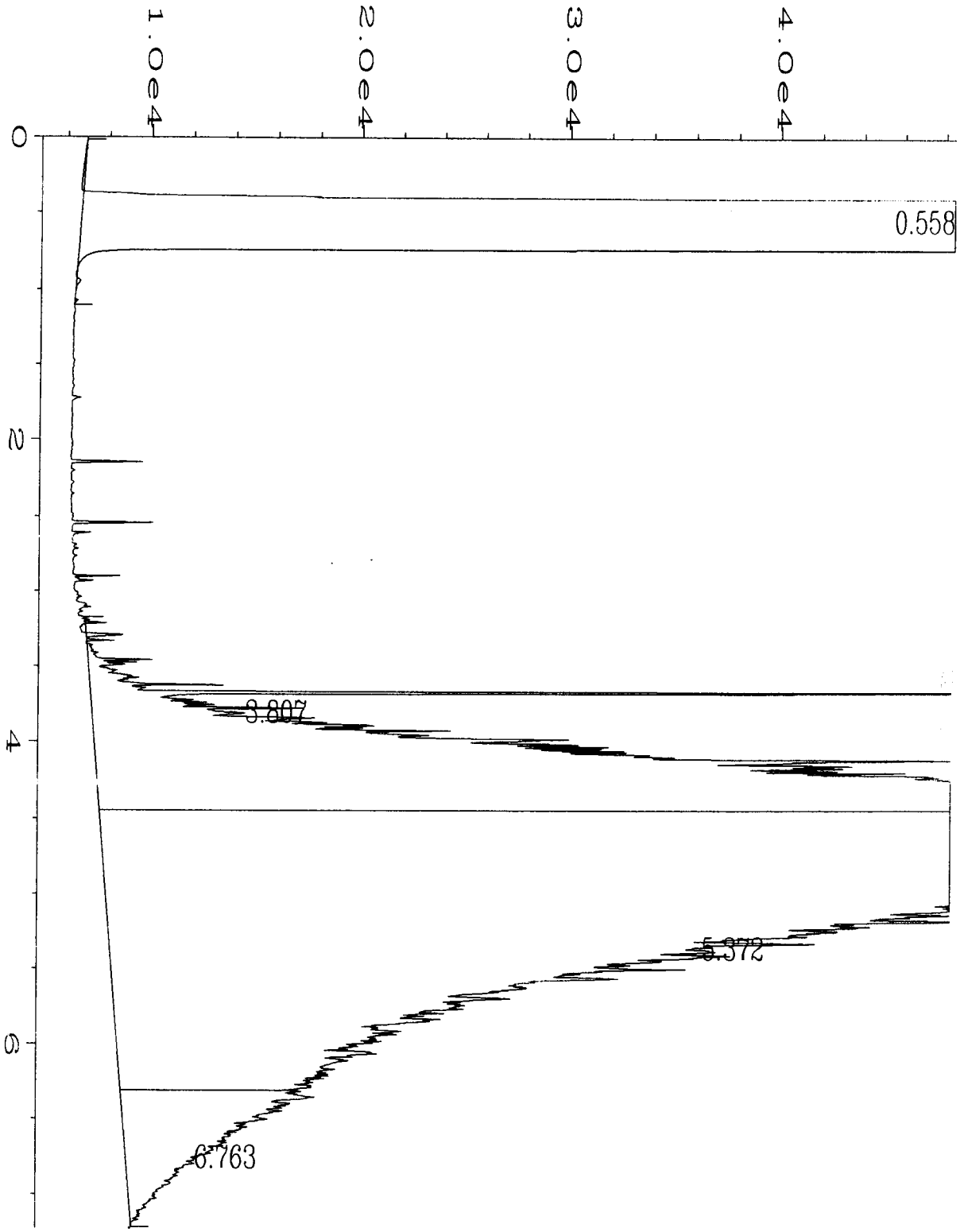
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.581 | 33281 | 45320 | BB | 0.012 | 2.2284 |
| 2 | 2.614 | 16546 | 29338 | BB | 0.009 | 1.1079 |
| 3 | 2.639 | 24883 | 33454 | BB | 0.012 | 1.6661 |
| 4 | 2.668 | 37450 | 54900 | BB | 0.011 | 2.5075 |
| 5 | 2.717 | 96200 | 191882 | BB | 0.008 | 6.4413 |
| 6 | 2.747 | 20775 | 31256 | BB | 0.011 | 1.3910 |
| 7 | 2.815 | 25741 | 23981 | BB | 0.017 | 1.7235 |
| 8 | 2.845 | 53709 | 60422 | BB | 0.015 | 3.5962 |
| 9 | 2.920 | 91857 | 212529 | BB | 0.007 | 6.1504 |
| 10 | 2.978 | 3177 | 9801 | BB | 0.005 | 0.2127 |
| 11 | 3.024 | 63912 | 34645 | BB | 0.029 | 4.2793 |
| 12 | 3.111 | 107679 | 217881 | BB | 0.008 | 7.2098 |
| 13 | 3.159 | 17825 | 14745 | BB | 0.020 | 1.1935 |
| 14 | 3.200 | 47221 | 75456 | BB | 0.010 | 3.1618 |
| 15 | 3.261 | 2637 | 1633 | BB | 0.027 | 0.1765 |
| 16 | 3.292 | 169432 | 205270 | BB | 0.016 | 11.3446 |
| 17 | 3.416 | 12836 | 19625 | BB | 0.011 | 0.8595 |
| 18 | 3.463 | 75593 | 186292 | BB | 0.007 | 5.0614 |
| 19 | 3.533 | 15526 | 8201 | BB | 0.030 | 1.0396 |
| 20 | 3.565 | 25931 | 17361 | BB | 0.025 | 1.7362 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.626 | 88053 | 173987 | BB | 0.008 | 5.8958 |
| 22 | 3.677 | 115061 | 234899 | BB | 0.008 | 7.7041 |
| 23 | 3.754 | 29090 | 20934 | BB | 0.020 | 1.9478 |
| 24 | 3.806 | 69542 | 6486 | BB | 0.179 | 4.6563 |
| 25 | 3.839 | 7213 | 8397 | BB | 0.014 | 0.4830 |
| 26 | 3.894 | 12270 | 14129 | BB | 0.014 | 0.8216 |
| 27 | 3.928 | 46027 | 94796 | BB | 0.008 | 3.0818 |
| 28 | 4.015 | 8459 | 3776 | BB | 0.037 | 0.5664 |
| 29 | 4.070 | 25726 | 57286 | BB | 0.007 | 1.7226 |
| 30 | 4.121 | 5012 | 7031 | BB | 0.012 | 0.3356 |
| 31 | 4.155 | 1732 | 3703 | BB | 0.008 | 0.1160 |
| 32 | 4.206 | 14094 | 33410 | BB | 0.007 | 0.9437 |
| 33 | 4.289 | 3904 | 2026 | BB | 0.032 | 0.2614 |
| 34 | 4.339 | 9376 | 16633 | BB | 0.009 | 0.6278 |
| 35 | 4.420 | 1561 | 1099 | BB | 0.024 | 0.1045 |
| 36 | 4.471 | 110069 | 207359 | BB | 0.009 | 7.3699 |
| 37 | 4.549 | 1341 | 603 | BB | 0.031 | 0.0898 |
| 38 | 4.599 | 2143 | 3783 | BB | 0.016 | 0.1435 |
| 39 | 4.732 | 617 | 861 | BB | 0.012 | 0.0413 |

Total area = 1493502

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\06-12-15\005F0601.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 5 | |
| Sample Name : 1000 Dx 44-172C | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 6 | |
| Acquired on | 6/12/15 | 13:35 | | Instrume | DX.MTH | |
| Report Created on: 15 Jun 15 10:05 AM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.22 | <5.26 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 121 | >4.44 | <4.53 | 110069 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 115 | >3.63 | <3.72 | 115061 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 1066 | >1.8 | <4.44 | 8.16E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 1064 | >1.8 | <6.3 | 8245275 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 16 | >4.44 | <6.3 | 81142 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 625 | >3.17 | <6.3 | 4250588 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 1281 | >1.8 | <4.44 | 8164133 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 531 | >1.1 | <3.17 | 4464919 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 1375 | >1.1 | <4.44 | 8634365 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1932 | >1.8 | <6.3 | 8245276 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 531 | | | | | |
| TPHD (8-36) | 555 | | | | | |
| TPHDX (8-36) | 549 | | | | | |
| Motor Oil (8-36 | 824 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\004F0901.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 4 |
| Sample Name | : 1000 MO 44-151B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 9 |
| Acquired on | : 12 Jun 15 05:18 PM | Instrument Method | : DX.MTH |
| Report Created on: | 12 Jun 15 05:28 PM | Analysis Method | : DX.MTH |

# Area Percent Report

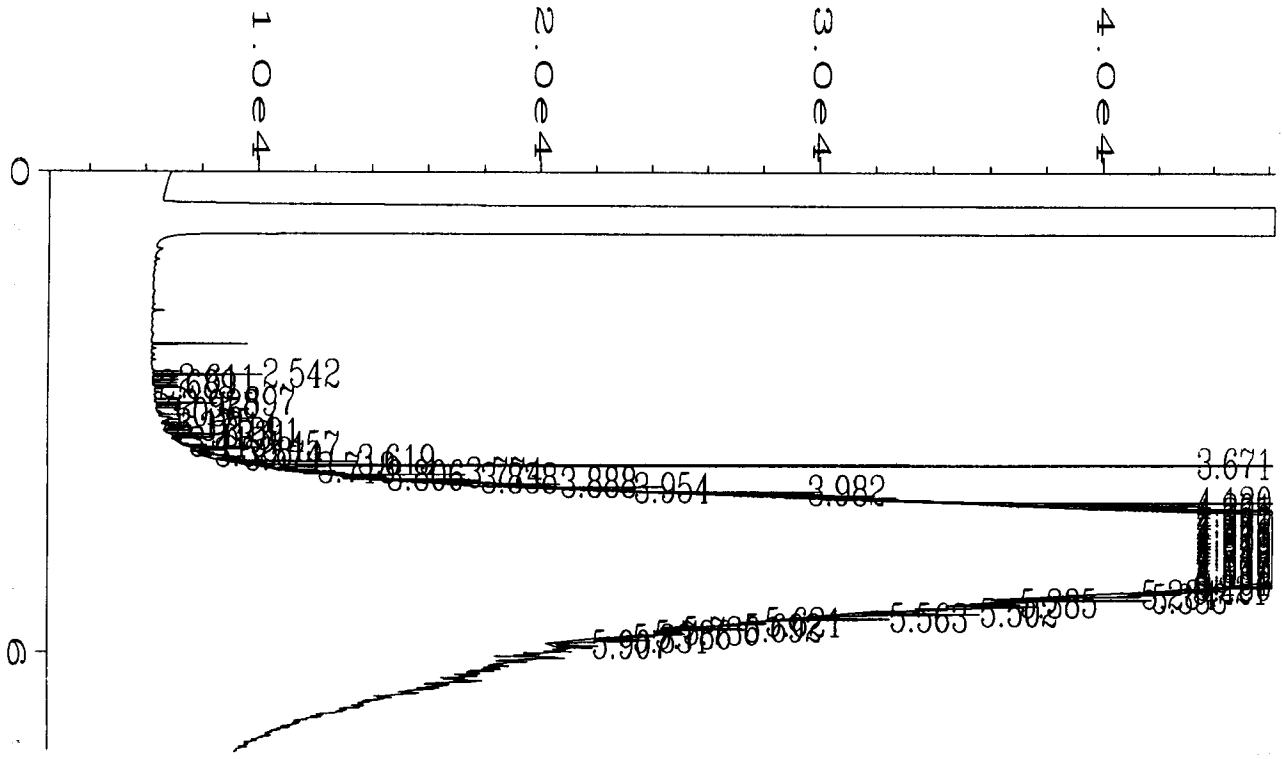
Data File Name : C:\HPCHEM\1\DATA\06-12-15\004F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 MO 44-151B
Run Time Bar Code:
Acquired on : 12 Jun 15 05:18 PM
Report Created on: 12 Jun 15 05:28 PM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\004F0901.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 7.91146E+008 | 7.37665E+007 | BVA | 0.179 | 99.3567 |
| 2 | 3.807 | 1335162 | 162167 | PVA | 0.137 | 0.1677 |
| 3 | 5.372 | 3584615 | 194843 | VVA | 0.307 | 0.4502 |
| 4 | 6.763 | 202834 | 8956 | VB + | 0.000 | 0.0255 |

Total area = 7.96268E+008




==========

Area Percent Report

==========

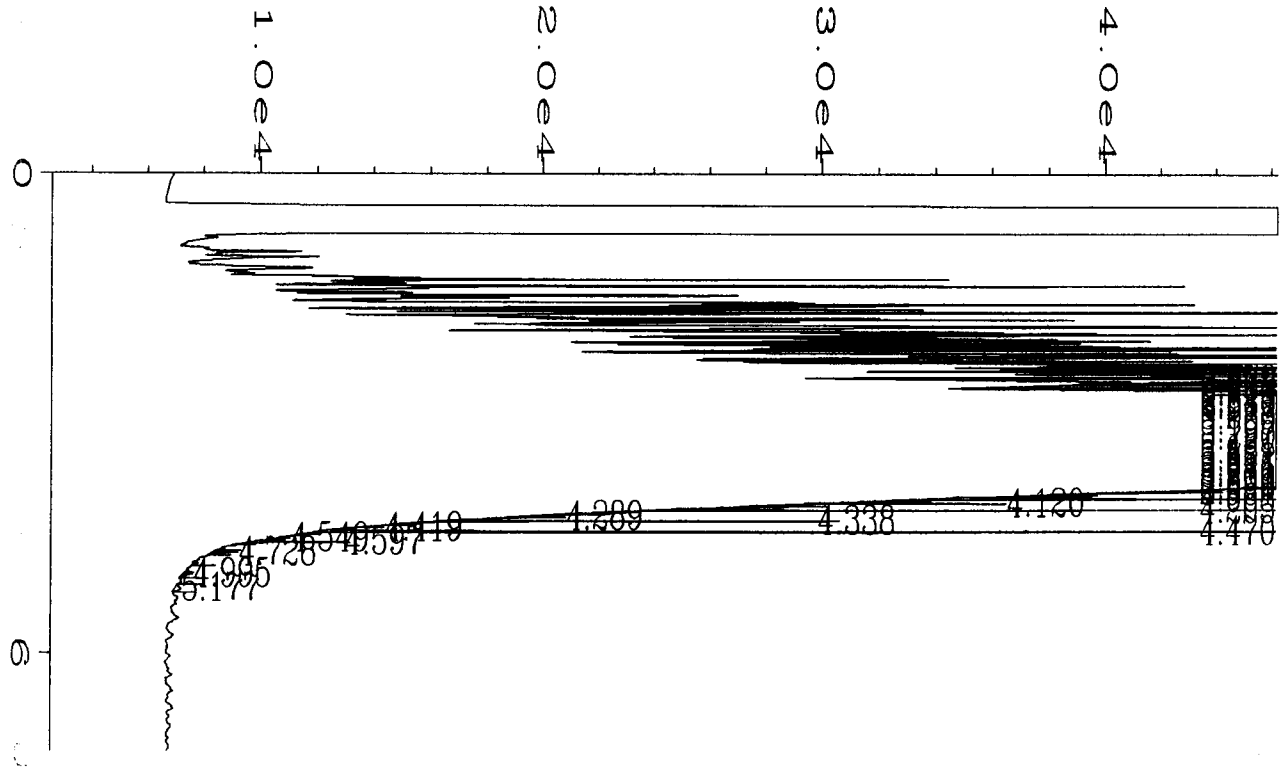
Data File Name : C:\HPCHEM\1\DATA\06-12-15\004R0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 MO 44-151B
Run Time Bar Code:
Acquired on : 12 Jun 15 05:18 PM
Report Created on: 12 Jun 15 05:28 PM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\004R0901.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.542 | 2096 | 4165 | BBAS | 0.008 | 0.4347 |
| 2 | 2.611 | 616 | 943 | BB | 0.011 | 0.1278 |
| 3 | 2.689 | 121 | 180 | BB | 0.011 | 0.0250 |
| 4 | 2.897 | 974 | 2216 | BB | 0.007 | 0.2020 |
| 5 | 2.928 | 560 | 935 | BB | 0.010 | 0.1162 |
| 6 | 3.035 | 326 | 256 | BB | 0.018 | 0.0675 |
| 7 | 3.175 | 207 | 387 | BB | 0.009 | 0.0429 |
| 8 | 3.214 | 1028 | 1294 | BB | 0.013 | 0.2132 |
| 9 | 3.291 | 1699 | 1882 | BB | 0.014 | 0.3522 |
| 10 | 3.331 | 794 | 1397 | BB | 0.009 | 0.1646 |
| 11 | 3.413 | 462 | 274 | BB | 0.028 | 0.0959 |
| 12 | 3.457 | 1126 | 2579 | BB | 0.007 | 0.2335 |
| 13 | 3.528 | 1775 | 568 | BB | 0.040 | 0.3680 |
| 14 | 3.574 | 1881 | 1330 | BB | 0.024 | 0.3901 |
| 15 | 3.619 | 2996 | 4874 | BB | 0.018 | 0.6212 |
| 16 | 3.671 | 77773 | 167308 | BB | 0.008 | 16.1262 |
| 17 | 3.718 | 873 | 1463 | BB | 0.010 | 0.1809 |
| 18 | 3.774 | 3714 | 5183 | BB | 0.012 | 0.7700 |
| 19 | 3.806 | 1406 | 1555 | BB | 0.015 | 0.2915 |
| 20 | 3.838 | 3626 | 3743 | BB | 0.017 | 0.7519 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\004F0901.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 4 | |
| Sample Name | : 1000 MO 44-151B | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 9 | |
| Acquired on | 6/12/15 | 17:18 | | Instrume | DX.MTH | |
| Report Created on: 12 Jun 15 05:28 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 3 | >5.22 | <5.26 | 2849 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 88 | >4.44 | <4.53 | 79802 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 78 | >3.63 | <3.72 | 77773 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 164 | >1.8 | <4.44 | 1.26E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 614 | >1.8 | <6.3 | 4759353 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 679 | >4.44 | <6.3 | 3501964 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 700 | >3.17 | <6.3 | 4759353 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 197 | >1.8 | <4.44 | 1257389 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.17 | 0 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 200 | >1.1 | <4.44 | 1257389 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1116 | >1.8 | <6.3 | 4762202 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 622 | | | | | |
| TPHDX (8-36) | 614 | | | | | |
| Motor Oil (8-36 | 922 | | | | | |




