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

F&B Project 506058

MP 06/03/15 BOS

Page 1 of 1 506058

USEPA
DateShipped: 6/2/2015
CarrierName: FedEx
AirbillNo:

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

No: 10-060115-203137-0015
Cooler #: 12
Lab: Friendman & Bruya
Lab Phone: (206) 285-8282

| Lab # | Collected | Sample Time | Sample # | Location | Analyses | | Matrix | Numb Cont | Container | Preservative | Lab QC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 AB | 6/1/2015 | 10:53 | 15053114 | BH12GW | Oil Fingerprinting | TPH-Dx | Ground Water | 2 | 32 oz Amber | Wet Ice | N |
| 02 A-B | 6/1/2015 | 16:26 | 15053115 | BH14GW | Oil Fingerprinting | | Ground Water | 2 | 32 oz Amber | Wet Ice | N |
| 03 AB | 6/1/2015 | 14:10 | 15053601 | IR01GW | Oil Fingerprinting | | Ground Water | 2 | 32 oz Amber | Wet Ice | N |
| 04 A-B | 6/1/2015 | 18:10 | 15053604 | IR04GW | Oil Fingerprinting | | Ground Water | 2 | 32 oz Amber | Wet Ice | N |

Special Instructions: 1 week TAT. Preliminary results to mwoodke@ene.com.
TPH-Dx per Kurt Johnson 6/3/15

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 |
|---|---|---|---|---|---|
| to lab | [signature] E&E | 6/2/15 7:30 | [signature] FCBI | 6/3/15 10:30 | |
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Samples received at 3 °C

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 506058 CLIENT Ecology & Enviroment INITIALS/ DATE: NP 6/3/15

**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)

**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 _____

# NWTPH-Dx
## Laboratory Worksheets

## F&B Project 506058

# TPH AS DIESEL/MOTOR OIL EXTRACTION WORKSHEET (WATER)

Project #: 506068
Client: Ecology & Environment
QC Batch ID: 05-1045
Samples checked against COC HN

Date Received: 6/3/15
Date Extracted: ✓
Date Analyzed:
GC ☒1 ☐4 ☐6, Seq. Date

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

Due Date: ~~Thurs 6/4~~

**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)
- ☐ 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 |
|---|---|---|---|---|---|---|---|---|---|
| 01 A | <2 | 1,000 | 3 x 60 ml | 2.5 ml or 5 ml | | | | | |
| 02 | | | | | | | | | |
| 03 | | | | | | | | | |
| 04 | | | | | | | | | |
| | HN | | | 6/3 | | | | | |
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| Initials | | | | | | | | | |

2015 JUN 3 PM 12:03

| | ✓ | Volume | Conc. (ppm) | Compound(s) | Lot # | Initials | Date |
|---|---|---|---|---|---|---|---|
| **Solvent** | | NA | NA | Methylene chloride | 145-47 | HN | 6/3/15 |
| Other | | | | | | | |
| **Surrogate(s)** | | 25 µl | 1,000 | Pentacosane/o-terphenyl | | | |
| | | 50 µl | 1,000 | Pentacosane/o-terphenyl | 45-50 | HN | 6/3/15 |
| | | 25 µl | 1,000 | Triacontane/Pentacosane/o-terphenyl | | | |
| | | 50 µl | 1,000 | Triacontane/Pentacosane/o-terphenyl | | | |
| **Acid (HCl)** | | | | | | | |

Project Leader Initials: GP

NOTES: need c-grams

FORMS\LAB\EXTRACT\DIESEL_HCID

Rev. 09/30/14

# BATCH ORGANIC EXTRACTION WORKSHEET

Date Extracted: 6/3 Technician: HL

QA Batch: **O5-01045**

2015 JUN 3 PM 2:05

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

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

Solvent Lot # 145-47

**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 | Extraction Solvent Volume | Final Volume | Dilutions Amt. Extract | Dilutions Amt. Solvent | Clean Up (Circle) Silica | FL Filter | Cu $H_2SO_4$ | Observations |
|---|---|---|---|---|---|---|---|---|---|---|
| MB | <2 | 1,000 | 3X60 HL | 5 ml | | | | | | |
| LCS | / | / | / | / | | | | | | |
| LCSD | / | / | / | / | | | | | | |
| | HL | | | 6/3 | | | | | | |
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| | | | | | | | | | | |
| Initials | | | | | | | | | | |

## Samples in Batch

| | | | | |
|---|---|---|---|---|
| 5T06025-01 | / 05 | / 04 | / 04 | |
| / 02 | 5T06026-01 | 5T06058-01 | | |
| / 03 | / 02 | / 02 | | |
| / 04 | / 03 | / 03 | | |

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 6/3/15 HL
Amount Concentration Analytes and Solvent

Surrogates:
25 µL of 1,000 ppm of Pentadecane/Sep/OTER Lot # 45-50 /
Amount Concentration Analytes and Solvent

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

Notes: _____

GC#1 06-03-15

| Wt % Solid | ca Gel Silica | ter-ed Filte | Form Rpt | Time | W or S Type | Samp Vol | Water Soil Final Vol | Dil | (Change limits for low level soils) Sample Name | 50 Diesel Conc. | 250 Diesel Ext Conc. | 250 Motor Oil Conc. | 250 Heavy Oil/C Conc. | 50 C12-24 Conc. | 50 Stoddard Conc. | 50 Kerosene Conc. | 250 C24-38 Conc. | Surrogate Rec Terphenyl | Vial | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.92 | | | 9 | 06-03-15 14:25 | S | 2 | 10.0 | | 506064-01 | 92 | 100 | <250 | <250 | 111 | <50 | 113 | <500 | 105 | 29 | |
| 0.87 | | | 9 | 06-03-15 14:36 | S | 2 | 10.0 | | 506064-02 | 31409 | 31523 | 721 | 18043 | 37741 | 15538 | 39766 | 57221 | 415 | 30 | |
| 0.93 | | | 9 | 06-03-15 14:47 | S | 2 | 10.0 | | 506064-03 | 2863 | 634 | <250 | 634 | 846 | 72 | 858 | 1152 | 95 | 31 | |
| 1.00 | | | | 06-03-15 14:58 | | 1 | 1.0 | | 1000 MO 44-151B | 223 | 872 | 979 | 994 | 268 | 0 | 272 | 1586 | 102 | 4 | |
| 1.00 | | | | 06-03-15 15:09 | | 1 | 1.0 | | 1000 Dx 44-172C | 1028 | 1030 | 22 | 604 | 1235 | 516 | 1327 | 1870 | 110 | 5 | |
| 1.00 | | | 1 | 06-03-15 15:41 | W | 1000 | 5.0 | | 05-1045 mb | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 89 | 32 | |
| 1.00 | | | | 06-03-15 15:50 | W | 1000 | 5.0 | | 05-1045 lcs | 2885 | 2874 | <250 | 1739 | 3467 | 1371 | 3692 | 5218 | 97 | 33 | |
| 1.00 | | | | 06-03-15 16:01 | W | 1000 | 5.0 | | 05-1045 lcsd | 2985 | 2971 | <250 | 1795 | 3586 | 1423 | 3824 | 5393 | 101 | 34 | |
| 1.00 | | | 2 | 06-03-15 16:12 | W | 1000 | 5.0 | | 506025-01 | 600 | 594 | <250 | <250 | 721 | 1627 | 2209 | 1078 | 90 | 35 | Gas |
| 1.00 | | | 2 | 06-03-15 16:23 | W | 1000 | 5.0 | | 506025-02 | <50 | <250 | <250 | <250 | <50 | <50 | 104 | 336 | 91 | 36 | |
| 1.00 | | | 2 | 06-03-15 16:34 | W | 1000 | 5.0 | | 506025-03 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 97 | 37 | |
| 1.00 | | | 2 | 06-03-15 16:45 | W | 1000 | 5.0 | | 506025-04 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 84 | 38 | |
| 1.00 | | | 2 | 06-03-15 16:57 | W | 1000 | 5.0 | | 506025-05 | 32220 | 34171 | 3495 | 35086 | 38715 | 3189 | 39394 | 62058 | 37 | 39 | Y |
| 1.00 | | | 2 | 06-03-15 17:08 | W | 1000 | 5.0 | | 506026-01 | 17274 | 17889 | 1227 | 9578 | 20756 | 12501 | 26113 | 32473 | 122 | 40 | |
| 1.00 | | | 2 | 06-03-15 17:19 | W | 1000 | 5.0 | | 506026-02 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 85 | 41 | |
| 1.00 | | | 2 | 06-03-15 17:30 | W | 1000 | 5.0 | | 506026-03 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 88 | 42 | |
| 1.00 | | | 2 | 06-03-15 17:41 | W | 1000 | 5.0 | | 506026-04 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 88 | 43 | |
| 1.00 | | | 2 | 06-03-15 17:53 | W | 1000 | 5.0 | | 506058-01 | 1194 | 1190 | <250 | 354 | 1435 | 1902 | 2920 | 2160 | 87 | 44 | |
| 1.00 | | | 2 | 06-03-15 18:04 | W | 1000 | 5.0 | | 506058-02 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 91 | 45 | |
| 1.00 | | | 2 | 06-03-15 18:15 | W | 1000 | 5.0 | | 506058-03 | 78 | <250 | <250 | <250 | 94 | <50 | 124 | <250 | 93 | 46 | X |
| 1.00 | | | 2 | 06-03-15 18:26 | W | 1000 | 5.0 | | 506058-04 | <50 | <250 | <250 | <250 | <50 | <50 | <50 | <250 | 97 | 47 | |
| 1.00 | | | | 06-03-15 18:37 | | 1 | 1.0 | | 500 MO 44-50B | 119 | 453 | 504 | 516 | 143 | 0 | 145 | 823 | 101 | 92 | |
| 1.00 | | | | 06-03-15 18:49 | | 1 | 1.0 | | 500 Dx 43-199B | 515 | 513 | 5 | 298 | 619 | 258 | 664 | 931 | 101 | 93 | |
| 0.84 | | | 2 | 06-03-15 19:00 | S | 2 | 10.0 | | 506066-04 | <50 | <50 | <250 | <250 | <50 | <50 | <50 | <500 | 92 | 48 | |
| 0.93 | | | 2 | 06-03-15 19:11 | S | 2 | 10.0 | | 506066-05 | 237 | 229 | <250 | <250 | 285 | 87 | 289 | <500 | 97 | 49 | |
| 0.91 | | | 2 | 06-03-15 19:22 | S | 2 | 10.0 | | 506066-06 | 5681 | 5664 | <250 | 3325 | 6826 | 2647 | 7087 | 10281 | 99 | 50 | |
| 0.77 | | | 9 | 06-03-15 19:33 | S | 2 | 10.0 | | 505436-05 | 946 | 2329 | 2092 | 2653 | 1137 | <50 | 1154 | 4227 | 97 | 51 | RR samples |
| 0.81 | | | 9 | 06-03-15 19:45 | S | 2 | 10.0 | | 506070-01 | 363 | <50 | <250 | <250 | <50 | <50 | <50 | <500 | 99 | 52 | |
| 0.84 | | | 9 | 06-03-15 19:56 | S | 2 | 10.0 | | 506070-02 | <50 | <50 | <250 | <250 | <50 | <50 | <50 | <500 | 93 | 53 | |
| 1.00 | | | | 06-03-15 20:07 | | 1 | 1.0 | | 500 MO 44-50B | 0 | 11 | 17 | 13 | 0 | 0 | 0 | 20 | 3 | 92 | Cont |
| 1.00 | | | | 06-03-15 20:18 | | 1 | 1.0 | | 500 Dx 43-199B | 549 | 546 | 6 | 318 | 659 | 274 | 706 | 992 | 109 | 93 | |

Calculated by:

Analyzed on: 6/3/15

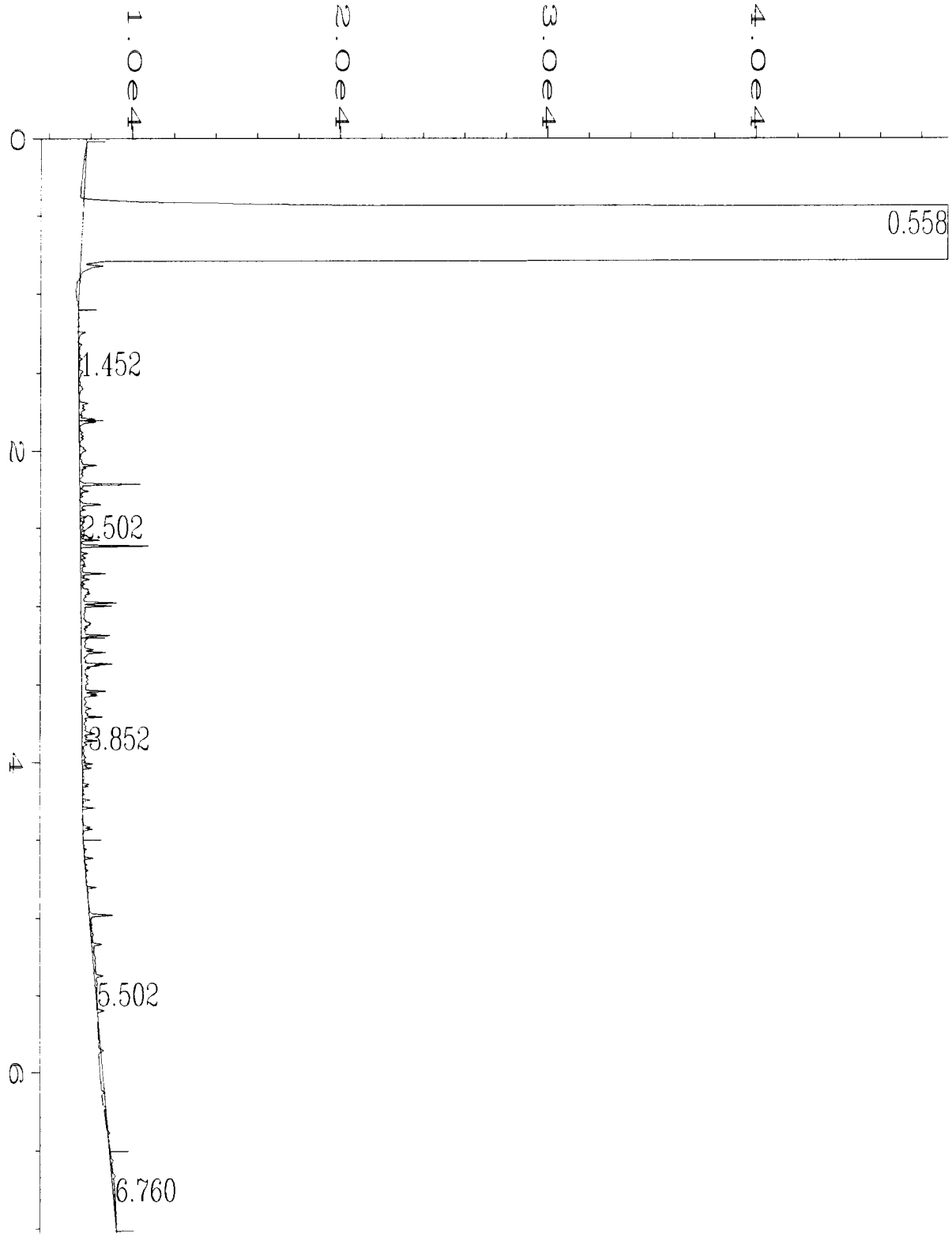


Reviewed by: MK 6/4/14

# NWTPH-Dx
## Initial Calibrations

## F&B Project 506058

| 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 | | | | | | | | |




| | | | |
|---|---|---|---|
| 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 |

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Area Percent Report

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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

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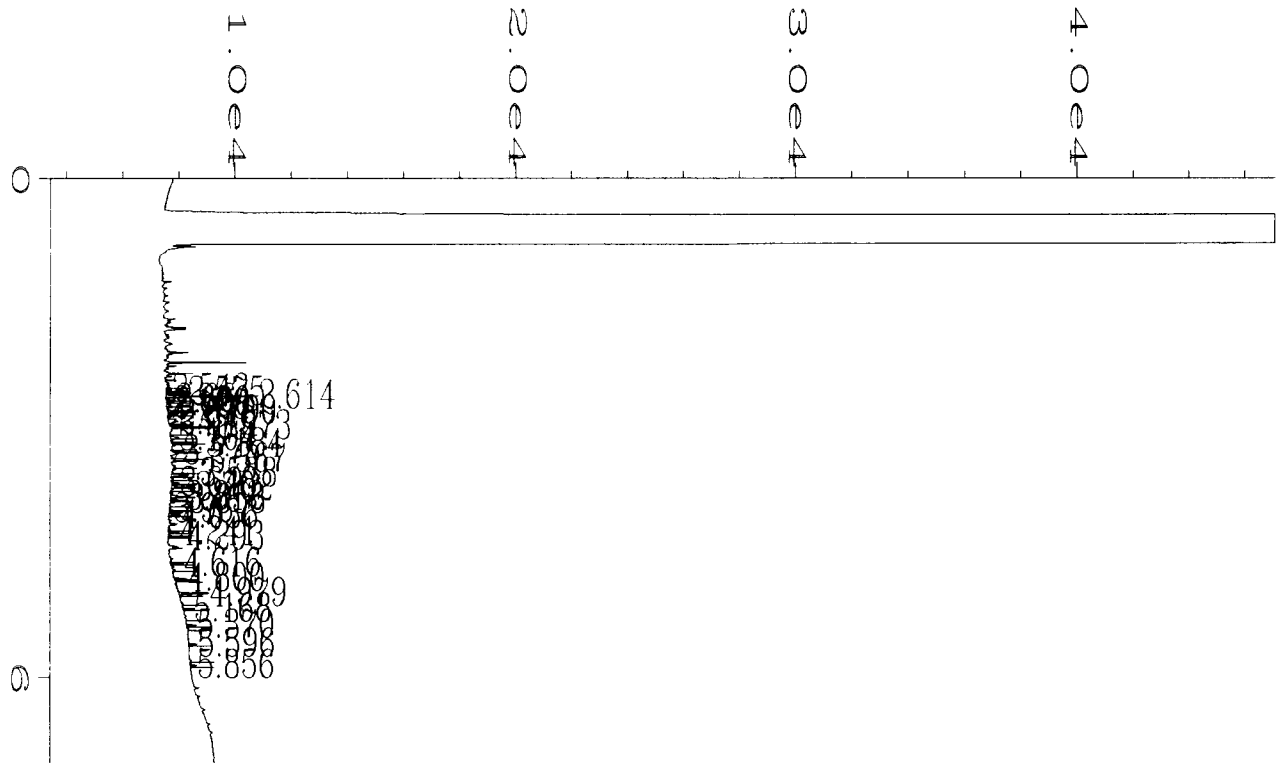


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Area Percent Report

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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

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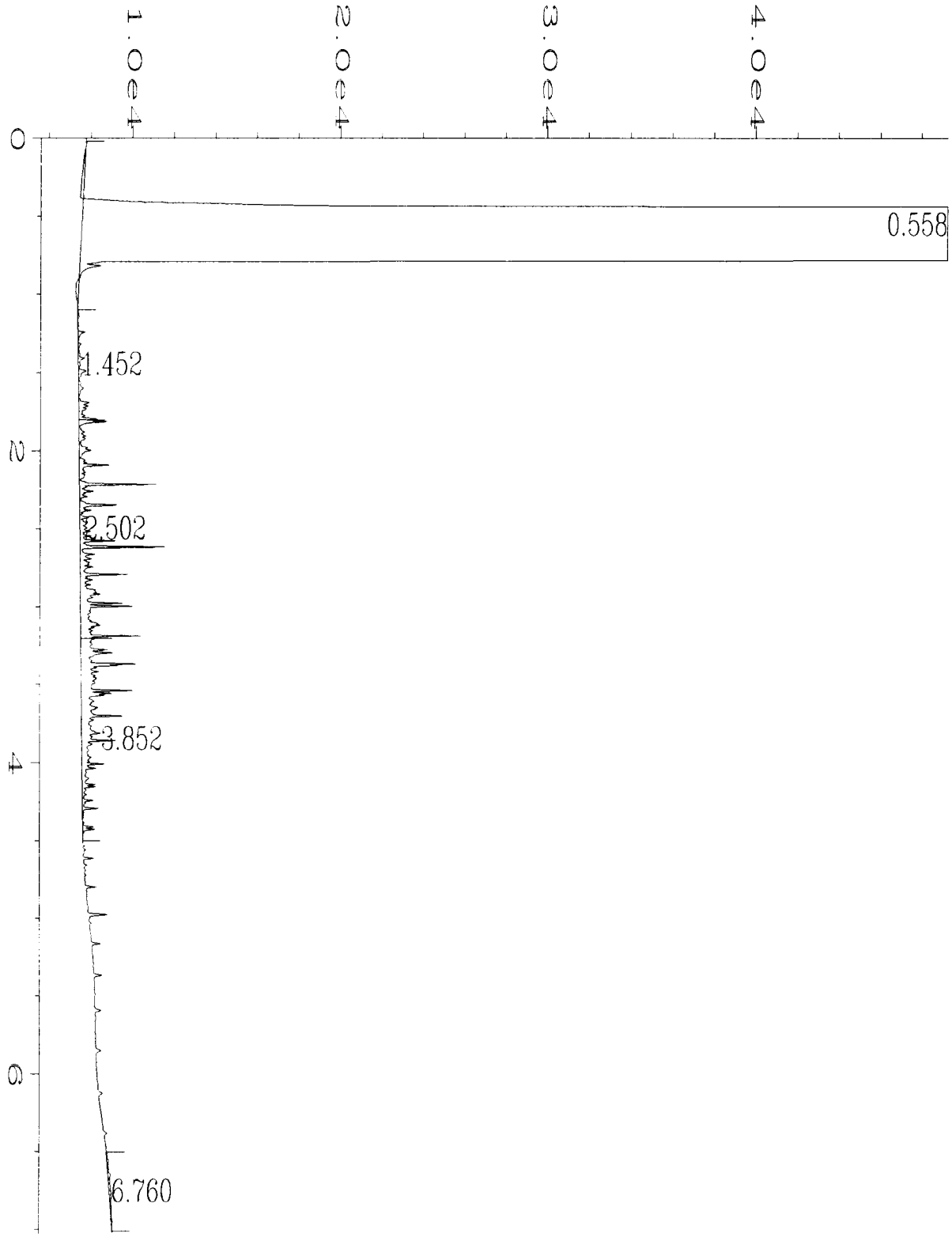
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\021F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 21 | |
| Sample Name | : 5ppm dx 44-94 | | | 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

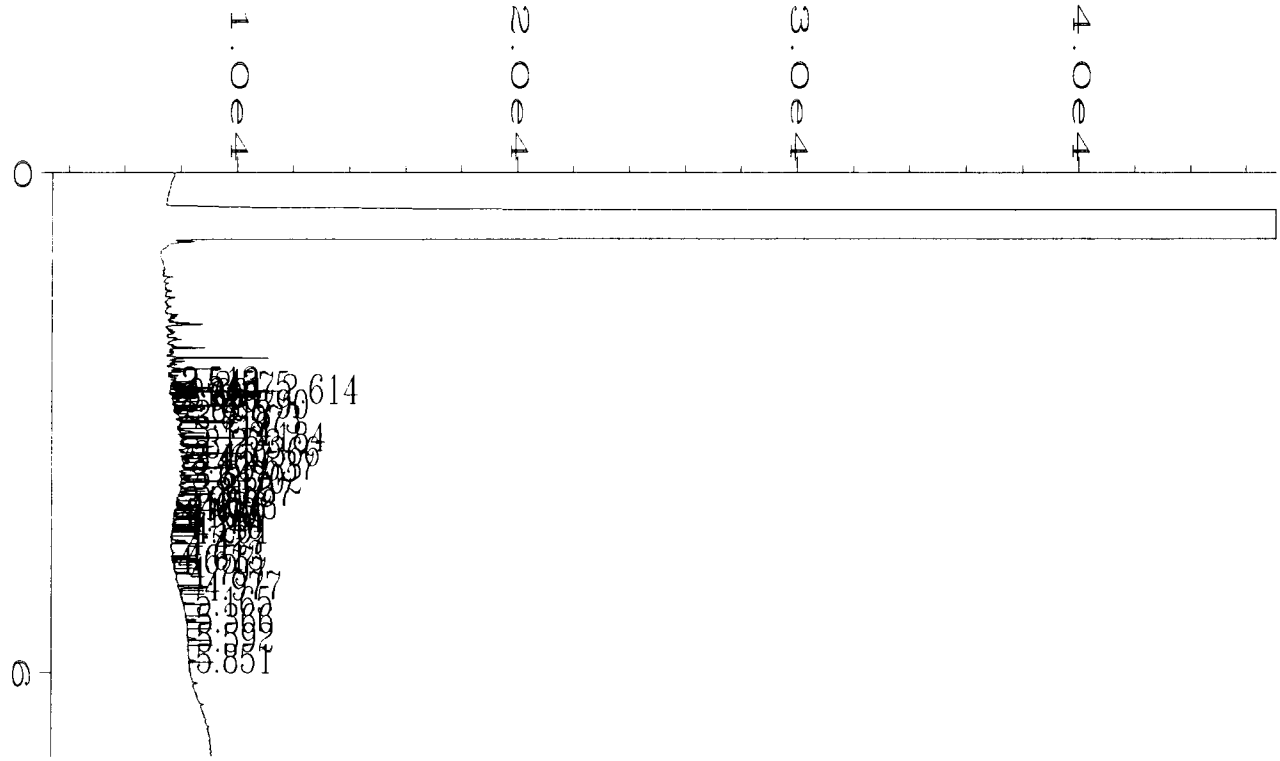
Data File Name : C:\HPCHEM\1\DATA\01-14-15\022F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 10ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 04:59 PM
Report Created on: 15 Jan 15 10:17 AM

