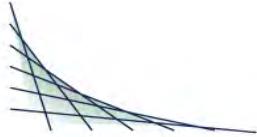


CT LABORATORIES

delivering more than data from your environmental analyses



ANALYTICAL RESULTS FOR:

AL EASTERDAY
ECC
33 POST ROAD WEST
MARLBOROUGH, MA 01752

PROJECT SITE: RVAAP Barn #5 CC-71
Ravenna, OH

DOD CONTRACT #:

PROJECT #:

SDG: 100701

PREPARED: November 1, 2013

DOCUMENT PAGES: 180

The data contained in the following report have been reviewed by the appropriate CT Laboratories LLC's staff members. In addition, CT Laboratories LLC certifies that to the best of our knowledge that the analyses reported herein are true, complete and correct within the limits of the methods employed and that they follow the applicable requirements as specified by the project plan, state-specific, NELAC or DOD QSM requirements. The estimated uncertainty of measurement is only available upon request. The reported results relate only to the tested samples. This report shall not be reproduced, except in full, without written approval of CT Laboratories LLC.

APPROVED BY: 
LABORATORY DIRECTOR

APPROVED BY: 
QA OFFICER

APPROVED BY: 
PROJECT MANAGER

Certifications: IL (NELAP 002413), KS (NELAP E-10368), KY (0023), PA (NELAP 68-04201), NJ (NELAP WI001), NC (674), WI (157066030),
GA EDP Stipulation (Accreditor: LA NELAP, ACC#: 115843, Scope: Haz/solid water/Non-potable water, Effective: 07/01/2012, Expires: annually),
DOD ELAP (A2LA 3317.013), AK (UST-099), LA (NELAP 115843), VA (460203)

CT Laboratories LLC • 1230 Lange Court • Baraboo, WI 53913 • 608-356-2760
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Case Narrative

Client: ECC

Project: Ravenna AAP, Barn #5 CC-71, Ravenna, OH

Sample Receipt Date(s): 8/14/2013

SDG #: 100701

Nineteen multi-incremental soil samples were analyzed for DRO (C10-C20) and ERO (C20-C34). These analyses were requested after the hold time had already been exceeded. In addition the previous GRO data was re-quantitated from C6 to C12 versus the original C6 to C10. The assigned sample ID number, date sampled, and date received are indicated in the attached Project Summary. The original samples were received intact and at a temperature within method specified acceptance limits. A breakdown of sample receipt information can be found on the Sample Condition Report located in the last section of the data package and any exceptions are noted below. The analyses were performed following DOD QSM 4.2

All of the multi-incremental soil samples were first air-dried. Samples were sieved and an aliquot of each sample removed for the metals analyses. The remaining amount, after removal of aliquot for metals testing, was then ground via puck mill and homogenized prior to analysis.

Sample Analysis and Quality Control

Volatile Organic Analysis:

The samples were analyzed using US EPA Method 8015C (GRO C6-C12). All samples were analyzed within the holding time. The following summaries of quality control procedures are included (where applicable):

Surrogate Recovery Data

Matrix Spike/Matrix Spike Duplicate Recovery Data

Laboratory Control Spike Data

Method Blank Data

Initial Calibration Summary

Calibration Check Summary

Analysis Run Log

Prep Log

All analysis results met the method specified quality control criteria with the following exceptions:

GRO (8015C) Soil Analyses

Analytical Run # 96860

All analytical results for this run met the method/project specified quality control criteria. Only one sample, 338368, needed to be re-quantitated because the remaining samples did not have anything

detectable from C10 to C12. Only information for re-quantitated sample, 338368, is provided with this package. All other information is as presented in the original data package (SDG 99236).

Semi-volatiles Analysis:

The samples were analyzed using US EPA Method 8015C (DRO C10 – C20 and ERO C20 – C34). All samples were analyzed beyond the holding time. The following summaries of quality control procedures are included:

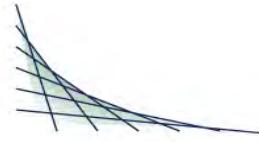
Surrogate Recovery Data
Matrix Spike/Matrix Spike Duplicate Recovery Data
Laboratory Control Spike Data
Method Blank Data
Initial Calibration Summary
Calibration Check Summary
Analysis Run Log
Prep Log
Chromatograms

All analysis results met the method specified quality control criteria with the following exceptions:

DRO C10-C20 and ERO C20-C34 (8015C) Soil Analyses

Analytical Run # 99459

All analytical results for this run met the method/project specified quality control criteria.



Data Qualifiers

Code	Description
A	Analyte averaged calibration criteria within acceptable limits.
B	Analyte detected in associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was not above the detection level.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Calibration criteria exceeded.



MANUAL INTEGRATION REASON CODES

CTLaboratories has identified four general cases with valid reasons supporting the use of manual integration techniques. These codes are used on chromatograms in this data package to document the reasons for manual integrations per CTLaboratories' SOP SS-10 current revision.

#1: Data system failed to select the correct peak or missed the peak entirely.

In some cases the chromatography system selects and integrates the "wrong peak". In this case the analyst must correct the selection and force the system to integrate the proper peak. In other instances the system may miss the peak completely. In this case the analyst manually integrated the peak

#2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak.

This phenomenon is common at low concentrations where the signal to noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low or high area counts for the target compound.

#3: Improperly Integrated Isomers and/or coeluting compounds.

For when the system fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations may be inaccurate, and they must be corrected by manual integration. Prime examples are compounds that are unresolved and integrated improperly when present at low concentrations in standards or samples.

#4: System Established Incorrect Baseline.

There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and may be corrected via manual procedures.

#5: Miscellaneous.

Some situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the group supervisor. If the form of manual integration is not clearly covered by these four cases, then review and approval by the group supervisor or the QA/QC Supervisor will be required.

Sample Delivery Group

100701

ECC
AL EASTERDAY
33 BOSTON POST RD
MARLBOROUGH, MA 01752

Project Name: RVAAP
Project #:

CT Sample #	Folder #	Client Sample #	Sample Description	Matrix	Date Sampled	Date Received
381305	100701		071SB-0001M-0001-SO	SOIL	08/13/2013	10/15/2013
381307	100701		071SB-0002M-0001-SO	SOIL	08/13/2013	10/15/2013
381309	100701		071SB-0003M-0001-SO	SOIL	08/13/2013	10/15/2013
381311	100701		071SB-0004M-0001-SO	SOIL	08/13/2013	10/15/2013
381313	100701		071SB-0005M-0001-SO	SOIL	08/13/2013	10/15/2013
381315	100701		071SB-0006M-0001-SO	SOIL	08/13/2013	10/15/2013
381317	100701		071SB-0016M-0001-SO	SOIL	08/13/2013	10/15/2013
381319	100701		071SB-0007M-0001-SO	SOIL	08/13/2013	10/15/2013
381321	100701		071SB-0009M-0001-SO	SOIL	08/13/2013	10/15/2013
381323	100701		071SB-0010M-0001-SO	SOIL	08/13/2013	10/15/2013
381325	100701		071SB-0011M-0001-SO	SOIL	08/13/2013	10/15/2013
381327	100701		071SB-0021M-0001-SO	SOIL	08/13/2013	10/15/2013
381329	100701		071SB-0017M-0001-SO	SOIL	08/13/2013	10/15/2013
381331	100701		071SB-0013M-0001-SO	SOIL	08/13/2013	10/15/2013
381333	100701		071SB-0018M-0001-SO	SOIL	08/13/2013	10/15/2013
381335	100701		071SB-0014M-0001-SO	SOIL	08/13/2013	10/15/2013
381337	100701		071SB-0019M-0001-SO	SOIL	08/13/2013	10/15/2013
381339	100701		071SB-0022M-0001-SO	SOIL	08/13/2013	10/15/2013
381341	100701		071SB-0023M-0001-SO	SOIL	08/13/2013	10/15/2013



QC Batch Cross Reference Summary

Page 1 of 2

ECC
 AL EASTERDAY
 33 BOSTON POST RD
 MARLBOROUGH, MA 01752

Project Name: RVAAP
 Project #:
 Report Date: 11/04/2013
 Date Received: 10/15/2013
 SDG #: 100701

Inorganic Parameters

CTI LAB#:	Parameter	Matrix	Prep Batch #	Analytical Run #
381305	Solids, Percent	SOIL		99382
381307	Solids, Percent	SOIL		99382
381309	Solids, Percent	SOIL		99382
381311	Solids, Percent	SOIL		99382
381313	Solids, Percent	SOIL		99382
381315	Solids, Percent	SOIL		99382
381317	Solids, Percent	SOIL		99382
381319	Solids, Percent	SOIL		99382
381321	Solids, Percent	SOIL		99382
381323	Solids, Percent	SOIL		99382
381325	Solids, Percent	SOIL		99382
381327	Solids, Percent	SOIL		99382
381329	Solids, Percent	SOIL		99382
381331	Solids, Percent	SOIL		99382
381333	Solids, Percent	SOIL		99382
381335	Solids, Percent	SOIL		99382
381337	Solids, Percent	SOIL		99382
381339	Solids, Percent	SOIL		99382
381341	Solids, Percent	SOIL		99382