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\005R0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 12 Jun 15 05:29 PM
Report Created on: 12 Jun 15 05:40 PM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\005R0901.D

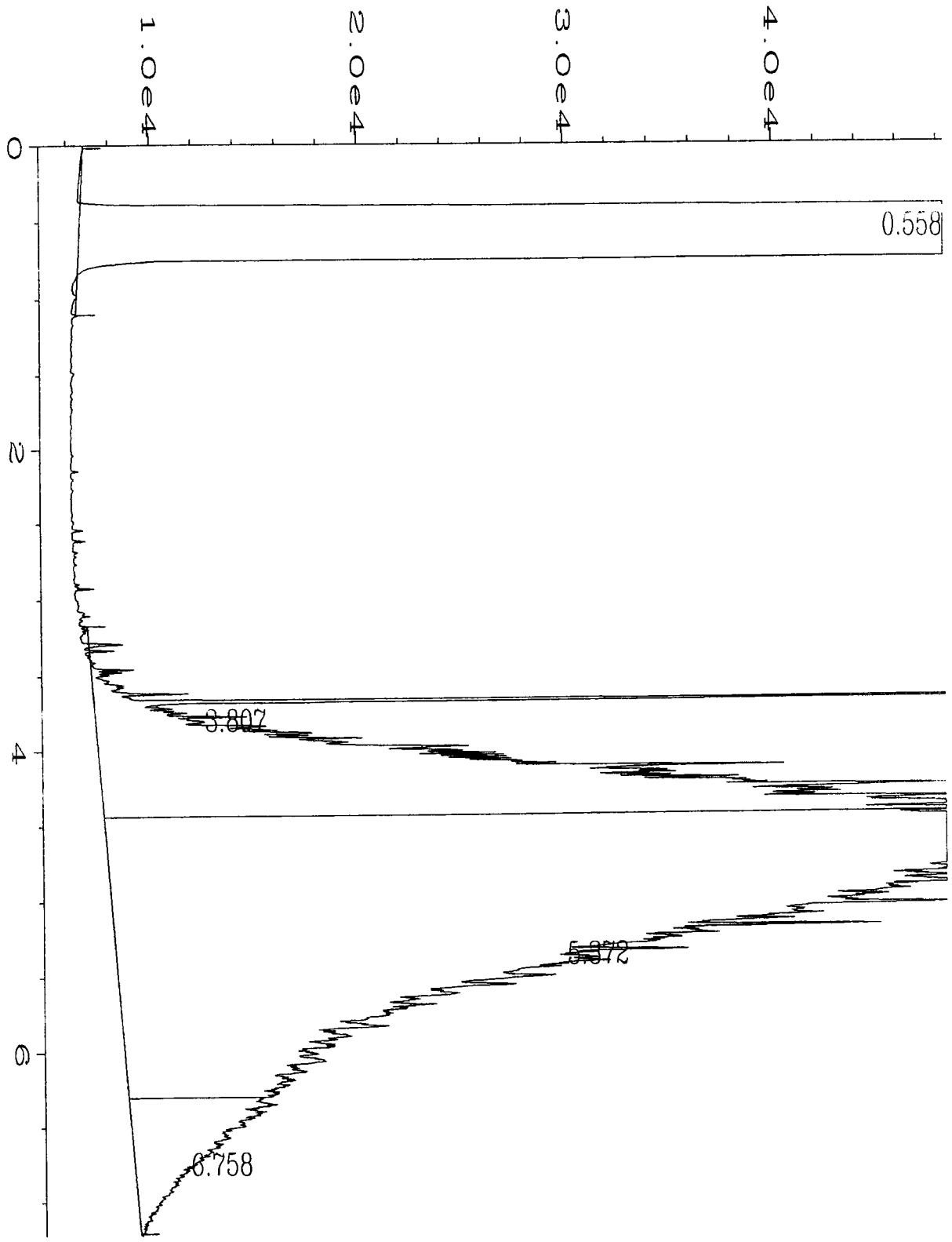
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.579 | 39533 | 50305 | BB | 0.016 | 2.8224 |
| 2 | 2.638 | 36624 | 31624 | BB | 0.019 | 2.6147 |
| 3 | 2.667 | 35107 | 53175 | BB | 0.011 | 2.5064 |
| 4 | 2.715 | 93031 | 186750 | BB | 0.008 | 6.6417 |
| 5 | 2.746 | 18960 | 26841 | BB | 0.012 | 1.3536 |
| 6 | 2.814 | 21963 | 23250 | BB | 0.016 | 1.5680 |
| 7 | 2.843 | 25072 | 53441 | BB | 0.008 | 1.7899 |
| 8 | 2.880 | 4524 | 5313 | BB | 0.014 | 0.3230 |
| 9 | 2.917 | 87875 | 202412 | BB | 0.007 | 6.2736 |
| 10 | 3.033 | 72320 | 31818 | BB | 0.030 | 5.1631 |
| 11 | 3.109 | 125628 | 222350 | BB | 0.017 | 8.9688 |
| 12 | 3.197 | 52749 | 74131 | BB | 0.012 | 3.7659 |
| 13 | 3.290 | 140742 | 188923 | BB | 0.015 | 10.0478 |
| 14 | 3.461 | 57574 | 170936 | BB | 0.006 | 4.1103 |
| 15 | 3.531 | 27199 | 8797 | BB | 0.046 | 1.9418 |
| 16 | 3.562 | 23257 | 17199 | BB | 0.023 | 1.6604 |
| 17 | 3.624 | 82891 | 161071 | BB | 0.009 | 5.9177 |
| 18 | 3.675 | 110081 | 227236 | BB | 0.008 | 7.8589 |
| 19 | 3.715 | 10568 | 9850 | BB | 0.018 | 0.7545 |
| 20 | 3.751 | 18653 | 20821 | BB | 0.015 | 1.3317 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.806 | 68664 | 8313 | BB | 0.138 | 4.9021 |
| 22 | 3.838 | 8296 | 9655 | BB | 0.014 | 0.5923 |
| 23 | 3.892 | 12387 | 13091 | BB | 0.016 | 0.8843 |
| 24 | 3.926 | 44593 | 91082 | BB | 0.008 | 3.1836 |
| 25 | 3.981 | 5263 | 4446 | BB | 0.020 | 0.3757 |
| 26 | 4.068 | 29011 | 53789 | BB | 0.012 | 2.0712 |
| 27 | 4.120 | 5763 | 7671 | BB | 0.013 | 0.4114 |
| 28 | 4.205 | 17548 | 30387 | BB | 0.018 | 1.2528 |
| 29 | 4.289 | 3267 | 2251 | BB | 0.022 | 0.2333 |
| 30 | 4.338 | 9128 | 15703 | BB | 0.010 | 0.6517 |
| 31 | 4.419 | 1854 | 1060 | BB | 0.029 | 0.1324 |
| 32 | 4.470 | 105280 | 214649 | BB | 0.008 | 7.5161 |
| 33 | 4.549 | 1116 | 573 | BB | 0.027 | 0.0797 |
| 34 | 4.597 | 1955 | 3375 | BB | 0.016 | 0.1396 |
| 35 | 4.728 | 659 | 1005 | BB | 0.011 | 0.0471 |
| 36 | 4.995 | 820 | 347 | BB | 0.034 | 0.0585 |
| 37 | 5.177 | 758 | 249 | BB | 0.041 | 0.0541 |

Total area = 1400717

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\005F0901.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 5 | |
| Sample Name | : 1000 Dx 44-172C | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 9 | |
| Acquired on | 6/12/15 | 17:29 | | Instrume | DX.MTH | | |
| Report Created on: 12 Jun 15 05:40 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 0 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 116 | >4.44 | <4.53 | 105280 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 110 | >3.63 | <3.72 | 110081 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 1006 | >1.8 | <4.44 | 7.70E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 1005 | >1.8 | <6.3 | 7790240 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 17 | >4.44 | <6.3 | 89036 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 591 | >3.17 | <6.3 | 4015099 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 1208 | >1.8 | <4.44 | 7701204 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 502 | >1.1 | <3.17 | 4219446 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 1297 | >1.1 | <4.44 | 8145509 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 1825 | >1.8 | <6.3 | 7790241 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 502 | | | | | | |
| TPHD (8-36) | 524 | | | | | | |
| TPHDX (8-36) | 518 | | | | | | |
| Motor Oil (8-36 | 778 | | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\092F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 92 |
| Sample Name | : 500 MO 44-50B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 12 Jun 15 07:43 PM | Instrument Method | : DX.MTH |
| Report Created on | : 12 Jun 15 07:54 PM | Analysis Method | : DX.MTH |

# Area Percent Report

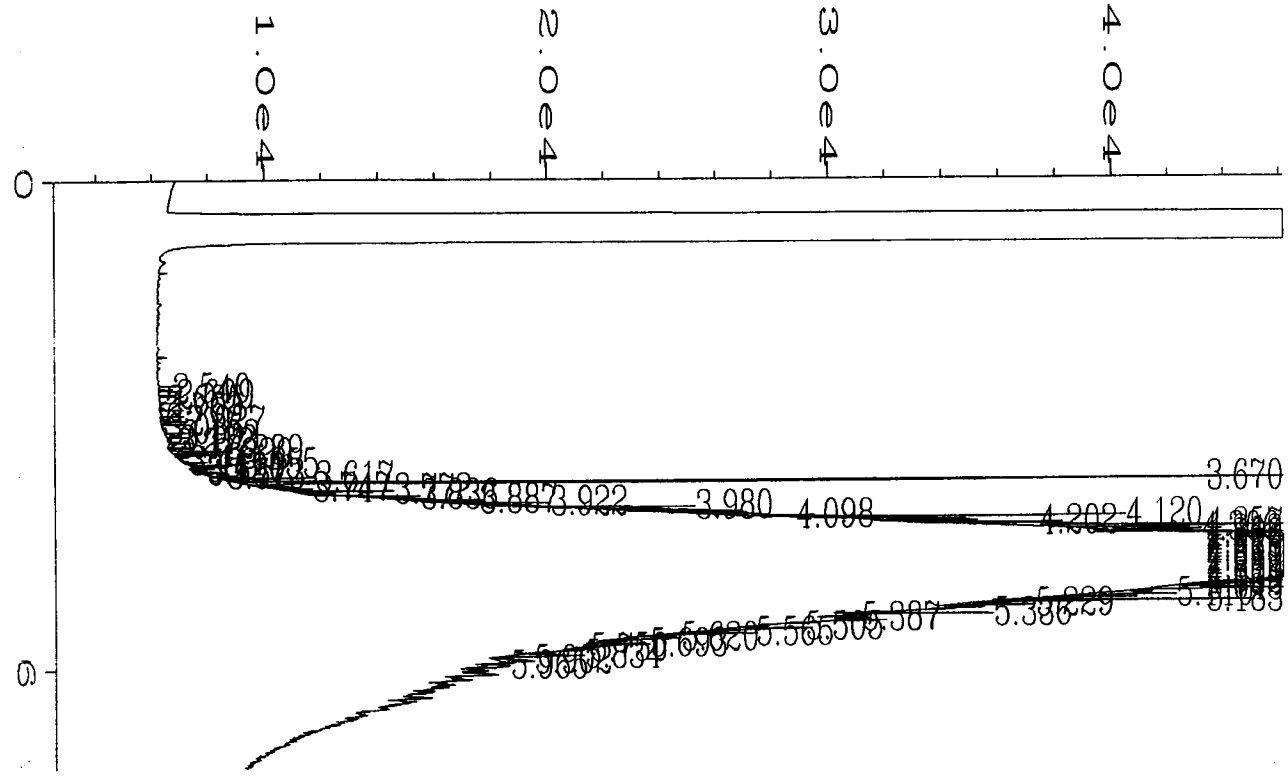
Data File Name : C:\HPCHEM\1\DATA\06-12-15\092F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 MO 44-50B
Run Time Bar Code:
Acquired on : 12 Jun 15 07:43 PM
Report Created on: 12 Jun 15 07:54 PM

Page Number : 1
Vial Number : 92
Injection Number : 1
Sequence Line : 11
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\092F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06507E+009 | 8.32634E+007 | BV + | 0.000 | 99.6112 |
| 2 | 3.807 | 1077696 | 241724 | PV + | 0.000 | 0.1008 |
| 3 | 5.372 | 2914725 | 244008 | VVA | 0.199 | 0.2726 |
| 4 | 6.758 | 165222 | 6869 | VB + | 0.000 | 0.0155 |

Total area = 1.06923E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\092R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 MO 44-50B
Run Time Bar Code:
Acquired on : 12 Jun 15 07:43 PM
Report Created on: 12 Jun 15 07:54 PM

Page Number : 1
Vial Number : 92
Injection Number : 1
Sequence Line : 11
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\092R1101.D