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

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Area Percent Report

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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

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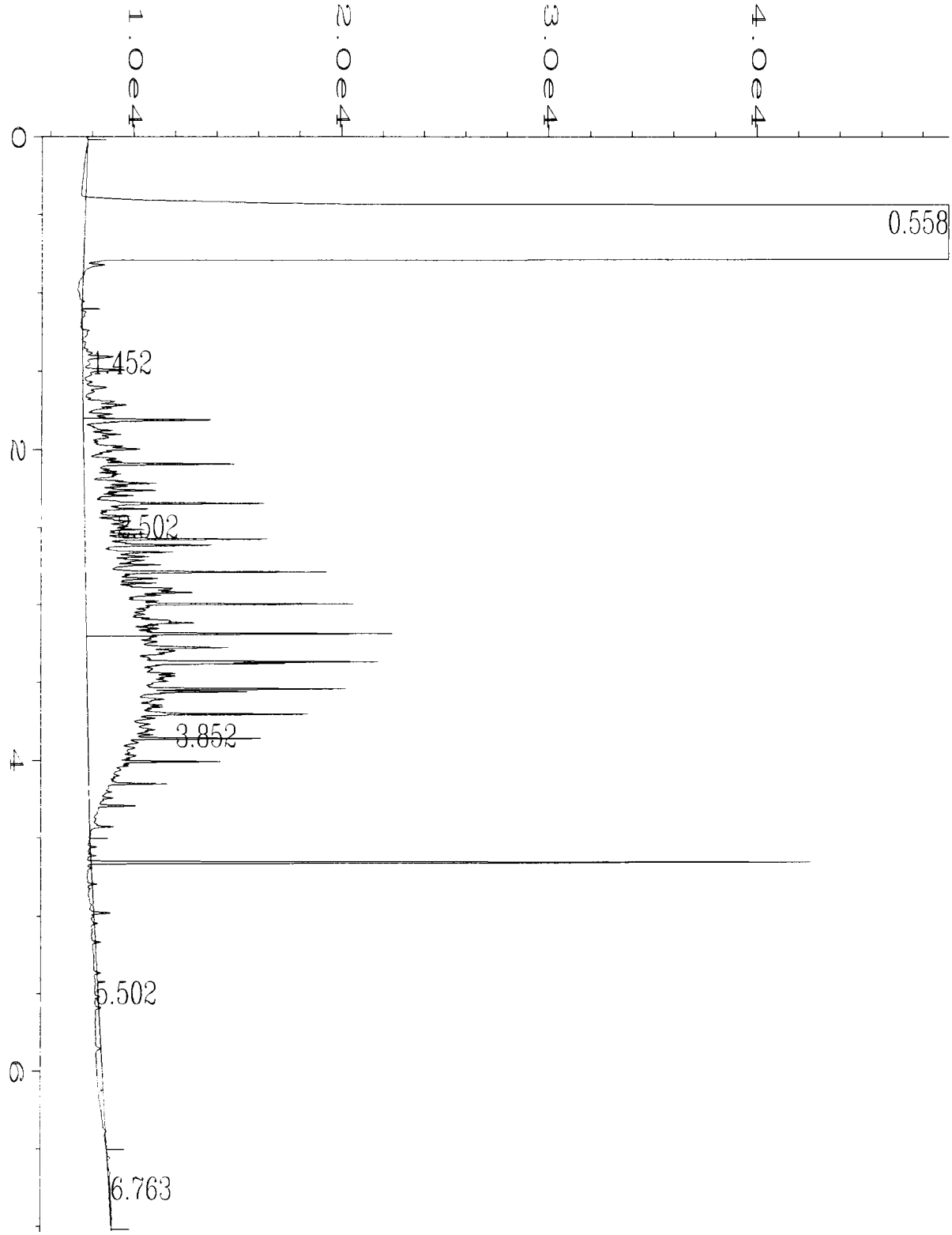
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\022F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 22 | |
| Sample Name | : 10ppm dx 44-94 | | | 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

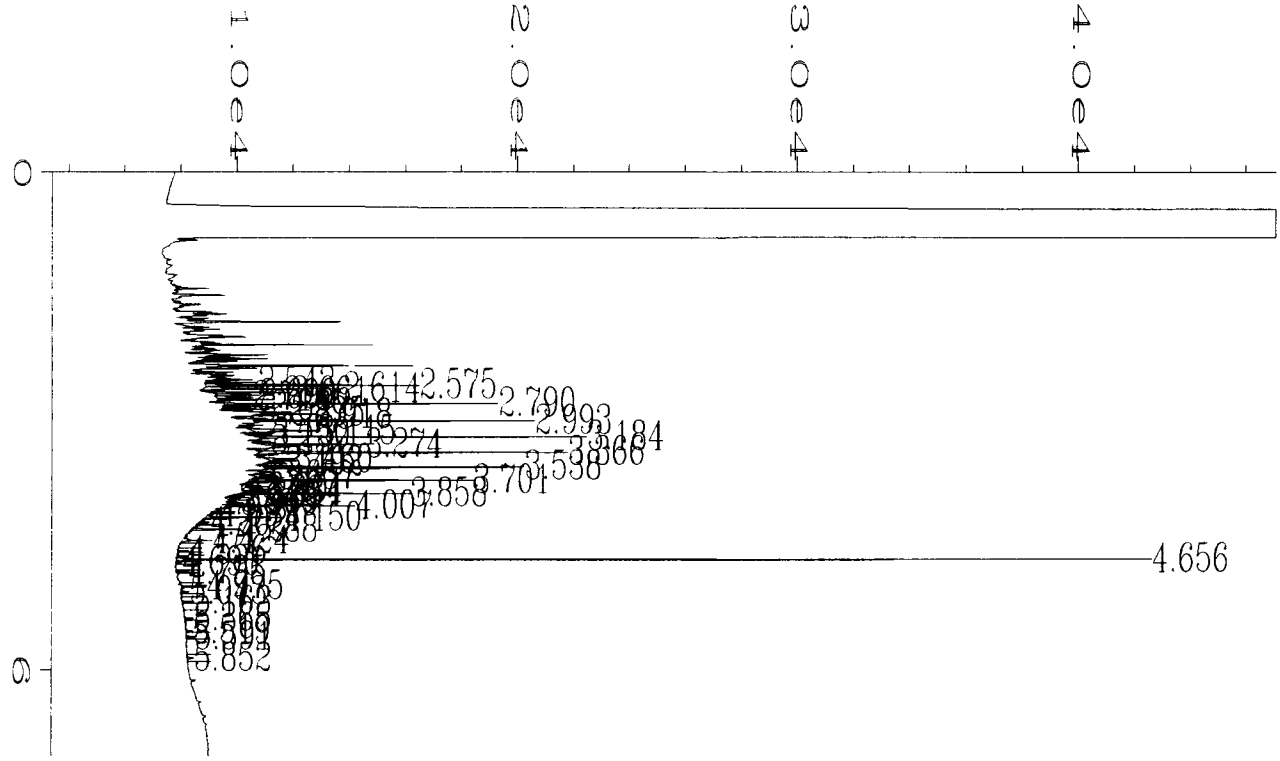
Data File Name : C:\HPCHEM\1\DATA\01-14-15\023F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 50ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:10 PM
Report Created on: 15 Jan 15 10:17 AM

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

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Area Percent Report

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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

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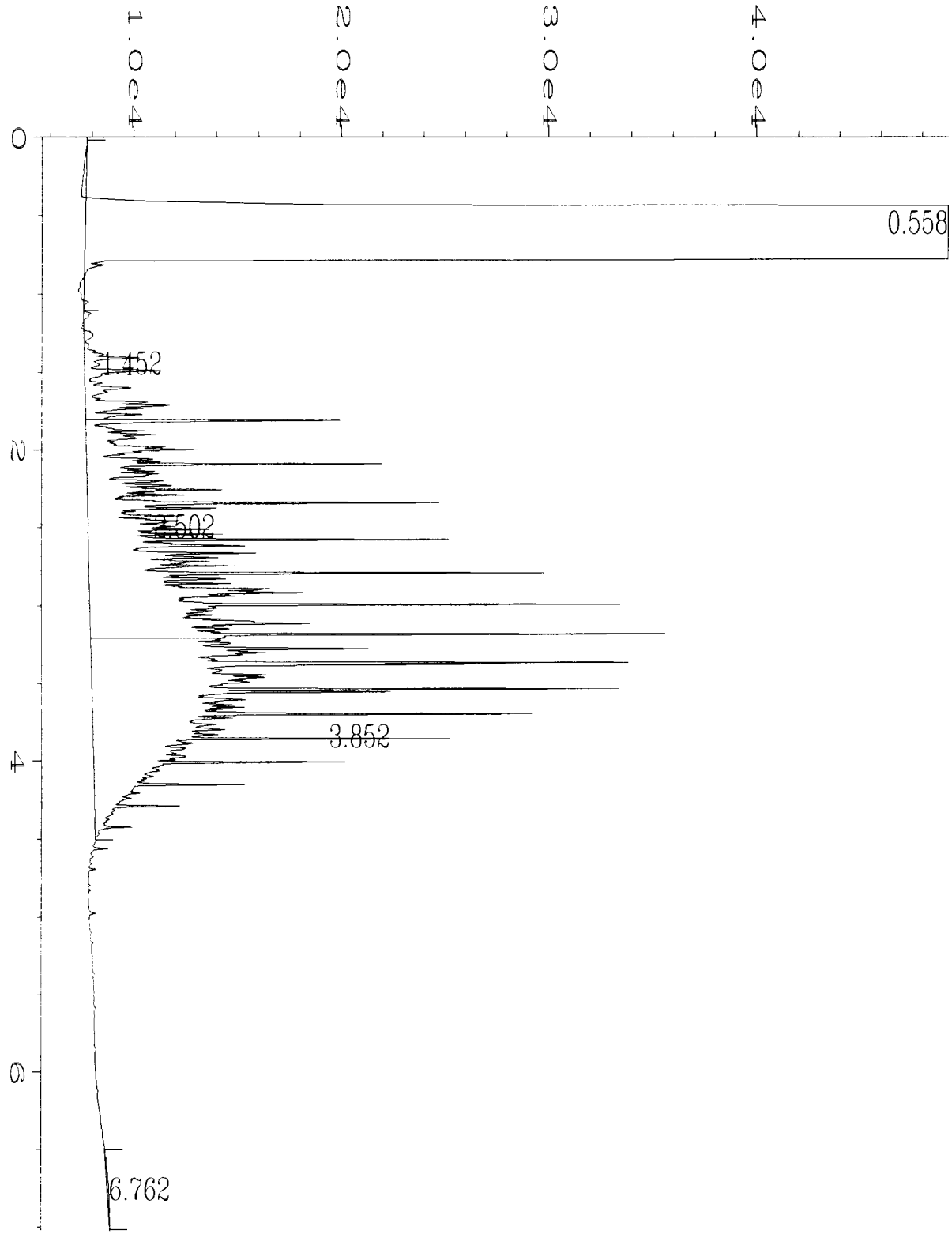
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\023F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 23 | |
| Sample Name | : 50ppm dx 44-94 | | | 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

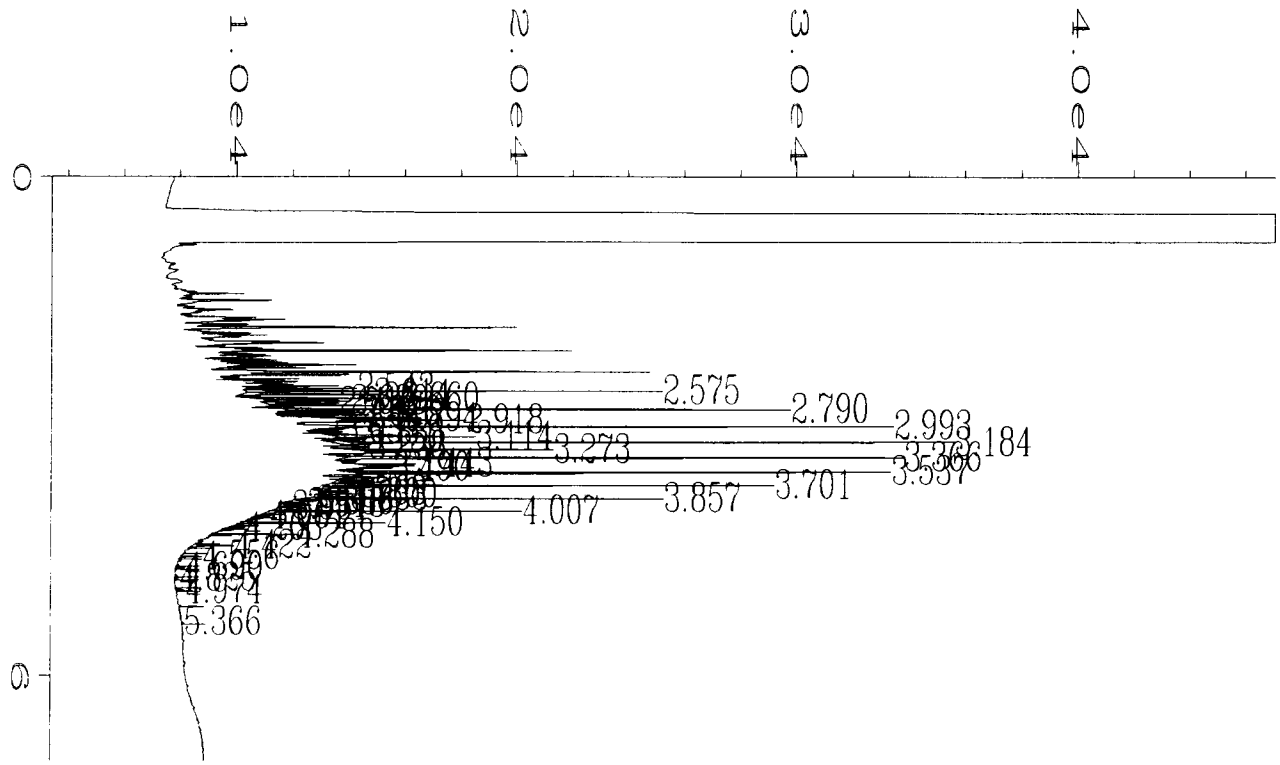
Data File Name : C:\HPCHEM\1\DATA\01-14-15\024F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 100ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:21 PM
Report Created on: 15 Jan 15 10:17 AM

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

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Area Percent Report

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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

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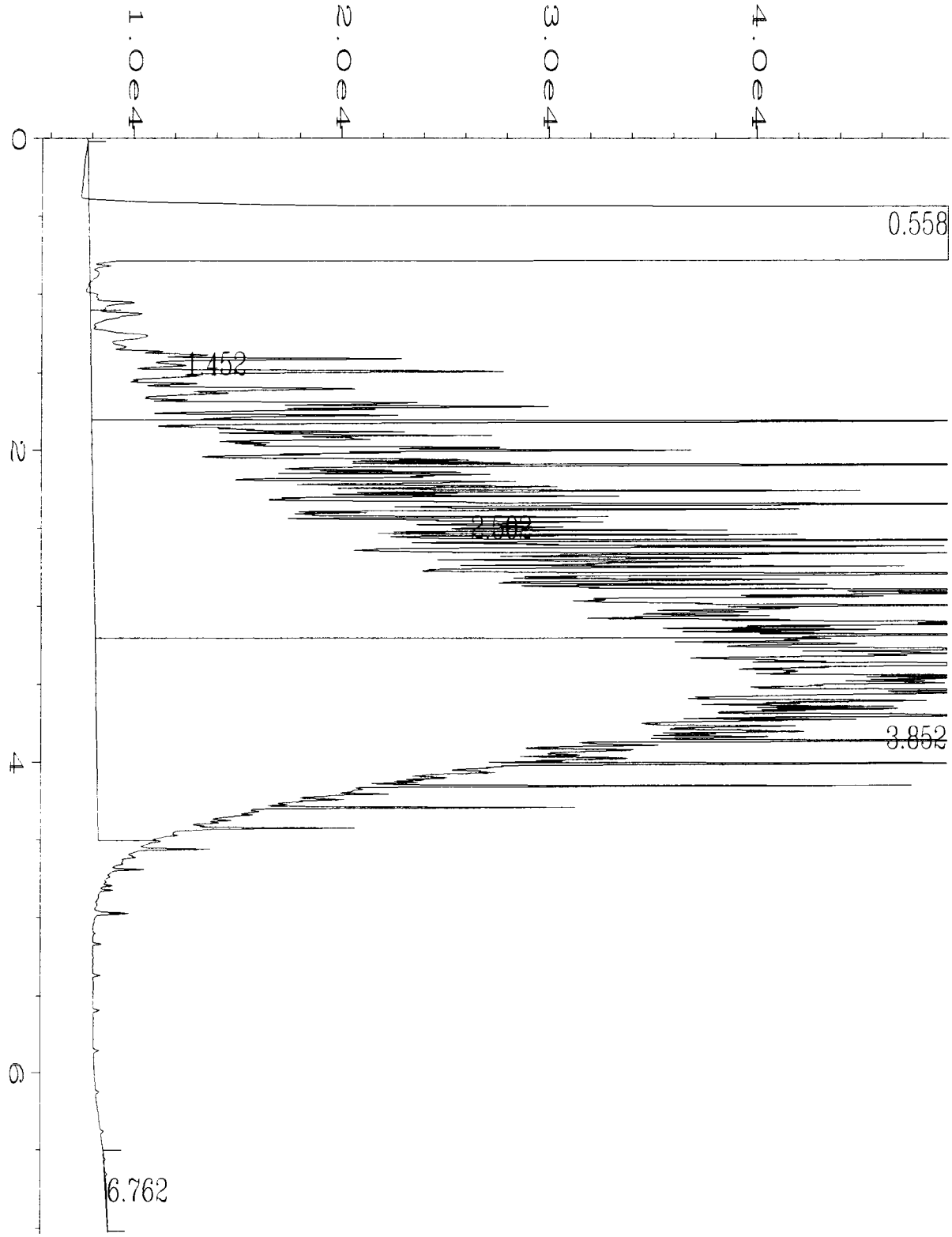
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\024F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 24 | |
| Sample Name | : 100ppm dx 44-94 | | | 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

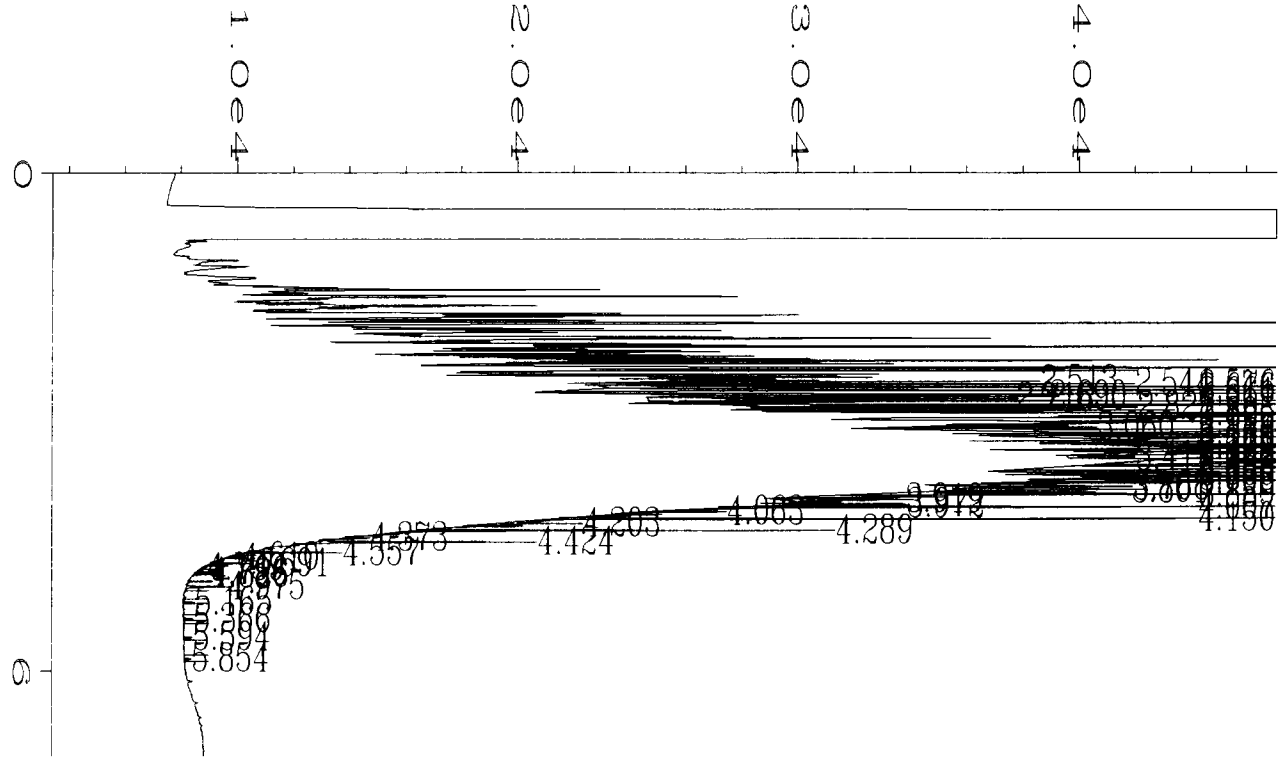
Data File Name : C:\HPCHEM\1\DATA\01-14-15\025F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 500ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:31 PM
Report Created on: 15 Jan 15 10:18 AM

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

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Area Percent Report

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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