Organic Parameters

CTI LAB#:	Parameter	Matrix	Prep Batch #	Analytical Run #
381305	DRO/ERO	SOIL	46448	99459
381307	DRO/ERO	SOIL	46448	99459
381309	DRO/ERO	SOIL	46448	99459
381311	DRO/ERO	SOIL	46448	99459
381313	DRO/ERO	SOIL	46448	99459



Project Name: RVAAP
 Project #:
 SDG #: 100701

CTI LAB#:	Parameter	Matrix	Prep Batch #	Analytical Run #
381315	DRO/ERO	SOIL	46448	99459
381317	DRO/ERO	SOIL	46448	99459
381319	DRO/ERO	SOIL	46448	99459
381321	DRO/ERO	SOIL	46448	99459
381323	DRO/ERO	SOIL	46448	99459
381325	DRO/ERO	SOIL	46448	99459
381327	DRO/ERO	SOIL	46448	99459
381329	DRO/ERO	SOIL	46448	99459
381331	DRO/ERO	SOIL	46448	99459
381333	DRO/ERO	SOIL	46448	99459
381335	DRO/ERO	SOIL	46448	99459
381337	DRO/ERO	SOIL	46448	99459
381339	DRO/ERO	SOIL	46448	99459
381341	DRO/ERO	SOIL	46448	99459

**VOLATILE ORGANIC ANALYSIS
QUALITY CONTROL SUMMARY
DOCUMENTS**



Sample Description

**1A
VOLATILE ORGANICS ANALYSIS**

071SB-0009M-0001-SO

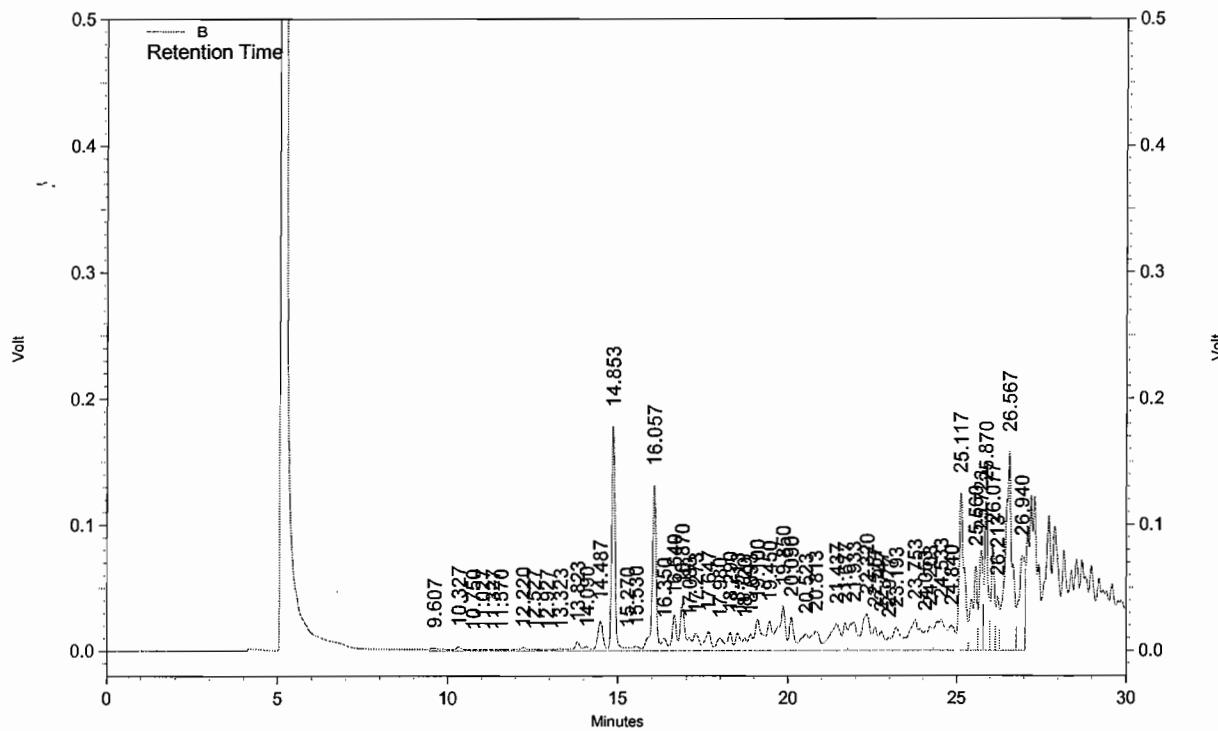
Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	99236 / 100701
Sample wt/vol:	5.76 (g/mL)	CTL Sample ID:	338368
% Solids:	84.6	Date Received:	08/14/2013
Soil Extract Vol:	5.0 (mL)	Date/Time Prepared:	08/19/2013 / 08:00
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	45509
Analytical Run #:	96860	Dilution Factor:	1.00
Date & Time Analyzed:	08/20/2013 / 01:18	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	8015p2s011513	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration Qualifiers	DL	LOD	LOQ	RL
GASCOMP	Gasoline Range Organics **	19	1.3	3.1	6.2	6.2

**Re-quanti ti ated from C6-C12

**VOLATILE ORGANIC ANALYSIS
SAMPLE DATA
DOCUMENTS**

Inst : PVOC2
File : C:\Instarch\PVOC2\Data\081913-8015S\015.dat
Method : C:\Instarch\PVOC2\Methods\8015p2s011513.met
Acquired : Aug 20, 2013 01:18:56
Sample ID : 96860,338368,
File Desc. : 08/19/13 8015 SOIL
5.0 mL PURGED + ISTD



B Results

<i>Compound Name</i>	<i>Area</i>	<i>Conc. (ug/L)</i>	<i>Retention Time</i>
S:aaaTFT	1051771	124.041	16.057
GRO	16802868	360.998	

C6-C12 = 19 mg/kg

**SEMI-VOLATILE ORGANIC ANALYSIS
QUALITY CONTROL SUMMARY
DOCUMENTS**



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0001M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 9.97 (g/L) CTL Sample ID: 381305
% Solids: 97.1 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/18/2013 / 18:32 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 101713deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	5.2	J H	5.2	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.2	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0002M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.01 (g/L)	CTL Sample ID:	381307
% Solids:	96.7	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/18/2013 / 19:04	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	101713deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	15	U H	5.2	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.2	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0003M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	9.96 (g/L)	CTL Sample ID:	381309
% Solids:	95.9	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/18/2013 / 19:37	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	101713deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	16	U H	5.2	16	42	42
PHCC20C34	Extractable Range Organics	16	U H	5.2	16	42	42



Sample Description

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

071SB-0004M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.00 (g/L)	CTL Sample ID:	381311
% Solids:	95.6	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/18/2013 / 21:15	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	101713deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	16	U H	5.2	16	42	42
PHCC20C34	Extractable Range Organics	16	U H	5.2	16	42	42



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0005M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 10.02 (g/L) CTL Sample ID: 381313
% Solids: 97.2 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/18/2013 / 21:48 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 101713deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	15	U H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0006M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.06 (g/L)	CTL Sample ID:	381315
% Solids:	97.7	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/18/2013 / 22:21	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	101713deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	15	U H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41



**1B
SEMIVOLATILE ORGANICS ANALYSIS**

071SB-0007M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.04 (g/L)	CTL Sample ID:	381319
% Solids:	97.7	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 11:17	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable): /			
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	16	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

071SB-0009M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.05 (g/L)	CTL Sample ID:	381321
% Solids:	97.7	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 11:49	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	32	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0010M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 10.04 (g/L) CTL Sample ID: 381323
% Solids: 97.8 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/22/2013 / 12:22 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 102113deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	9.2	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0011M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 10.02 (g/L) CTL Sample ID: 381325
% Solids: 97.4 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/22/2013 / 12:56 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 102113deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	10	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0013M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.03 (g/L)	CTL Sample ID:	381331
% Solids:	97.2	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 14:34	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	10	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	8.2	J H	5.1	15	41	41



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0014M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 10.02 (g/L) CTL Sample ID: 381335
% Solids: 97.5 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/22/2013 / 15:41 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 102113deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	24	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	7.1	J H	5.1	15	41	41



**1B
SEMIVOLATILE ORGANICS ANALYSIS**

071SB-0016M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.01 (g/L)	CTL Sample ID:	381317
% Solids:	96.7	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 10:44	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	15	U H	5.2	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.2	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0017M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.01 (g/L)	CTL Sample ID:	381329
% Solids:	97.2	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 14:02	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	13	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41