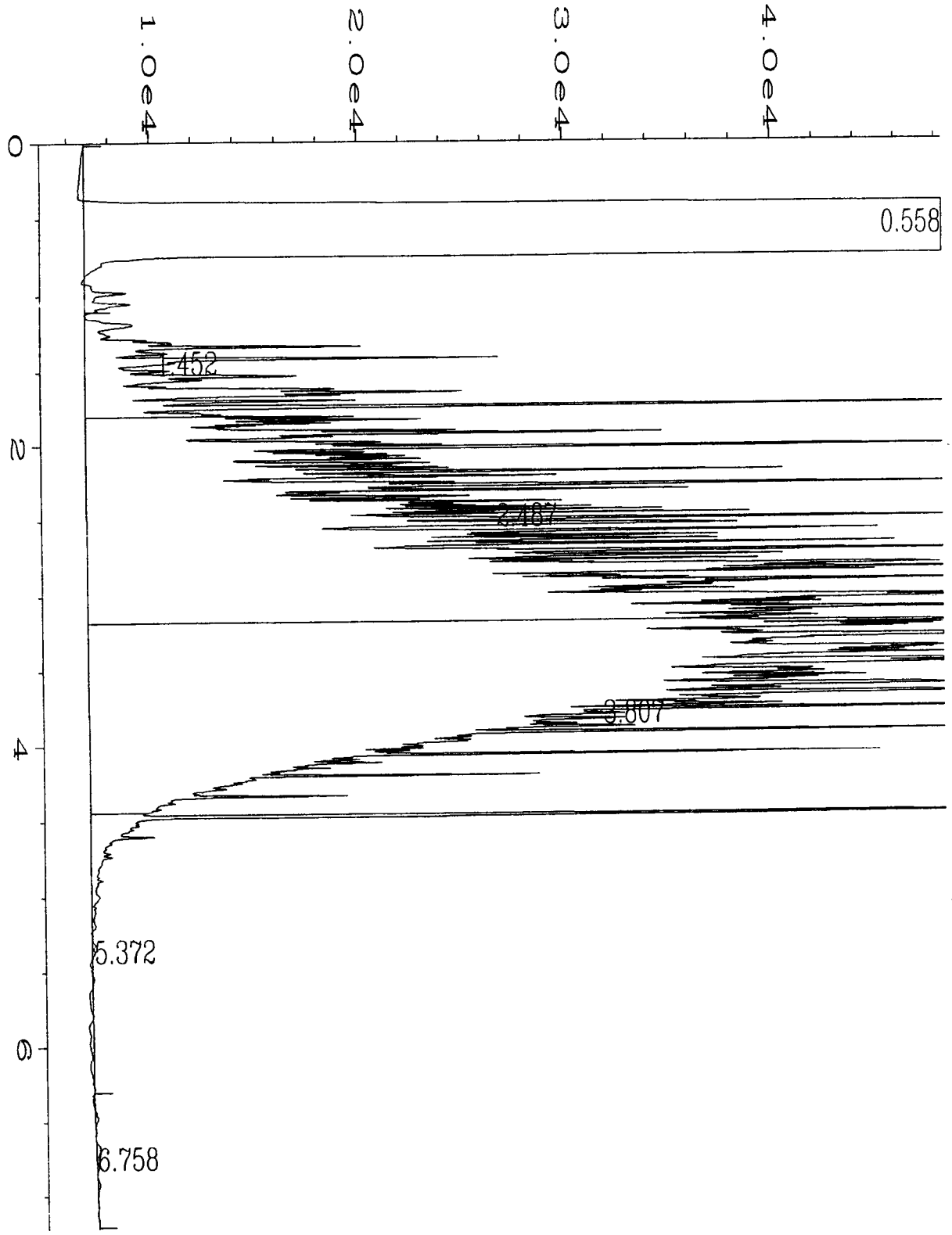
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.540 | 176 | 517 | BBAS | 0.006 | 0.0368 |
| 2 | 2.609 | 367 | 640 | BB | 0.010 | 0.0764 |
| 3 | 2.685 | 105 | 218 | BB | 0.008 | 0.0219 |
| 4 | 2.763 | 237 | 187 | BB | 0.020 | 0.0494 |
| 5 | 2.927 | 850 | 991 | BB | 0.017 | 0.1772 |
| 6 | 3.035 | 354 | 140 | BB | 0.042 | 0.0738 |
| 7 | 3.103 | 733 | 574 | BB | 0.020 | 0.1528 |
| 8 | 3.173 | 205 | 356 | BB | 0.010 | 0.0428 |
| 9 | 3.212 | 497 | 266 | BB | 0.031 | 0.1035 |
| 10 | 3.289 | 1771 | 1979 | BB | 0.015 | 0.3690 |
| 11 | 3.329 | 797 | 1501 | BB | 0.009 | 0.1661 |
| 12 | 3.411 | 438 | 264 | BB | 0.028 | 0.0913 |
| 13 | 3.455 | 923 | 1970 | BB | 0.008 | 0.1924 |
| 14 | 3.490 | 970 | 623 | BB | 0.026 | 0.2021 |
| 15 | 3.527 | 546 | 425 | BB | 0.021 | 0.1137 |
| 16 | 3.573 | 1239 | 781 | BB | 0.026 | 0.2582 |
| 17 | 3.617 | 2073 | 3555 | BB | 0.010 | 0.4320 |
| 18 | 3.670 | 118265 | 251023 | BB | 0.008 | 24.6452 |
| 19 | 3.747 | 1519 | 1219 | BB | 0.021 | 0.3165 |
| 20 | 3.772 | 3617 | 3968 | BB | 0.024 | 0.7537 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.836 | 2735 | 2909 | BB | 0.016 | 0.5699 |
| 22 | 3.887 | 3560 | 2676 | BB | 0.022 | 0.7419 |
| 23 | 3.922 | 3606 | 3779 | BB | 0.016 | 0.7515 |
| 24 | 3.980 | 4663 | 5305 | BB | 0.016 | 0.9717 |
| 25 | 4.098 | 8153 | 2638 | BB | 0.052 | 1.6990 |
| 26 | 4.120 | 9409 | 12134 | BB | 0.013 | 1.9607 |
| 27 | 4.202 | 8154 | 5427 | BB | 0.025 | 1.6991 |
| 28 | 4.257 | 18806 | 13394 | BB | 0.021 | 3.9190 |
| 29 | 4.306 | 5491 | 3762 | BB | 0.024 | 1.1443 |
| 30 | 4.343 | 5924 | 9886 | BB | 0.011 | 1.2345 |
| 31 | 4.390 | 17656 | 18371 | BB | 0.017 | 3.6792 |
| 32 | 4.476 | 111061 | 217157 | BB | 0.009 | 23.1439 |
| 33 | 4.520 | 15211 | 19986 | BB | 0.013 | 3.1699 |
| 34 | 4.568 | 10264 | 7981 | BB | 0.025 | 2.1389 |
| 35 | 4.613 | 6096 | 7790 | BB | 0.013 | 1.2704 |
| 36 | 4.649 | 14824 | 18195 | BB | 0.014 | 3.0891 |
| 37 | 4.683 | 6969 | 4608 | BB | 0.025 | 1.4523 |
| 38 | 4.781 | 17748 | 15404 | BB | 0.017 | 3.6984 |
| 39 | 4.821 | 5814 | 4242 | BB | 0.023 | 1.2115 |
| 40 | 4.874 | 3000 | 2728 | BB | 0.018 | 0.6253 |
| 41 | 4.909 | 8803 | 11806 | BB | 0.012 | 1.8345 |
| 42 | 4.956 | 3963 | 2513 | BB | 0.023 | 0.8258 |
| 43 | 5.043 | 11534 | 8803 | BB | 0.022 | 2.4036 |
| 44 | 5.110 | 4926 | 3356 | BB | 0.024 | 1.0265 |
| 45 | 5.183 | 7547 | 9536 | BB | 0.015 | 1.5726 |
| 46 | 5.229 | 3334 | 3067 | BB | 0.018 | 0.6948 |
| 47 | 5.336 | 2410 | 4809 | BB | 0.008 | 0.5021 |
| 48 | 5.387 | 231 | 513 | BB | 0.008 | 0.0482 |
| 49 | 5.505 | 4379 | 3029 | BB | 0.021 | 0.9125 |
| 50 | 5.565 | 3175 | 3144 | BB | 0.017 | 0.6616 |
| 51 | 5.620 | 3177 | 2081 | BB | 0.025 | 0.6620 |
| 52 | 5.693 | 2569 | 2168 | BB | 0.019 | 0.5354 |
| 53 | 5.750 | 1801 | 786 | BB | 0.035 | 0.3753 |
| 54 | 5.834 | 3632 | 2669 | BB | 0.019 | 0.7568 |
| 55 | 5.902 | 2164 | 1326 | BB | 0.023 | 0.4509 |
| 56 | 5.965 | 1401 | 1087 | BB | 0.022 | 0.2919 |

Total area = 479872

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\092F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 92 | |
| Sample Name | : 500 MO 44-50B | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 6/12/15 | 19:43 | | Instrume | DX.MTH | |
| Report Created on: 12 Jun 15 07:54 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 4 | >5.22 | <5.26 | 3334 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 122 | >4.44 | <4.53 | 111061 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 118 | >3.63 | <3.72 | 118265 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 125 | >1.8 | <4.44 | 9.59E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 485 | >1.8 | <6.3 | 3759761 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 543 | >4.44 | <6.3 | 2800330 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 553 | >3.17 | <6.3 | 3759761 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 151 | >1.8 | <4.44 | 959431 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.17 | 0 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 153 | >1.1 | <4.44 | 959431 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 882 | >1.8 | <6.3 | 3763095 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 491 | | | | | |
| TPHDX (8-36) | 485 | | | | | |
| Motor Oil (8-36 | 729 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\093F1101.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 93 |
| Sample Name | : 500 Dx 43-199B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 11 |
| Acquired on | : 12 Jun 15 07:54 PM | Instrument Method | : DX.MTH |
| Report Created on | : 12 Jun 15 08:05 PM | Analysis Method | : DX.MTH |

# Area Percent Report

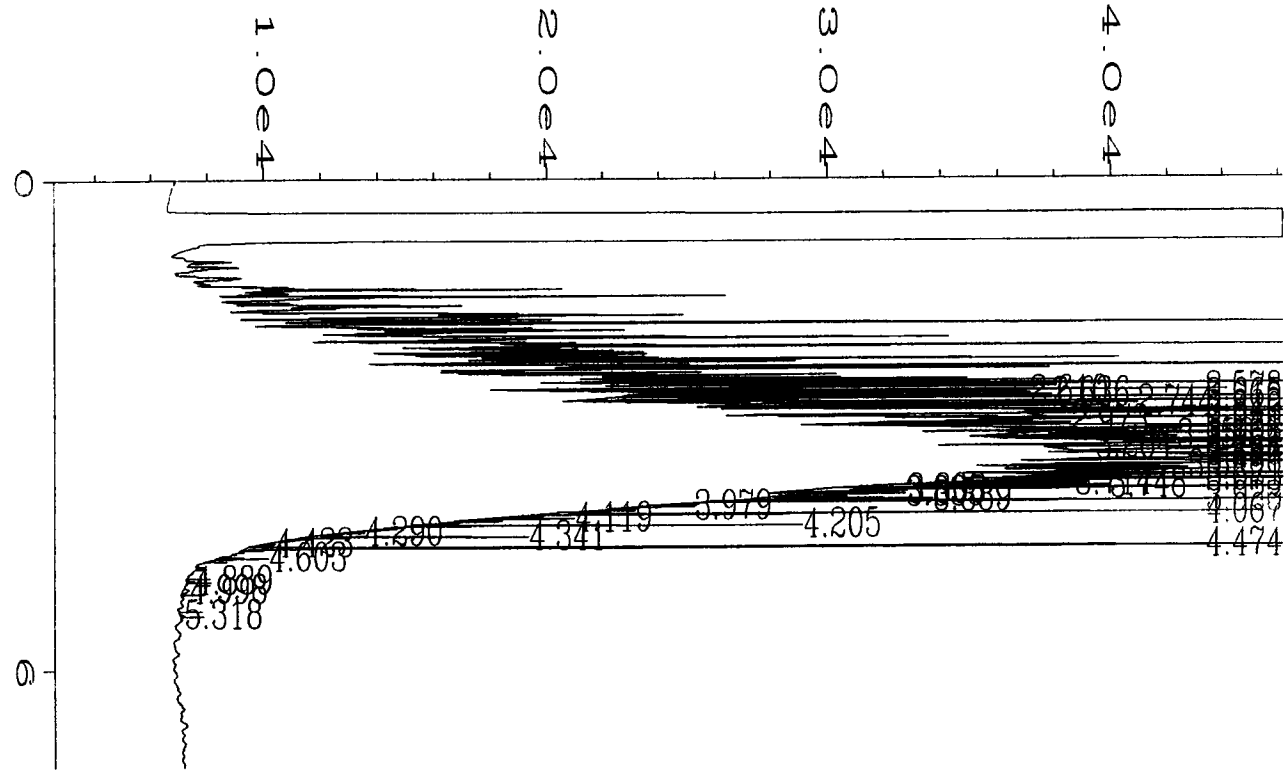
Data File Name : C:\HPCHEM\1\DATA\06-12-15\093F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 12 Jun 15 07:54 PM
Report Created on: 12 Jun 15 08:05 PM

Page Number : 1
Vial Number : 93
Injection Number : 1
Sequence Line : 11
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\093F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.03386E+009 | 8.18777E+007 | BVA | 0.210 | 99.5863 |
| 2 | 1.452 | 219514 | 62844 | VV + | 0.000 | 0.0211 |
| 3 | 2.487 | 1893876 | 128312 | VVA | 0.246 | 0.1824 |
| 4 | 3.807 | 2048459 | 225416 | VVA | 0.151 | 0.1973 |
| 5 | 5.372 | 131705 | 184097 | VVA | 0.012 | 0.0127 |
| 6 | 6.758 | 1654 | 204 | PB + | 0.000 | 0.0002 |

Total area = 1.03816E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\093R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 12 Jun 15 07:54 PM
Report Created on: 12 Jun 15 08:05 PM

Page Number : 1
Vial Number : 93
Injection Number : 1
Sequence Line : 11
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\093R1101.D