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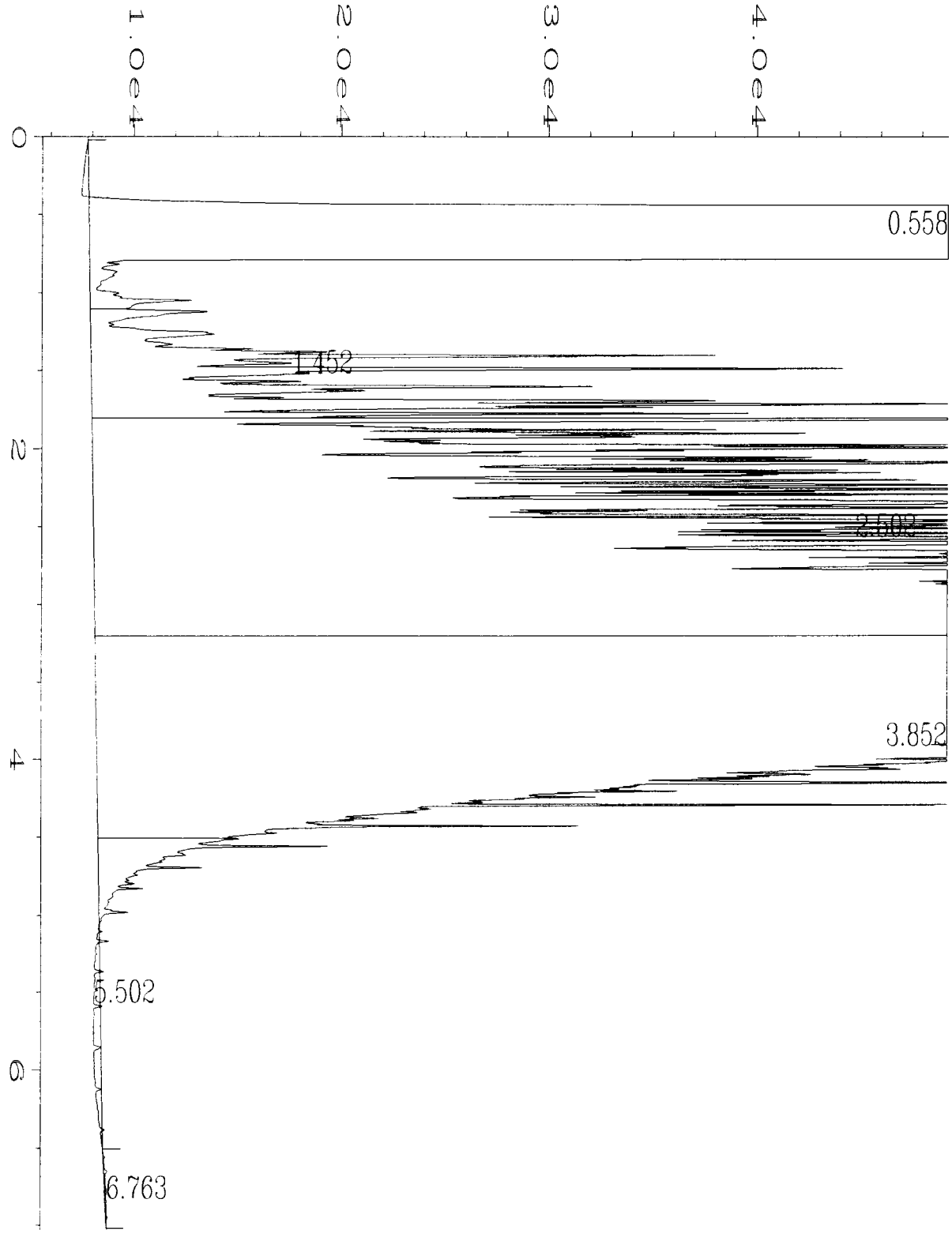
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\025F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 25 | |
| Sample Name | : 500ppm dx 44-94 | | | 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

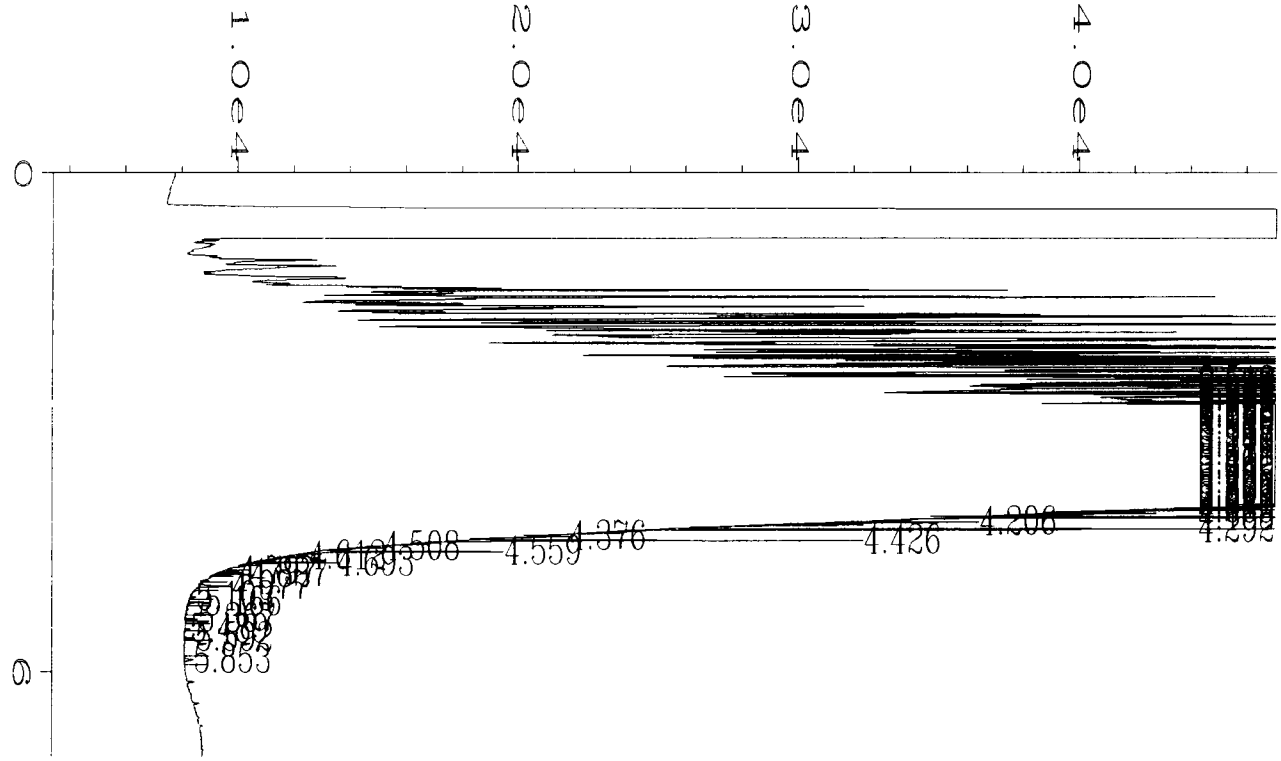
Data File Name : C:\HPCHEM\1\DATA\01-14-15\026F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000ppm dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 05:42 PM
Report Created on: 15 Jan 15 10:18 AM

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

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Area Percent Report

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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

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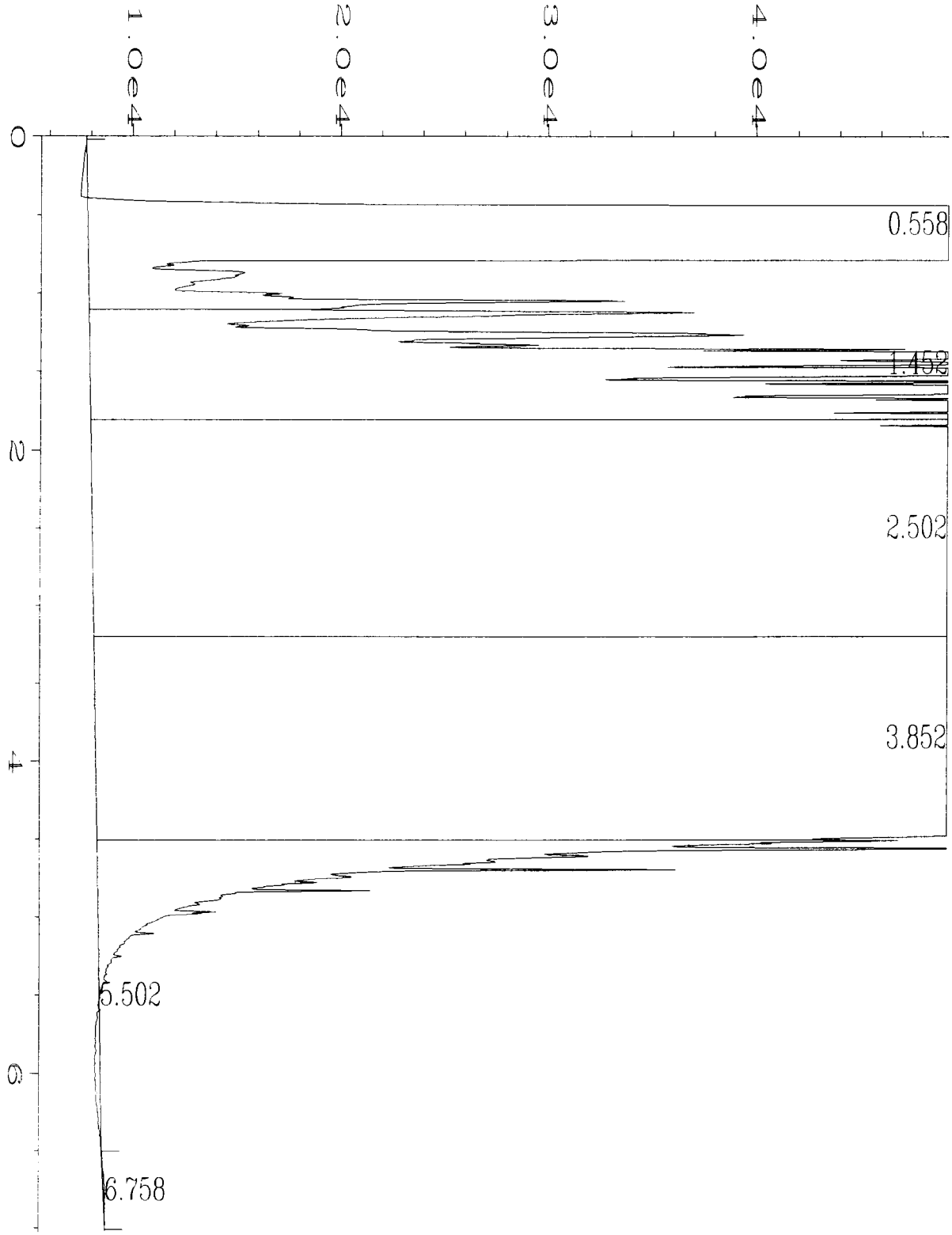
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\026F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 26 | |
| Sample Name | : 1000ppm dx 44-94 | | | 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 |

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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

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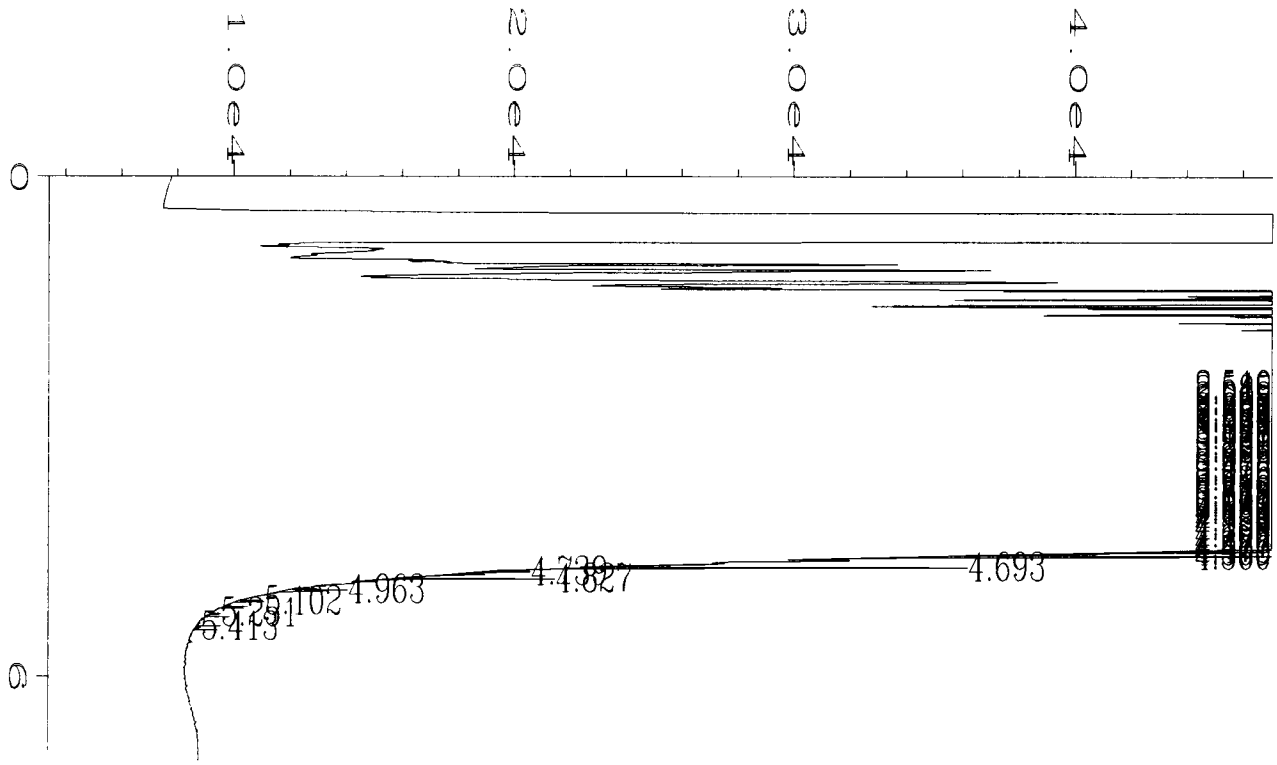


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Area Percent Report

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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

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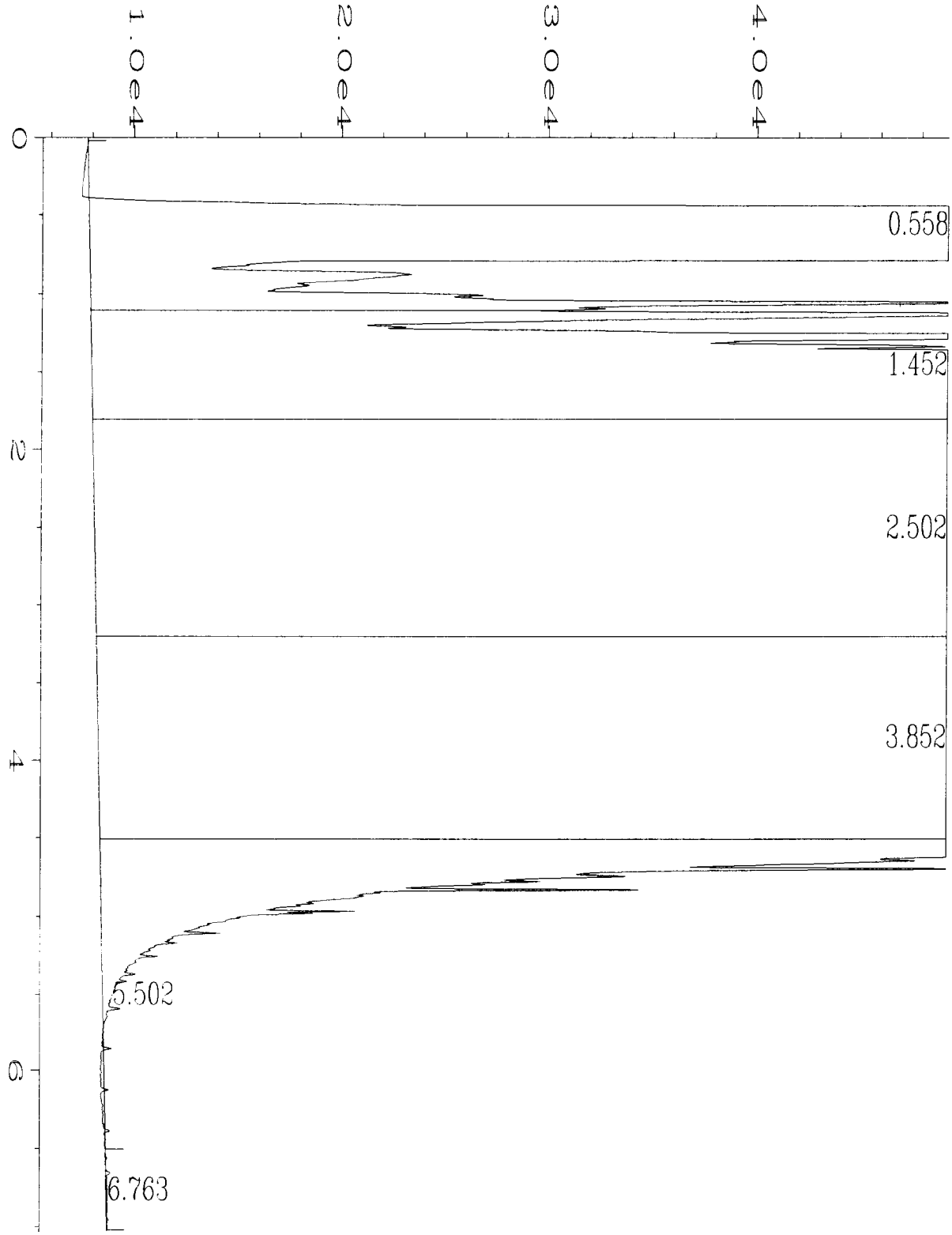
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\01-14-15\027F0701.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 27 | |
| Sample Name | : 5000ppm dx 44-94 | | | 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

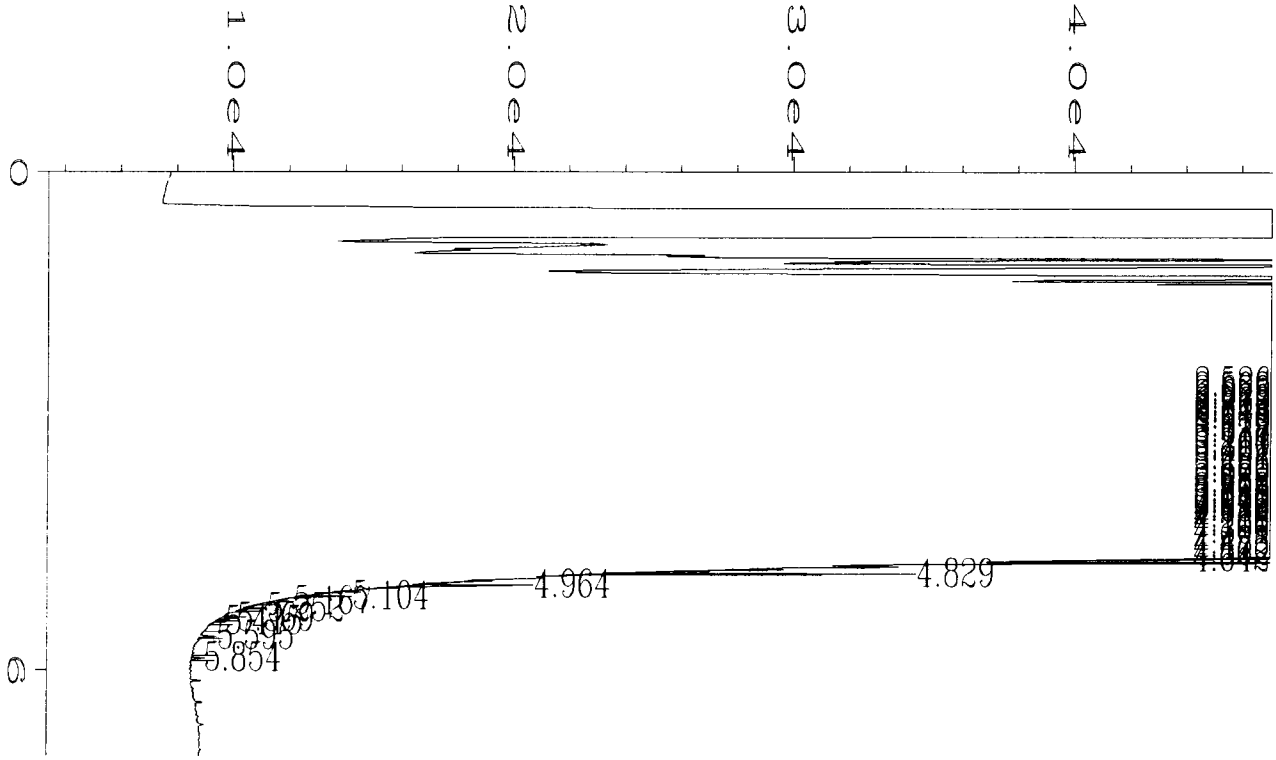
Data File Name : C:\HPCHEM\1\DATA\01-14-15\028F0701.D
Operator : mwdl
Instrument : GC1
Sample Name : 10000 dx 44-94
Run Time Bar Code:
Acquired on : 14 Jan 15 06:03 PM
Report Created on: 15 Jan 15 10:18 AM

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

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Area Percent Report

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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

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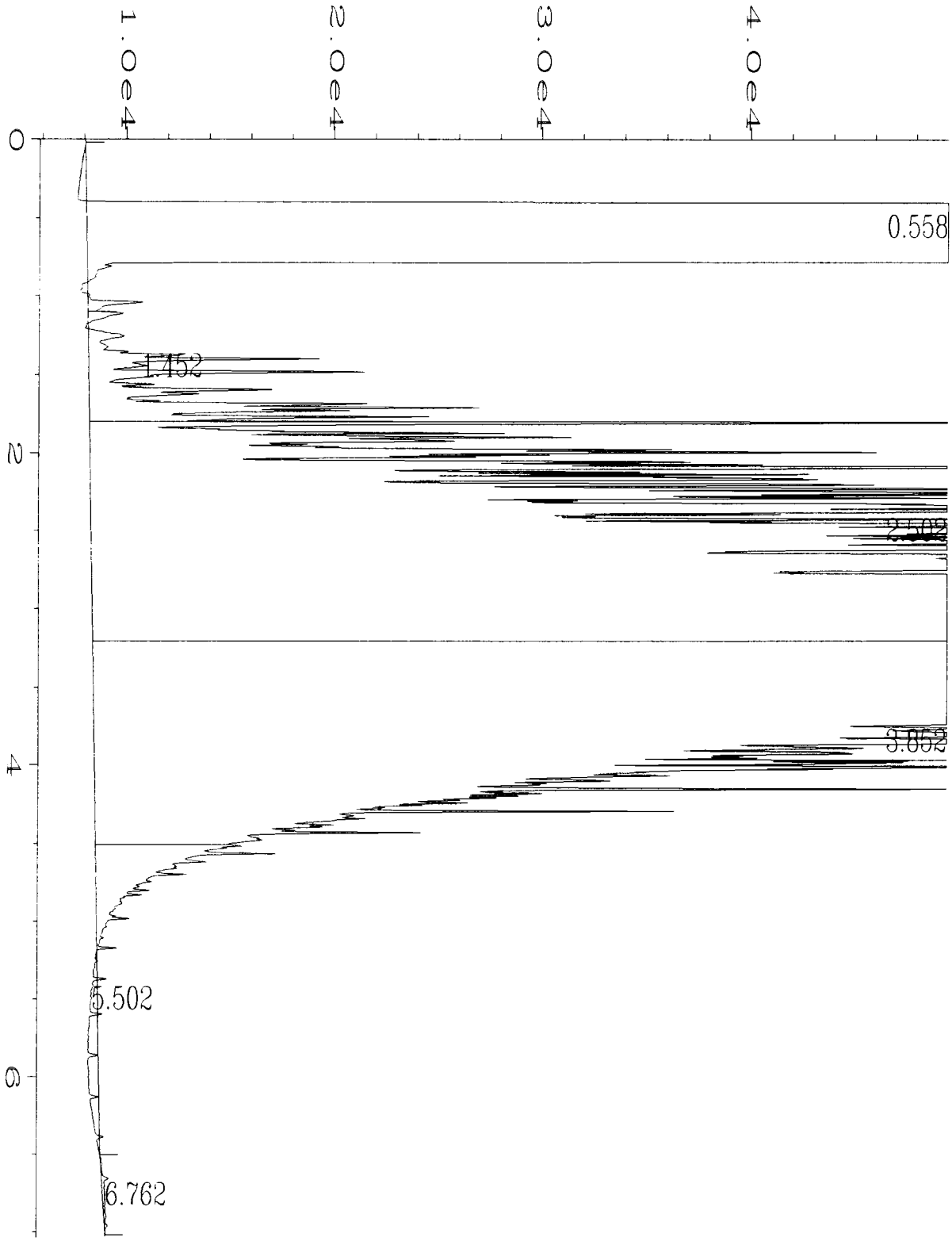
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 1/15/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name : C:\HPCHEM\1\DATA\01-14-15\028F0701.D | | | | | | | |
| Operator : mwdl | | | | Page Number : 1 | | | |
| Instrument : GC1 | | | | Vial Number : 28 | | | |
| Sample Name : 10000 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