Sample Description

1B
SEMIVOLATILE ORGANICS ANALYSIS

071SB-0018M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix: SOIL SDG No.: 100701
Sample wt/vol: 10.00 (g/L) CTL Sample ID: 381333
% Solids: 97.5 Date Received: 10/15/2013
Conc. Extract Vol: 1.0 (mL) Date/Time Prepared: 10/16/2013 / 09:30
Analytical Method: EPA 8015C Analytical Prep Batch #: 46448
Analytical Run #: 99459 Dilution Factor: 1.00
Date & Time Analyzed: 10/22/2013 / 15:08 GPC Cleanup Date/Time: /
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (*if applicable*): /
ICAL Calibration #: 102113deroic Concentration Units: mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	15	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0019M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	9.99 (g/L)	CTL Sample ID:	381337
% Solids:	97.0	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 17:20	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	9.4	J H	5.2	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.2	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0021M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.04 (g/L)	CTL Sample ID:	381327
% Solids:	96.8	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 13:29	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (if applicable):	/		
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	9.5	J H	5.1	15	41	41
PHCC20C34	Extractable Range Organics	15	U H	5.1	15	41	41



**1B
SEMIVOLATILE ORGANICS ANALYSIS**

071SB-0022M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	10.02 (g/L)	CTL Sample ID:	381339
% Solids:	96.8	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 17:53	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	17	J H	5.2	15	41	41
PHCC20C34	Extractable Range Organics	12	J H	5.2	15	41	41

**1B
SEMIVOLATILE ORGANICS ANALYSIS**

Sample Description

071SB-0023M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:	SOIL	SDG No.:	100701
Sample wt/vol:	9.99 (g/L)	CTL Sample ID:	381341
% Solids:	96.4	Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Date & Time Analyzed:	10/22/2013 / 18:25	GPC Cleanup Date/Time:	/
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	102113deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
PHCC10C20	Diesel Range Organics	28	J H	5.2	16	42	42
PHCC20C34	Extractable Range Organics	14	J H	5.2	16	42	42



Sample Description

**1B-2
SEMIVOLATILE ORGANICS ANALYSIS (MB)**

METHOD BLANK

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix:		SDG No.:	100701
Sample wt/vol:	10.00 (g/L)	CTL Sample ID:	381873
% Solids:		Date Received:	10/15/2013
Conc. Extract Vol:	1.0 (mL)	Date/Time Prepared:	10/16/2013 / 09:30
Analytical Method:	EPA 8015C	Analytical Prep Batch #:	46448
Analytical Run #:	99459	Dilution Factor:	1.00
Cleanup Date/Time/Type:	.	.	,
TCLP / SPLP / MLP or ASTM Procedure Extraction Date (<i>if applicable</i>): /			
ICAL Calibration #:	101713deroic	Concentration Units:	mg/kg

CAS NO.	Analyte	Analysis Date/Time	Concentration	Qualifiers	DL/LOD	RL	Control Limit
PHCC10C20	Diesel Range Organics	10/18/2013 17:26	5	U	5	40	20
PHCC20C34	Extractable Range Organics	10/18/2013 17:26	5	U	5	40	20



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Analytical Method:	EPA 8015C	SDG:	100701
Analytical Run #:	99459	ICAL Calibration #:	101713deroic

CTLab # 381305					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381307					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79	44	125	
Surr: Triacontane	100	79	35	136	
CTLab # 381309					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	53	44	125	
Surr: Triacontane	100	46	35	136	
CTLab # 381311					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79	44	125	
Surr: Triacontane	100	76	35	136	
CTLab # 381313					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	57	44	125	
Surr: Triacontane	100	53	35	136	
CTLab # 381315					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	53	44	125	
Surr: Triacontane	100	49	35	136	
CTLab # 381317					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381319					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	85	44	125	
Surr: Triacontane	100	88	35	136	
CTLab # 381321					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	83	44	125	
Surr: Triacontane	100	87	35	136	
CTLab # 381323					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	77	44	125	
Surr: Triacontane	100	79	35	136	



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Analytical Method:	EPA 8015C	SDG:	100701
Analytical Run #:	99459	ICAL Calibration #:	101713deroic

CTLab # 381325					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	82	44	125	
Surr: Triacontane	100	85	35	136	
CTLab # 381327					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	83	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381329					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	90	44	125	
Surr: Triacontane	100	91	35	136	
CTLab # 381331					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	85	35	136	
CTLab # 381333					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	78	44	125	
Surr: Triacontane	100	79	35	136	
CTLab # 381335					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	88	44	125	
Surr: Triacontane	100	89	35	136	
CTLab # 381337					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	85	44	125	
Surr: Triacontane	100	89	35	136	
CTLab # 381339					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	88	44	125	
Surr: Triacontane	100	96	35	136	
CTLab # 381341					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	108	44	125	
Surr: Triacontane	100	115	35	136	
CTLab # 381873					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79.2	25	162	
Surr: Triacontane	100	81.9	50	113	



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CT Laboratories Contract: ECC-RVAAP

Analytical Method: EPA 8015C SDG: 100701

Analytical Run #: 99459 ICAL Calibration #: 101713deroic

Surrogate	CTLab #	381874	Sample Type:	Lab Control Spike	Qualifier
SURR: Octacosane		100	93.3	25	162
Surr: Triacontane		100	96.0	30	150
Surrogate	CTLab #	381876	Sample Type:	Matrix Spike	Qualifier
SURR: Octacosane		100	66.1	25	162
Surr: Triacontane		100	67.0	30	150
Surrogate	CTLab #	381877	Sample Type:	Matrix Spike Duplicate	Qualifier
SURR: Octacosane		100	67.6	25	162
Surr: Triacontane		100	67.6	30	150



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Analytical Method:	EPA 8015C	SDG:	100701
Analytical Run #:	99459	ICAL Calibration #:	102113deroic

CTLab # 381305					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381307					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79	44	125	
Surr: Triacontane	100	79	35	136	
CTLab # 381309					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	53	44	125	
Surr: Triacontane	100	46	35	136	
CTLab # 381311					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79	44	125	
Surr: Triacontane	100	76	35	136	
CTLab # 381313					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	57	44	125	
Surr: Triacontane	100	53	35	136	
CTLab # 381315					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	53	44	125	
Surr: Triacontane	100	49	35	136	
CTLab # 381317					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381319					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	85	44	125	
Surr: Triacontane	100	88	35	136	
CTLab # 381321					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	83	44	125	
Surr: Triacontane	100	87	35	136	
CTLab # 381323					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	77	44	125	
Surr: Triacontane	100	79	35	136	



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Analytical Method:	EPA 8015C	SDG:	100701
Analytical Run #:	99459	ICAL Calibration #:	102113deroic

CTLab # 381325					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	82	44	125	
Surr: Triacontane	100	85	35	136	
CTLab # 381327					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	83	44	125	
Surr: Triacontane	100	84	35	136	
CTLab # 381329					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	90	44	125	
Surr: Triacontane	100	91	35	136	
CTLab # 381331					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	81	44	125	
Surr: Triacontane	100	85	35	136	
CTLab # 381333					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	78	44	125	
Surr: Triacontane	100	79	35	136	
CTLab # 381335					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	88	44	125	
Surr: Triacontane	100	89	35	136	
CTLab # 381337					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	85	44	125	
Surr: Triacontane	100	89	35	136	
CTLab # 381339					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	88	44	125	
Surr: Triacontane	100	96	35	136	
CTLab # 381341					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	108	44	125	
Surr: Triacontane	100	115	35	136	
CTLab # 381873					
Surrogate	Spike Amount	% Recovery	Lower Limit	Upper Limit	Qualifier
SURR: Octacosane	100	79.2	25	162	
Surr: Triacontane	100	81.9	50	113	



2D

SOIL SEMI VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CT Laboratories Contract: ECC-RVAAP

Analytical Method: EPA 8015C SDG: 100701

Analytical Run #: 99459 ICAL Calibration #: 102113deroic

Surrogate	CTLab #	381874	Sample Type:	Lab Control Spike	Qualifier
SURR: Octacosane		100	% Recovery	25	162
Surr: Triacontane		100		30	150
Surrogate	CTLab #	381876	Sample Type:	Matrix Spike	Qualifier
SURR: Octacosane		100	% Recovery	25	162
Surr: Triacontane		100		30	150
Surrogate	CTLab #	381877	Sample Type:	Matrix Spike Duplicate	Qualifier
SURR: Octacosane		100	% Recovery	25	162
Surr: Triacontane		100		30	150

3D

Sample Description

SOIL SEMIVOLATILE MATRIX SPIKE RECOVERY

071SB-0003M-0001-SO

Lab Name: CT Laboratories

Contract: ECC-RVAAP

Matrix: SOIL

SDG No.: 100701

Analytical Method: EPA 8015C

Concentration Units: mg/kg

Analytical Run #: 99459 Sample No.: 381876 Parent Sample No.: 381309

Analytical Prep Batch #: 46448 Analytical Preparation Date/Time: 10/16/2013 09:30

ICAL Calibration #: 101713deroic

Analyte	Analysis Date/Time	Control Limit (%R)	Spike Result	Parent Result	Spike Amount	%R
Diesel Range Organics	10/18/2013 20:10	50-150	156	BDL	260	60
Extractable Range Organics	10/18/2013 20:10	50-150	157	BDL	260	60

Spike Recovery: 0 out of 2 outside QC limits



3D

Sample Description

SOIL SEMIVOLATILE MATRIX SPIKE DUPLICATE RECOVERY

071SB-0003M-0001-SO

Lab Name: CT LaboratoriesContract: ECC-RVAAPMatrix: SOILSDG No.: 100701Analytical Method: EPA 8015CConcentration Units: mg/kgAnalytical Run #: 99459 Sample No.: 381877 Parent Sample No.: 381876Analytical Prep Batch #: 46448 Analytical Preparation Date/Time: 10/16/2013 09:30ICAL Calibration #: 101713deroic