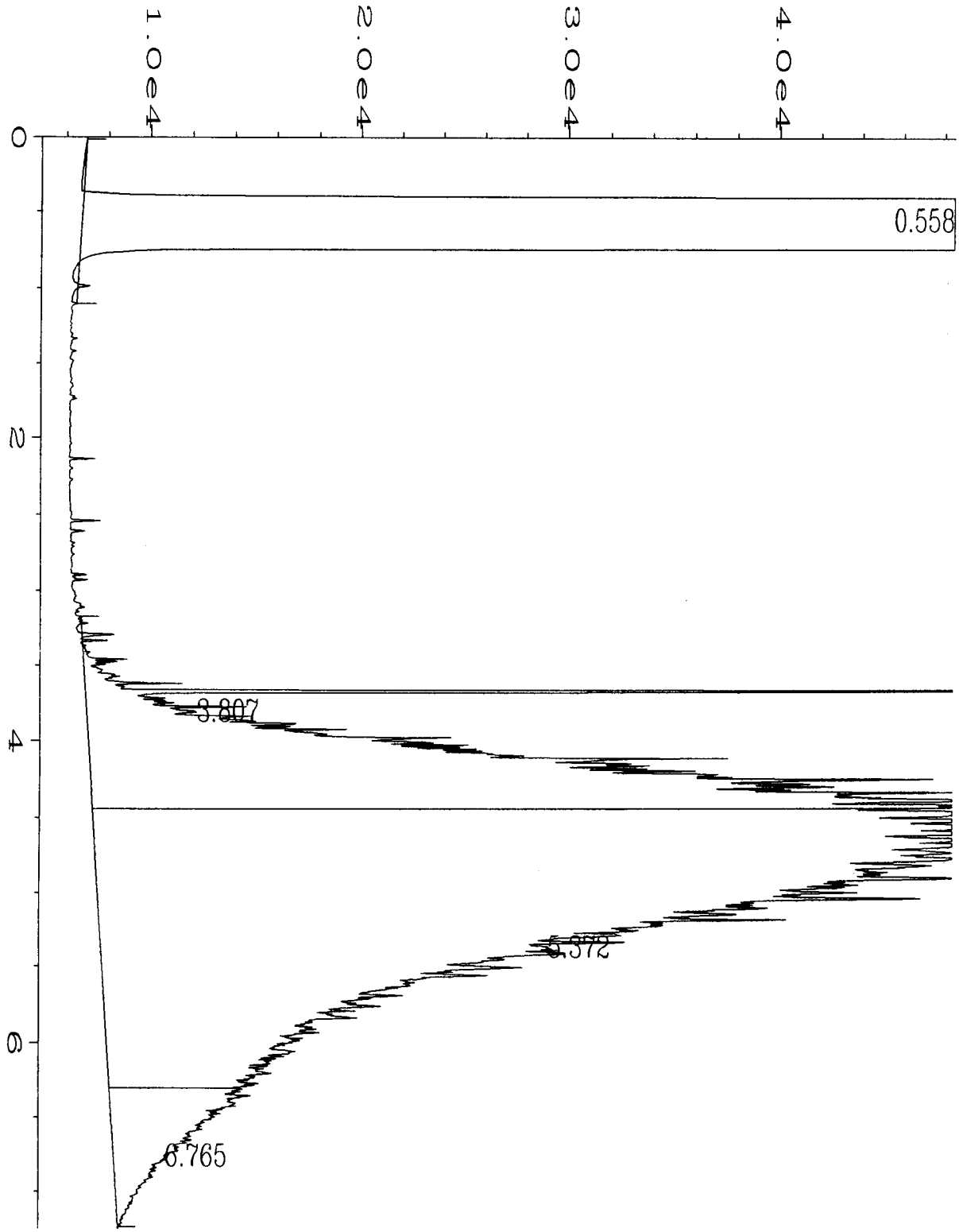
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.578 | 15877 | 23225 | BB | 0.011 | 2.0873 |
| 2 | 2.610 | 7752 | 13993 | BB | 0.009 | 1.0191 |
| 3 | 2.636 | 11666 | 15581 | BB | 0.012 | 1.5337 |
| 4 | 2.665 | 17669 | 25945 | BB | 0.014 | 2.3230 |
| 5 | 2.713 | 46361 | 97731 | BB | 0.008 | 6.0951 |
| 6 | 2.744 | 8978 | 14445 | BB | 0.010 | 1.1803 |
| 7 | 2.812 | 10256 | 12503 | BB | 0.014 | 1.3484 |
| 8 | 2.840 | 12108 | 27808 | BB | 0.007 | 1.5919 |
| 9 | 2.915 | 25114 | 94968 | BB | 0.004 | 3.3018 |
| 10 | 2.973 | 4781 | 7170 | BB | 0.011 | 0.6286 |
| 11 | 3.031 | 27333 | 16407 | BB | 0.027 | 3.5935 |
| 12 | 3.106 | 54138 | 109721 | BB | 0.016 | 7.1176 |
| 13 | 3.156 | 5052 | 7075 | BB | 0.012 | 0.6641 |
| 14 | 3.194 | 21368 | 36339 | BB | 0.010 | 2.8093 |
| 15 | 3.264 | 812 | 1313 | BB | 0.010 | 0.1067 |
| 16 | 3.287 | 79783 | 112085 | BB | 0.012 | 10.4892 |
| 17 | 3.366 | 5959 | 7216 | BB | 0.017 | 0.7835 |
| 18 | 3.458 | 27330 | 87543 | BB | 0.005 | 3.5931 |
| 19 | 3.529 | 13091 | 4811 | BB | 0.035 | 1.7211 |
| 20 | 3.621 | 40219 | 77875 | BB | 0.009 | 5.2876 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.673 | 108291 | 228235 | BB | 0.008 | 14.2371 |
| 22 | 3.714 | 5637 | 5097 | BB | 0.017 | 0.7412 |
| 23 | 3.748 | 9472 | 9212 | BB | 0.017 | 1.2453 |
| 24 | 3.803 | 33300 | 4134 | BB | 0.134 | 4.3780 |
| 25 | 3.835 | 3328 | 4666 | BB | 0.012 | 0.4376 |
| 26 | 3.889 | 5437 | 6939 | BB | 0.013 | 0.7148 |
| 27 | 3.923 | 21514 | 45689 | BB | 0.008 | 2.8284 |
| 28 | 3.979 | 2796 | 2277 | BB | 0.020 | 0.3676 |
| 29 | 4.067 | 15302 | 26926 | BB | 0.013 | 2.0117 |
| 30 | 4.119 | 3116 | 3637 | BB | 0.016 | 0.4096 |
| 31 | 4.205 | 7861 | 15281 | BB | 0.017 | 1.0335 |
| 32 | 4.290 | 1092 | 874 | BB | 0.021 | 0.1435 |
| 33 | 4.341 | 4591 | 8188 | BB | 0.009 | 0.6036 |
| 34 | 4.423 | 688 | 470 | BB | 0.024 | 0.0904 |
| 35 | 4.474 | 100303 | 181003 | BB | 0.009 | 13.1869 |
| 36 | 4.603 | 1191 | 2005 | BB | 0.016 | 0.1565 |
| 37 | 4.889 | 242 | 296 | BB | 0.014 | 0.0318 |
| 38 | 4.998 | 633 | 238 | BB | 0.039 | 0.0832 |
| 39 | 5.318 | 184 | 168 | BB | 0.018 | 0.0241 |

Total area = 760624

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\093F1101.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 93 | |
| Sample Name | : 500 Dx 43-199B | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 11 | |
| Acquired on | 6/12/15 | 19:54 | | Instrume | DX.MTH | |
| Report Created on: 12 Jun 15 08:05 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.22 | <5.26 | 0 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 110 | >4.44 | <4.53 | 100303 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 108 | >3.63 | <3.72 | 108291 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 501 | >1.8 | <4.44 | 3.83E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 499 | >1.8 | <6.3 | 3865445 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 6 | >4.44 | <6.3 | 31401 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 290 | >3.17 | <6.3 | 1971569 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 602 | >1.8 | <4.44 | 3834044 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 251 | >1.1 | <3.17 | 2113390 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 646 | >1.1 | <4.44 | 4053558 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 906 | >1.8 | <6.3 | 3865446 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 251 | | | | | |
| TPHD (8-36) | 257 | | | | | |
| TPHDX (8-36) | 254 | | | | | |
| Motor Oil (8-36 | 382 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\092F1301.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 92 |
| Sample Name | : 500 MO 44-50B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 13 |
| Acquired on | : 12 Jun 15 09:12 PM | Instrument Method: | DX.MTH |
| Report Created on: | 12 Jun 15 09:23 PM | Analysis Method | : DX.MTH |

# Area Percent Report

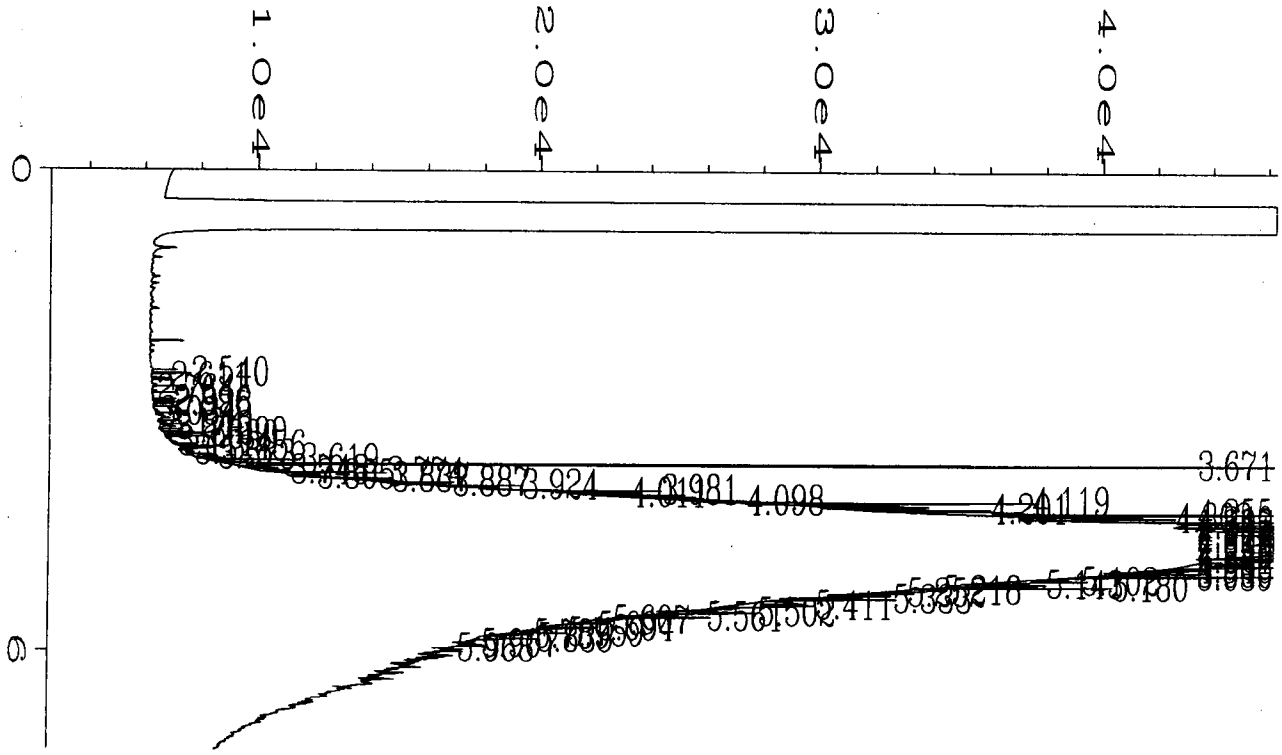
Data File Name : C:\HPCHEM\1\DATA\06-12-15\092F1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 MO 44-50B
Run Time Bar Code:
Acquired on : 12 Jun 15 09:12 PM
Report Created on: 12 Jun 15 09:23 PM

Page Number : 1
Vial Number : 92
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\092F1301.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06692E+009 | 8.56498E+007 | BV + | 0.000 | 99.6347 |
| 2 | 3.807 | 1030051 | 210583 | PV + | 0.000 | 0.0962 |
| 3 | 5.372 | 2729386 | 223444 | VVA | 0.204 | 0.2549 |
| 4 | 6.765 | 152049 | 6518 | VB + | 0.000 | 0.0142 |

Total area = 1.07083E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\092R1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 MO 44-50B
Run Time Bar Code:
Acquired on : 12 Jun 15 09:12 PM
Report Created on: 12 Jun 15 09:23 PM

Page Number : 1
Vial Number : 92
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\092R1301.D

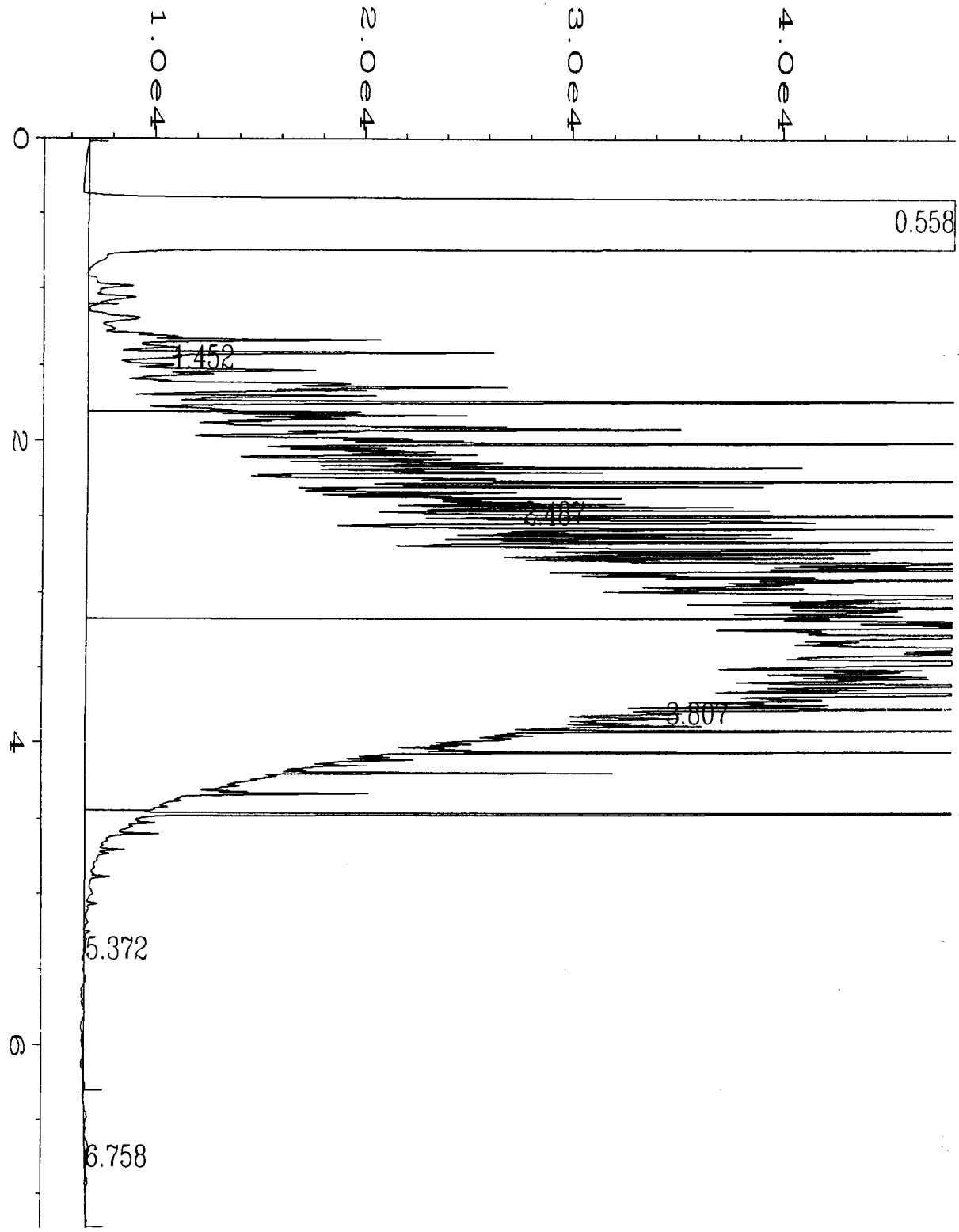
| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.540 | 607 | 1446 | BBAS | 0.007 | 0.1314 |
| 2 | 2.611 | 387 | 695 | BB | 0.009 | 0.0838 |
| 3 | 2.764 | 196 | 173 | BB | 0.021 | 0.0424 |
| 4 | 2.896 | 363 | 740 | BB | 0.008 | 0.0786 |
| 5 | 2.928 | 488 | 797 | BB | 0.010 | 0.1056 |
| 6 | 3.034 | 200 | 134 | BB | 0.021 | 0.0433 |
| 7 | 3.174 | 150 | 260 | BB | 0.010 | 0.0325 |
| 8 | 3.213 | 577 | 564 | BB | 0.019 | 0.1248 |
| 9 | 3.290 | 1406 | 1652 | BB | 0.014 | 0.3042 |
| 10 | 3.330 | 634 | 1271 | BB | 0.008 | 0.1371 |
| 11 | 3.411 | 347 | 238 | BB | 0.024 | 0.0750 |
| 12 | 3.456 | 1295 | 1808 | BB | 0.012 | 0.2802 |
| 13 | 3.528 | 370 | 286 | BB | 0.021 | 0.0801 |
| 14 | 3.573 | 1268 | 908 | BB | 0.026 | 0.2745 |
| 15 | 3.619 | 2071 | 3557 | BB | 0.017 | 0.4481 |
| 16 | 3.671 | 110806 | 223429 | BB | 0.008 | 23.9776 |
| 17 | 3.748 | 1877 | 1244 | BB | 0.025 | 0.4063 |
| 18 | 3.774 | 1841 | 4133 | BB | 0.007 | 0.3985 |
| 19 | 3.805 | 1251 | 1067 | BB | 0.018 | 0.2708 |
| 20 | 3.837 | 2205 | 2493 | BB | 0.015 | 0.4771 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.887 | 2747 | 2493 | BB | 0.018 | 0.5945 |
| 22 | 3.924 | 1692 | 3376 | BB | 0.008 | 0.3661 |
| 23 | 3.981 | 2868 | 4724 | BB | 0.011 | 0.6206 |
| 24 | 4.011 | 1558 | 2205 | BB | 0.012 | 0.3371 |
| 25 | 4.098 | 6641 | 2283 | BB | 0.048 | 1.4371 |
| 26 | 4.119 | 9255 | 10781 | BB | 0.014 | 2.0026 |
| 27 | 4.201 | 7485 | 4482 | BB | 0.028 | 1.6197 |
| 28 | 4.255 | 15589 | 12070 | BB | 0.021 | 3.3734 |
| 29 | 4.303 | 6072 | 5538 | BB | 0.018 | 1.3140 |
| 30 | 4.340 | 3930 | 7967 | BB | 0.008 | 0.8503 |
| 31 | 4.387 | 15060 | 17669 | BB | 0.014 | 3.2590 |
| 32 | 4.471 | 113766 | 194730 | BB | 0.015 | 24.6181 |
| 33 | 4.515 | 16588 | 20761 | BB | 0.013 | 3.5896 |
| 34 | 4.566 | 13680 | 8966 | BB | 0.023 | 2.9603 |
| 35 | 4.609 | 9441 | 10248 | BB | 0.015 | 2.0431 |
| 36 | 4.645 | 15082 | 18193 | BB | 0.014 | 3.2636 |
| 37 | 4.740 | 3326 | 2326 | BB | 0.021 | 0.7197 |
| 38 | 4.776 | 13158 | 13664 | BB | 0.018 | 2.8474 |
| 39 | 4.821 | 5616 | 3842 | BB | 0.024 | 1.2153 |
| 40 | 4.906 | 11519 | 11595 | BB | 0.017 | 2.4927 |
| 41 | 4.946 | 1658 | 2267 | BB | 0.012 | 0.3588 |
| 42 | 5.000 | 3467 | 3448 | BB | 0.017 | 0.7502 |
| 43 | 5.039 | 7108 | 7976 | BB | 0.015 | 1.5381 |
| 44 | 5.102 | 5293 | 3055 | BB | 0.026 | 1.1455 |
| 45 | 5.143 | 3579 | 3179 | BB | 0.019 | 0.7744 |
| 46 | 5.180 | 4477 | 6547 | BB | 0.011 | 0.9687 |
| 47 | 5.218 | 2679 | 1802 | BB | 0.025 | 0.5797 |
| 48 | 5.252 | 2706 | 1965 | BB | 0.023 | 0.5855 |
| 49 | 5.333 | 3276 | 3858 | BB | 0.014 | 0.7089 |
| 50 | 5.411 | 8120 | 3067 | BB | 0.042 | 1.7571 |
| 51 | 5.502 | 3426 | 3223 | BB | 0.018 | 0.7413 |
| 52 | 5.561 | 3547 | 3232 | BB | 0.017 | 0.7675 |
| 53 | 5.607 | 1557 | 925 | BB | 0.028 | 0.3369 |
| 54 | 5.694 | 1081 | 1938 | BB | 0.010 | 0.2339 |
| 55 | 5.759 | 2298 | 2204 | BB | 0.016 | 0.4972 |
| 56 | 5.789 | 826 | 1760 | BB | 0.008 | 0.1788 |
| 57 | 5.835 | 2822 | 2333 | BB | 0.020 | 0.6107 |
| 58 | 5.907 | 258 | 750 | BB | 0.006 | 0.0559 |
| 59 | 5.968 | 531 | 630 | BBA | 0.020 | 0.1150 |