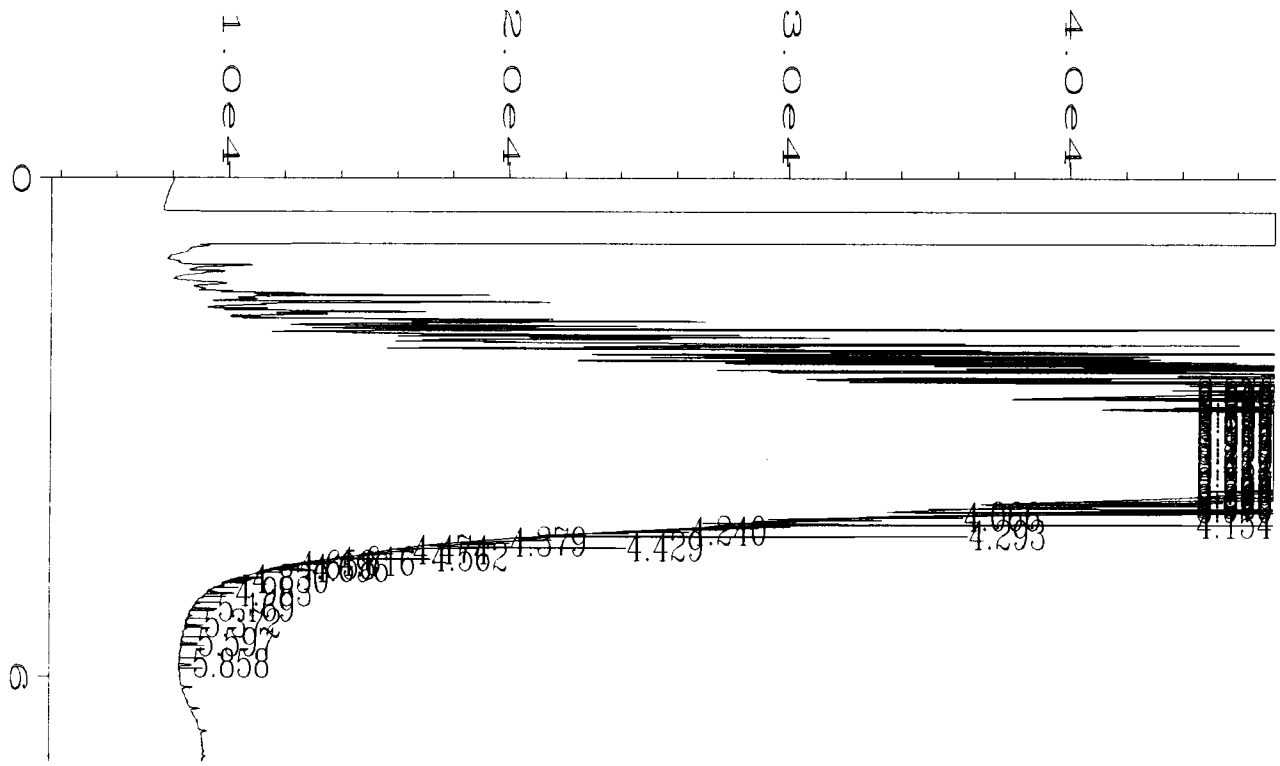
Data File Name : C:\HPCHEM\1\DATA\01-14-15\029F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 dx2' 43-120
Run Time Bar Code:
Acquired on : 14 Jan 15 06:23 PM
Report Created on: 15 Jan 15 10:19 AM

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

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Area Percent Report

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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

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 | | | | | | |

# NWTPH-Dx
## MDLs

F&B Project 506058

## 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 506058

Sequence: C:\HPCHEM\1\SEQUENCE\06-03-15.SEQ

## Sequence Table

| Inj. | Seq. Line | Cal. Line | Method Name | From Vial | To Vial | Inj/ Vial |
|---|---|---|---|---|---|---|
| FRONT | | | | | | |
| | 1 | | BAKEOUT | 1 | 1 | 1 |
| | 2 | | DX | 2 | 3 | 1 |
| | 3 | | DX | 6 | 12 | 1 |
| | 4 | | DX | 11 | 11 | 1 |
| | 5 | | DX | 13 | 28 | 1 |
| | 6 | | DX | 4 | 5 | 1 |
| | 7 | | DX | 27 | 27 | 1 |
| | 8 | | DX | 29 | 31 | 1 |
| | 9 | | DX | 4 | 5 | 1 |
| | 10 | | DX | 32 | 47 | 1 |
| | 11 | | DX | 92 | 93 | 1 |
| | 12 | | DX | 48 | 53 | 1 |
| | 13 | | DX | 92 | 93 | 1 |
| | 14 | | END | 1 | 1 | 1 |
| REAR | | | | | | |
| | 1 | | | | | |

## 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 | 05-1041 MB2 | | | |
| 7 | 506037-01 | | | |
| 8 | 506037-02 | | | |
| 9 | 506037-03 | | | |
| 10 | 506037-04 | | | |
| 11 | 506051-01 | | | |
| 12 | 506051-02 | | | |
| 13 | 506046-01 | | | |
| 14 | 506046-02 | | | |
| 15 | 506047-01 | | | |
| 16 | 506047-02 | | | |
| 17 | 506049-01 | | | |
| 18 | 506049-02 | | | |
| 19 | 506049-03 | | | |
| 20 | 506049-04 | | | |
| 21 | 506055-01 | | | |
| 22 | 506055-02 | | | |
| 23 | 506055-03 | | | |
| 24 | 05-1046 mb | | | |
| 25 | 05-1046 lcs | | | |
| 26 | 506055-01 ms | | | |
| 27 | 506055-01 md | | | |
| 28 | 506054-01 | | | |
| 29 | 506064-01 | | | |
| 30 | 506064-02 | | | |
| 31 | 506064-03 | | | |

@C1 6/3/15 2 of 2

Sample Table

| Vial Num. | Sample Name | Sample Amount | Multiplier | ISTD Amount |
|---|---|---|---|---|
| 32 | 05-1045 mb | | | |
| 33 | 05-1045 lcs | | | |
| 34 | 05-1045 lcsd | | | |
| 35 | 506025-01 | | | |
| 36 | 506025-02 | | | |
| 37 | 506025-03 | | | |
| 38 | 506025-04 | | | |
| 39 | 506025-05 | | | |
| 40 | 506026-01 | | | |
| 41 | 506026-02 | | | |
| 42 | 506026-03 | | | |
| 43 | 506026-04 | | | |
| 44 | 506058-01 | | | |
| 45 | 506058-02 | | | |
| 46 | 506058-03 | | | |
| 47 | 506058-04 | | | |
| 48 | 506066-04 | | | |
| 49 | 506066-05 | | | |
| 50 | 506066-06 | | | |
| 51 | 505436-05 | | | |
| 52 | 506070-01 | | | |
| 53 | 506070-02 | | | |
| 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 506058

## Diesel Summary Checklist for GC 1 Date 6/3

| 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 | dx |
| ☑ B 6/4 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 |

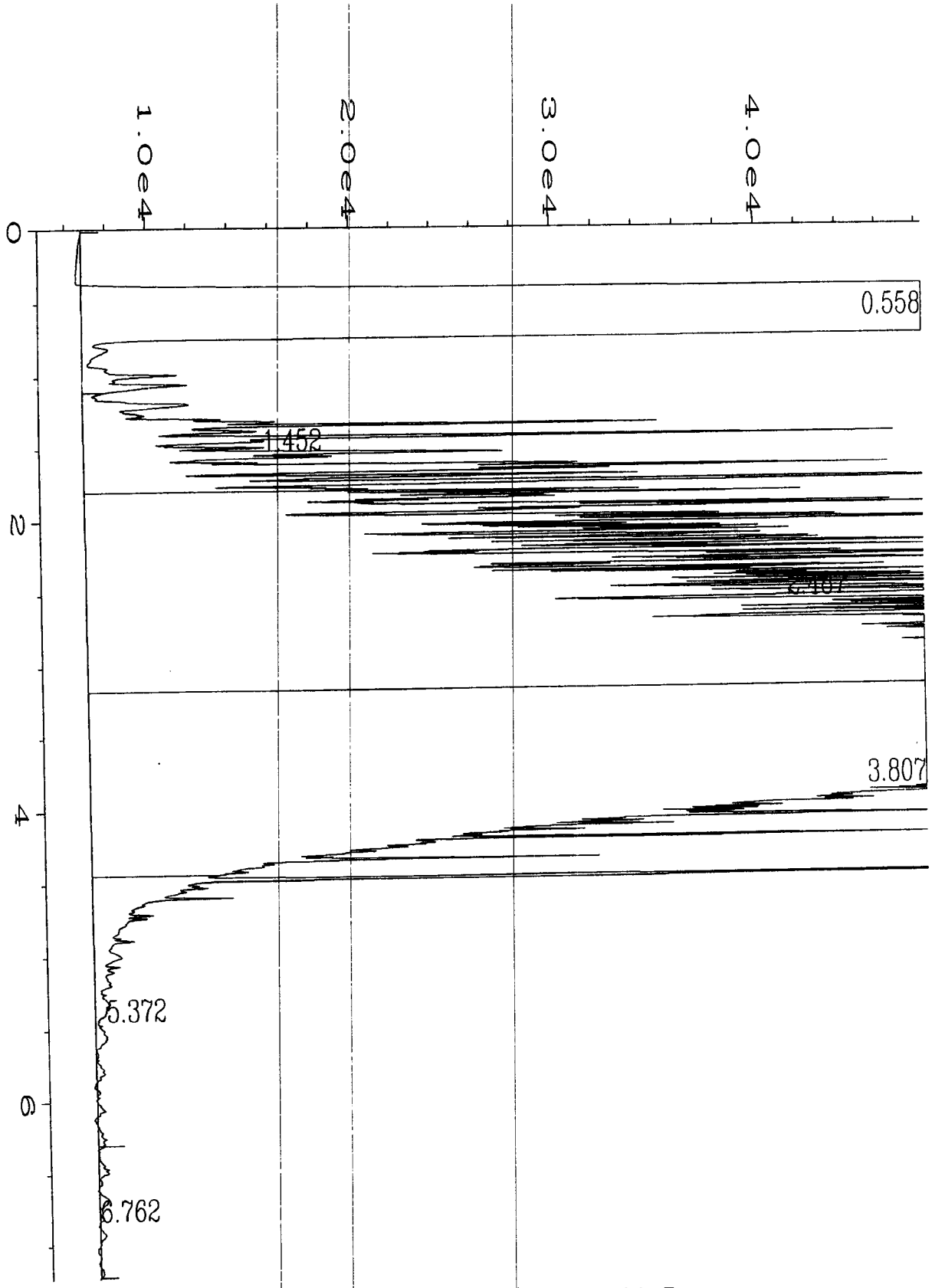
| Same-Day Rush Samples | Samples to be Reanalyzed | Maintenance to be Done |
|---|---|---|
| ____ | ____ | ☐ Change Liner |
| ____ | ____ | ☐ Change Septa |
| ____ | ____ | ☐ Clip Column |
| ____ | ____ | ☐ ____ |
| ____ | ____ | Symptom ____ |
| ____ | ____ | ____ |

Date/Time Finished Processing Data Pack 9a 6/4/15

Date/Time Finished Reviewing Data Pack 9:58 6/4/15 MC

# NWTPH-Dx
## CCVs

F&B Project 506058




Data File Name : C:\HPCHEM\1\DATA\06-03-15\005F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 03 Jun 15 03:09 PM
Report Created on: 03 Jun 15 03:20 PM

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

# Area Percent Report

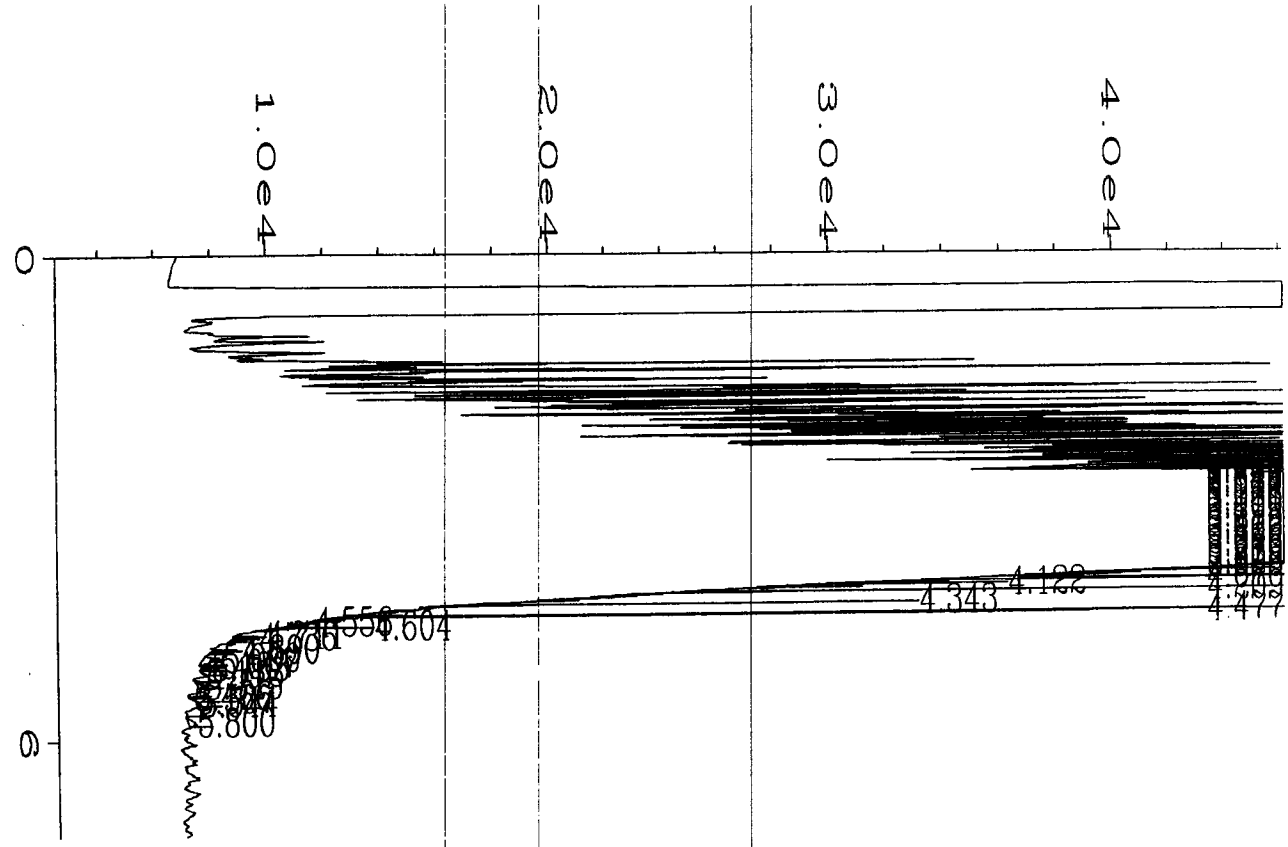
Data File Name : C:\HPCHEM\1\DATA\06-03-15\005F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 03 Jun 15 03:09 PM
Report Created on: 03 Jun 15 03:20 PM

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

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\005F0901.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06197E+009 | 8.38087E+007 | BVA | 0.211 | 99.1910 |
| 2 | 1.452 | 461902 | 127672 | VV + | 0.000 | 0.0431 |
| 3 | 2.487 | 3877158 | 265030 | VVA | 0.244 | 0.3621 |
| 4 | 3.807 | 4102401 | 252183 | VVA | 0.271 | 0.3832 |
| 5 | 5.372 | 213962 | 214198 | VV + | 0.000 | 0.0200 |
| 6 | 6.762 | 5796 | 495 | VB + | 0.000 | 0.0005 |

Total area = 1.07063E+009

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Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\06-03-15\005R0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 1000 Dx 44-172C
Run Time Bar Code:
Acquired on : 03 Jun 15 03:09 PM
Report Created on: 03 Jun 15 03:20 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\06-03-15\005R0901.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.582 | 32495 | 44385 | BB | 0.012 | 2.2338 |
| 2 | 2.615 | 16671 | 27731 | BB | 0.010 | 1.1460 |
| 3 | 2.640 | 24504 | 32834 | BB | 0.012 | 1.6845 |
| 4 | 2.669 | 36355 | 53124 | BB | 0.011 | 2.4992 |
| 5 | 2.718 | 95267 | 173899 | BB | 0.009 | 6.5490 |
| 6 | 2.748 | 19491 | 27190 | BB | 0.012 | 1.3399 |
| 7 | 2.816 | 22343 | 24867 | BB | 0.015 | 1.5359 |
| 8 | 2.846 | 49378 | 62053 | BB | 0.013 | 3.3945 |
| 9 | 2.884 | 9305 | 11393 | BB | 0.014 | 0.6396 |
| 10 | 2.920 | 89978 | 195318 | BB | 0.008 | 6.1854 |
| 11 | 3.036 | 60801 | 32137 | BB | 0.028 | 4.1797 |
| 12 | 3.111 | 100665 | 199341 | BB | 0.008 | 6.9201 |
| 13 | 3.159 | 12919 | 12024 | BB | 0.018 | 0.8881 |
| 14 | 3.200 | 45522 | 80747 | BB | 0.009 | 3.1294 |
| 15 | 3.293 | 148834 | 207859 | BB | 0.014 | 10.2314 |
| 16 | 3.370 | 16257 | 16731 | BB | 0.018 | 1.1176 |
| 17 | 3.416 | 13426 | 19895 | BB | 0.011 | 0.9230 |
| 18 | 3.463 | 83115 | 178819 | BB | 0.008 | 5.7137 |
| 19 | 3.520 | 27651 | 6809 | BB | 0.055 | 1.9008 |
| 20 | 3.626 | 108018 | 176882 | BB | 0.010 | 7.4255 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.676 | 110255 | 215116 | BB | 0.009 | 7.5793 |
| 22 | 3.753 | 30711 | 19908 | BB | 0.022 | 2.1112 |
| 23 | 3.779 | 57903 | 132148 | BB | 0.007 | 3.9805 |
| 24 | 3.838 | 5238 | 6496 | BB | 0.013 | 0.3601 |
| 25 | 3.893 | 12642 | 13635 | BB | 0.017 | 0.8690 |
| 26 | 3.928 | 44145 | 86757 | BB | 0.008 | 3.0347 |
| 27 | 4.070 | 34224 | 55034 | BB | 0.013 | 2.3527 |
| 28 | 4.122 | 6354 | 7344 | BB | 0.014 | 0.4368 |
| 29 | 4.209 | 16601 | 30881 | BB | 0.017 | 1.1412 |
| 30 | 4.343 | 10415 | 16894 | BB | 0.010 | 0.7160 |
| 31 | 4.477 | 102221 | 214449 | BB | 0.008 | 7.0270 |
| 32 | 4.556 | 1754 | 634 | BB | 0.037 | 0.1206 |
| 33 | 4.604 | 1943 | 3690 | BB | 0.009 | 0.1336 |
| 34 | 4.711 | 736 | 1237 | BB | 0.010 | 0.0506 |
| 35 | 4.736 | 658 | 1024 | BB | 0.011 | 0.0452 |
| 36 | 4.890 | 742 | 1112 | BB | 0.011 | 0.0510 |
| 37 | 5.000 | 1999 | 720 | BB | 0.036 | 0.1374 |
| 38 | 5.067 | 470 | 712 | BB | 0.011 | 0.0323 |
| 39 | 5.103 | 438 | 376 | BB | 0.019 | 0.0301 |
| 40 | 5.173 | 170 | 124 | BB | 0.023 | 0.0117 |
| 41 | 5.325 | 590 | 254 | BB | 0.033 | 0.0406 |
| 42 | 5.466 | 107 | 186 | BB | 0.010 | 0.0073 |
| 43 | 5.507 | 112 | 99.7 | BB | 0.019 | 0.0077 |
| 44 | 5.544 | 189 | 142 | BB | 0.022 | 0.0130 |
| 45 | 5.800 | 1066 | 301 | BB | 0.047 | 0.0733 |

Total area = 1454680

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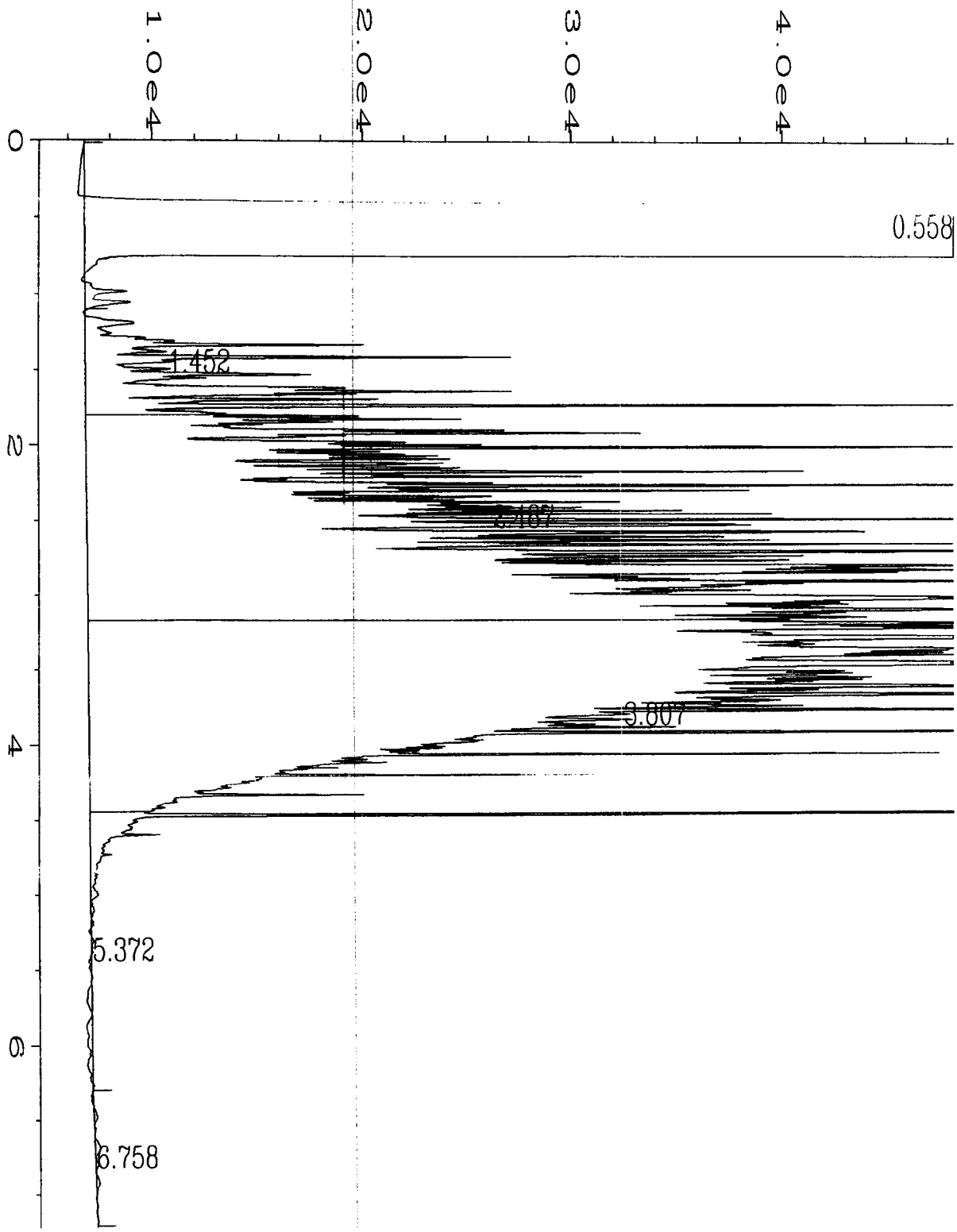
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\005F0901.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 5 | |
| Sample Name | : 1000 Dx 44-172C | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 9 | |
| Acquired on | 6/3/15 | 15:09 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 03:20 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 | | | | | | |
| 112 | >4.44 | <4.53 | 102221 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 110 | >3.63 | <3.72 | 110255 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 1028 | >1.8 | <4.44 | 7.87E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 1030 | >1.8 | <6.3 | 7981044 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 22 | >4.44 | <6.3 | 111740 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 604 | >3.17 | <6.3 | 4103886 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 1235 | >1.8 | <4.44 | 7869304 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 516 | >1.1 | <3.17 | 4339060 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 1327 | >1.1 | <4.44 | 8331206 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1870 | >1.8 | <6.3 | 7981045 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 516 | | | | | |
| TPHD (8-36) | 536 | | | | | |
| TPHDX (8-36) | 530 | | | | | |
| Motor Oil (8-36 | 795 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\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 | : 03 Jun 15 06:49 PM | Instrument Method | : DX.MTH |
| Report Created on | : 03 Jun 15 06:59 PM | Analysis Method | : DX.MTH |