Analyte	Analysis Date/Time	Spike Result	Spike Amount	%R	%RPD	Control Limits		
						(%R)	(%RPD)	
Diesel Range Organics	10/18/2013	20:42	174	259	67	11	50-150	20
Extractable Range Organics	10/18/2013	20:42	174	259	67	11	50-150	20

RPD or
Spike Recovery: 0 out of 2 outside QC limits

3D

Sample Description

SOIL SEMIVOLATILE LAB CONTROL SAMPLE

LCS

Lab Name: CT Laboratories

Contract ECC-RVAAP

Sample No.: 381874

SDG No.: 100701

Analytical Method: EPA 8015C

Concentration Units: mg/kg

Sample No.: 381874

Parent Sample No.: 0

Analytical Prep Batch #: 46448

Analytical Preparation Date/Time: 10/16/2013 09:30

Analytical Run #: 99459

ICAL Calibration #: 101713deroic

Analyte	Analysis Date/Time	Control Limit (%R)	Spike Result	Parent Result	Spike Amount	%R
Diesel Range Organics	10/18/2013 17:59	50-150	219		250	88
Extractable Range Organics	10/18/2013 17:59	50-150	219		250	88

Spike Recovery: 0 out of 2 outside limits



4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Sample ID:	381873	SDG No.:	100701
Matrix:	SOLID	Date Extracted:	10/16/2013
Date Analyzed:	10/18/2013	Time Analyzed:	17:26
Analytical Method:	EPA 8015C	Extraction Method:	SW3546
Analytical Run #:	99459	Extraction Batch #:	46448
		ICAL Calibration #:	101713deroic

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND QC:

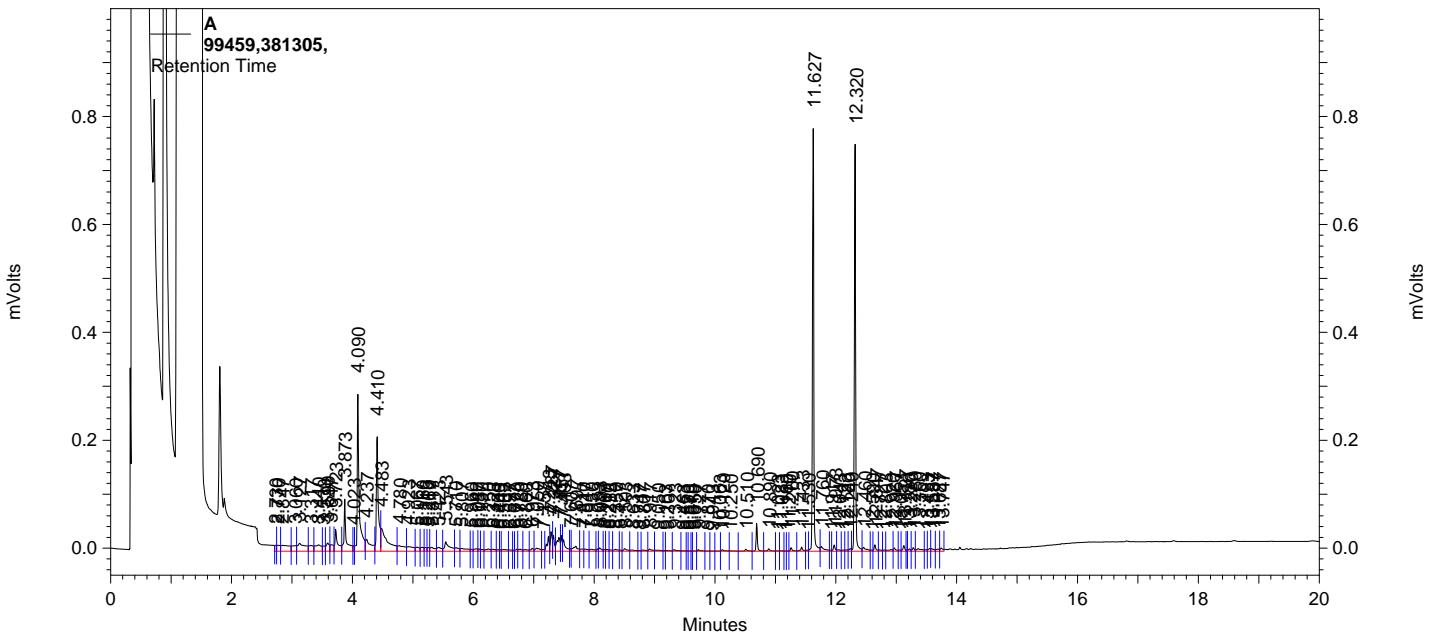
SEQUENCE	SAMPLE DESCRIPTION	SAMPLE ID	DATE/TIME ANALYZED
1	MBS	381873	10/18/2013 17:26
2	LCSS	381874	10/18/2013 17:59
3	071SB-0001M-0001-SO	381305	10/18/2013 18:32
4	071SB-0002M-0001-SO	381307	10/18/2013 19:04
5	071SB-0003M-0001-SO	381309	10/18/2013 19:37
6	071SB-0003M-0001-SOMSS	381876	10/18/2013 20:10
7	071SB-0003M-0001-SOMSDS	381877	10/18/2013 20:42
8	071SB-0004M-0001-SO	381311	10/18/2013 21:15
9	071SB-0005M-0001-SO	381313	10/18/2013 21:48
10	071SB-0006M-0001-SO	381315	10/18/2013 22:21
11	071SB-0016M-0001-SO	381317	10/22/2013 10:44
12	071SB-0007M-0001-SO	381319	10/22/2013 11:17
13	071SB-0009M-0001-SO	381321	10/22/2013 11:49
14	071SB-0010M-0001-SO	381323	10/22/2013 12:22
15	071SB-0011M-0001-SO	381325	10/22/2013 12:56
16	071SB-0021M-0001-SO	381327	10/22/2013 13:29
17	071SB-0017M-0001-SO	381329	10/22/2013 14:02
18	071SB-0013M-0001-SO	381331	10/22/2013 14:34
19	071SB-0018M-0001-SO	381333	10/22/2013 15:08
20	071SB-0014M-0001-SO	381335	10/22/2013 15:41
21	071SB-0019M-0001-SO	381337	10/22/2013 17:20
22	071SB-0022M-0001-SO	381339	10/22/2013 17:53
23	071SB-0023M-0001-SO	381341	10/22/2013 18:25

**SEMI - VOLATILE ORGANIC ANALYSIS
SAMPLE DATA
DOCUMENTS**

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\012.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381305,
Acquired: Oct 18, 2013 18:32:04
Printed: Oct 29, 2013 12:28:34

Data Summary: {Data Description}



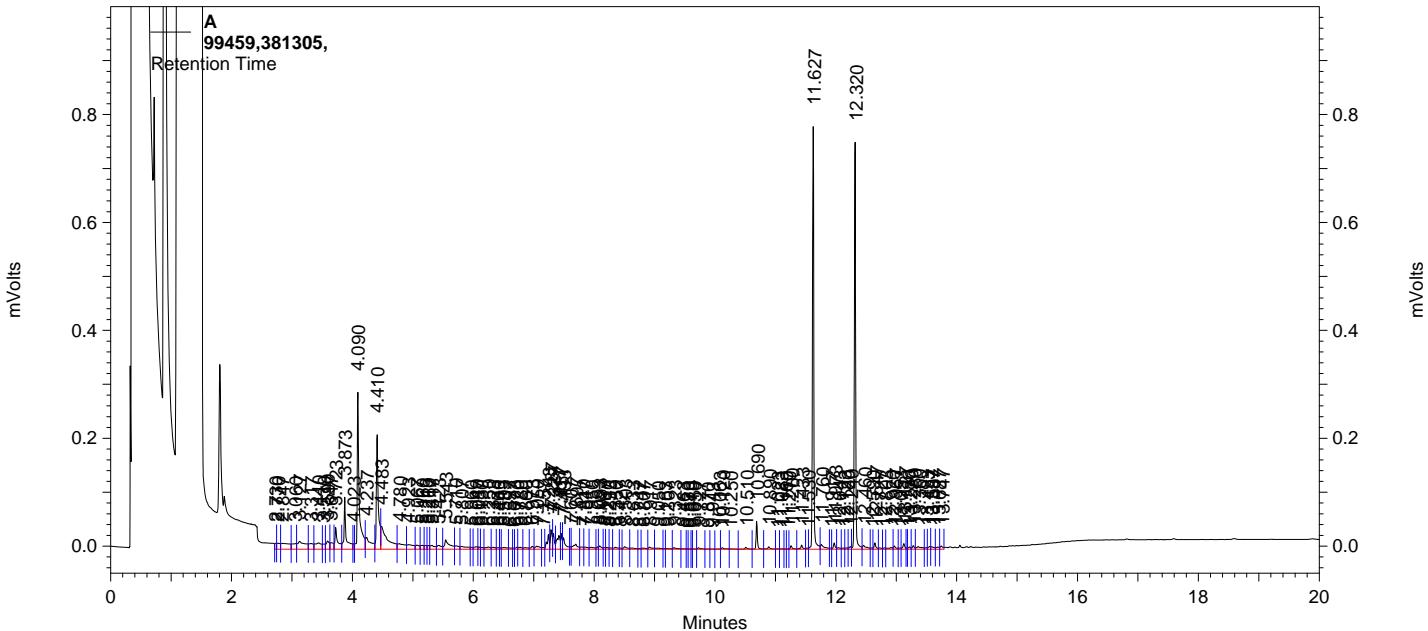
A Results

Component	Retention Time	Area Counts
C10C20		3888246
C20C34		602485

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\012.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381305,
Acquired: Oct 18, 2013 18:32:04
Printed: Oct 29, 2013 09:56:19