Total area = 462123

==========

| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\092F1301.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 92 | |
| Sample Name | : 500 MO 44-50B | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 13 | |
| Acquired on | 6/12/15 | 21:12 | | Instrume | DX.MTH | |
| Report Created on: 12 Jun 15 09:23 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 3 | >5.22 | <5.26 | 2706 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 125 | >4.44 | <4.53 | 113766 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 110 | >3.63 | <3.72 | 110806 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 120 | >1.8 | <4.44 | 9.19E+05 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 456 | >1.8 | <6.3 | 3532159 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 506 | >4.44 | <6.3 | 2612914 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 519 | >3.17 | <6.3 | 3532159 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 144 | >1.8 | <4.44 | 919245 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 0 | >1.1 | <3.17 | 0 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 146 | >1.1 | <4.44 | 919245 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 828 | >1.8 | <6.3 | 3534865 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 0 | | | | | |
| TPHD (8-36) | 461 | | | | | |
| TPHDX (8-36) | 456 | | | | | |
| Motor Oil (8-36 | 685 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\093F1301.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 93 |
| Sample Name | : 500 Dx 43-199B | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 13 |
| Acquired on | : 12 Jun 15 09:24 PM | Instrument Method | : DX.MTH |
| Report Created on: | 12 Jun 15 09:34 PM | Analysis Method | : DX.MTH |

Rep

# Area Percent Report

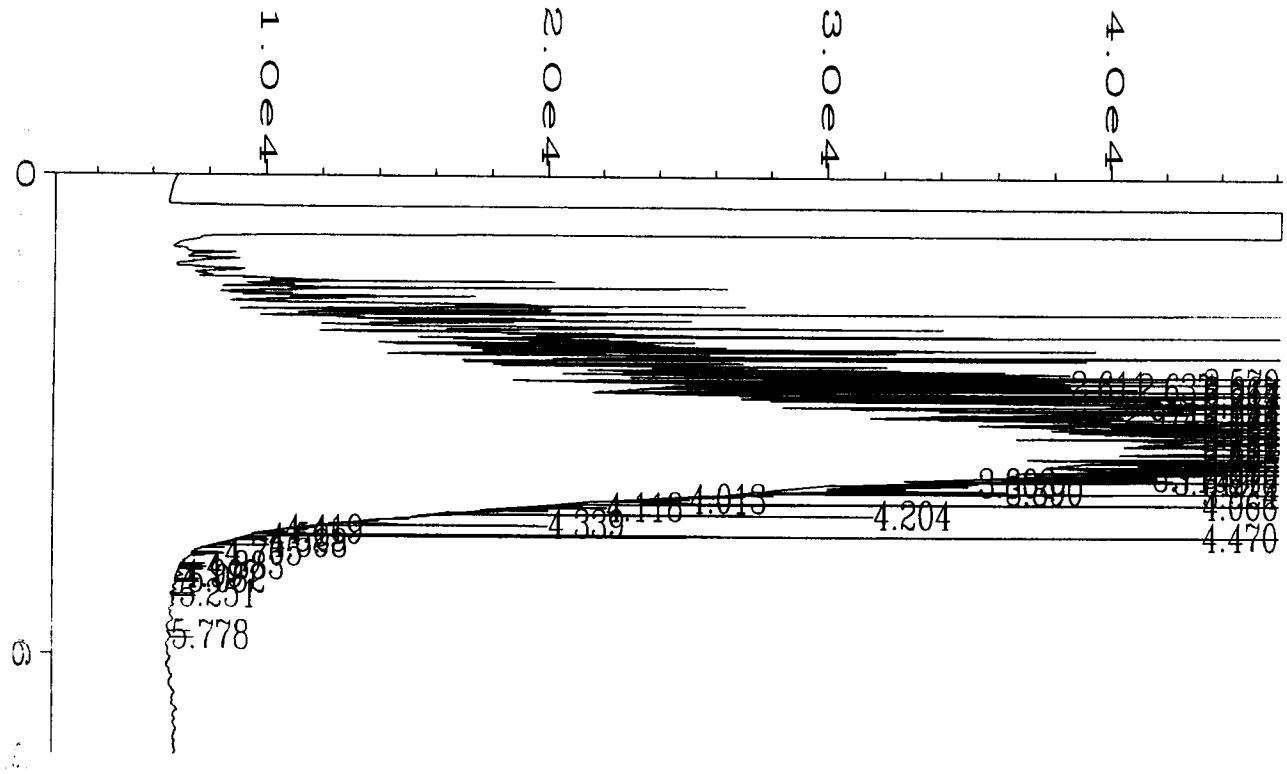
Data File Name : C:\HPCHEM\1\DATA\06-12-15\093F1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 12 Jun 15 09:24 PM
Report Created on: 12 Jun 15 09:34 PM

Page Number : 1
Vial Number : 93
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\093F1301.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.07809E+009 | 8.53522E+007 | BVA | 0.211 | 99.5650 |
| 2 | 1.452 | 227206 | 65958 | VV + | 0.000 | 0.0210 |
| 3 | 2.487 | 2059064 | 147671 | VV + | 0.000 | 0.1902 |
| 4 | 3.807 | 2273559 | 256469 | VVA | 0.148 | 0.2100 |
| 5 | 5.372 | 148629 | 221390 | VV + | 0.000 | 0.0137 |
| 6 | 6.758 | 2271 | 195 | PB + | 0.000 | 0.0002 |

Total area = 1.08281E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\093R1301.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 12 Jun 15 09:24 PM
Report Created on: 12 Jun 15 09:34 PM

Page Number : 1
Vial Number : 93
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\093R1301.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.579 | 16572 | 25843 | BB | 0.011 | 1.9805 |
| 2 | 2.611 | 7948 | 14273 | BB | 0.009 | 0.9499 |
| 3 | 2.637 | 12582 | 17345 | BB | 0.012 | 1.5036 |
| 4 | 2.667 | 19899 | 28786 | BB | 0.012 | 2.3781 |
| 5 | 2.714 | 51245 | 100604 | BB | 0.008 | 6.1241 |
| 6 | 2.745 | 10641 | 16305 | BB | 0.011 | 1.2717 |
| 7 | 2.812 | 13628 | 14177 | BB | 0.016 | 1.6287 |
| 8 | 2.916 | 19317 | 108855 | BB | 0.003 | 2.3085 |
| 9 | 2.974 | 6491 | 6713 | BB | 0.016 | 0.7757 |
| 10 | 3.021 | 29218 | 17330 | BB | 0.028 | 3.4918 |
| 11 | 3.066 | 5428 | 7828 | BB | 0.012 | 0.6487 |
| 12 | 3.106 | 58241 | 128562 | BB | 0.008 | 6.9602 |
| 13 | 3.155 | 9385 | 7705 | BB | 0.020 | 1.1216 |
| 14 | 3.196 | 24471 | 41963 | BB | 0.010 | 2.9244 |
| 15 | 3.287 | 80295 | 116951 | BB | 0.014 | 9.5958 |
| 16 | 3.367 | 9458 | 8557 | BB | 0.019 | 1.1303 |
| 17 | 3.458 | 27615 | 94074 | BB | 0.005 | 3.3002 |
| 18 | 3.515 | 12040 | 2837 | BB | 0.071 | 1.4389 |
| 19 | 3.575 | 13125 | 8113 | BB | 0.027 | 1.5686 |
| 20 | 3.620 | 45893 | 94034 | BB | 0.008 | 5.4845 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.673 | 119220 | 248822 | BB | 0.008 | 14.2476 |
| 22 | 3.715 | 5604 | 5105 | BB | 0.017 | 0.6697 |
| 23 | 3.749 | 9576 | 8735 | BB | 0.016 | 1.1444 |
| 24 | 3.776 | 30762 | 68218 | BB | 0.008 | 3.6763 |
| 25 | 3.803 | 2645 | 3371 | BB | 0.013 | 0.3161 |
| 26 | 3.890 | 15451 | 8399 | BB | 0.027 | 1.8465 |
| 27 | 3.924 | 24294 | 52312 | BB | 0.008 | 2.9033 |
| 28 | 4.013 | 5556 | 2299 | BB | 0.040 | 0.6640 |
| 29 | 4.066 | 17518 | 30788 | BB | 0.013 | 2.0935 |
| 30 | 4.118 | 3459 | 3777 | BB | 0.015 | 0.4134 |
| 31 | 4.204 | 7786 | 16337 | BB | 0.008 | 0.9305 |
| 32 | 4.339 | 6183 | 8435 | BB | 0.017 | 0.7389 |
| 33 | 4.419 | 549 | 586 | BB | 0.016 | 0.0656 |
| 34 | 4.470 | 109529 | 217698 | BB | 0.008 | 13.0895 |
| 35 | 4.525 | 772 | 1256 | BB | 0.010 | 0.0923 |
| 36 | 4.598 | 1576 | 2104 | BB | 0.018 | 0.1883 |
| 37 | 4.705 | 722 | 1229 | BB | 0.010 | 0.0863 |
| 38 | 4.883 | 763 | 968 | BB | 0.018 | 0.0912 |
| 39 | 4.997 | 621 | 241 | BB | 0.035 | 0.0742 |
| 40 | 5.062 | 357 | 481 | BB | 0.012 | 0.0426 |
| 41 | 5.251 | 222 | 287 | BB | 0.013 | 0.0265 |
| 42 | 5.778 | 114 | 53 | BB | 0.036 | 0.0137 |