# Area Percent Report

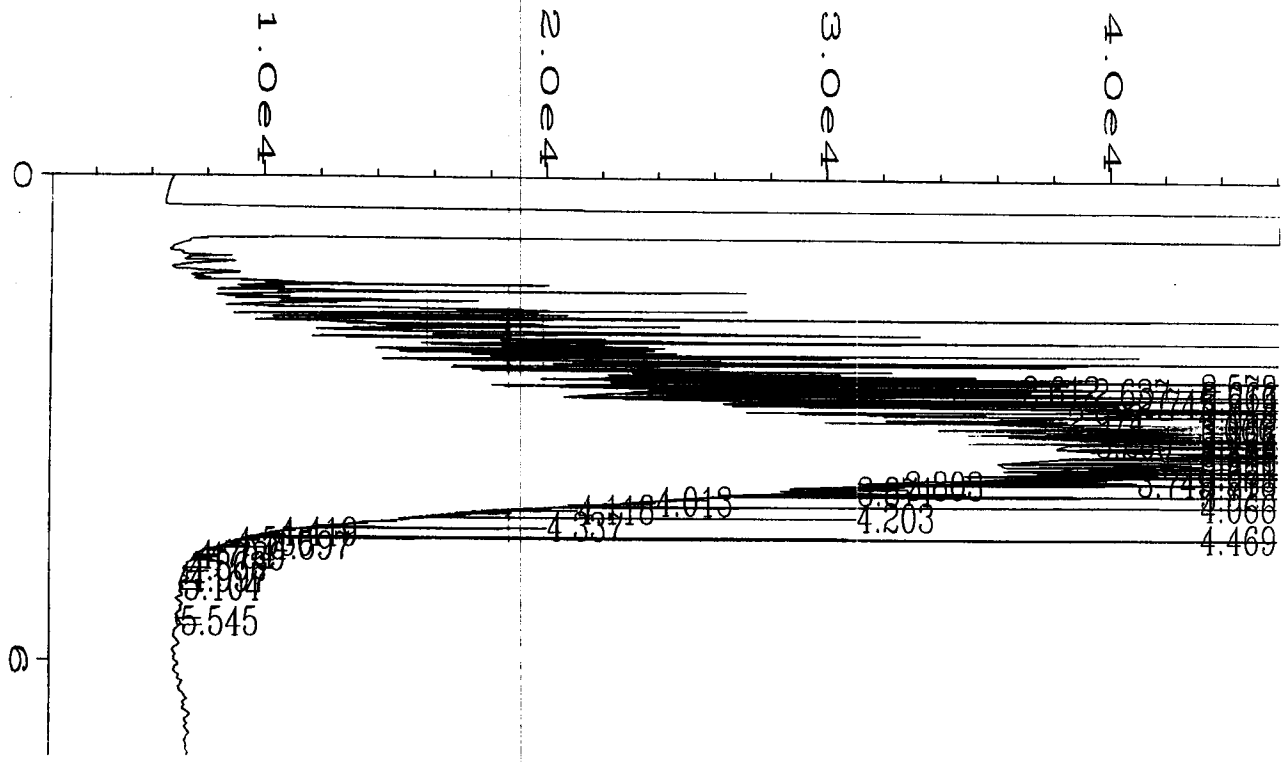
Data File Name : C:\HPCHEM\1\DATA\06-03-15\093F1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 03 Jun 15 06:49 PM
Report Created on: 03 Jun 15 06:59 PM

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\06-03-15\093F1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.02406E+009 | 7.98646E+007 | BVA | 0.214 | 99.5729 |
| 2 | 1.452 | 221105 | 64319 | VV + | 0.000 | 0.0215 |
| 3 | 2.487 | 1948604 | 142918 | VV + | 0.000 | 0.1895 |
| 4 | 3.807 | 2097808 | 228185 | VVA | 0.153 | 0.2040 |
| 5 | 5.372 | 122454 | 194768 | VV + | 0.000 | 0.0119 |
| 6 | 6.758 | 2887 | 224 | PB + | 0.000 | 0.0003 |

Total area = 1.02845E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\093R1101.D
Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 43-199B
Run Time Bar Code:
Acquired on : 03 Jun 15 06:49 PM
Report Created on: 03 Jun 15 06:59 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\06-03-15\093R1101.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.578 | 16125 | 22608 | BB | 0.012 | 2.0501 |
| 2 | 2.612 | 8295 | 13955 | BB | 0.010 | 1.0546 |
| 3 | 2.637 | 12863 | 17011 | BB | 0.013 | 1.6354 |
| 4 | 2.666 | 19745 | 28432 | BB | 0.012 | 2.5103 |
| 5 | 2.714 | 49056 | 97736 | BB | 0.008 | 6.2368 |
| 6 | 2.745 | 9730 | 14385 | BB | 0.011 | 1.2370 |
| 7 | 2.813 | 10916 | 13407 | BB | 0.014 | 1.3878 |
| 8 | 2.916 | 15330 | 106122 | BB | 0.002 | 1.9491 |
| 9 | 2.974 | 1391 | 4229 | BB | 0.005 | 0.1769 |
| 10 | 3.032 | 18338 | 13116 | BB | 0.023 | 2.3314 |
| 11 | 3.066 | 5343 | 7148 | BB | 0.012 | 0.6793 |
| 12 | 3.107 | 53509 | 116731 | BB | 0.008 | 6.8030 |
| 13 | 3.156 | 6286 | 7206 | BB | 0.015 | 0.7992 |
| 14 | 3.196 | 23043 | 40055 | BB | 0.010 | 2.9296 |
| 15 | 3.260 | 1326 | 117 | BB | 0.188 | 0.1685 |
| 16 | 3.288 | 82825 | 109930 | BB | 0.013 | 10.5302 |
| 17 | 3.366 | 9346 | 7873 | BB | 0.021 | 1.1883 |
| 18 | 3.413 | 6907 | 10053 | BB | 0.011 | 0.8781 |
| 19 | 3.459 | 74198 | 102579 | BB | 0.020 | 9.4333 |
| 20 | 3.530 | 11053 | 7160 | BB | 0.026 | 1.4052 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.621 | 43747 | 82045 | BB | 0.009 | 5.5619 |
| 22 | 3.673 | 100920 | 207036 | BB | 0.008 | 12.8307 |
| 23 | 3.749 | 13118 | 9085 | BB | 0.024 | 1.6677 |
| 24 | 3.776 | 28829 | 66340 | BB | 0.007 | 3.6652 |
| 25 | 3.803 | 2135 | 2293 | BB | 0.016 | 0.2714 |
| 26 | 3.871 | 4915 | 2549 | BB | 0.032 | 0.6249 |
| 27 | 3.923 | 25982 | 47563 | BB | 0.016 | 3.3033 |
| 28 | 4.013 | 1392 | 1290 | BB | 0.018 | 0.1769 |
| 29 | 4.066 | 12889 | 28531 | BB | 0.011 | 1.6387 |
| 30 | 4.118 | 3516 | 3413 | BB | 0.017 | 0.4470 |
| 31 | 4.203 | 8049 | 16445 | BB | 0.008 | 1.0234 |
| 32 | 4.337 | 4879 | 8607 | BB | 0.012 | 0.6203 |
| 33 | 4.419 | 455 | 519 | BB | 0.015 | 0.0578 |
| 34 | 4.469 | 96041 | 202281 | BB | 0.008 | 12.2104 |
| 35 | 4.550 | 710 | 317 | BB | 0.032 | 0.0903 |
| 36 | 4.597 | 1183 | 2112 | BB | 0.009 | 0.1504 |
| 37 | 4.704 | 104 | 138 | BB | 0.013 | 0.0132 |
| 38 | 4.729 | 327 | 543 | BB | 0.010 | 0.0416 |
| 39 | 4.862 | 202 | 190 | BB | 0.018 | 0.0257 |
| 40 | 4.997 | 775 | 284 | BB | 0.037 | 0.0985 |
| 41 | 5.104 | 325 | 130 | BB | 0.036 | 0.0413 |
| 42 | 5.545 | 437 | 133 | BB | 0.046 | 0.0556 |

Total area = 786553

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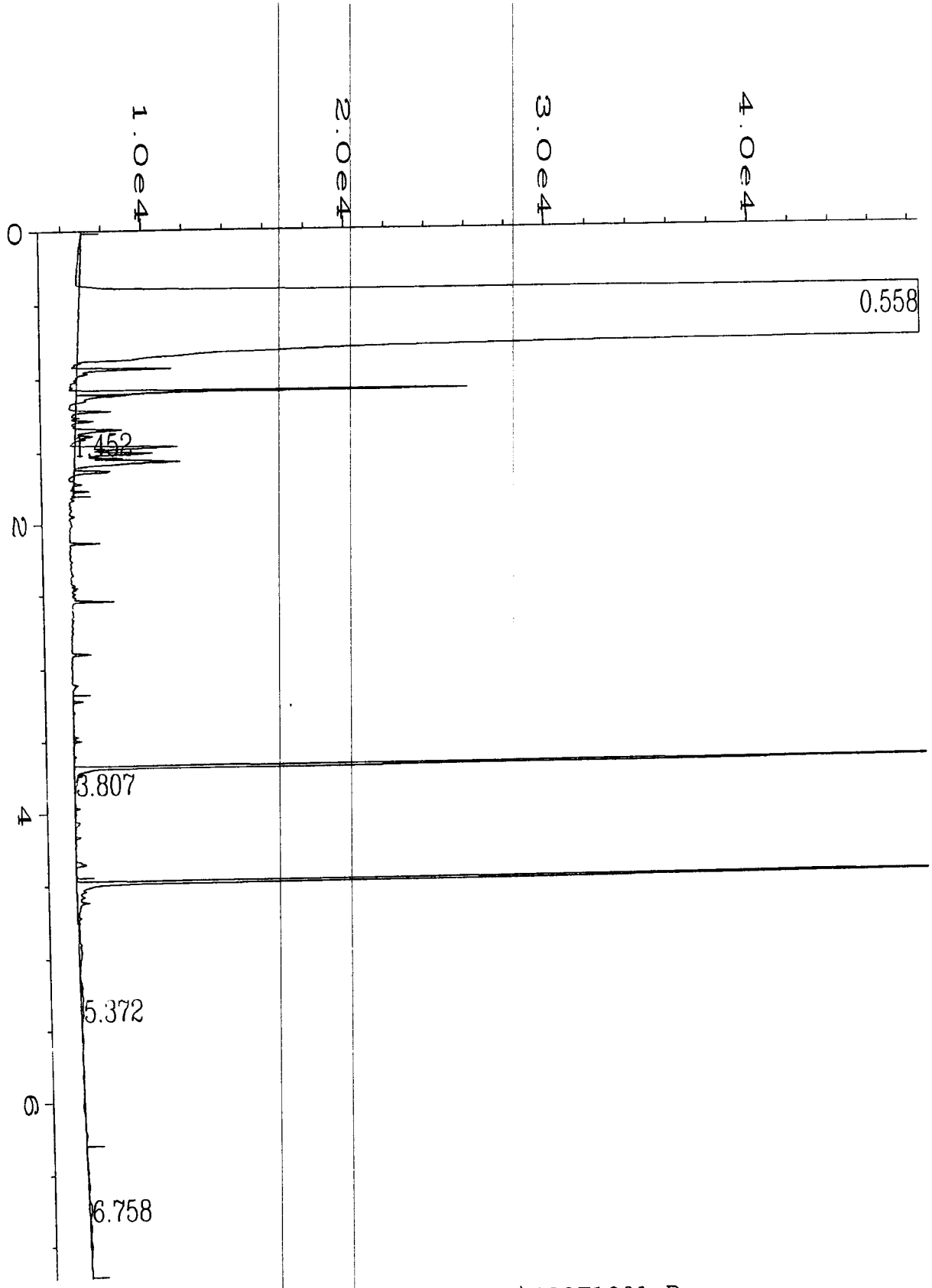
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\093F1101.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 93 | |
| Sample Name | : 500 Dx 43-199B | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 11 | |
| Acquired on | 6/3/15 | 18:49 | | Instrume | DX.MTH | | |
| Report Created on: 03 Jun 15 06:59 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 | | | | | | | |
| 105 | >4.44 | <4.53 | 96041 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 101 | >3.63 | <3.72 | 100920 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 515 | >1.8 | <4.44 | 3.95E+06 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 513 | >1.8 | <6.3 | 3971904 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 5 | >4.44 | <6.3 | 26412 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 298 | >3.17 | <6.3 | 2023300 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 619 | >1.8 | <4.44 | 3945492 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 258 | >1.1 | <3.17 | 2169709 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 664 | >1.1 | <4.44 | 4166597 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 931 | >1.8 | <6.3 | 3971905 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 258 | | | | | | |
| TPHD (8-36) | 264 | | | | | | |
| TPHDX (8-36) | 261 | | | | | | |
| Motor Oil (8-36 | 392 | | | | | | |

# NWTPH-Dx
## Quality Assurance Data

F&B Project 506058




Data File Name : C:\HPCHEM\1\DATA\06-03-15\032F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 mb
Run Time Bar Code:
Acquired on : 03 Jun 15 03:41 PM
Report Created on: 03 Jun 15 03:50 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

# Area Percent Report

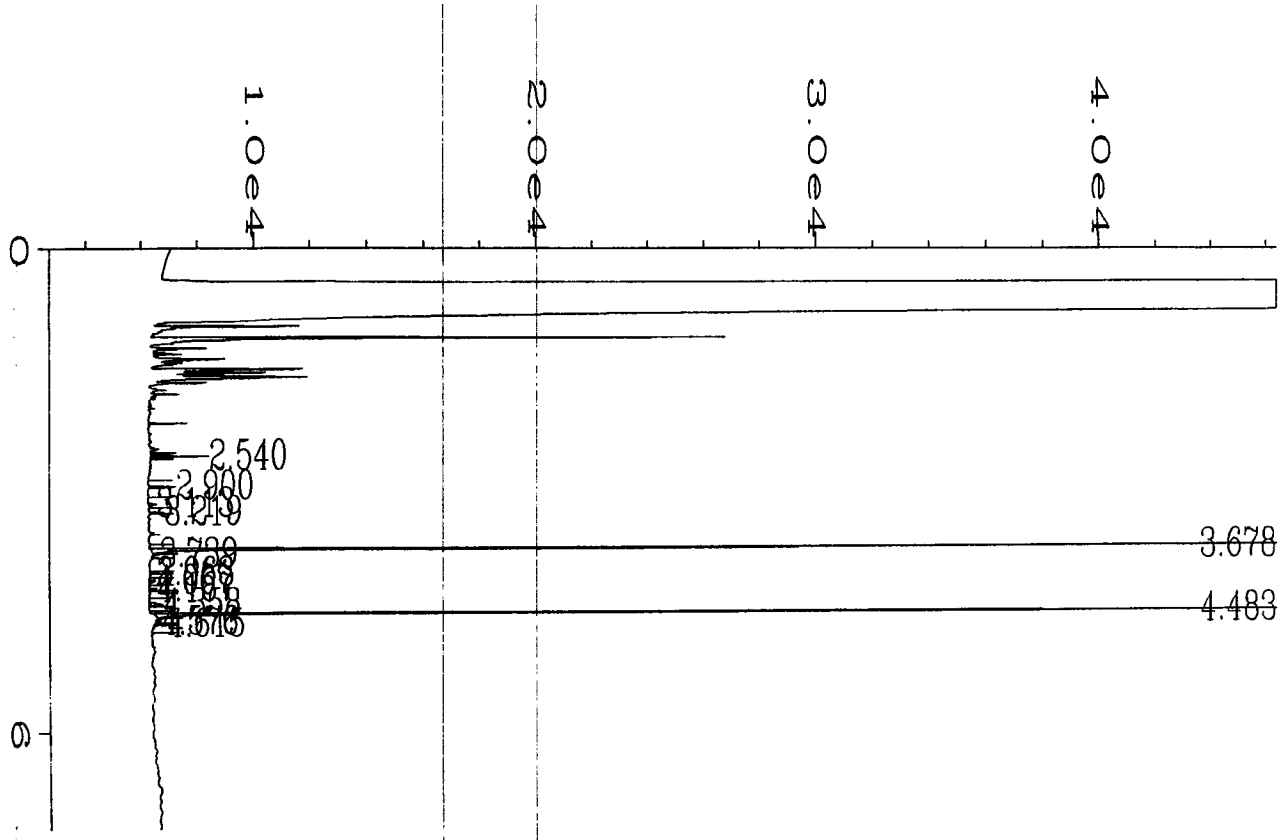
Data File Name : C:\HPCHEM\1\DATA\06-03-15\032F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 mb
Run Time Bar Code:
Acquired on : 03 Jun 15 03:41 PM
Report Created on: 03 Jun 15 03:50 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\032F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.02206E+009 | 8.21665E+007 | BVA | 0.207 | 99.9794 |
| 2 | 1.452 | 28827 | 5200 | VV + | 0.000 | 0.0028 |
| 3 | 3.807 | 93548 | 180788 | PVA | 0.009 | 0.0092 |
| 4 | 5.372 | 86306 | 153515 | PV + | 0.000 | 0.0084 |
| 5 | 6.758 | 2113 | 131 | PB + | 0.000 | 0.0002 |

Total area = 1.02227E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\032R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 mb
Run Time Bar Code:
Acquired on : 03 Jun 15 03:41 PM
Report Created on: 03 Jun 15 03:50 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\032R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.540 | 1186 | 2154 | BBAS | 0.014 | 0.6828 |
| 2 | 2.900 | 497 | 996 | BB | 0.008 | 0.2865 |
| 3 | 3.113 | 221 | 289 | BB | 0.014 | 0.1271 |
| 4 | 3.219 | 250 | 562 | BB | 0.007 | 0.1439 |
| 5 | 3.678 | 89295 | 178878 | BB | 0.008 | 51.4179 |
| 6 | 3.739 | 182 | 290 | BB | 0.010 | 0.1048 |
| 7 | 3.963 | 141 | 264 | BB | 0.009 | 0.0811 |
| 8 | 4.067 | 357 | 233 | BB | 0.025 | 0.2053 |
| 9 | 4.167 | 172 | 290 | BB | 0.014 | 0.0993 |
| 10 | 4.358 | 669 | 532 | BB | 0.025 | 0.3853 |
| 11 | 4.483 | 80078 | 158883 | BB | 0.008 | 46.1109 |
| 12 | 4.576 | 182 | 180 | BB | 0.017 | 0.1047 |
| 13 | 4.615 | 435 | 467 | BB | 0.025 | 0.2504 |

Total area = 173664

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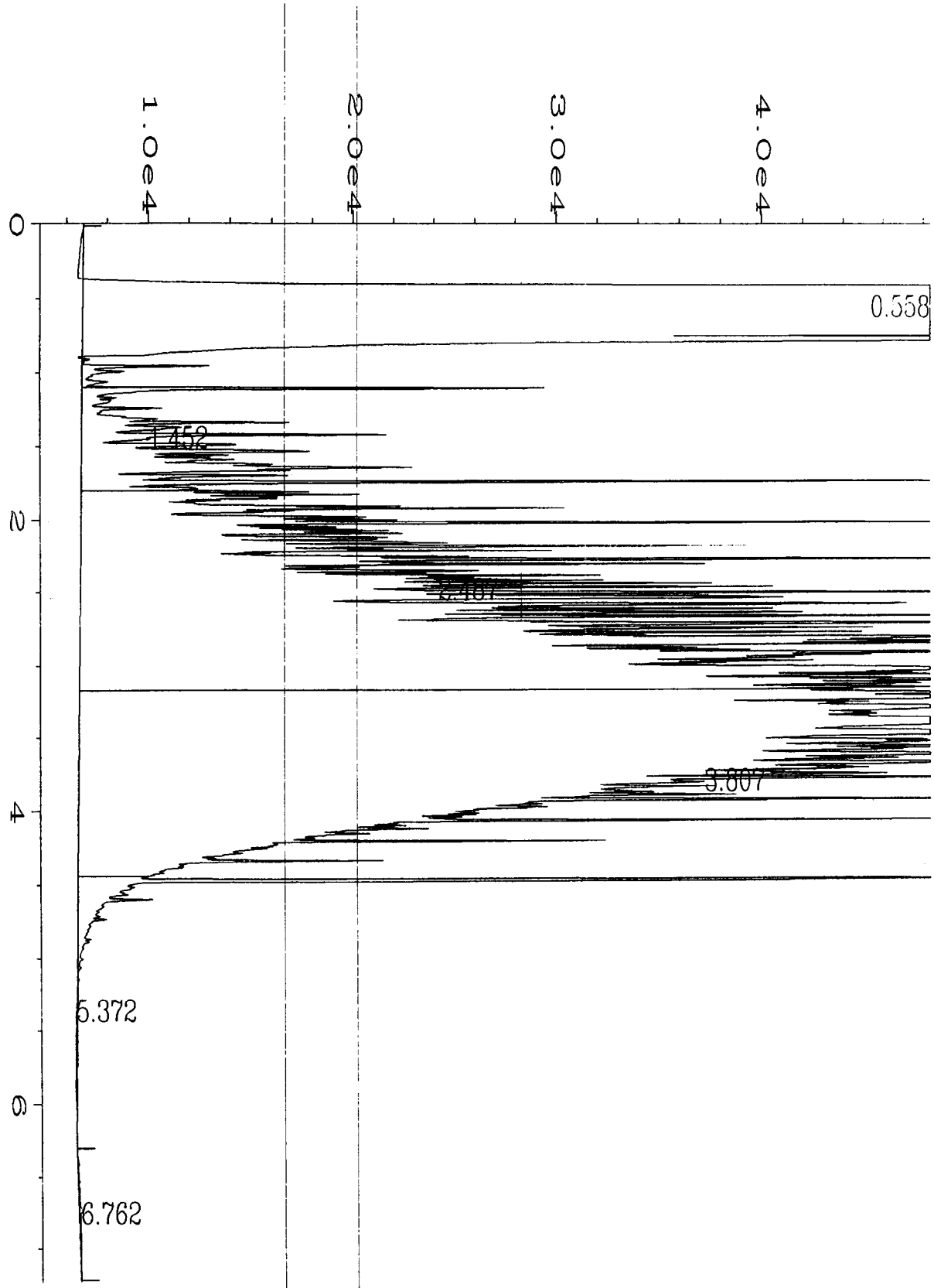
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\032F1001.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 32 | |
| Sample Name | : 05-1045 mb | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 10 | |
| Acquired on | 6/3/15 | 15:41 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 03:50 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 | | | | | | |
| 88 | >4.44 | <4.53 | 80078 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 89 | >3.63 | <3.72 | 89295 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 1 | >1.8 | <4.44 | 4.25E+03 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 1 | >1.8 | <6.3 | 10480 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 1 | >4.44 | <6.3 | 6227 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 2 | >3.17 | <6.3 | 10480 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 1 | >1.8 | <4.44 | 4253 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 3 | >1.1 | <3.17 | 28827 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 5 | >1.1 | <4.44 | 33080 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 2 | >1.8 | <6.3 | 10481 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 3 | | | | | |
| TPHD (8-36) | 1 | | | | | |
| TPHDX (8-36) | 1 | | | | | |
| Motor Oil (8-36 | 2 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\033F1001.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 33 |
| Sample Name | : 05-1045 lcs | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 10 |
| Acquired on | : 03 Jun 15 03:50 PM | Instrument Method | : DX.MTH |
| Report Created on: | 03 Jun 15 04:01 PM | Analysis Method | : DX.MTH |