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1205284	80.912
Triacontane	12.320	1099406	83.843
DSL (C10C28)		4161184	44.081
DRO (C10C34)		4490731	58.035

Example Calculation:

Area counts C10-C20 = 3888246 (from previous page)

Area counts C20-C34 = 602485 (from previous page)

Total DRO (C10C34) area counts = 4490731

Total DRO (C10C34) = 58.035 ug/mL

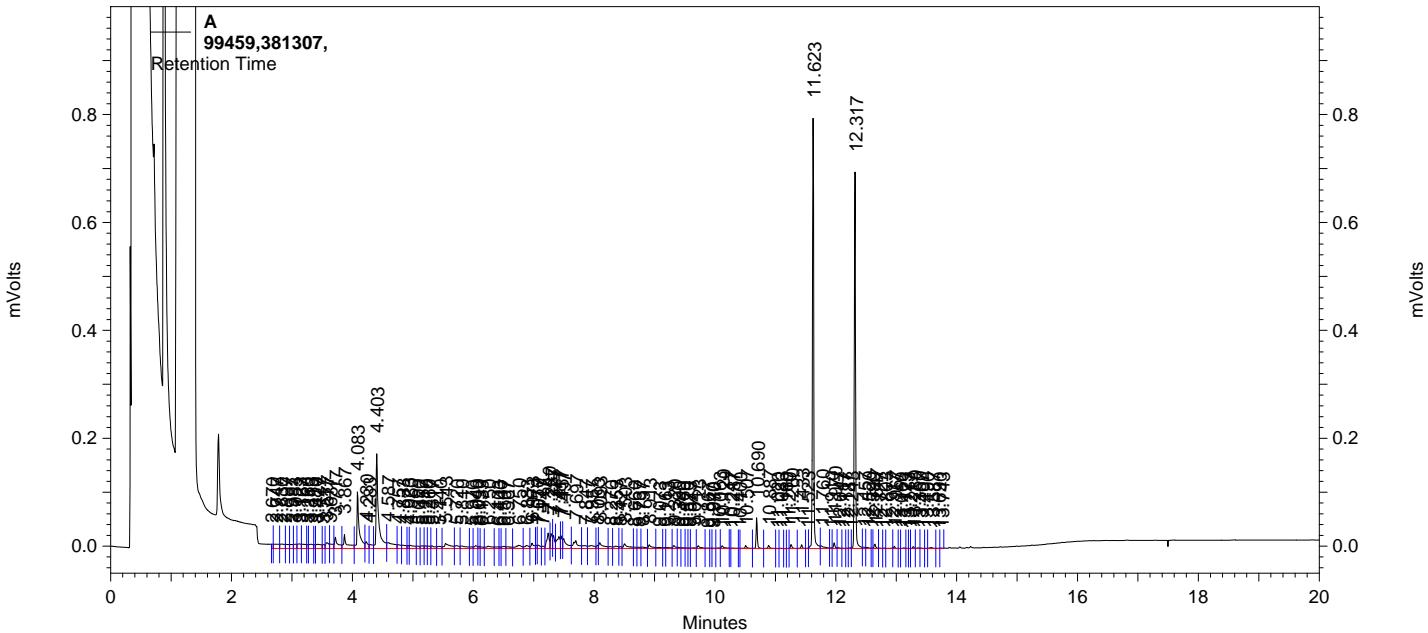
DRO (C10C20) = (3888246/4490731)*58.035 = 50.249 ug/ml

DRO (C20C34) = 58.035 - 50.249 = 7.786 ug/ml

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\013.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381307,
Acquired: Oct 18, 2013 19:04:48
Printed: Oct 29, 2013 12:28:41

Data Summary: {Data Description}



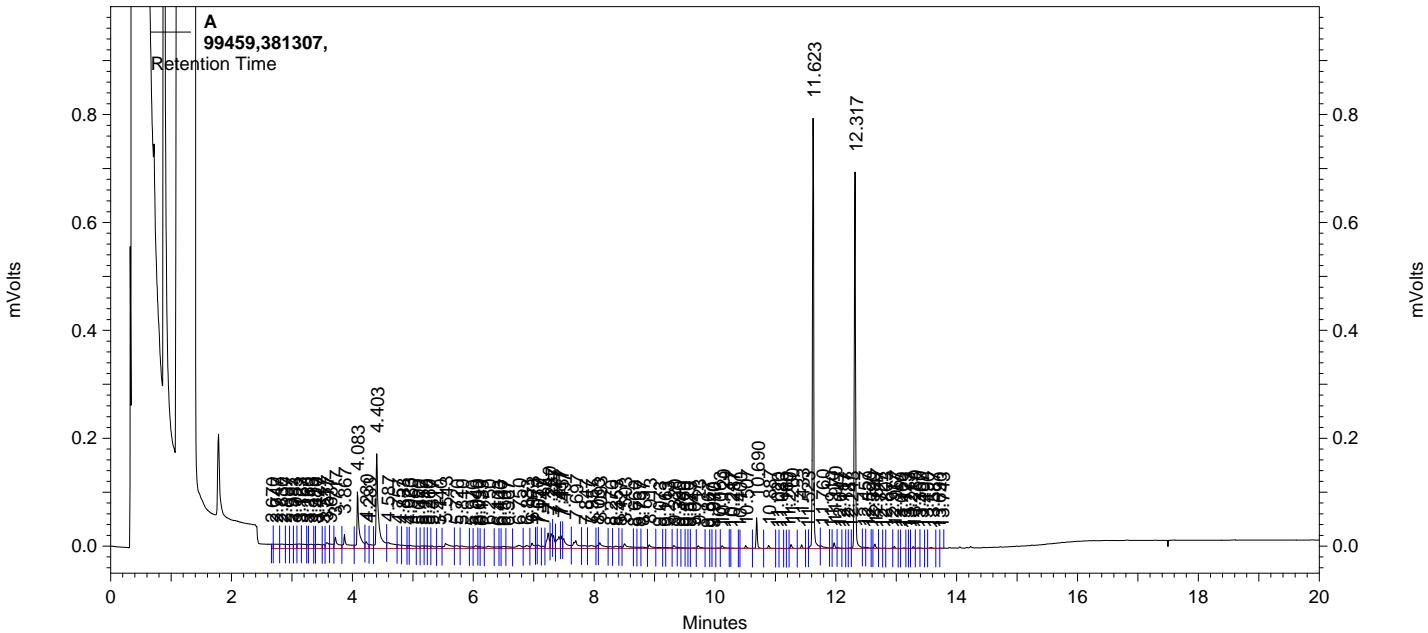
A Results

Component	Retention Time	Area Counts
C10C20		2910567
C20C34		527223

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\013.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381307,
Acquired: Oct 18, 2013 19:04:48
Printed: Oct 29, 2013 09:56:24