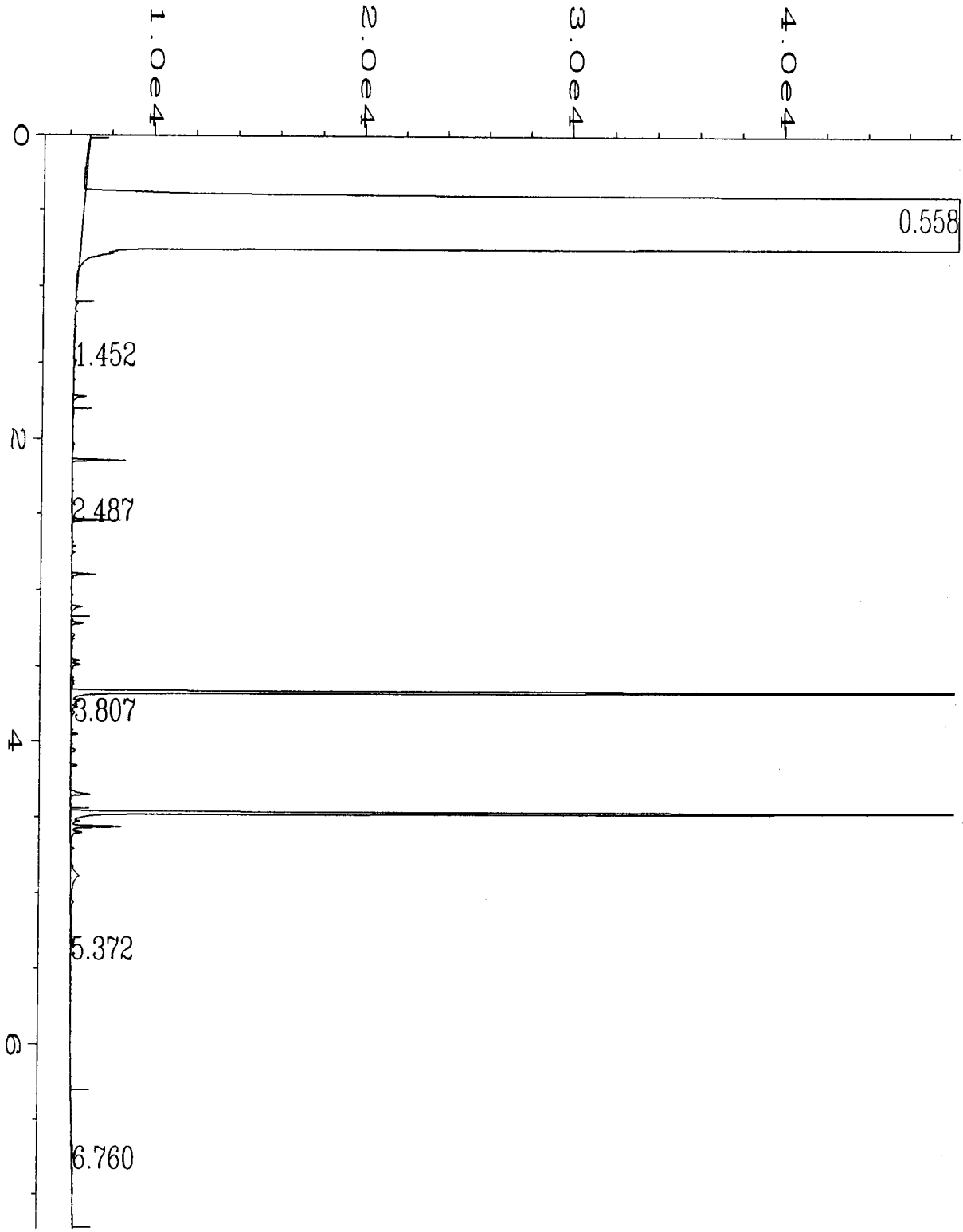
Total area = 836772

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\093F1301.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 93 | |
| Sample Name | : 500 Dx 43-199B | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 13 | |
| Acquired on | 6/12/15 | 21:24 | | Instrume | DX.MTH | | |
| Report Created on: 12 Jun 15 09:34 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 222 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 120 | >4.44 | <4.53 | 109529 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 119 | >3.63 | <3.72 | 119220 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 550 | >1.8 | <4.44 | 4.21E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 549 | >1.8 | <6.3 | 4252281 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 8 | >4.44 | <6.3 | 38878 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 323 | >3.17 | <6.3 | 2193217 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 661 | >1.8 | <4.44 | 4213403 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 272 | >1.1 | <3.17 | 2286270 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 707 | >1.1 | <4.44 | 4440609 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 996 | >1.8 | <6.3 | 4252503 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 272 | | | | | | |
| TPHD (8-36) | 286 | | | | | | |
| TPHDX (8-36) | 283 | | | | | | |
| Motor Oil (8-36 | 425 | | | | | | |

# NWTPH-Dx
## Quality Assurance Data

F&B Project 506270




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\050F1001.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 50 |
| Sample Name | : 05-1104 mb | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 10 |
| Acquired on | : 12 Jun 15 05:40 PM | Instrument Method | : DX.MTH |
| Report Created on | : 12 Jun 15 05:51 PM | Analysis Method | : DX.MTH |

# Area Percent Report

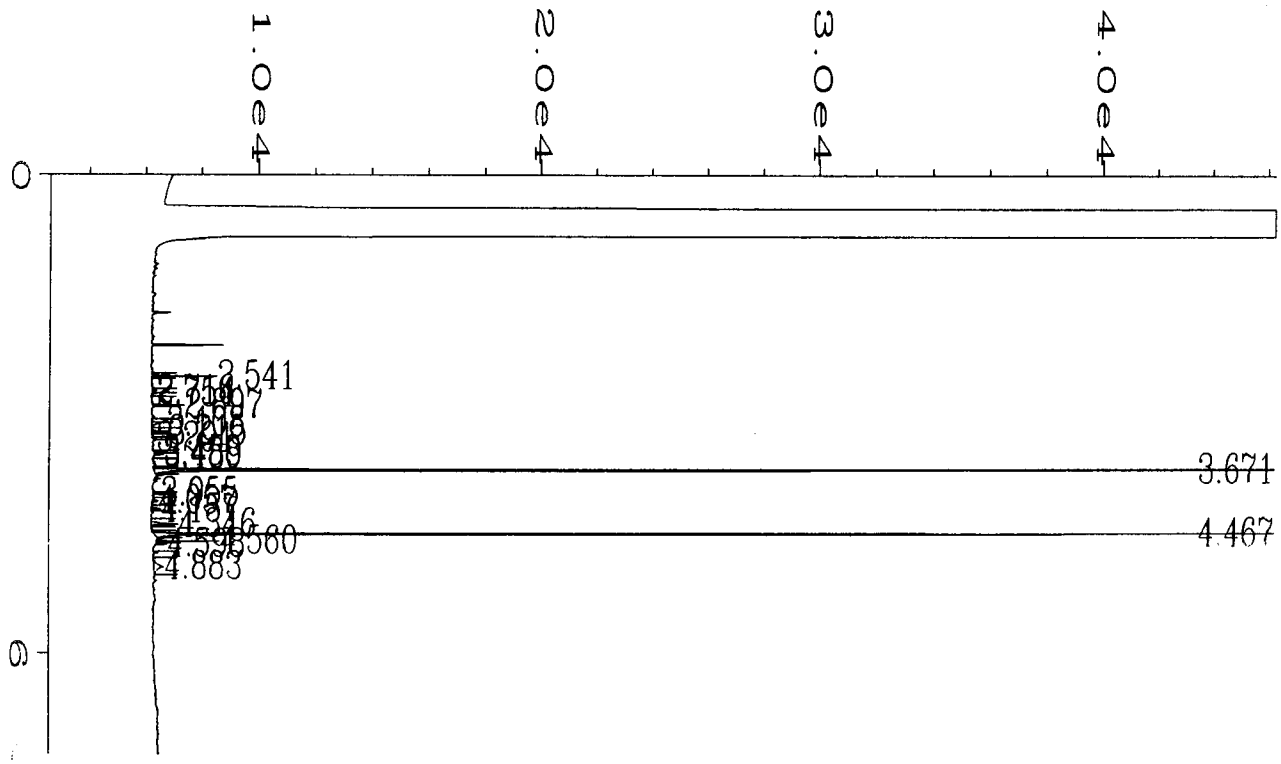
Data File Name : C:\HPCHEM\1\DATA\06-12-15\050F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 mb
Run Time Bar Code:
Acquired on : 12 Jun 15 05:40 PM
Report Created on: 12 Jun 15 05:51 PM

Page Number : 1
Vial Number : 50
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\050F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.0581E+009 | 8.25124E+007 | BV + | 0.000 | 99.9821 |
| 2 | 1.452 | 353 | 612 | PV + | 0.000 | 0.0000 |
| 3 | 2.487 | 4227 | 2526 | PVA | 0.028 | 0.0004 |
| 4 | 3.807 | 97013 | 156618 | VV + | 0.000 | 0.0092 |
| 5 | 5.372 | 86766 | 159507 | PV + | 0.000 | 0.0082 |
| 6 | 6.760 | 908 | 73 | PB + | 0.000 | 0.0001 |

Total area = 1.05829E+009




==========

Area Percent Report

==========

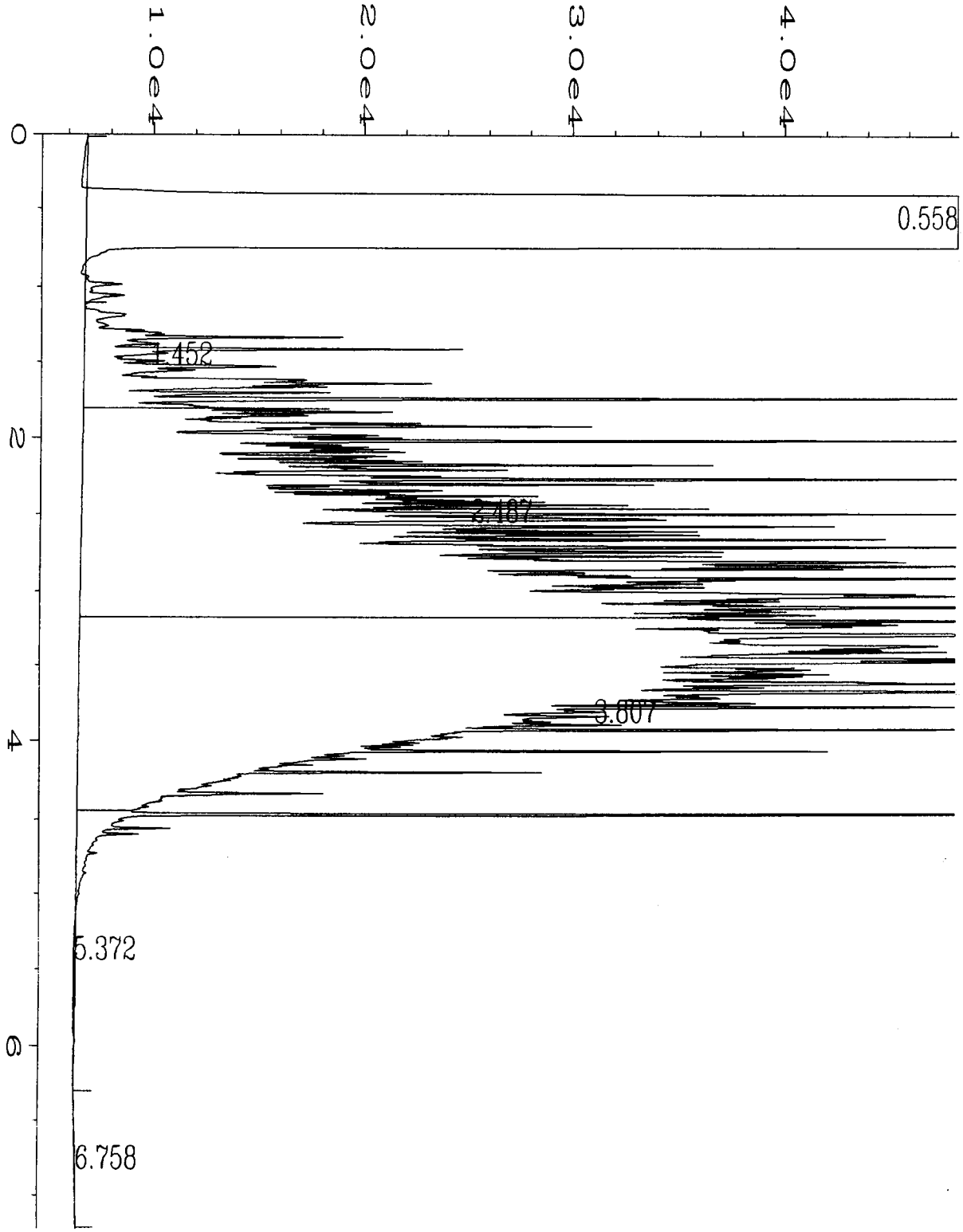
Data File Name : C:\HPCHEM\1\DATA\06-12-15\050R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 mb
Run Time Bar Code:
Acquired on : 12 Jun 15 05:40 PM
Report Created on: 12 Jun 15 05:51 PM

Page Number : 1
Vial Number : 50
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\050R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.541 | 1229 | 2429 | BBAS | 0.008 | 0.6842 |
| 2 | 2.716 | 125 | 176 | BB | 0.012 | 0.0695 |
| 3 | 2.754 | 137 | 167 | BB | 0.014 | 0.0765 |
| 4 | 2.897 | 515 | 1160 | BB | 0.007 | 0.2865 |
| 5 | 3.108 | 533 | 555 | BB | 0.017 | 0.2968 |
| 6 | 3.215 | 444 | 631 | BB | 0.021 | 0.2468 |
| 7 | 3.291 | 147 | 129 | BB | 0.019 | 0.0816 |
| 8 | 3.458 | 156 | 362 | BB | 0.007 | 0.0871 |
| 9 | 3.489 | 223 | 366 | BB | 0.010 | 0.1243 |
| 10 | 3.671 | 90931 | 171512 | BB | 0.009 | 50.6020 |
| 11 | 3.955 | 172 | 316 | BB | 0.009 | 0.0959 |
| 12 | 4.057 | 351 | 217 | BB | 0.026 | 0.1955 |
| 13 | 4.157 | 197 | 348 | BB | 0.009 | 0.1098 |
| 14 | 4.346 | 939 | 980 | BB | 0.016 | 0.5224 |
| 15 | 4.467 | 80591 | 166271 | BB | 0.017 | 44.8479 |
| 16 | 4.560 | 1301 | 2297 | BB | 0.009 | 0.7241 |
| 17 | 4.598 | 248 | 455 | BB | 0.009 | 0.1380 |
| 18 | 4.883 | 1458 | 370 | BB | 0.061 | 0.8111 |

Total area = 179699




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\051F1001.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 51 |
| Sample Name | : 05-1104 lcs | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 10 |
| Acquired on | : 12 Jun 15 05:51 PM | Instrument Method: | DX.MTH |
| Report Created on: | 12 Jun 15 06:02 PM | Analysis Method | : DX.MTH |

==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\051F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 lcs
Run Time Bar Code:
Acquired on : 12 Jun 15 05:51 PM
Report Created on: 12 Jun 15 06:02 PM

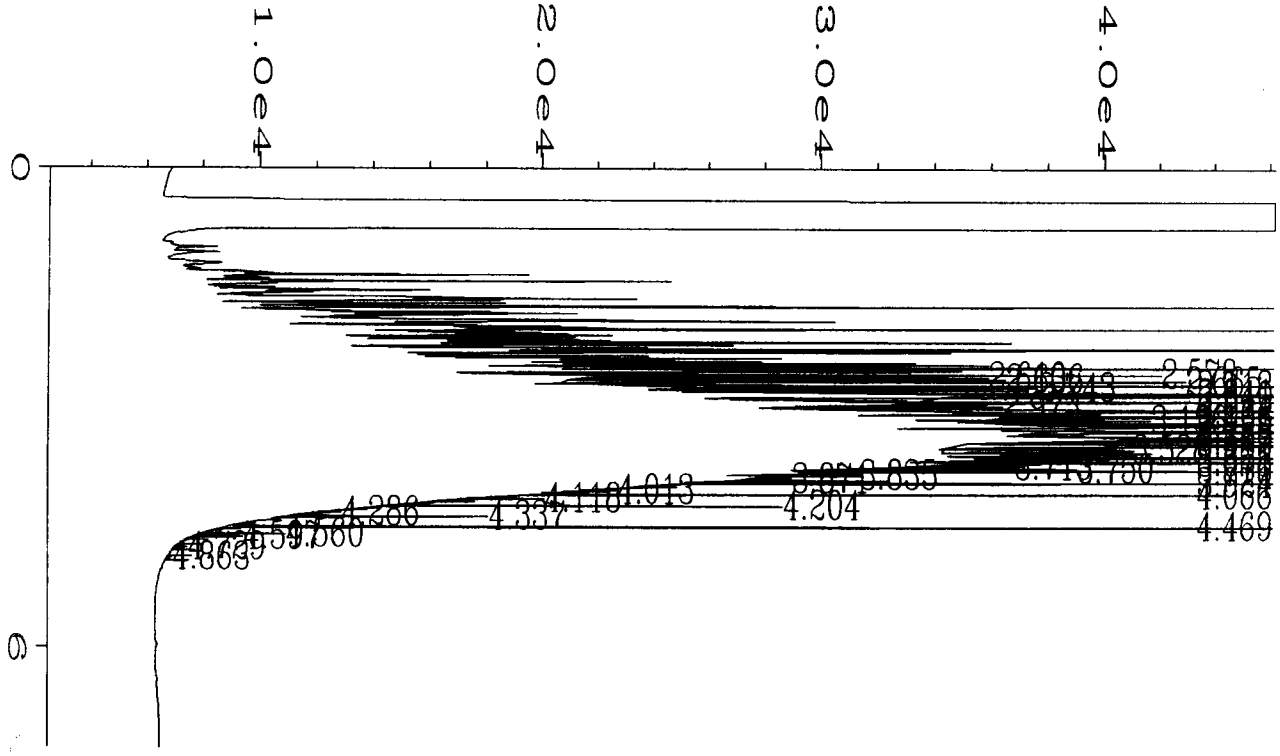
Page Number : 1
Vial Number : 51
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\051F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.03174E+009 | 8.19909E+007 | BVA | 0.210 | 99.6105 |
| 2 | 1.452 | 195105 | 57814 | VV + | 0.000 | 0.0188 |
| 3 | 2.487 | 1762917 | 119118 | VV + | 0.000 | 0.1702 |
| 4 | 3.807 | 1966137 | 197042 | VVA | 0.166 | 0.1898 |
| 5 | 5.372 | 109253 | 146154 | VV + | 0.000 | 0.0105 |
| 6 | 6.758 | 1164 | 69 | PB + | 0.000 | 0.0001 |