# Area Percent Report

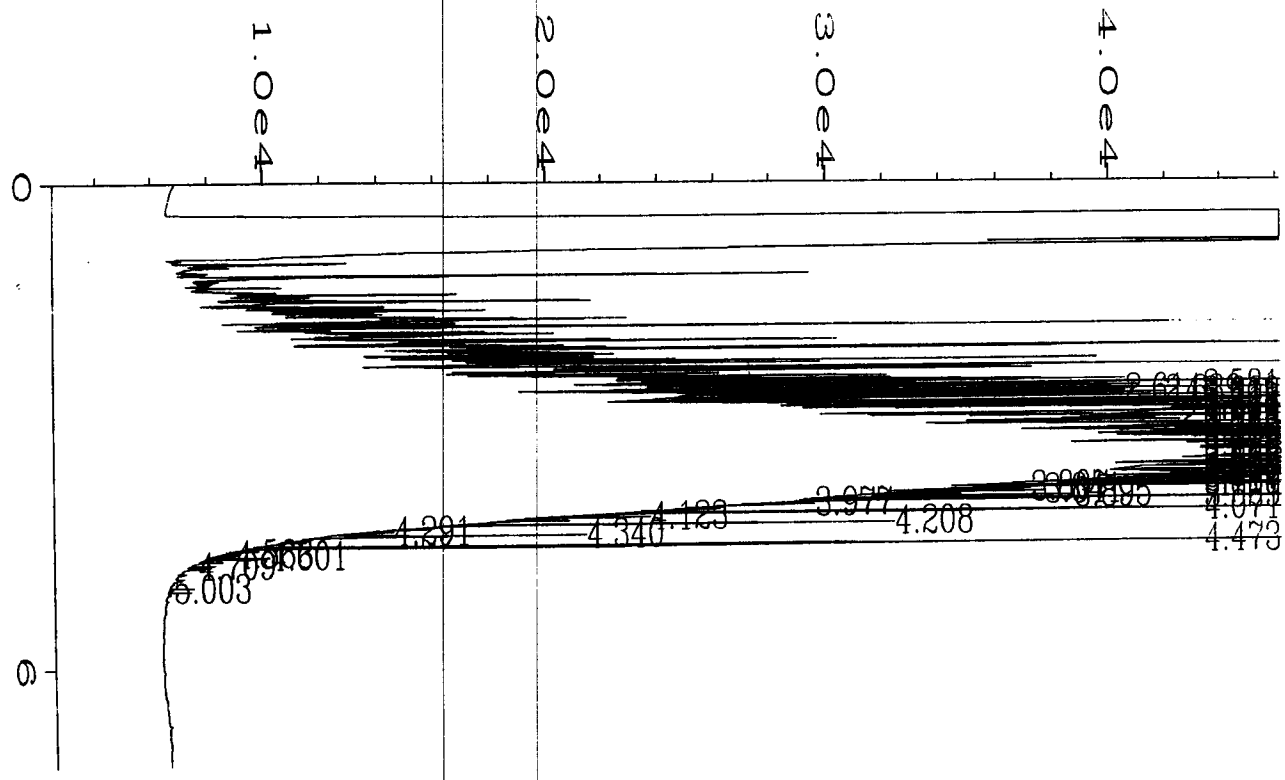
Data File Name : C:\HPCHEM\1\DATA\06-03-15\033F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 lcs
Run Time Bar Code:
Acquired on : 03 Jun 15 03:50 PM
Report Created on: 03 Jun 15 04:01 PM

Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\033F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.06921E+009 | 8.33768E+007 | BV + | 0.000 | 99.5469 |
| 2 | 1.452 | 218377 | 51864 | VV + | 0.000 | 0.0203 |
| 3 | 2.487 | 2089388 | 173443 | VVA | 0.201 | 0.1945 |
| 4 | 3.807 | 2426255 | 223629 | VVA | 0.181 | 0.2259 |
| 5 | 5.372 | 130487 | 173586 | VB + | 0.000 | 0.0121 |
| 6 | 6.762 | 2392 | 138 | BB + | 0.000 | 0.0002 |

Total area = 1.07408E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\033R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 lcs
Run Time Bar Code:
Acquired on : 03 Jun 15 03:50 PM
Report Created on: 03 Jun 15 04:01 PM

Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\033R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.581 | 17958 | 24571 | BB | 0.012 | 2.0522 |
| 2 | 2.614 | 8627 | 15545 | BB | 0.009 | 0.9859 |
| 3 | 2.639 | 13457 | 17770 | BB | 0.013 | 1.5379 |
| 4 | 2.669 | 20551 | 29505 | BB | 0.012 | 2.3486 |
| 5 | 2.717 | 54090 | 111091 | BB | 0.008 | 6.1815 |
| 6 | 2.748 | 10394 | 16531 | BB | 0.010 | 1.1879 |
| 7 | 2.815 | 11164 | 13670 | BB | 0.014 | 1.2758 |
| 8 | 2.844 | 13660 | 32081 | BB | 0.007 | 1.5611 |
| 9 | 2.919 | 36476 | 122739 | BB | 0.011 | 4.1685 |
| 10 | 2.978 | 3753 | 6167 | BB | 0.010 | 0.4290 |
| 11 | 3.025 | 22641 | 16076 | BB | 0.023 | 2.5875 |
| 12 | 3.069 | 5728 | 8930 | BB | 0.011 | 0.6546 |
| 13 | 3.110 | 68824 | 144150 | BB | 0.008 | 7.8653 |
| 14 | 3.160 | 9248 | 9165 | BB | 0.017 | 1.0569 |
| 15 | 3.200 | 25585 | 45720 | BB | 0.009 | 2.9239 |
| 16 | 3.292 | 86961 | 120246 | BB | 0.012 | 9.9381 |
| 17 | 3.370 | 8540 | 10268 | BB | 0.014 | 0.9759 |
| 18 | 3.416 | 8365 | 10239 | BB | 0.014 | 0.9560 |
| 19 | 3.463 | 48219 | 111880 | BB | 0.007 | 5.5105 |
| 20 | 3.533 | 12618 | 5191 | BB | 0.033 | 1.4420 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.565 | 14758 | 10940 | BB | 0.026 | 1.6866 |
| 22 | 3.626 | 48298 | 95556 | BB | 0.008 | 5.5196 |
| 23 | 3.677 | 97303 | 198826 | BB | 0.008 | 11.1200 |
| 24 | 3.717 | 6756 | 6412 | BB | 0.018 | 0.7721 |
| 25 | 3.754 | 9727 | 10192 | BB | 0.015 | 1.1116 |
| 26 | 3.780 | 32804 | 72392 | BB | 0.008 | 3.7489 |
| 27 | 3.807 | 2588 | 3146 | BB | 0.014 | 0.2958 |
| 28 | 3.841 | 4273 | 5603 | BB | 0.013 | 0.4883 |
| 29 | 3.895 | 9047 | 8987 | BB | 0.017 | 1.0339 |
| 30 | 3.929 | 25702 | 53007 | BB | 0.008 | 2.9372 |
| 31 | 3.977 | 2019 | 2460 | BB | 0.014 | 0.2307 |
| 32 | 4.071 | 16233 | 30846 | BB | 0.009 | 1.8551 |
| 33 | 4.123 | 3447 | 4019 | BB | 0.014 | 0.3939 |
| 34 | 4.208 | 9265 | 17035 | BB | 0.009 | 1.0589 |
| 35 | 4.291 | 2558 | 1020 | BB | 0.042 | 0.2924 |
| 36 | 4.340 | 5927 | 9656 | BB | 0.010 | 0.6774 |
| 37 | 4.473 | 94479 | 176484 | BB | 0.015 | 10.7973 |
| 38 | 4.563 | 1163 | 699 | BB | 0.028 | 0.1329 |
| 39 | 4.601 | 1485 | 2346 | BB | 0.011 | 0.1697 |
| 40 | 4.709 | 171 | 307 | BB | 0.009 | 0.0195 |
| 41 | 5.003 | 170 | 182 | BB | 0.019 | 0.0194 |

Total area = 875027

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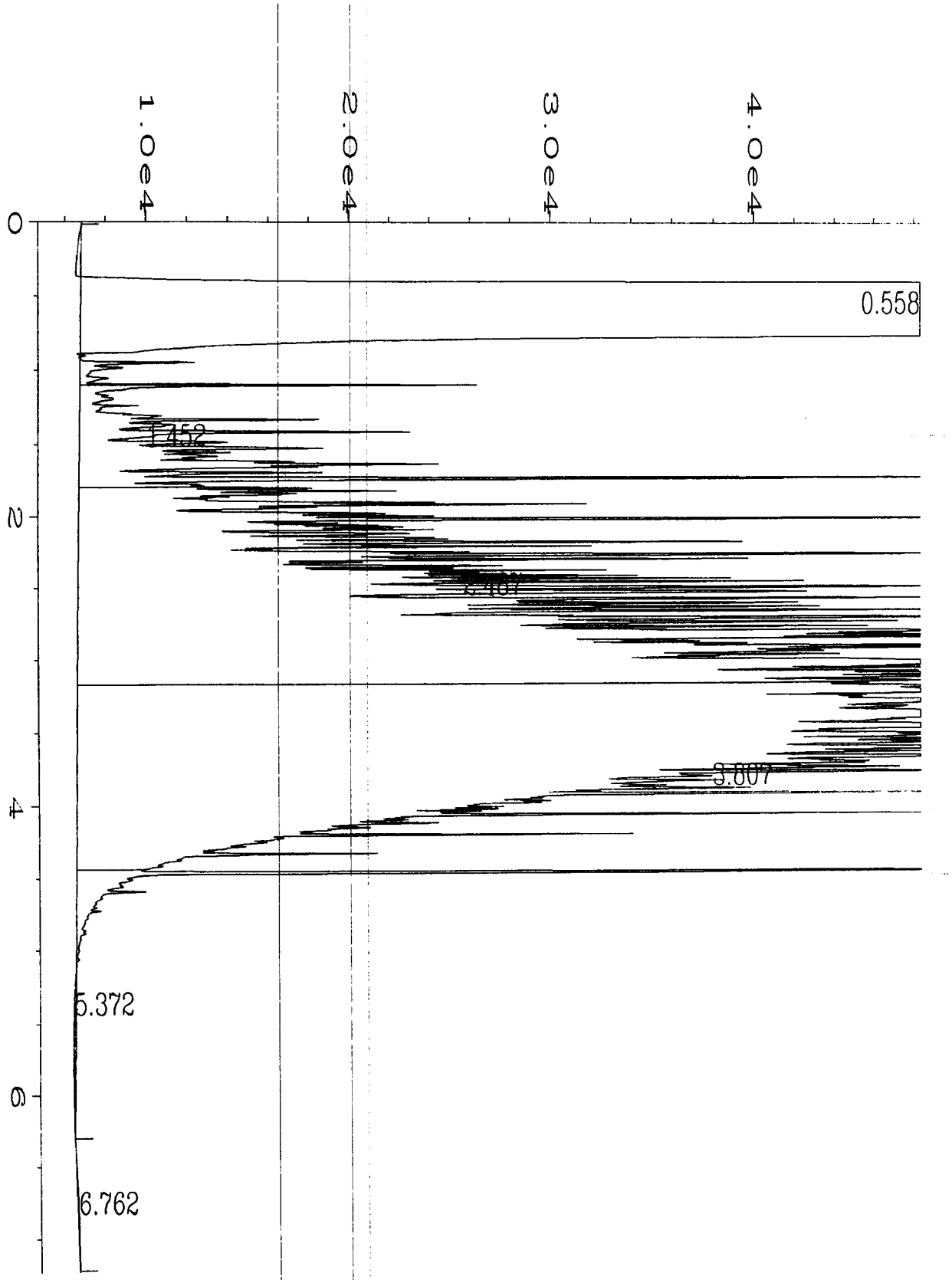
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\06-03-15\033F1001.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 33 | |
| Sample Name : 05-1045 lcs | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 10 | |
| Acquired on | 6/3/15 | 15:50 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 04:01 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 | | | | | | |
| 104 | >4.44 | <4.53 | 94479 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 97 | >3.63 | <3.72 | 97303 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 577 | >1.8 | <4.44 | 4.42E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 575 | >1.8 | <6.3 | 4454347 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 7 | >4.44 | <6.3 | 36007 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 348 | >3.17 | <6.3 | 2364959 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 693 | >1.8 | <4.44 | 4418340 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 274 | >1.1 | <3.17 | 2307765 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 738 | >1.1 | <4.44 | 4636717 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1044 | >1.8 | <6.3 | 4454348 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 274 | | | | | |
| TPHD (8-36) | 309 | | | | | |
| TPHDX (8-36) | 305 | | | | | |
| Motor Oil (8-36 | 458 | | | | | |




Data File Name : C:\HPCHEM\1\DATA\06-03-15\034F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 lcsd
Run Time Bar Code:
Acquired on : 03 Jun 15 04:01 PM
Report Created on: 03 Jun 15 04:12 PM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

# Area Percent Report

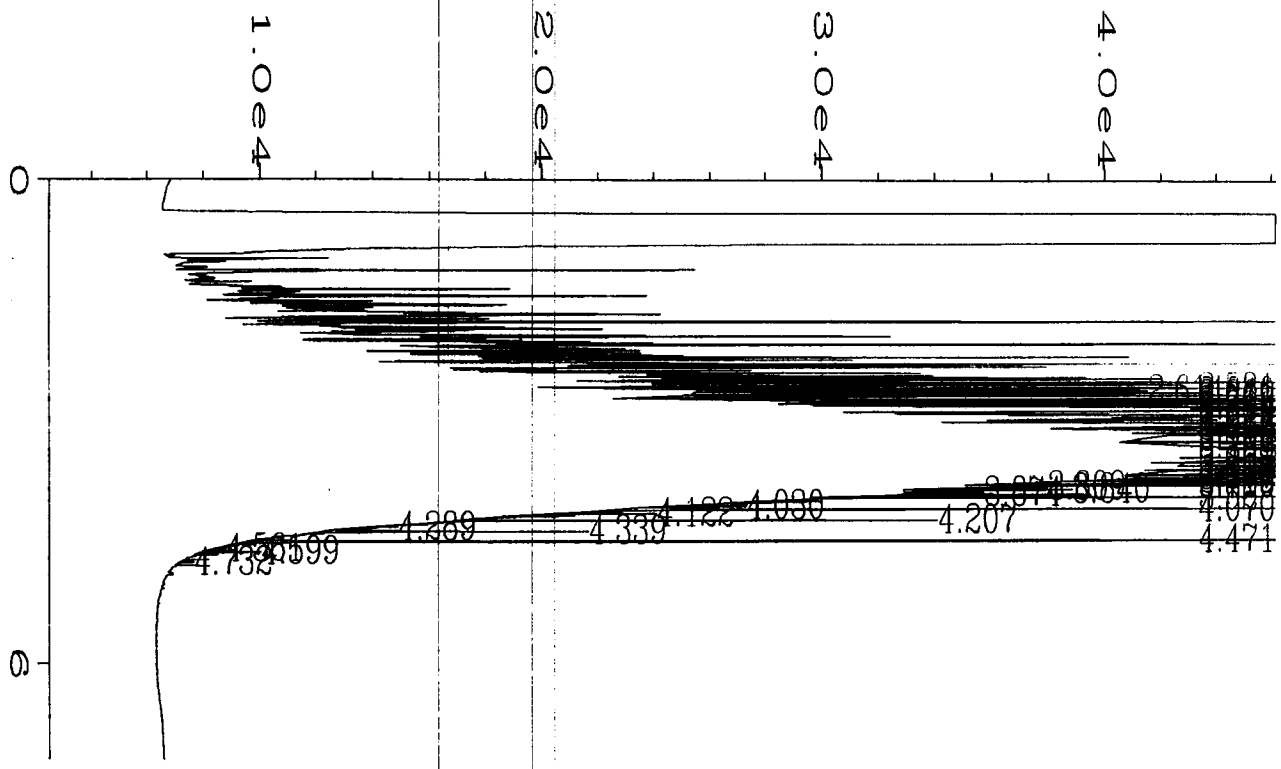
Data File Name : C:\HPCHEM\1\DATA\06-03-15\034F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 lcsd
Run Time Bar Code:
Acquired on : 03 Jun 15 04:01 PM
Report Created on: 03 Jun 15 04:12 PM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\034F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.04498E+009 | 8.19117E+007 | BV + | 0.000 | 99.5207 |
| 2 | 1.452 | 231308 | 54139 | VV + | 0.000 | 0.0220 |
| 3 | 2.487 | 2163232 | 172190 | VV + | 0.000 | 0.2060 |
| 4 | 3.807 | 2509002 | 239963 | VVA | 0.174 | 0.2389 |
| 5 | 5.372 | 127387 | 189963 | VV + | 0.000 | 0.0121 |
| 6 | 6.762 | 1388 | 101 | PB + | 0.000 | 0.0001 |

Total area = 1.05002E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\034R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 05-1045 lcsd
Run Time Bar Code:
Acquired on : 03 Jun 15 04:01 PM
Report Created on: 03 Jun 15 04:12 PM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\034R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.581 | 17485 | 24536 | BB | 0.012 | 1.9015 |
| 2 | 2.614 | 9206 | 16159 | BB | 0.009 | 1.0012 |
| 3 | 2.640 | 13743 | 18985 | BB | 0.012 | 1.4945 |
| 4 | 2.669 | 21194 | 30076 | BB | 0.012 | 2.3048 |
| 5 | 2.717 | 56226 | 110671 | BB | 0.008 | 6.1146 |
| 6 | 2.748 | 12060 | 18087 | BB | 0.011 | 1.3115 |
| 7 | 2.816 | 14523 | 17344 | BB | 0.014 | 1.5793 |
| 8 | 2.919 | 17306 | 125039 | BB | 0.002 | 1.8820 |
| 9 | 2.977 | 1361 | 5527 | BB | 0.004 | 0.1480 |
| 10 | 3.036 | 20529 | 14689 | BB | 0.023 | 2.2325 |
| 11 | 3.068 | 5947 | 8825 | BB | 0.011 | 0.6467 |
| 12 | 3.110 | 65149 | 137653 | BB | 0.008 | 7.0850 |
| 13 | 3.160 | 6559 | 7739 | BB | 0.014 | 0.7133 |
| 14 | 3.198 | 56914 | 47100 | BB | 0.020 | 6.1894 |
| 15 | 3.291 | 105111 | 131347 | BB | 0.013 | 11.4309 |
| 16 | 3.369 | 10132 | 9067 | BB | 0.020 | 1.1019 |
| 17 | 3.462 | 77926 | 119985 | BB | 0.011 | 8.4745 |
| 18 | 3.533 | 10933 | 7410 | BB | 0.025 | 1.1890 |
| 19 | 3.625 | 61444 | 102232 | BB | 0.010 | 6.6821 |
| 20 | 3.677 | 100993 | 209216 | BB | 0.008 | 10.9830 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.719 | 6703 | 5248 | BB | 0.021 | 0.7290 |
| 22 | 3.753 | 10395 | 11089 | BB | 0.015 | 1.1305 |
| 23 | 3.780 | 33994 | 76567 | BB | 0.007 | 3.6968 |
| 24 | 3.809 | 2589 | 3403 | BB | 0.013 | 0.2815 |
| 25 | 3.840 | 5024 | 6045 | BB | 0.014 | 0.5463 |
| 26 | 3.874 | 1649 | 2923 | BB | 0.009 | 0.1794 |
| 27 | 3.928 | 30220 | 51000 | BB | 0.010 | 3.2864 |
| 28 | 4.030 | 5691 | 3385 | BB | 0.028 | 0.6188 |
| 29 | 4.070 | 17962 | 34164 | BB | 0.012 | 1.9534 |
| 30 | 4.122 | 3595 | 4236 | BB | 0.016 | 0.3910 |
| 31 | 4.207 | 10388 | 17905 | BB | 0.010 | 1.1297 |
| 32 | 4.289 | 2519 | 1175 | BB | 0.036 | 0.2739 |
| 33 | 4.339 | 6302 | 9913 | BB | 0.013 | 0.6854 |
| 34 | 4.471 | 94857 | 187586 | BB | 0.008 | 10.3157 |
| 35 | 4.561 | 1066 | 523 | BB | 0.030 | 0.1160 |
| 36 | 4.599 | 1383 | 2229 | BB | 0.016 | 0.1504 |
| 37 | 4.732 | 460 | 567 | BB | 0.014 | 0.0500 |

Total area = 919537

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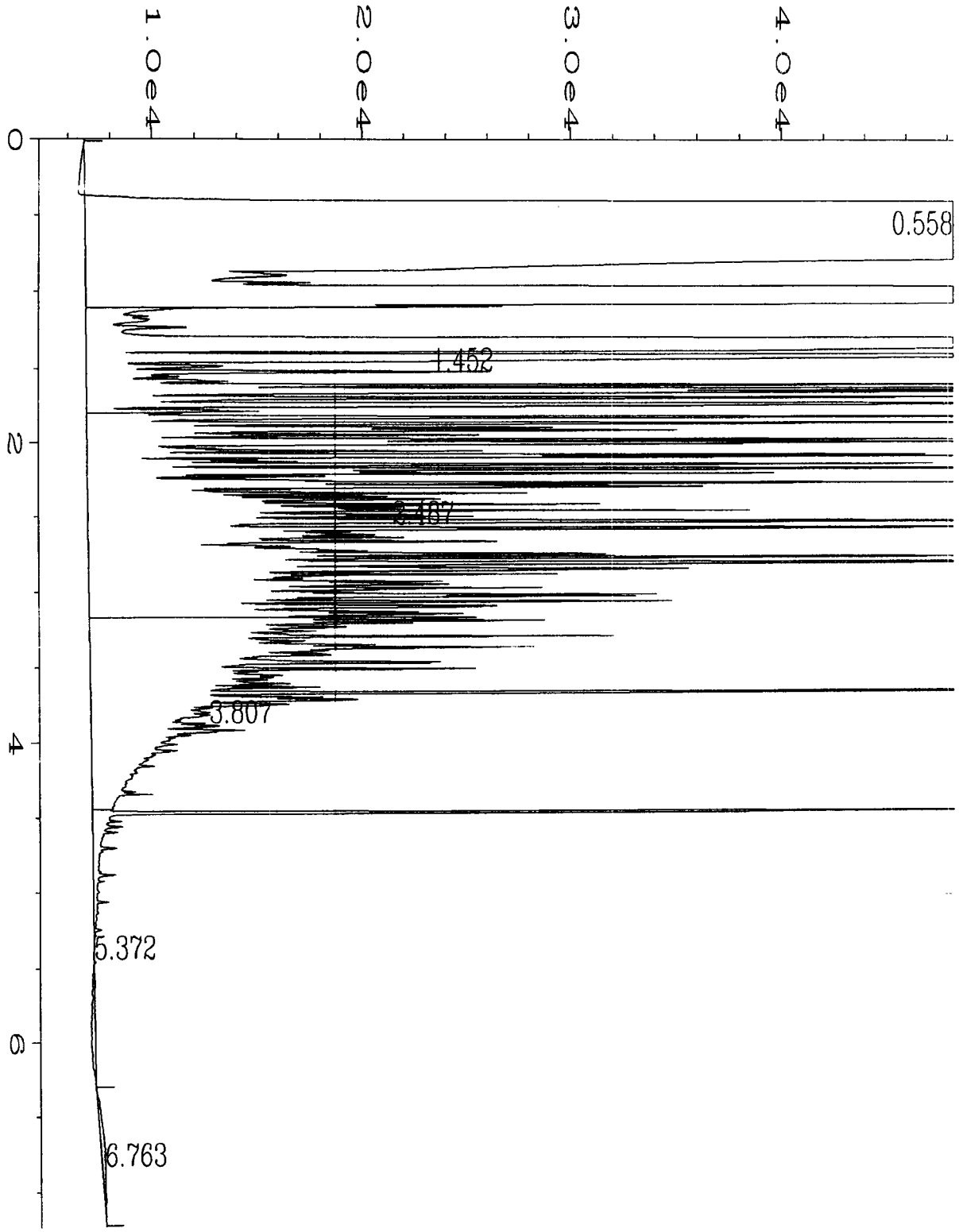
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\034F1001.D | | | | | |
| Operator | : mwdl | | | Page Number | : 1 | |
| Instrument | : GC1 | | | Vial Number | : 34 | |
| Sample Name | : 05-1045 lcsd | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 10 | |
| Acquired on | 6/3/15 | 16:01 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 04:12 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 | | | | | | |
| 104 | >4.44 | <4.53 | 94857 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 101 | >3.63 | <3.72 | 100993 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 597 | >1.8 | <4.44 | 4.57E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 594 | >1.8 | <6.3 | 4603770 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 6 | >4.44 | <6.3 | 32529 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 359 | >3.17 | <6.3 | 2440538 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 717 | >1.8 | <4.44 | 4571241 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 285 | >1.1 | <3.17 | 2394540 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 765 | >1.1 | <4.44 | 4802549 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 1079 | >1.8 | <6.3 | 4603771 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 285 | | | | | |
| TPHD (8-36) | 319 | | | | | |
| TPHDX (8-36) | 315 | | | | | |
| Motor Oil (8-36 | 473 | | | | | |