Data Summary: {Data Description}



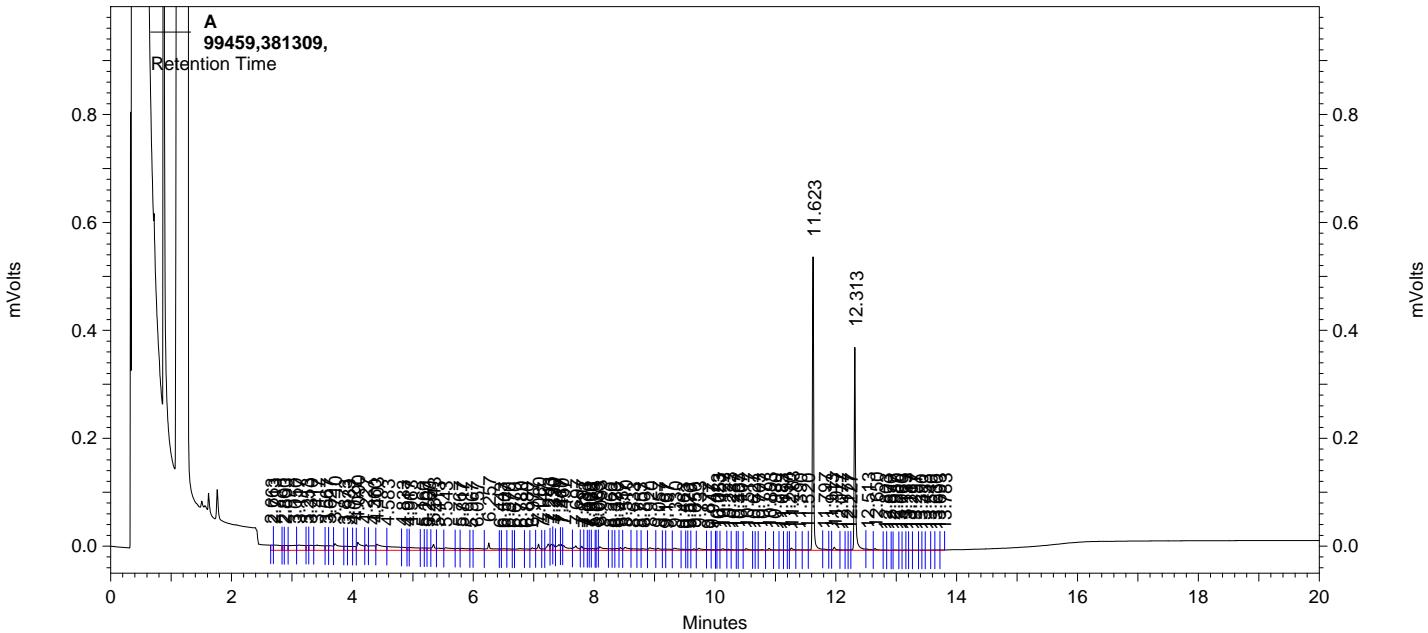
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	1174153	78.849
Triacontane	12.317	1034216	78.952
DSL (C10C28)		3297705	2.412
DRO (C10C34)		3437790	7.231

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\014.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381309,
Acquired: Oct 18, 2013 19:37:31
Printed: Oct 29, 2013 12:28:47

Data Summary: {Data Description}



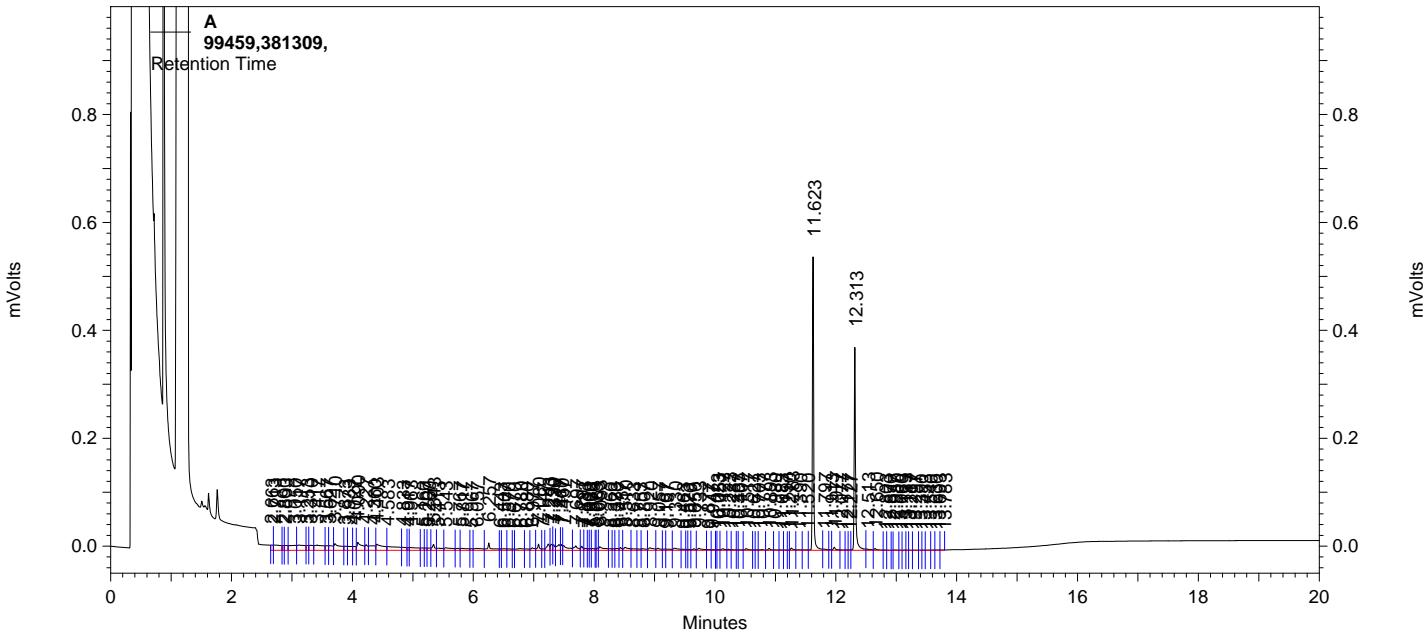
A Results

Component	Retention Time	Area Counts
C10C20		1951160
C20C34		378946

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\014.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381309,
Acquired: Oct 18, 2013 19:37:31
Printed: Oct 29, 2013 09:56:29

Data Summary: {Data Description}



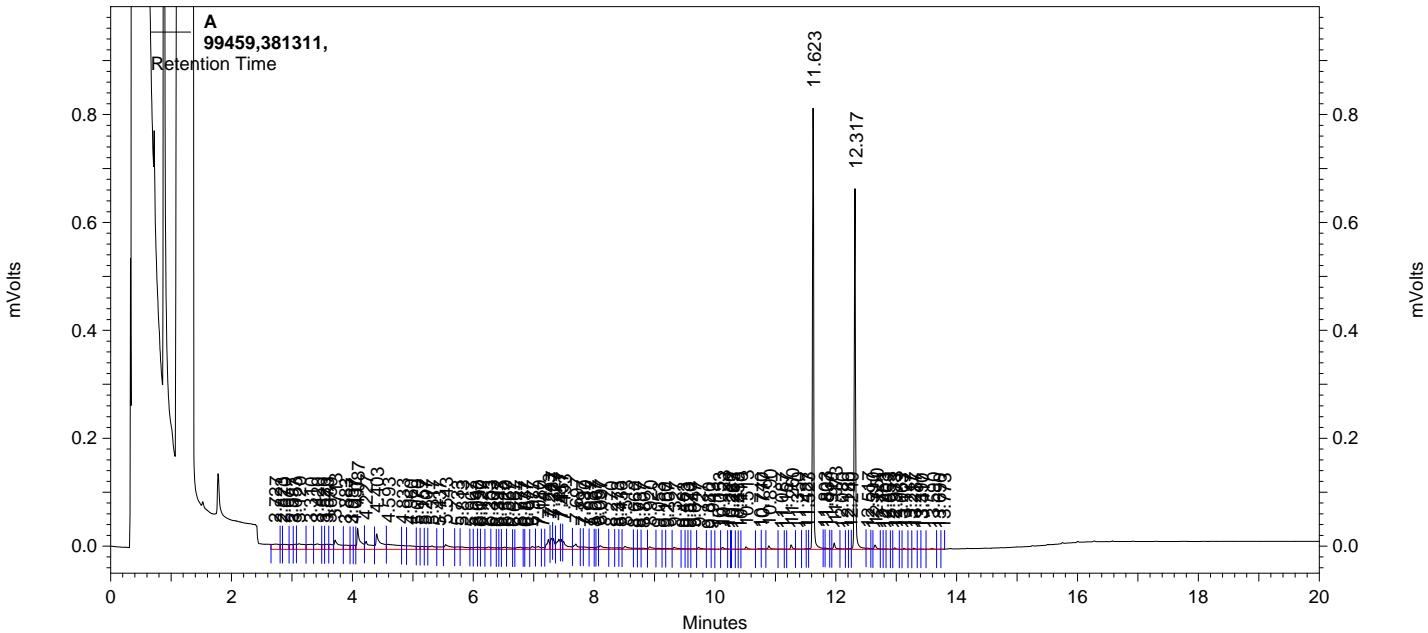
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	791408	53.490
Triacontane	12.313	600376	46.402
DSL (C10C28)		2260395	0.000
DRO (C10C34)		2330106	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\017.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381311,
Acquired: Oct 18, 2013 21:15:42
Printed: Oct 29, 2013 12:29:07