Total area = 1.03577E+009

==========




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\051R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 lcs
Run Time Bar Code:
Acquired on : 12 Jun 15 05:51 PM
Report Created on: 12 Jun 15 06:02 PM

Page Number : 1
Vial Number : 51
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

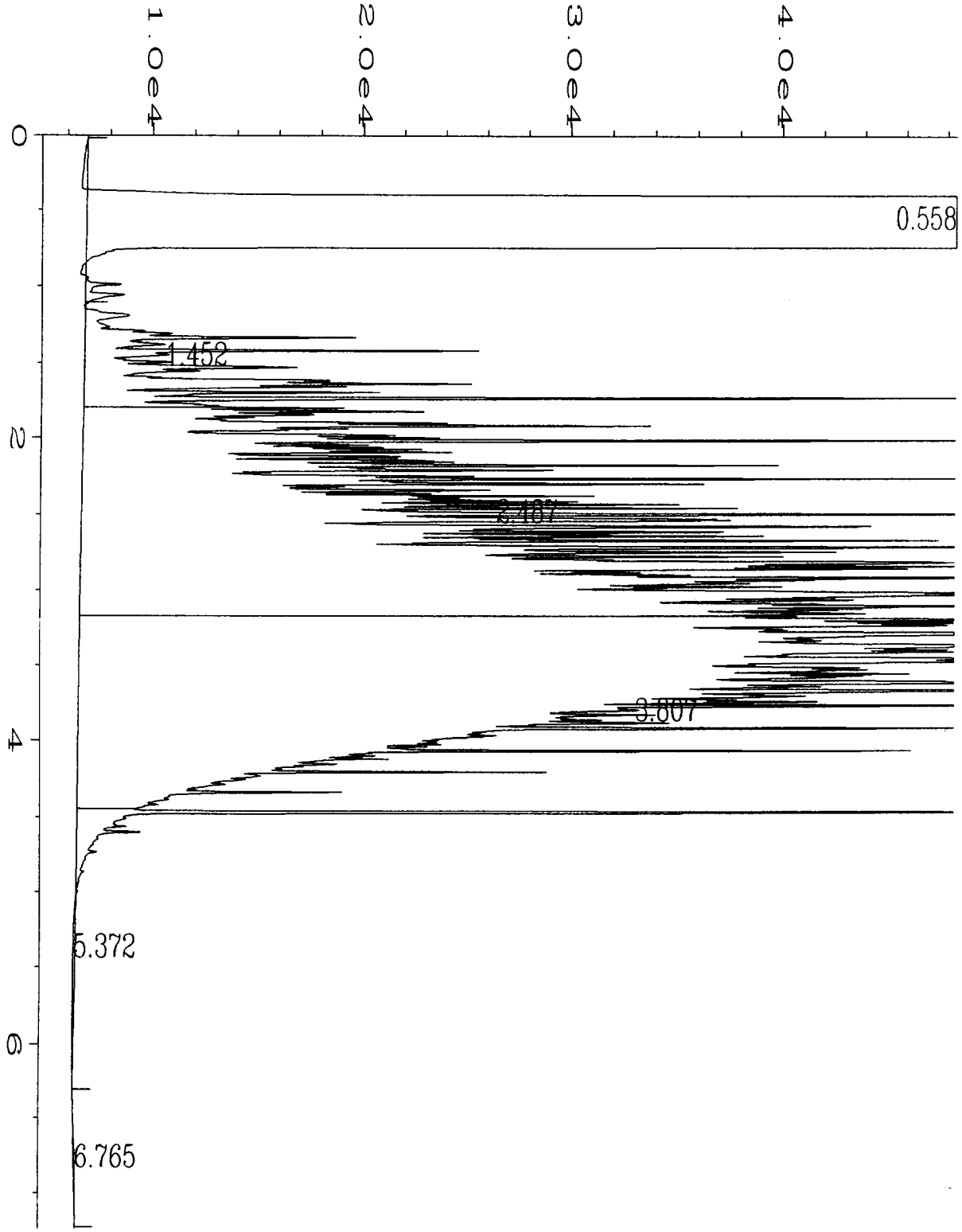
Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\051R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.578 | 14694 | 22128 | BB | 0.011 | 2.0225 |
| 2 | 2.610 | 7666 | 14184 | BB | 0.009 | 1.0552 |
| 3 | 2.636 | 11358 | 15818 | BB | 0.012 | 1.5633 |
| 4 | 2.665 | 15466 | 23991 | BB | 0.011 | 2.1289 |
| 5 | 2.713 | 41052 | 90391 | BB | 0.008 | 5.6505 |
| 6 | 2.743 | 8690 | 12792 | BB | 0.011 | 1.1961 |
| 7 | 2.811 | 12226 | 11655 | BB | 0.017 | 1.6828 |
| 8 | 2.840 | 12844 | 26264 | BB | 0.008 | 1.7679 |
| 9 | 2.915 | 32901 | 91703 | BB | 0.011 | 4.5287 |
| 10 | 2.973 | 6732 | 6860 | BB | 0.016 | 0.9266 |
| 11 | 3.031 | 25345 | 14545 | BB | 0.028 | 3.4886 |
| 12 | 3.106 | 42277 | 106370 | BB | 0.007 | 5.8192 |
| 13 | 3.156 | 6152 | 6978 | BB | 0.015 | 0.8468 |
| 14 | 3.195 | 19732 | 33079 | BB | 0.010 | 2.7160 |
| 15 | 3.288 | 68649 | 99488 | BB | 0.012 | 9.4492 |
| 16 | 3.367 | 5089 | 6873 | BB | 0.013 | 0.7004 |
| 17 | 3.412 | 6742 | 8536 | BB | 0.013 | 0.9280 |
| 18 | 3.459 | 70217 | 92601 | BB | 0.020 | 9.6650 |
| 19 | 3.528 | 10119 | 7002 | BB | 0.022 | 1.3928 |
| 20 | 3.621 | 39756 | 80880 | BB | 0.008 | 5.4722 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.673 | 86503 | 196545 | BB | 0.007 | 11.9067 |
| 22 | 3.715 | 4197 | 3650 | BB | 0.019 | 0.5777 |
| 23 | 3.750 | 7737 | 8974 | BB | 0.014 | 1.0650 |
| 24 | 3.776 | 27353 | 62348 | BB | 0.007 | 3.7650 |
| 25 | 3.835 | 1919 | 3244 | BB | 0.010 | 0.2642 |
| 26 | 3.871 | 1034 | 1809 | BB | 0.010 | 0.1424 |
| 27 | 3.924 | 23945 | 44021 | BB | 0.013 | 3.2960 |
| 28 | 4.013 | 1445 | 1227 | BB | 0.020 | 0.1989 |
| 29 | 4.066 | 11896 | 26462 | BB | 0.011 | 1.6375 |
| 30 | 4.118 | 2885 | 3072 | BB | 0.016 | 0.3971 |
| 31 | 4.204 | 7476 | 14759 | BB | 0.008 | 1.0290 |
| 32 | 4.286 | 2155 | 863 | BB | 0.042 | 0.2966 |
| 33 | 4.337 | 5145 | 7444 | BB | 0.012 | 0.7082 |
| 34 | 4.469 | 81497 | 164053 | BB | 0.008 | 11.2177 |
| 35 | 4.560 | 1980 | 3124 | BB | 0.011 | 0.2726 |
| 36 | 4.597 | 1152 | 1903 | BB | 0.010 | 0.1586 |
| 37 | 4.729 | 285 | 478 | BB | 0.015 | 0.0392 |
| 38 | 4.863 | 197 | 184 | BB | 0.020 | 0.0271 |

Total area = 726508

==========




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\052F1001.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 52 |
| Sample Name | : 05-1104 lcsd | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 10 |
| Acquired on | : 12 Jun 15 06:02 PM | Instrument Method | : DX.MTH |
| Report Created on: | 12 Jun 15 06:13 PM | Analysis Method | : DX.MTH |

# Area Percent Report

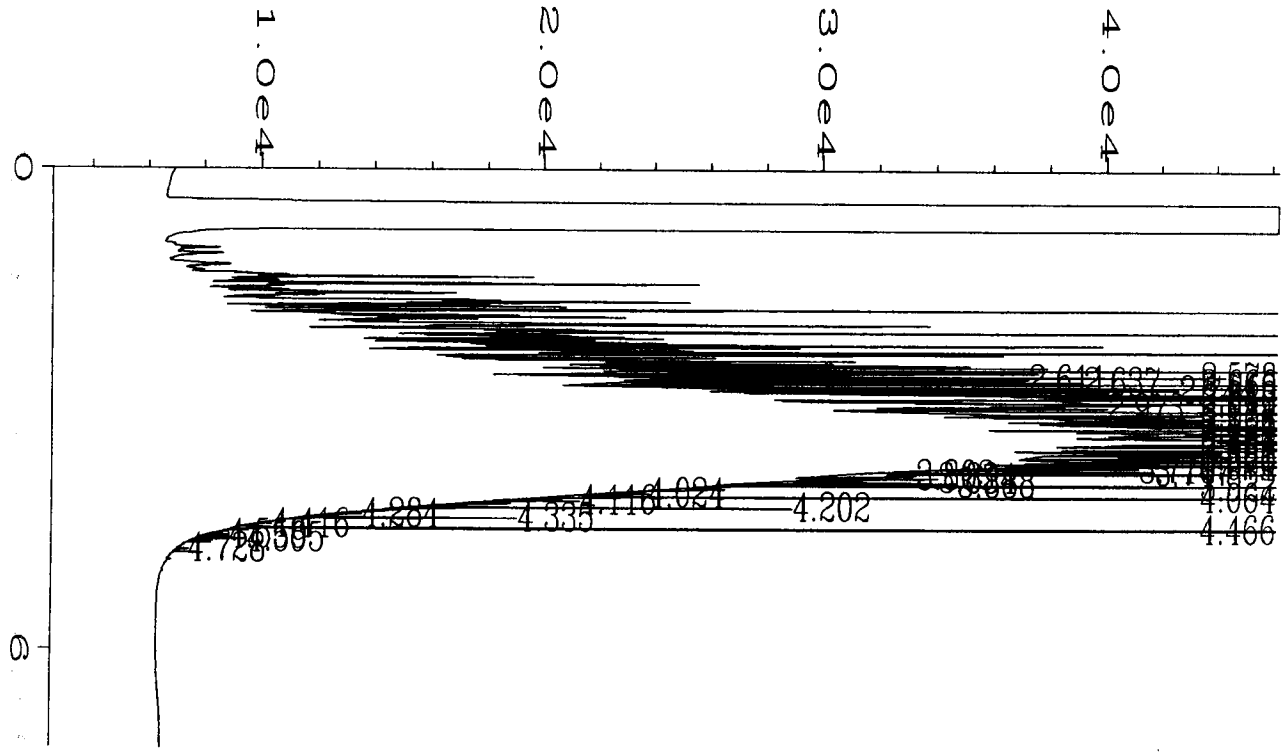
Data File Name : C:\HPCHEM\1\DATA\06-12-15\052F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 lcsd
Run Time Bar Code:
Acquired on : 12 Jun 15 06:02 PM
Report Created on: 12 Jun 15 06:13 PM

Page Number : 1
Vial Number : 52
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\052F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.05634E+009 | 8.27071E+007 | BVA | 0.213 | 99.5827 |
| 2 | 1.452 | 209782 | 63449 | VV + | 0.000 | 0.0198 |
| 3 | 2.487 | 1944443 | 144646 | VV + | 0.000 | 0.1833 |
| 4 | 3.807 | 2158243 | 211246 | VVA | 0.170 | 0.2035 |
| 5 | 5.372 | 113347 | 174773 | VB + | 0.000 | 0.0107 |
| 6 | 6.765 | 1209 | 79 | BB + | 0.000 | 0.0001 |

Total area = 1.06077E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\052R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1104 lcsd
Run Time Bar Code:
Acquired on : 12 Jun 15 06:02 PM
Report Created on: 12 Jun 15 06:13 PM

Page Number : 1
Vial Number : 52
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\052R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.578 | 16335 | 23083 | BB | 0.012 | 2.0966 |
| 2 | 2.611 | 8064 | 14687 | BB | 0.009 | 1.0350 |
| 3 | 2.637 | 12385 | 16696 | BB | 0.012 | 1.5896 |
| 4 | 2.666 | 18963 | 27414 | BB | 0.012 | 2.4338 |
| 5 | 2.713 | 49129 | 98455 | BB | 0.008 | 6.3055 |
| 6 | 2.744 | 9843 | 15940 | BB | 0.010 | 1.2633 |
| 7 | 2.813 | 13526 | 14595 | BB | 0.015 | 1.7360 |
| 8 | 2.840 | 13703 | 29763 | BB | 0.008 | 1.7587 |
| 9 | 2.915 | 23694 | 96149 | BB | 0.004 | 3.0410 |
| 10 | 2.973 | 2899 | 7095 | BB | 0.007 | 0.3721 |
| 11 | 3.031 | 38199 | 19258 | BB | 0.030 | 4.9027 |
| 12 | 3.106 | 55105 | 119845 | BB | 0.008 | 7.0725 |
| 13 | 3.156 | 7767 | 6492 | BB | 0.020 | 0.9969 |
| 14 | 3.194 | 21719 | 38002 | BB | 0.010 | 2.7876 |
| 15 | 3.287 | 77337 | 115660 | BB | 0.013 | 9.9259 |
| 16 | 3.364 | 5885 | 8207 | BB | 0.013 | 0.7554 |
| 17 | 3.457 | 26368 | 99678 | BB | 0.004 | 3.3843 |
| 18 | 3.528 | 10952 | 4310 | BB | 0.042 | 1.4056 |
| 19 | 3.560 | 11767 | 9002 | BB | 0.022 | 1.5103 |
| 20 | 3.620 | 43407 | 88900 | BB | 0.008 | 5.5712 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.671 | 95928 | 193200 | BB | 0.008 | 12.3120 |
| 22 | 3.710 | 6059 | 6255 | BB | 0.016 | 0.7776 |
| 23 | 3.747 | 9354 | 9354 | BB | 0.017 | 1.2006 |
| 24 | 3.803 | 34751 | 3419 | BB | 0.169 | 4.4601 |
| 25 | 3.834 | 3787 | 4886 | BB | 0.013 | 0.4861 |
| 26 | 3.888 | 8171 | 7763 | BB | 0.018 | 1.0487 |
| 27 | 3.922 | 23739 | 50004 | BB | 0.008 | 3.0468 |
| 28 | 4.024 | 4496 | 2269 | BB | 0.033 | 0.5771 |
| 29 | 4.064 | 14868 | 27746 | BB | 0.009 | 1.9083 |
| 30 | 4.116 | 3370 | 3328 | BB | 0.017 | 0.4325 |
| 31 | 4.202 | 9014 | 15493 | BB | 0.010 | 1.1569 |
| 32 | 4.284 | 2487 | 1028 | BB | 0.040 | 0.3192 |
| 33 | 4.335 | 4858 | 8260 | BB | 0.010 | 0.6236 |
| 34 | 4.416 | 952 | 678 | BB | 0.023 | 0.1222 |
| 35 | 4.466 | 88058 | 179868 | BB | 0.008 | 11.3019 |
| 36 | 4.558 | 783 | 866 | BB | 0.015 | 0.1005 |
| 37 | 4.595 | 1230 | 1978 | BB | 0.016 | 0.1578 |
| 38 | 4.728 | 188 | 433 | BB | 0.014 | 0.0241 |