# NWTPH-Dx
## Sample Chromatograms & Data

F&B Project 506058




Data File Name : C:\HPCHEM\1\DATA\06-03-15\044F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-01
Run Time Bar Code:
Acquired on : 03 Jun 15 05:53 PM
Report Created on: 03 Jun 15 06:03 PM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

# Area Percent Report

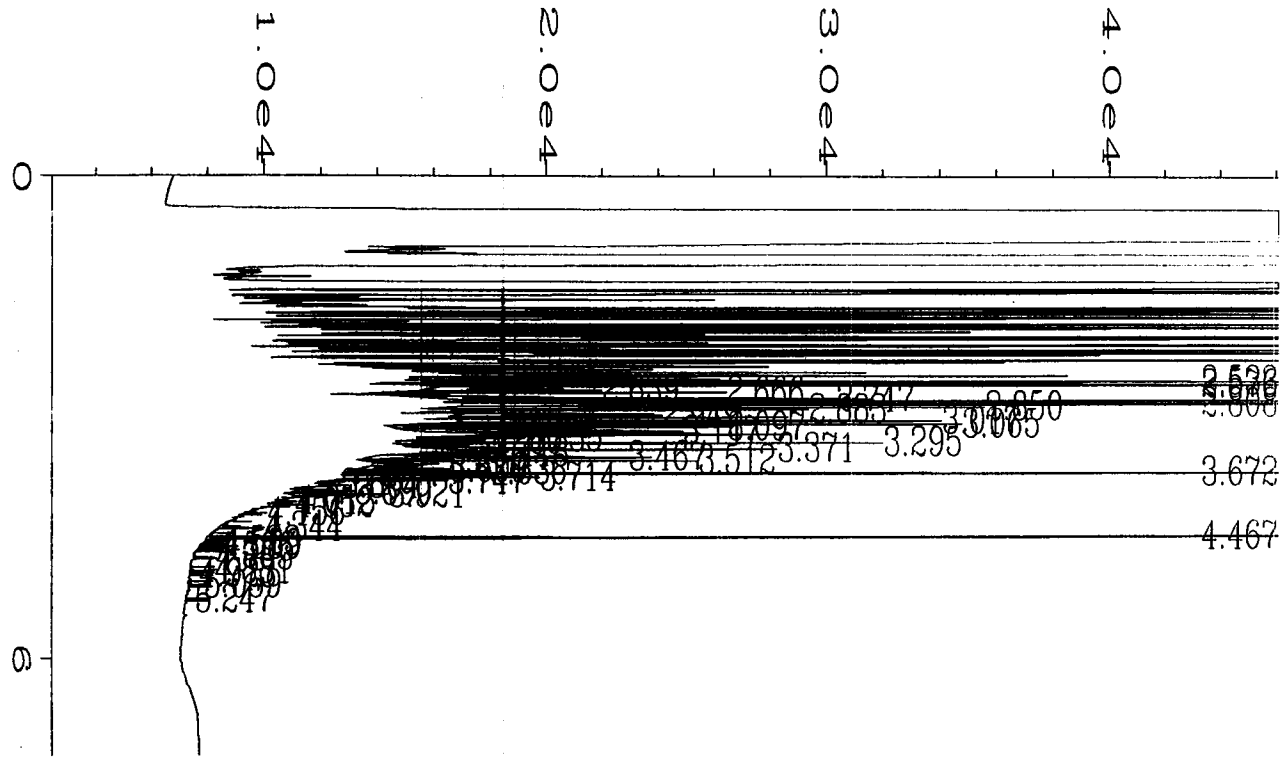
Data File Name : C:\HPCHEM\1\DATA\06-03-15\044F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-01
Run Time Bar Code:
Acquired on : 03 Jun 15 05:53 PM
Report Created on: 03 Jun 15 06:03 PM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\044F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 9.68423E+008 | 7.73207E+007 | BVA | 0.209 | 99.6035 |
| 2 | 1.452 | 1837943 | 895933 | VV + | 0.000 | 0.1890 |
| 3 | 2.487 | 1361710 | 97359 | VV + | 0.000 | 0.1401 |
| 4 | 3.807 | 554861 | 178524 | VVA | 0.052 | 0.0571 |
| 5 | 5.372 | 94576 | 158927 | VV + | 0.000 | 0.0097 |
| 6 | 6.763 | 6250 | 236 | PB + | 0.000 | 0.0006 |

Total area = 9.72278E+008

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\044R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-01
Run Time Bar Code:
Acquired on : 03 Jun 15 05:53 PM
Report Created on: 03 Jun 15 06:03 PM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\044R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.533 | 37116 | 80202 | BBAS | 0.008 | 6.9129 |
| 2 | 2.576 | 38195 | 73117 | BB | 0.009 | 7.1140 |
| 3 | 2.639 | 9064 | 7160 | BB | 0.021 | 1.6882 |
| 4 | 2.666 | 6710 | 12866 | BB | 0.009 | 1.2497 |
| 5 | 2.747 | 20692 | 14152 | BB | 0.024 | 3.8540 |
| 6 | 2.808 | 72322 | 60632 | BB | 0.018 | 13.4701 |
| 7 | 2.850 | 18820 | 19190 | BB | 0.016 | 3.5053 |
| 8 | 2.883 | 4910 | 13178 | BB | 0.006 | 0.9146 |
| 9 | 2.949 | 7259 | 7886 | BB | 0.015 | 1.3521 |
| 10 | 3.017 | 27393 | 17627 | BB | 0.025 | 5.1021 |
| 11 | 3.065 | 13165 | 20439 | BB | 0.011 | 2.4521 |
| 12 | 3.097 | 12234 | 11962 | BB | 0.017 | 2.2786 |
| 13 | 3.147 | 12170 | 9493 | BB | 0.023 | 2.2667 |
| 14 | 3.235 | 9606 | 3502 | BB | 0.046 | 1.7892 |
| 15 | 3.260 | 1731 | 2945 | BB | 0.010 | 0.3224 |
| 16 | 3.295 | 11763 | 19132 | BB | 0.021 | 2.1909 |
| 17 | 3.371 | 9637 | 12015 | BB | 0.013 | 1.7948 |
| 18 | 3.418 | 2792 | 3217 | BB | 0.014 | 0.5199 |
| 19 | 3.467 | 11860 | 8974 | BB | 0.020 | 2.2089 |
| 20 | 3.512 | 7140 | 12801 | BB | 0.009 | 1.3298 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 3.556 | 2527 | 2433 | BB | 0.017 | 0.4708 |
| 22 | 3.609 | 3663 | 3503 | BB | 0.017 | 0.6822 |
| 23 | 3.636 | 3040 | 5253 | BB | 0.010 | 0.5663 |
| 24 | 3.672 | 87402 | 188090 | BB | 0.008 | 16.2788 |
| 25 | 3.714 | 9163 | 6916 | BB | 0.019 | 1.7067 |
| 26 | 3.747 | 3641 | 4002 | BB | 0.015 | 0.6782 |
| 27 | 3.804 | 1008 | 844 | BB | 0.020 | 0.1878 |
| 28 | 3.890 | 1891 | 2151 | BB | 0.014 | 0.3523 |
| 29 | 3.921 | 3382 | 3459 | BB | 0.016 | 0.6300 |
| 30 | 4.013 | 620 | 787 | BB | 0.014 | 0.1154 |
| 31 | 4.052 | 379 | 886 | BB | 0.007 | 0.0706 |
| 32 | 4.156 | 519 | 845 | BB | 0.013 | 0.0967 |
| 33 | 4.344 | 1748 | 1736 | BB | 0.024 | 0.3256 |
| 34 | 4.467 | 80166 | 164123 | BB | 0.015 | 14.9312 |
| 35 | 4.523 | 399 | 711 | BB | 0.009 | 0.0744 |
| 36 | 4.559 | 533 | 882 | BB | 0.010 | 0.0992 |
| 37 | 4.596 | 367 | 711 | BB | 0.009 | 0.0684 |
| 38 | 4.703 | 378 | 781 | BB | 0.008 | 0.0705 |
| 39 | 4.881 | 680 | 880 | BB | 0.013 | 0.1267 |
| 40 | 4.923 | 184 | 344 | BB | 0.009 | 0.0343 |
| 41 | 5.059 | 402 | 580 | BB | 0.016 | 0.0749 |
| 42 | 5.247 | 231 | 334 | BB | 0.012 | 0.0431 |

Total area = 536905

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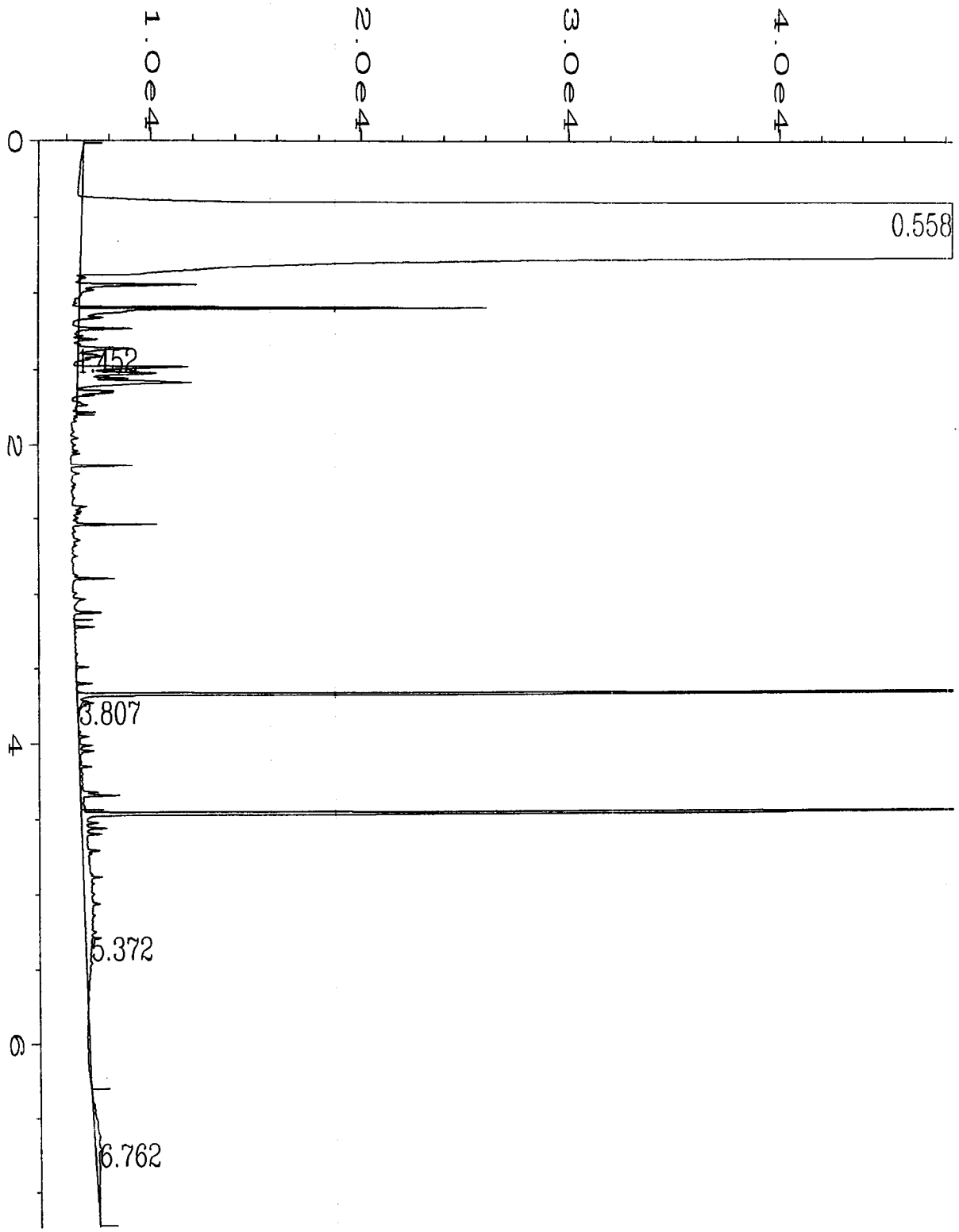
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\06-03-15\044F1001.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 44 | |
| Sample Name : 506058-01 | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 10 | |
| Acquired on | 6/3/15 | 17:53 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 06:03 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | | Calibrated |
| 0 | >5.22 | <5.26 | 231 | 8.24E+04 | | 9/25/13 |
| Pentacosane | | | | | | |
| 88 | >4.44 | <4.53 | 80166 | 9.11E+04 | | 1/14/15 |
| o-Terphenyl | | | | | | |
| 87 | >3.63 | <3.72 | 87402 | 1.00E+05 | | 1/14/15 |
| **Results** | | | Area | Resp. factor | | Calibrated |
| Diesel, start C10 - start C25 | | | | | | |
| 239 | >1.8 | <4.44 | 1.83E+06 | 7.66E+03 | | 1/14/15 |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 238 | >1.8 | <6.3 | 1843348 | 7.75E+03 | | 1/14/15 |
| Motor Oil, start C25 - end C36 | | | | | | |
| 3 | >4.44 | <6.3 | 14179 | 5.16E+03 | | 1/14/15 |
| Heavy Oil, start C17- end C36 | | | | | | |
| 71 | >3.17 | <6.3 | 481638 | 6.80E+03 | | 1/14/15 |
| C12-C24 | | | | | | |
| 287 | >1.8 | <4.44 | 1829169 | 6.37E+03 | | 6/22/11 |
| Stoddard, start C8 - end C11 | | | | | | |
| 380 | >1.1 | <3.17 | 3199653 | 8.41E+03 | | 1/16/15 |
| Kerosene C8-C20 | | | | | | |
| 584 | >1.1 | <4.44 | 3667112 | 6.28E+03 | | 7/5/12 |
| Bunker C | | | | | | |
| 432 | >1.8 | <6.3 | 1843579 | 4.27E+03 | | 9/19/11 |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 380 | | | | | |
| TPHD (8-36) | 63 | | | | | |
| TPHDX (8-36) | 62 | | | | | |
| Motor Oil (8-36 | 93 | | | | | |




| | | | |
|---|---|---|---|
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\045F1001.D | | |
| Operator | : mwdl | Page Number | : 1 |
| Instrument | : GC1 | Vial Number | : 45 |
| Sample Name | : 506058-02 | Injection Number | : 1 |
| Run Time Bar Code: | | Sequence Line | : 10 |
| Acquired on | : 03 Jun 15 06:04 PM | Instrument Method | : DX.MTH |
| Report Created on: | 03 Jun 15 06:15 PM | Analysis Method | : DX.MTH |

# Area Percent Report

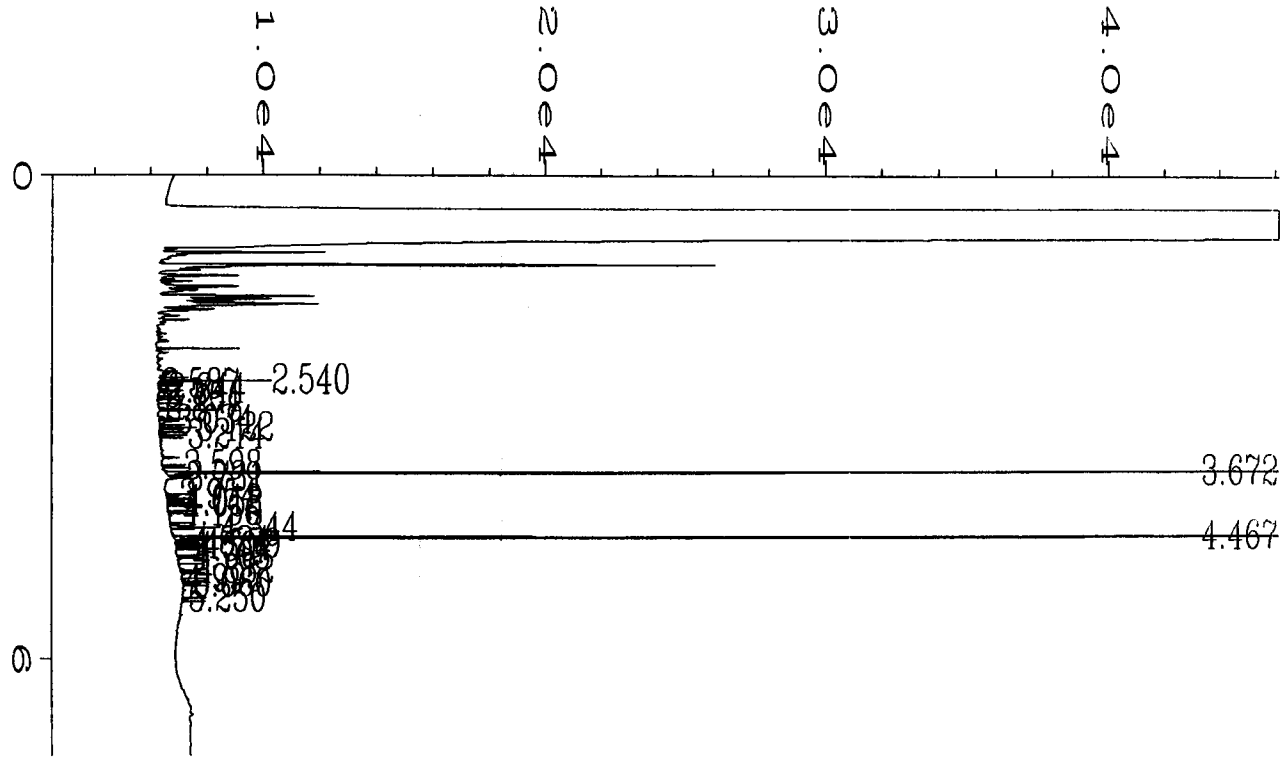
Data File Name : C:\HPCHEM\1\DATA\06-03-15\045F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-02
Run Time Bar Code:
Acquired on : 03 Jun 15 06:04 PM
Report Created on: 03 Jun 15 06:15 PM

Page Number : 1
Vial Number : 45
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\045F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.00175E+009 | 7.92145E+007 | BV + | 0.000 | 99.9751 |
| 2 | 1.452 | 36512 | 17074 | VV + | 0.000 | 0.0036 |
| 3 | 3.807 | 100732 | 165541 | PV + | 0.000 | 0.0101 |
| 4 | 5.372 | 105821 | 161949 | VV + | 0.000 | 0.0106 |
| 5 | 6.762 | 6440 | 275 | PB + | 0.000 | 0.0006 |

Total area = 1.002E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\045R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-02
Run Time Bar Code:
Acquired on : 03 Jun 15 06:04 PM
Report Created on: 03 Jun 15 06:15 PM

Page Number : 1
Vial Number : 45
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\045R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.540 | 1976 | 4082 | BBAS | 0.014 | 1.0569 |
| 2 | 2.587 | 110 | 151 | BB | 0.012 | 0.0591 |
| 3 | 2.644 | 317 | 339 | BB | 0.016 | 0.1698 |
| 4 | 2.751 | 198 | 304 | BB | 0.011 | 0.1061 |
| 5 | 2.878 | 138 | 222 | BB | 0.010 | 0.0737 |
| 6 | 3.034 | 687 | 595 | BB | 0.021 | 0.3676 |
| 7 | 3.122 | 862 | 1396 | BB | 0.010 | 0.4611 |
| 8 | 3.214 | 572 | 1043 | BB | 0.015 | 0.3058 |
| 9 | 3.598 | 367 | 792 | BB | 0.008 | 0.1964 |
| 10 | 3.672 | 91151 | 177699 | BB | 0.018 | 48.7602 |
| 11 | 3.731 | 502 | 619 | BB | 0.014 | 0.2683 |
| 12 | 3.954 | 295 | 502 | BB | 0.016 | 0.1576 |
| 13 | 4.013 | 376 | 628 | BB | 0.010 | 0.2009 |
| 14 | 4.052 | 409 | 714 | BB | 0.010 | 0.2187 |
| 15 | 4.156 | 282 | 563 | BB | 0.008 | 0.1506 |
| 16 | 4.344 | 1570 | 1829 | BB | 0.014 | 0.8399 |
| 17 | 4.467 | 84350 | 168465 | BB | 0.008 | 45.1223 |
| 18 | 4.524 | 335 | 607 | BB | 0.009 | 0.1791 |
| 19 | 4.559 | 582 | 1005 | BB | 0.010 | 0.3115 |
| 20 | 4.597 | 398 | 737 | BB | 0.009 | 0.2130 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.705 | 318 | 605 | BB | 0.009 | 0.1703 |
| 22 | 4.882 | 559 | 587 | BB | 0.018 | 0.2988 |
| 23 | 4.995 | 146 | 152 | BB | 0.019 | 0.0782 |
| 24 | 5.060 | 248 | 362 | BB | 0.011 | 0.1326 |
| 25 | 5.250 | 190 | 228 | BB | 0.014 | 0.1016 |

Total area = 186937

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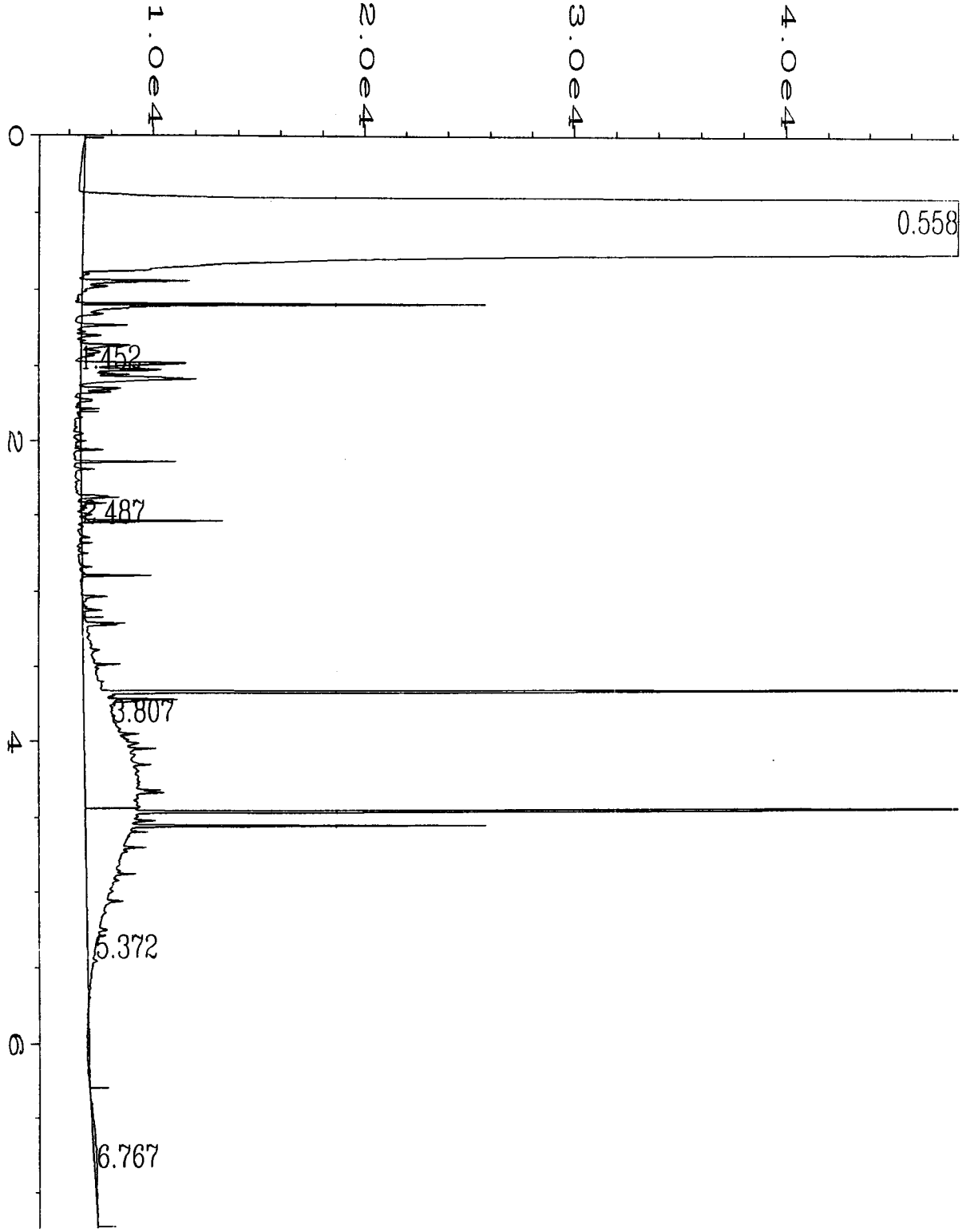
| | | | | | | |
|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | |
| Data File Name : C:\HPCHEM\1\DATA\06-03-15\045F1001.D | | | | | | |
| Operator : mwdl | | | | Page Number | : 1 | |
| Instrument : GC1 | | | | Vial Number | : 45 | |
| Sample Name : 506058-02 | | | | Injection Number | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | : 10 | |
| Acquired on | 6/3/15 | 18:04 | | Instrume | DX.MTH | |
| Report Created on: 03 Jun 15 06:15 PM | | | | Analysis Method | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | |
| Triacontane | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 190 | 8.24E+04 | 9/25/13 | |
| Pentacosane | | | | | | |
| 93 | >4.44 | <4.53 | 84350 | 9.11E+04 | 1/14/15 | |
| o-Terphenyl | | | | | | |
| 91 | >3.63 | <3.72 | 91151 | 1.00E+05 | 1/14/15 | |
| **Results** | | | Area | Resp. factor | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | |
| 1 | >1.8 | <4.44 | 9.58E+03 | 7.66E+03 | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | |
| 4 | >1.8 | <6.3 | 30862 | 7.75E+03 | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | |
| 4 | >4.44 | <6.3 | 21281 | 5.16E+03 | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | |
| 5 | >3.17 | <6.3 | 30862 | 6.80E+03 | 1/14/15 | |
| C12-C24 | | | | | | |
| 2 | >1.8 | <4.44 | 9581 | 6.37E+03 | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | |
| 4 | >1.1 | <3.17 | 36512 | 8.41E+03 | 1/16/15 | |
| Kerosene C8-C20 | | | | | | |
| 7 | >1.1 | <4.44 | 46093 | 6.28E+03 | 7/5/12 | |
| Bunker C | | | | | | |
| 7 | >1.8 | <6.3 | 31052 | 4.27E+03 | 9/19/11 | |
| Calibration Info: | | | | | | |
| Stoddard (8-11) | 4 | | | | | |
| TPHD (8-36) | 4 | | | | | |
| TPHDX (8-36) | 4 | | | | | |
| Motor Oil (8-36 | 6 | | | | | |