Data Summary: {Data Description}



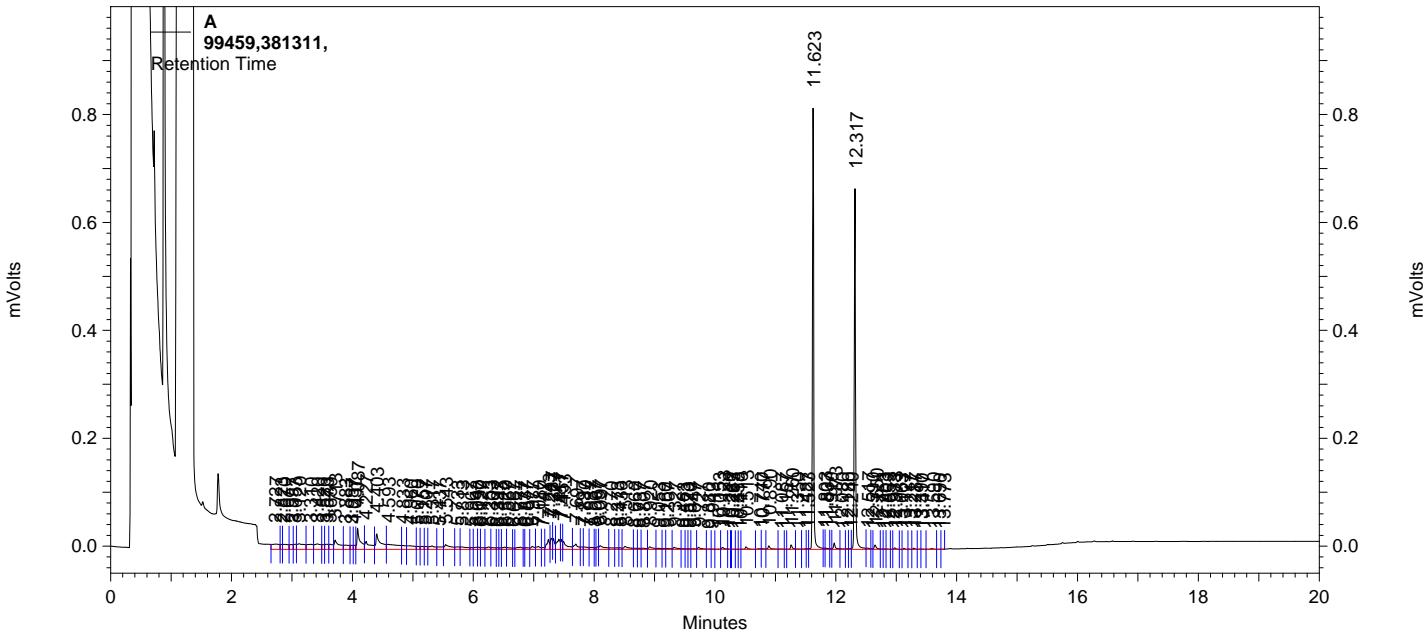
A Results

Component	Retention Time	Area Counts
C10C20		2347698
C20C34		348244

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\017.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381311,
Acquired: Oct 18, 2013 21:15:42
Printed: Oct 29, 2013 09:56:43

Data Summary: {Data Description}



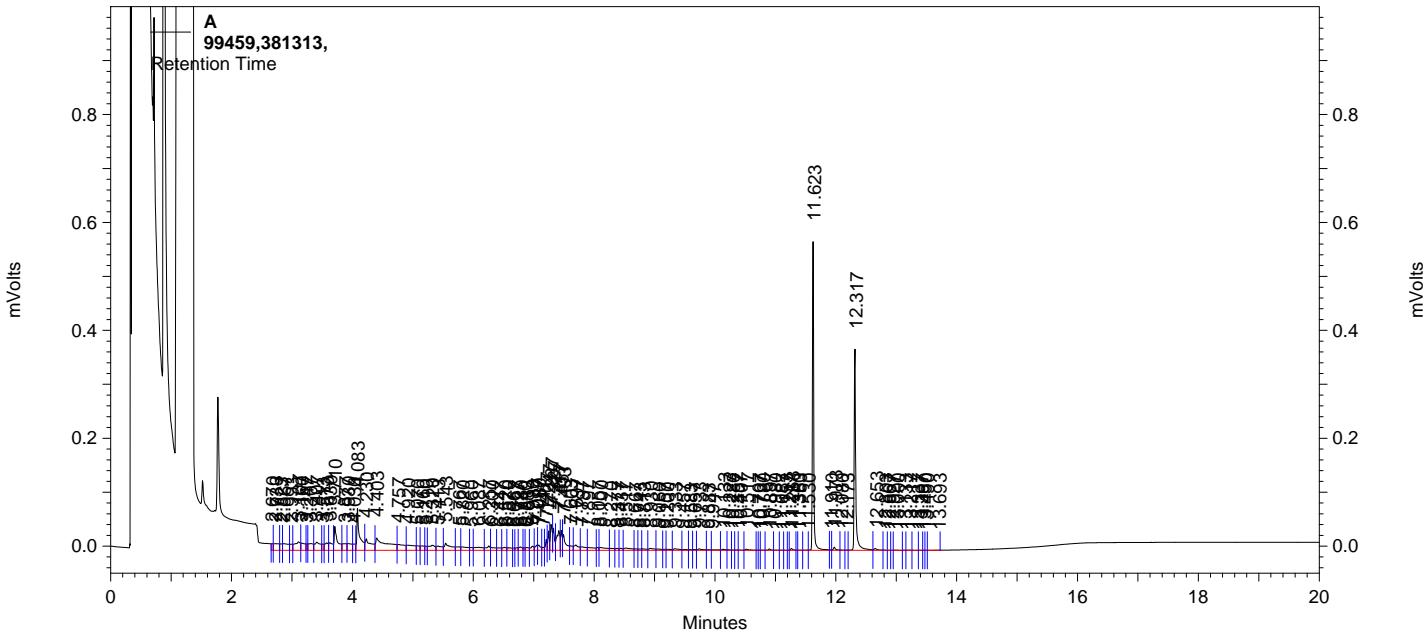
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	1172469	78.737
Triacontane	12.317	989295	75.582
DSL (C10C28)		2585847	0.000
DRO (C10C34)		2695942	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\018.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381313,
Acquired: Oct 18, 2013 21:48:29
Printed: Oct 29, 2013 12:29:13

Data Summary: {Data Description}



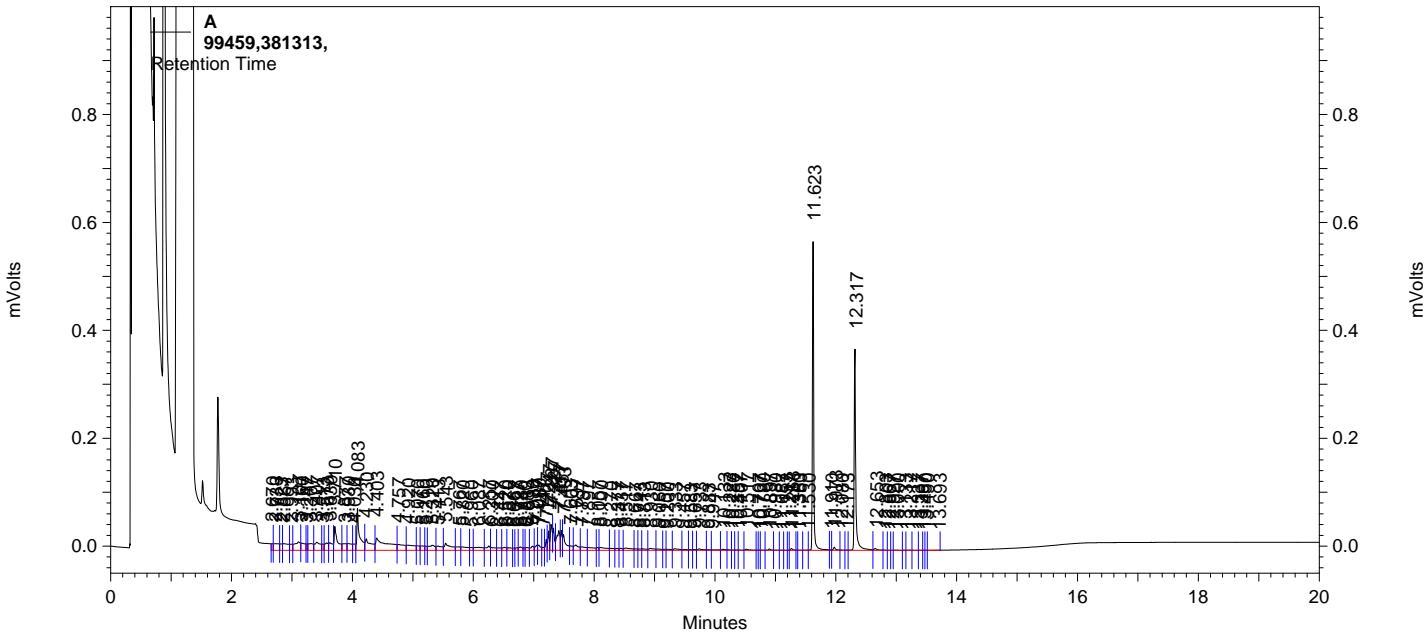
A Results

Component	Retention Time	Area Counts
C10C20		3559691
C20C34		306343

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\018.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381313,
Acquired: Oct 18, 2013 21:48:29
Printed: Oct 29, 2013 09:56:47