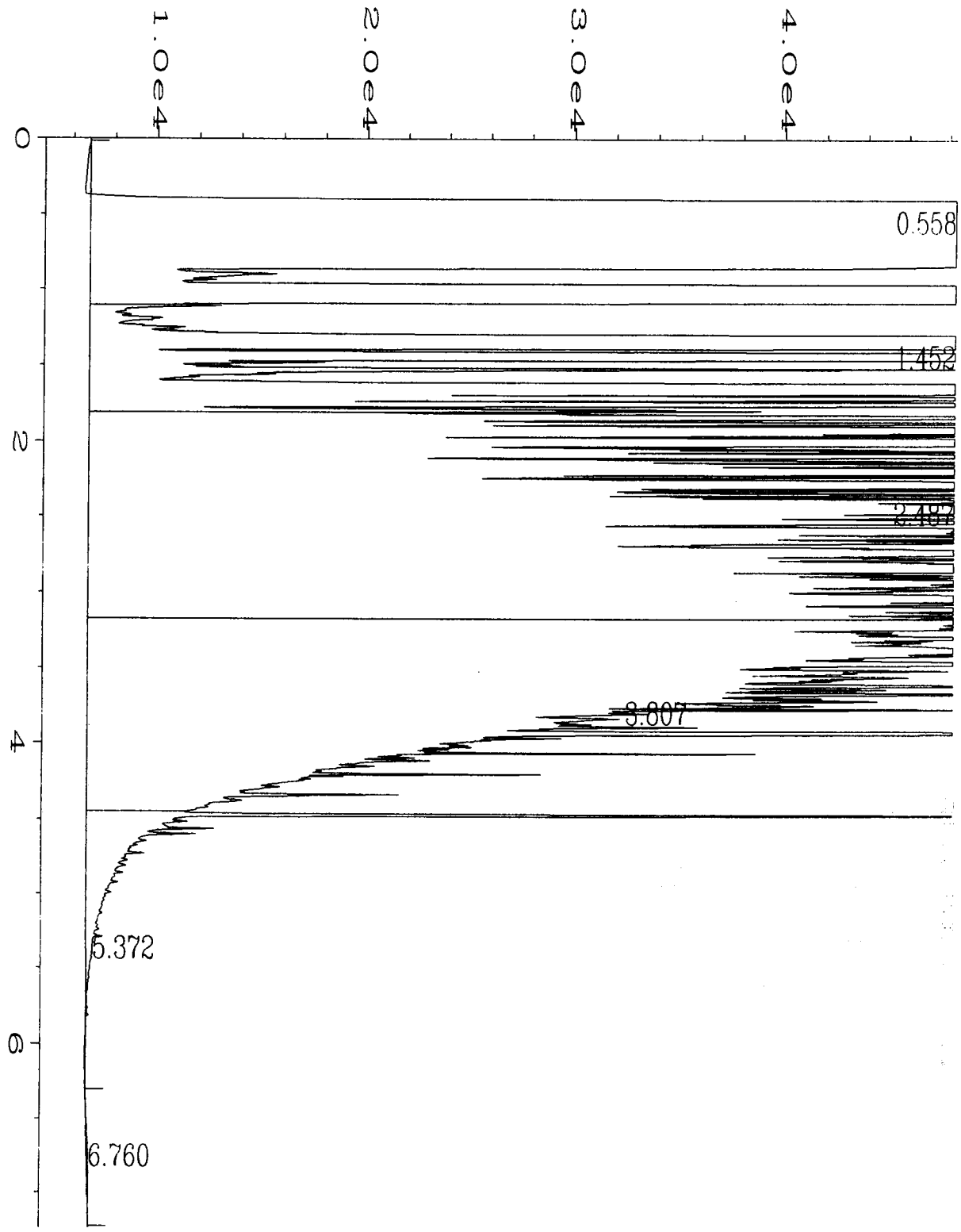
Total area = 779144

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\052F1001.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 52 | |
| Sample Name | : 05-1104 lcsd | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 10 | |
| Acquired on | 6/12/15 | 18:02 | | Instrume | DX.MTH | | |
| Report Created on: 12 Jun 15 06:13 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 0 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 97 | >4.44 | <4.53 | 88058 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 96 | >3.63 | <3.72 | 95928 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 523 | >1.8 | <4.44 | 4.01E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 520 | >1.8 | <6.3 | 4032046 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 5 | >4.44 | <6.3 | 25288 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 307 | >3.17 | <6.3 | 2087603 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 629 | >1.8 | <4.44 | 4006758 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 256 | >1.1 | <3.17 | 2154225 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 672 | >1.1 | <4.44 | 4216540 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 945 | >1.8 | <6.3 | 4032047 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 256 | | | | | | |
| TPHD (8-36) | 273 | | | | | | |
| TPHDX (8-36) | 269 | | | | | | |
| Motor Oil (8-36 | 405 | | | | | | |

# NWTPH-Dx
## Sample Chromatograms & Data

F&B Project 506270




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\066F1201.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 66 |
| Sample Name | : 506270-01 | Injection Number | : 1 |
| Run Time Bar Code | : | Sequence Line | : 12 |
| Acquired on | : 12 Jun 15 09:01 PM | Instrument Method | : DX.MTH |
| Report Created on | : 12 Jun 15 09:12 PM | Analysis Method | : DX.MTH |

# Area Percent Report

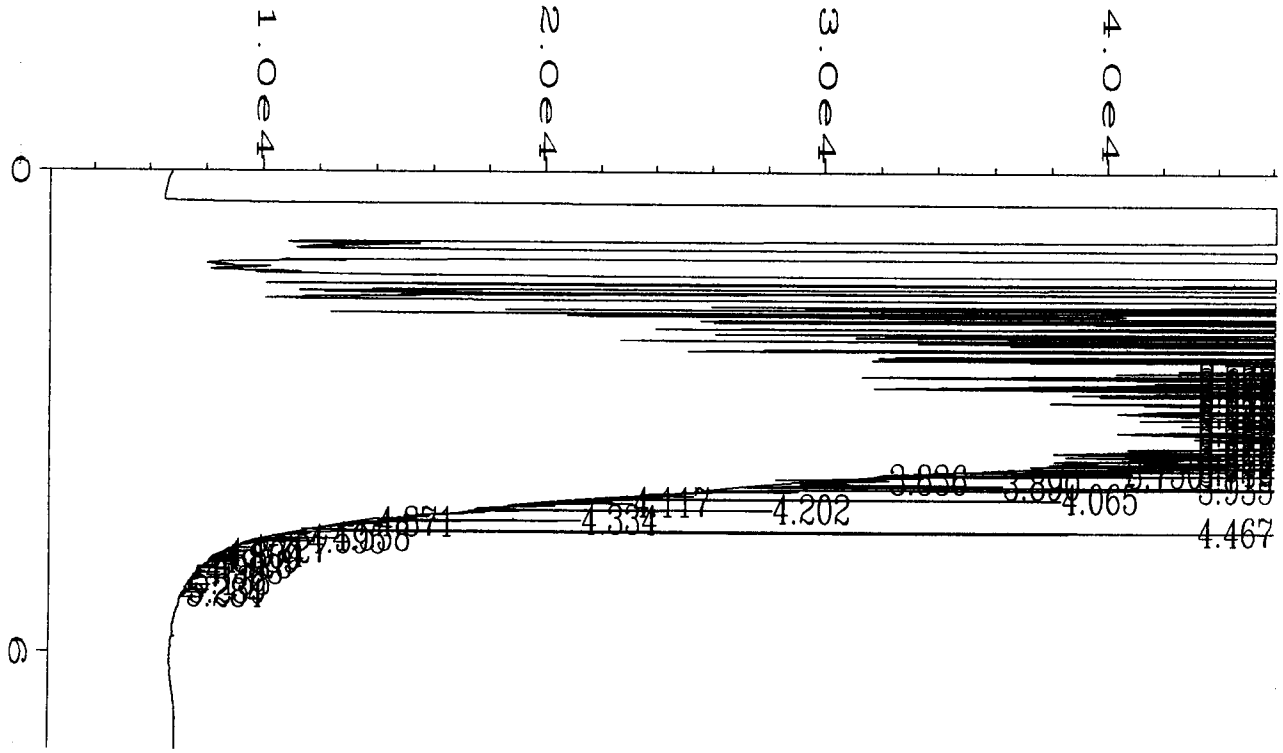
Data File Name : C:\HPCHEM\1\DATA\06-12-15\066F1201.D
Operator : mwdl
Instrument : GC1
Sample Name : 506270-01
Run Time Bar Code:
Acquired on : 12 Jun 15 09:01 PM
Report Created on: 12 Jun 15 09:12 PM

Page Number : 1
Vial Number : 66
Injection Number : 1
Sequence Line : 12
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-12-15\066F1201.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06449E+009 | 8.45317E+007 | BVA | 0.210 | 98.4520 |
| 2 | 1.452 | 8165529 | 2475415 | VV + | 0.000 | 0.7552 |
| 3 | 2.487 | 6127773 | 698384 | VV + | 0.000 | 0.5667 |
| 4 | 3.807 | 2275095 | 171471 | VVA | 0.221 | 0.2104 |
| 5 | 5.372 | 166859 | 142566 | VV + | 0.000 | 0.0154 |
| 6 | 6.760 | 1943 | 92 | PB + | 0.000 | 0.0002 |

Total area = 1.08122E+009




==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-12-15\066R1201.D
Operator : mwdl
Instrument : GC1
Sample Name : 506270-01
Run Time Bar Code:
Acquired on : 12 Jun 15 09:01 PM
Report Created on: 12 Jun 15 09:12 PM

Page Number : 1
Vial Number : 66
Injection Number : 1
Sequence Line : 12
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-12-15\066R1201.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.539 | 68113 | 312690 | BBAS | 0.004 | 6.4590 |
| 2 | 2.579 | 96190 | 193399 | BB | 0.008 | 9.1215 |
| 3 | 2.638 | 36510 | 35679 | BB | 0.017 | 3.4621 |
| 4 | 2.668 | 33529 | 52491 | BB | 0.011 | 3.1795 |
| 5 | 2.716 | 44378 | 81443 | BB | 0.009 | 4.2083 |
| 6 | 2.747 | 29366 | 36850 | BB | 0.013 | 2.7847 |
| 7 | 2.811 | 76751 | 62928 | BB | 0.019 | 7.2781 |
| 8 | 2.917 | 36466 | 73841 | BB | 0.008 | 3.4579 |
| 9 | 2.950 | 9021 | 5904 | BB | 0.025 | 0.8554 |
| 10 | 2.976 | 9542 | 16554 | BB | 0.010 | 0.9049 |
| 11 | 3.021 | 42288 | 29304 | BB | 0.023 | 4.0101 |
| 12 | 3.107 | 44035 | 72878 | BB | 0.010 | 4.1757 |
| 13 | 3.157 | 12229 | 11131 | BB | 0.018 | 1.1596 |
| 14 | 3.196 | 30287 | 49955 | BB | 0.010 | 2.8720 |
| 15 | 3.235 | 12973 | 10048 | BB | 0.022 | 1.2302 |
| 16 | 3.297 | 65163 | 71300 | BB | 0.016 | 6.1792 |
| 17 | 3.372 | 5370 | 9566 | BB | 0.013 | 0.5092 |
| 18 | 3.459 | 52376 | 56430 | BB | 0.022 | 4.9667 |
| 19 | 3.516 | 3791 | 7408 | BB | 0.009 | 0.3595 |
| 20 | 3.560 | 1264 | 4302 | BB | 0.005 | 0.1199 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.621 | 26153 | 50352 | BB | 0.009 | 2.4801 |
| 22 | 3.673 | 80750 | 163118 | BB | 0.008 | 7.6573 |
| 23 | 3.716 | 8863 | 8673 | BB | 0.017 | 0.8405 |
| 24 | 3.750 | 8382 | 7372 | BB | 0.018 | 0.7949 |
| 25 | 3.775 | 17147 | 37750 | BB | 0.008 | 1.6260 |
| 26 | 3.836 | 1909 | 2426 | BB | 0.013 | 0.1810 |
| 27 | 3.890 | 7678 | 8726 | BB | 0.016 | 0.7281 |
| 28 | 3.935 | 88712 | 108065 | BB | 0.014 | 8.4124 |
| 29 | 4.065 | 11549 | 18342 | BB | 0.015 | 1.0952 |
| 30 | 4.117 | 3840 | 3667 | BB | 0.017 | 0.3642 |
| 31 | 4.202 | 5697 | 11649 | BB | 0.013 | 0.5402 |
| 32 | 4.334 | 5587 | 8026 | BB | 0.012 | 0.5298 |
| 33 | 4.371 | 1455 | 1221 | BB | 0.020 | 0.1380 |
| 34 | 4.467 | 70414 | 140418 | BB | 0.008 | 6.6772 |
| 35 | 4.558 | 2432 | 2820 | BB | 0.014 | 0.2306 |
| 36 | 4.595 | 1626 | 2437 | BB | 0.011 | 0.1542 |
| 37 | 4.727 | 568 | 945 | BB | 0.010 | 0.0539 |
| 38 | 4.774 | 371 | 352 | BB | 0.018 | 0.0352 |
| 39 | 4.809 | 437 | 460 | BB | 0.019 | 0.0414 |
| 40 | 4.859 | 277 | 476 | BB | 0.010 | 0.0263 |
| 41 | 4.923 | 384 | 420 | BB | 0.018 | 0.0364 |
| 42 | 4.993 | 193 | 292 | BB | 0.011 | 0.0183 |
| 43 | 5.133 | 195 | 192 | BB | 0.017 | 0.0185 |
| 44 | 5.239 | 134 | 198 | BB | 0.011 | 0.0127 |
| 45 | 5.284 | 149 | 179 | BB | 0.020 | 0.0141 |

Total area = 1054546

==========

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-12-15\066F1201.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 66 | |
| Sample Name | : 506270-01 | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 12 | |
| Acquired on | 6/12/15 | 21:01 | | Instrume | DX.MTH | | |
| Report Created on: 12 Jun 15 09:12 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 134 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 77 | >4.44 | <4.53 | 70414 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 81 | >3.63 | <3.72 | 80750 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 1087 | >1.8 | <4.44 | 8.32E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 1087 | >1.8 | <6.3 | 8418429 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 19 | >4.44 | <6.3 | 96311 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 337 | >3.17 | <6.3 | 2290656 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 1306 | >1.8 | <4.44 | 8322118 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 1699 | >1.1 | <3.17 | 14293302 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 2626 | >1.1 | <4.44 | 16487647 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 1972 | >1.8 | <6.3 | 8418563 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 1699 | | | | | | |
| TPHD (8-36) | 299 | | | | | | |
| TPHDX (8-36) | 296 | | | | | | |
| Motor Oil (8-36 | 444 | | | | | | |