Data File Name : C:\HPCHEM\1\DATA\06-03-15\046F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-03
Run Time Bar Code:
Acquired on : 03 Jun 15 06:15 PM
Report Created on: 03 Jun 15 06:26 PM

Page Number : 1
Vial Number : 46
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

# Area Percent Report

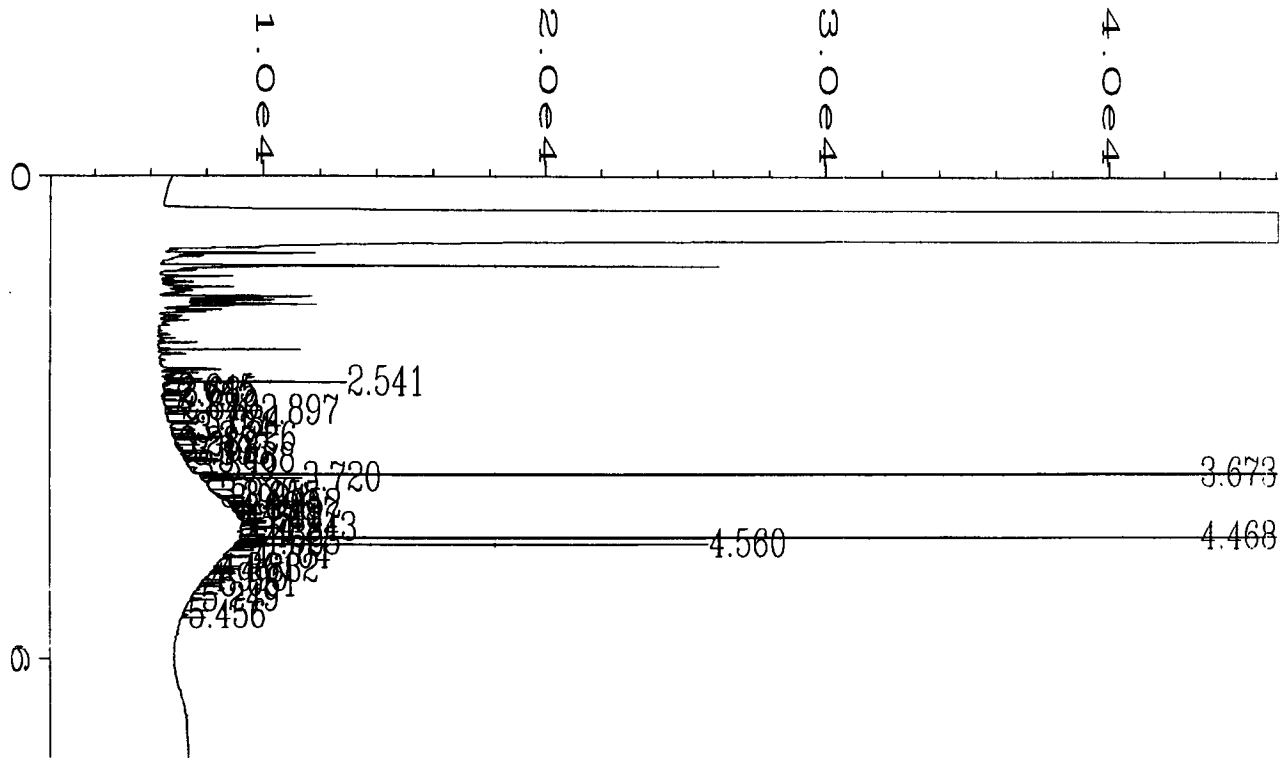
Data File Name : C:\HPCHEM\1\DATA\06-03-15\046F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-03
Run Time Bar Code:
Acquired on : 03 Jun 15 06:15 PM
Report Created on: 03 Jun 15 06:26 PM

Page Number : 1
Vial Number : 46
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\046F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 9.9512E+008 | 7.80386E+007 | BV + | 0.000 | 99.9568 |
| 2 | 1.452 | 35656 | 13355 | VVA | 0.044 | 0.0036 |
| 3 | 2.487 | 4819 | 6664 | PV + | 0.000 | 0.0005 |
| 4 | 3.807 | 207547 | 174690 | VV + | 0.000 | 0.0208 |
| 5 | 5.372 | 177220 | 174950 | VV + | 0.000 | 0.0178 |
| 6 | 6.767 | 4635 | 204 | PB + | 0.000 | 0.0005 |

Total area = 9.9555E+008

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\046R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-03
Run Time Bar Code:
Acquired on : 03 Jun 15 06:15 PM
Report Created on: 03 Jun 15 06:26 PM

Page Number : 1
Vial Number : 46
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\046R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.541 | 2968 | 6670 | BBAS | 0.007 | 1.4105 |
| 2 | 2.645 | 672 | 518 | BB | 0.022 | 0.3193 |
| 3 | 2.685 | 377 | 662 | BB | 0.009 | 0.1790 |
| 4 | 2.752 | 447 | 507 | BB | 0.015 | 0.2123 |
| 5 | 2.840 | 328 | 607 | BB | 0.009 | 0.1559 |
| 6 | 2.897 | 1920 | 3493 | BB | 0.013 | 0.9126 |
| 7 | 3.034 | 700 | 1221 | BB | 0.010 | 0.3325 |
| 8 | 3.124 | 372 | 866 | BB | 0.007 | 0.1766 |
| 9 | 3.226 | 1696 | 1725 | BB | 0.016 | 0.8061 |
| 10 | 3.287 | 183 | 137 | BB | 0.022 | 0.0870 |
| 11 | 3.358 | 360 | 133 | BB | 0.038 | 0.1709 |
| 12 | 3.393 | 296 | 438 | BB | 0.011 | 0.1408 |
| 13 | 3.488 | 700 | 1282 | BB | 0.009 | 0.3325 |
| 14 | 3.599 | 219 | 250 | BB | 0.015 | 0.1039 |
| 15 | 3.673 | 92853 | 202353 | BB | 0.008 | 44.1337 |
| 16 | 3.720 | 2083 | 3387 | BB | 0.012 | 0.9903 |
| 17 | 3.922 | 212 | 165 | BB | 0.021 | 0.1006 |
| 18 | 3.955 | 470 | 912 | BB | 0.009 | 0.2232 |
| 19 | 3.994 | 183 | 169 | BB | 0.018 | 0.0870 |
| 20 | 4.052 | 1195 | 1272 | BB | 0.016 | 0.5681 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.096 | 281 | 215 | BB | 0.021 | 0.1334 |
| 22 | 4.157 | 676 | 956 | BB | 0.012 | 0.3212 |
| 23 | 4.203 | 255 | 251 | BB | 0.017 | 0.1214 |
| 24 | 4.241 | 116 | 106 | BB | 0.018 | 0.0549 |
| 25 | 4.343 | 1781 | 1411 | BB | 0.021 | 0.8466 |
| 26 | 4.436 | 117 | 204 | BB | 0.010 | 0.0556 |
| 27 | 4.468 | 86502 | 171193 | BB | 0.008 | 41.1149 |
| 28 | 4.525 | 730 | 1073 | BB | 0.011 | 0.3468 |
| 29 | 4.560 | 8997 | 17404 | BB | 0.014 | 4.2765 |
| 30 | 4.704 | 573 | 1071 | BB | 0.009 | 0.2724 |
| 31 | 4.861 | 111 | 191 | BB | 0.010 | 0.0526 |
| 32 | 4.882 | 680 | 1039 | BB | 0.011 | 0.3234 |
| 33 | 4.995 | 213 | 187 | BB | 0.018 | 0.1013 |
| 34 | 5.061 | 642 | 797 | BB | 0.015 | 0.3052 |
| 35 | 5.249 | 304 | 395 | BB | 0.013 | 0.1446 |
| 36 | 5.456 | 182 | 199 | BB | 0.019 | 0.0864 |

Total area = 210391

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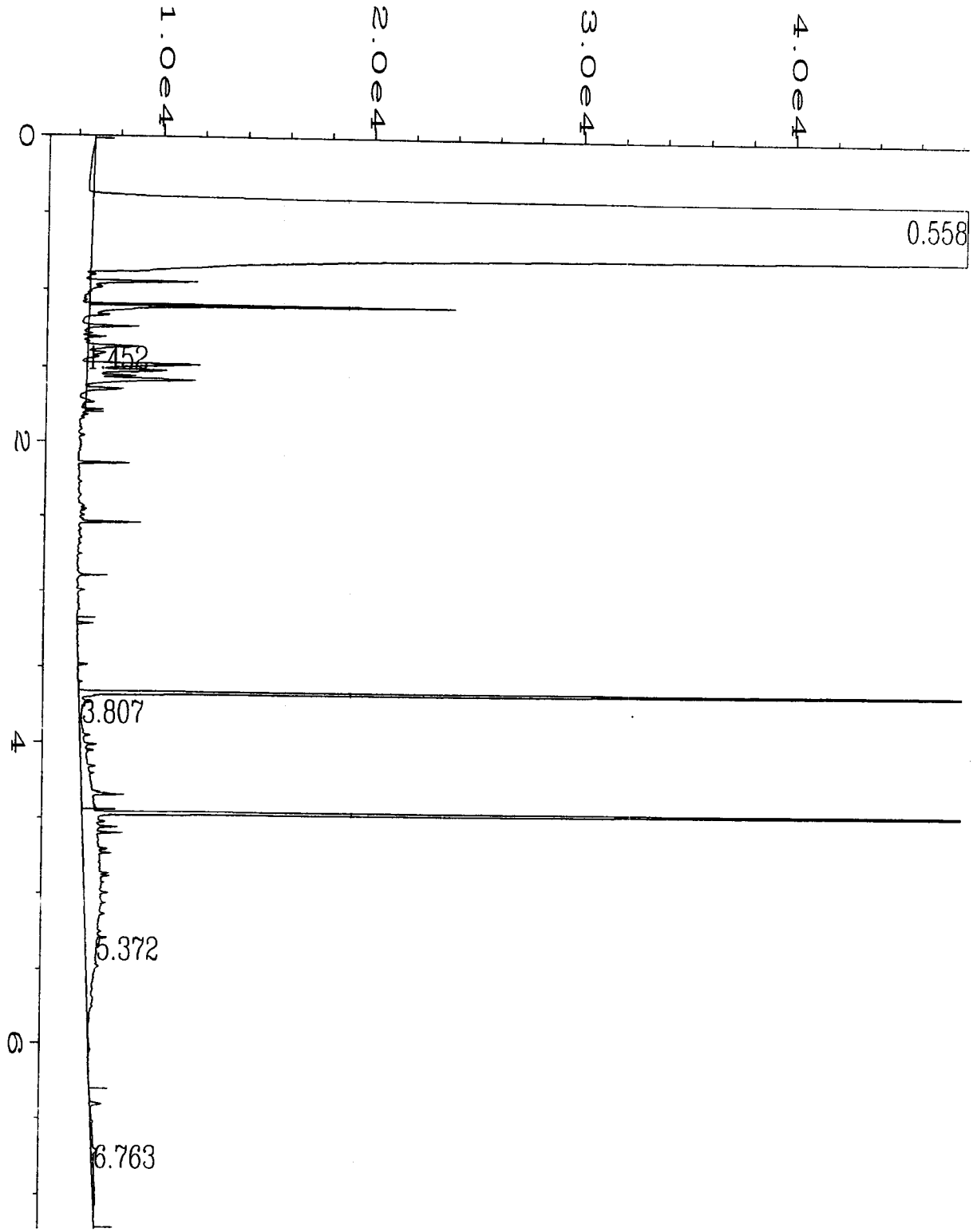
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\046F1001.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 46 | |
| Sample Name | : 506058-03 | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 10 | |
| Acquired on | 6/3/15 | 18:15 | | Instrume | DX.MTH | | |
| Report Created on: 03 Jun 15 06:26 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 304 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 95 | >4.44 | <4.53 | 86502 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 93 | >3.63 | <3.72 | 92853 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 16 | >1.8 | <4.44 | 1.20E+05 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 27 | >1.8 | <6.3 | 209927 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 18 | >4.44 | <6.3 | 90414 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 30 | >3.17 | <6.3 | 205108 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 19 | >1.8 | <4.44 | 119513 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 5 | >1.1 | <3.17 | 40475 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 25 | >1.1 | <4.44 | 155169 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 49 | >1.8 | <6.3 | 210231 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 5 | | | | | | |
| TPHD (8-36) | 27 | | | | | | |
| TPHDX (8-36) | 26 | | | | | | |
| Motor Oil (8-36 | 40 | | | | | | |




Data File Name : C:\HPCHEM\1\DATA\06-03-15\047F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-04
Run Time Bar Code:
Acquired on : 03 Jun 15 06:26 PM
Report Created on: 03 Jun 15 06:37 PM

Page Number : 1
Vial Number : 47
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

# Area Percent Report

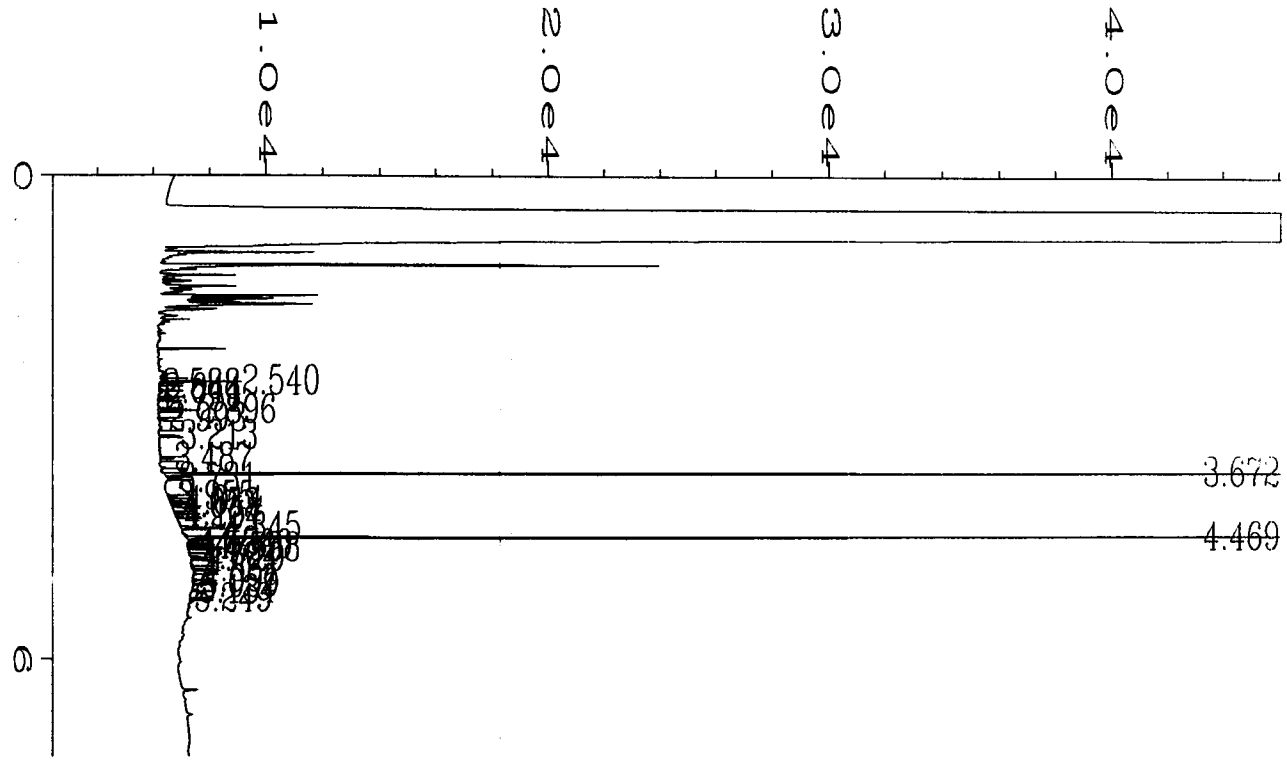
Data File Name : C:\HPCHEM\1\DATA\06-03-15\047F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-04
Run Time Bar Code:
Acquired on : 03 Jun 15 06:26 PM
Report Created on: 03 Jun 15 06:37 PM

Page Number : 1
Vial Number : 47
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-03-15\047F1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 0.558 | 1.01049E+009 | 7.90525E+007 | BV + | 0.000 | 99.9710 |
| 2 | 1.452 | 34238 | 18073 | VB + | 0.000 | 0.0034 |
| 3 | 3.807 | 113711 | 184279 | BV + | 0.000 | 0.0112 |
| 4 | 5.372 | 141334 | 164266 | VV + | 0.000 | 0.0140 |
| 5 | 6.763 | 4149 | 455 | PB + | 0.000 | 0.0004 |

Total area = 1.01079E+009

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-03-15\047R1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 506058-04
Run Time Bar Code:
Acquired on : 03 Jun 15 06:26 PM
Report Created on: 03 Jun 15 06:37 PM

Page Number : 1
Vial Number : 47
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : istnddx.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-03-15\047R1001.D

| Pk# | Ret Time | Area | Height | Type | Width | Area % |
|---|---|---|---|---|---|---|
| 1 | 2.540 | 1479 | 2972 | BBAS | 0.014 | 0.7522 |
| 2 | 2.588 | 103 | 136 | BB | 0.013 | 0.0526 |
| 3 | 2.644 | 220 | 185 | BB | 0.020 | 0.1119 |
| 4 | 2.751 | 167 | 259 | BB | 0.011 | 0.0847 |
| 5 | 2.896 | 887 | 1502 | BB | 0.014 | 0.4512 |
| 6 | 2.993 | 320 | 376 | BB | 0.014 | 0.1628 |
| 7 | 3.213 | 318 | 769 | BB | 0.007 | 0.1617 |
| 8 | 3.487 | 268 | 514 | BB | 0.009 | 0.1363 |
| 9 | 3.672 | 96828 | 202363 | BB | 0.013 | 49.2278 |
| 10 | 3.731 | 280 | 424 | BB | 0.011 | 0.1425 |
| 11 | 3.955 | 213 | 373 | BB | 0.009 | 0.1081 |
| 12 | 4.014 | 370 | 574 | BB | 0.011 | 0.1883 |
| 13 | 4.052 | 273 | 413 | BB | 0.011 | 0.1387 |
| 14 | 4.157 | 203 | 391 | BB | 0.009 | 0.1033 |
| 15 | 4.204 | 166 | 270 | BB | 0.010 | 0.0844 |
| 16 | 4.345 | 1473 | 1631 | BB | 0.015 | 0.7487 |
| 17 | 4.469 | 90055 | 176960 | BB | 0.008 | 45.7844 |
| 18 | 4.524 | 255 | 419 | BB | 0.010 | 0.1297 |
| 19 | 4.560 | 561 | 991 | BB | 0.009 | 0.2852 |
| 20 | 4.598 | 679 | 1280 | BB | 0.009 | 0.3451 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | 4.704 | 176 | 378 | BB | 0.008 | 0.0894 |
| 22 | 4.729 | 308 | 581 | BB | 0.009 | 0.1567 |
| 23 | 4.861 | 263 | 446 | BB | 0.010 | 0.1339 |
| 24 | 4.995 | 247 | 413 | BB | 0.010 | 0.1253 |
| 25 | 5.059 | 261 | 309 | BB | 0.014 | 0.1327 |
| 26 | 5.134 | 185 | 251 | BB | 0.012 | 0.0939 |
| 27 | 5.249 | 135 | 180 | BB | 0.012 | 0.0685 |

Total area = 196693

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Last modified 4/21/15 mwdl | | | TPHDSL.XLS | | | | |
| Data File Name | : C:\HPCHEM\1\DATA\06-03-15\047F1001.D | | | | | | |
| Operator | : mwdl | | | Page Number | | : 1 | |
| Instrument | : GC1 | | | Vial Number | | : 47 | |
| Sample Name | : 506058-04 | | | Injection Number | | : 1 | |
| Run Time Bar Code: | | | | Sequence Line | | : 10 | |
| Acquired on | 6/3/15 | 18:26 | | Instrume | DX.MTH | | |
| Report Created on: 03 Jun 15 06:37 PM | | | | Analysis Method | | : DX.MTH | |
| **Surr / IS** | **Ret Time window** | | **Area** | **Avg. Area** | | | |
| Triacontane | | | | | | Calibrated | |
| 0 | >5.22 | <5.26 | 135 | 8.24E+04 | | 9/25/13 | |
| Pentacosane | | | | | | | |
| 99 | >4.44 | <4.53 | 90055 | 9.11E+04 | | 1/14/15 | |
| o-Terphenyl | | | | | | | |
| 97 | >3.63 | <3.72 | 96828 | 1.00E+05 | | 1/14/15 | |
| **Results** | | | Area | Resp. factor | | Calibrated | |
| Diesel, start C10 - start C25 | | | | | | | |
| 2 | >1.8 | <4.44 | 1.69E+04 | 7.66E+03 | | 1/14/15 | |
| NWTPH-DX, start C10 - end C36 | | | | | | | |
| 9 | >1.8 | <6.3 | 68027 | 7.75E+03 | | 1/14/15 | |
| Motor Oil, start C25 - end C36 | | | | | | | |
| 10 | >4.44 | <6.3 | 51144 | 5.16E+03 | | 1/14/15 | |
| Heavy Oil, start C17- end C36 | | | | | | | |
| 10 | >3.17 | <6.3 | 68027 | 6.80E+03 | | 1/14/15 | |
| C12-C24 | | | | | | | |
| 3 | >1.8 | <4.44 | 16883 | 6.37E+03 | | 6/22/11 | |
| Stoddard, start C8 - end C11 | | | | | | | |
| 4 | >1.1 | <3.17 | 34238 | 8.41E+03 | | 1/16/15 | |
| Kerosene C8-C20 | | | | | | | |
| 8 | >1.1 | <4.44 | 51121 | 6.28E+03 | | 7/5/12 | |
| Bunker C | | | | | | | |
| 16 | >1.8 | <6.3 | 68162 | 4.27E+03 | | 9/19/11 | |
| Calibration Info: | | | | | | | |
| Stoddard (8-11) | 4 | | | | | | |
| TPHD (8-36) | 9 | | | | | | |
| TPHDX (8-36) | 9 | | | | | | |
| Motor Oil (8-36 | 13 | | | | | | |