Data Summary: {Data Description}



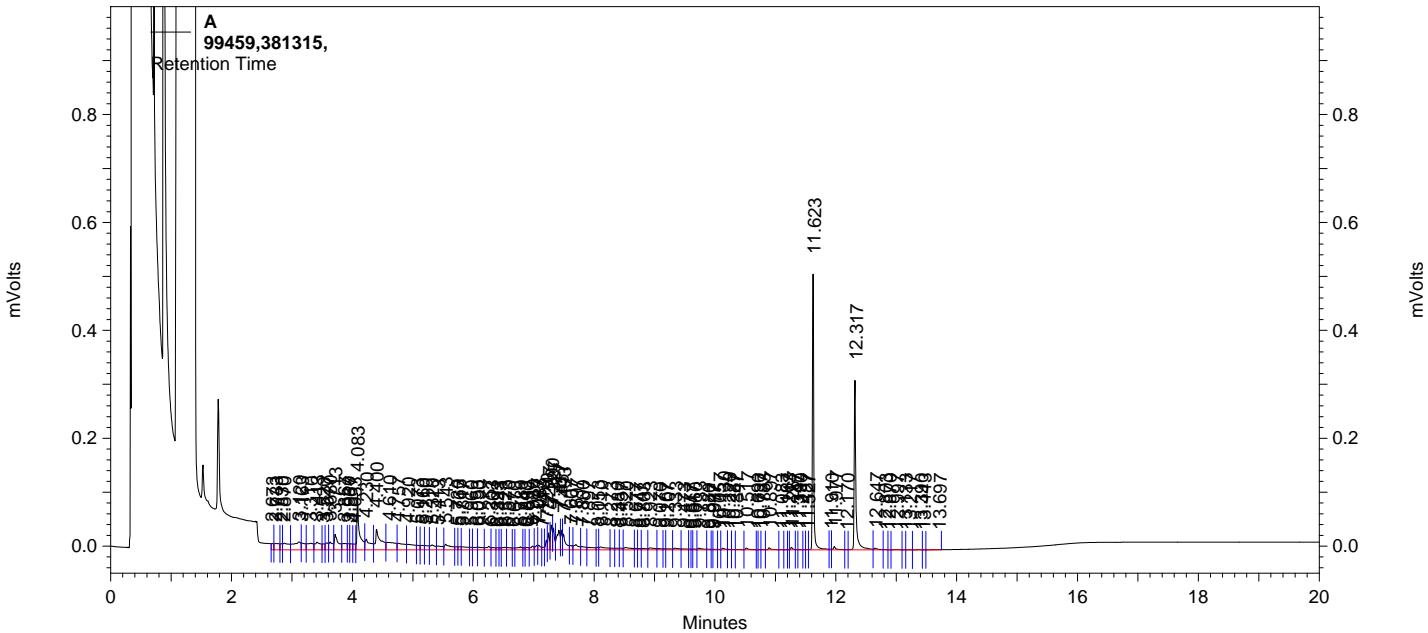
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	851136	57.447
Triacontane	12.317	682270	52.546
DSL (C10C28)		3819746	27.604
DRO (C10C34)		3866034	27.894

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\019.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,381315,
Acquired: Oct 18, 2013 22:21:13
Printed: Oct 29, 2013 12:29:19

Data Summary: {Data Description}



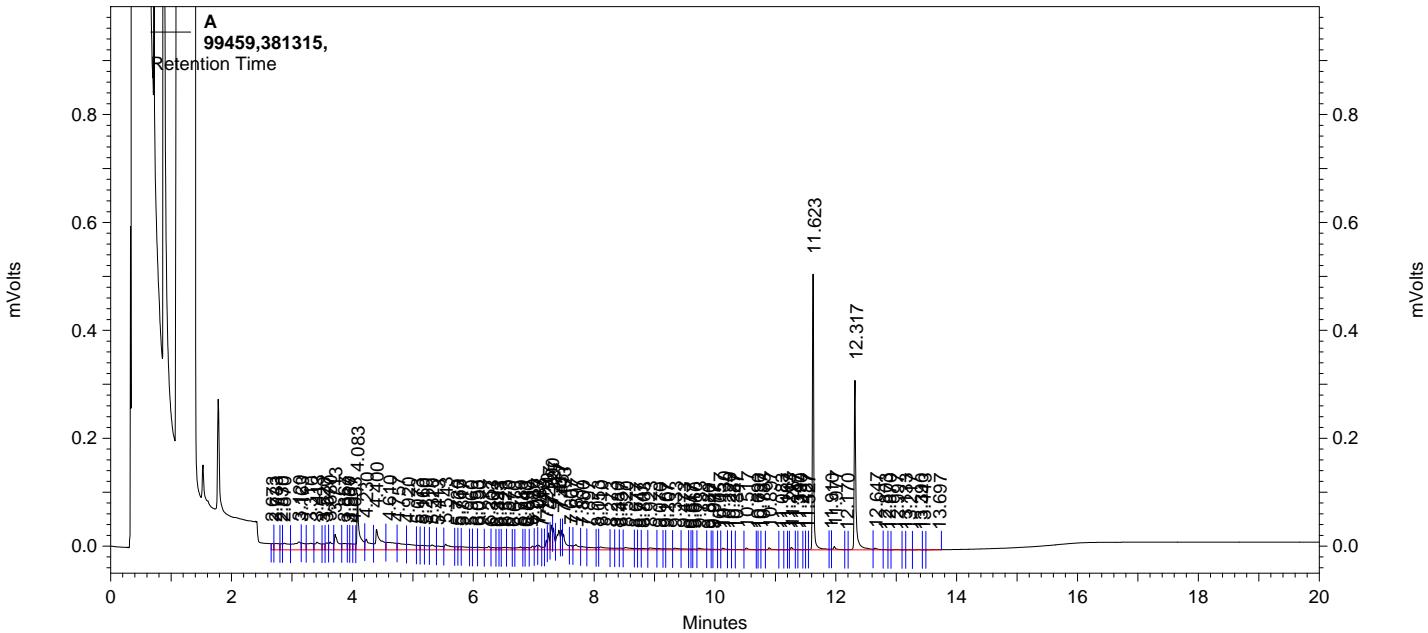
A Results

Component	Retention Time	Area Counts
C10C20		3481507
C20C34		329036

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\019.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,381315,
Acquired: Oct 18, 2013 22:21:13
Printed: Oct 29, 2013 09:56:52

Data Summary: {Data Description}



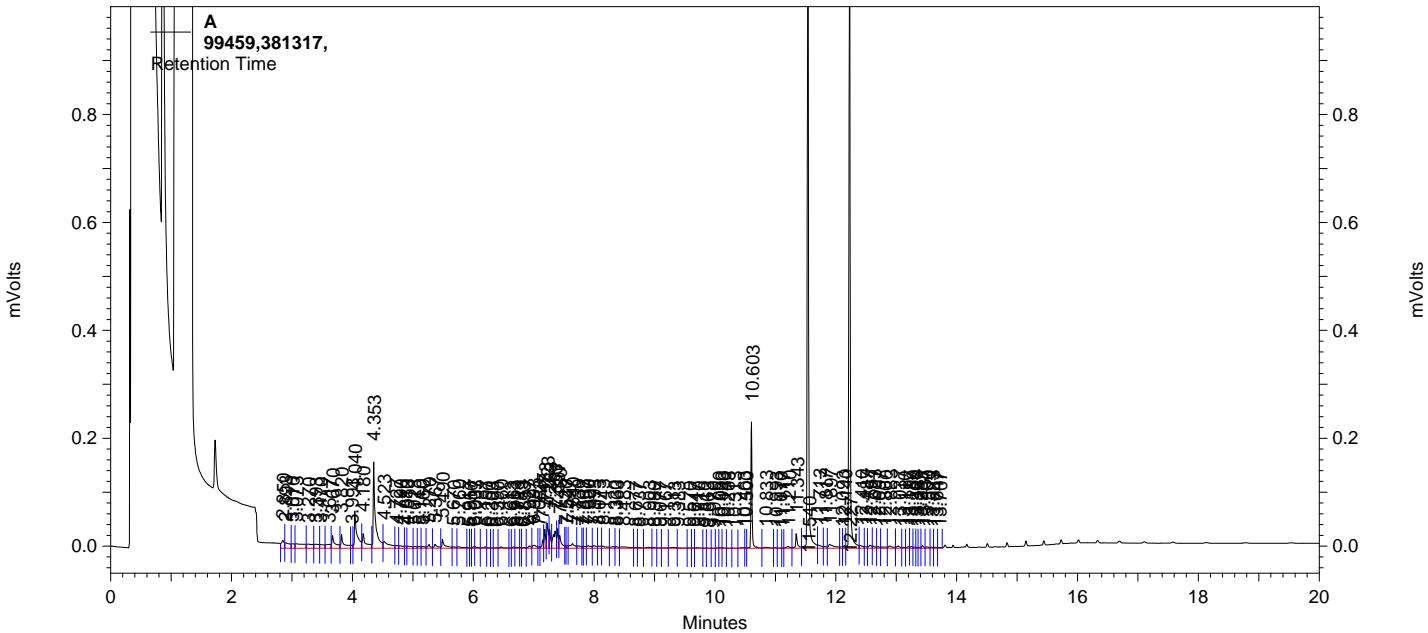
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	790014	53.398
Triacontane	12.317	628714	48.528
DSL (C10C28)		3760761	24.758
DRO (C10C34)		3810543	25.216

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\005.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JY
Sample ID: 99459,381317,
Acquired: Oct 22, 2013 10:44:20
Printed: Oct 29, 2013 12:43:50

Data Summary: {Data Description}



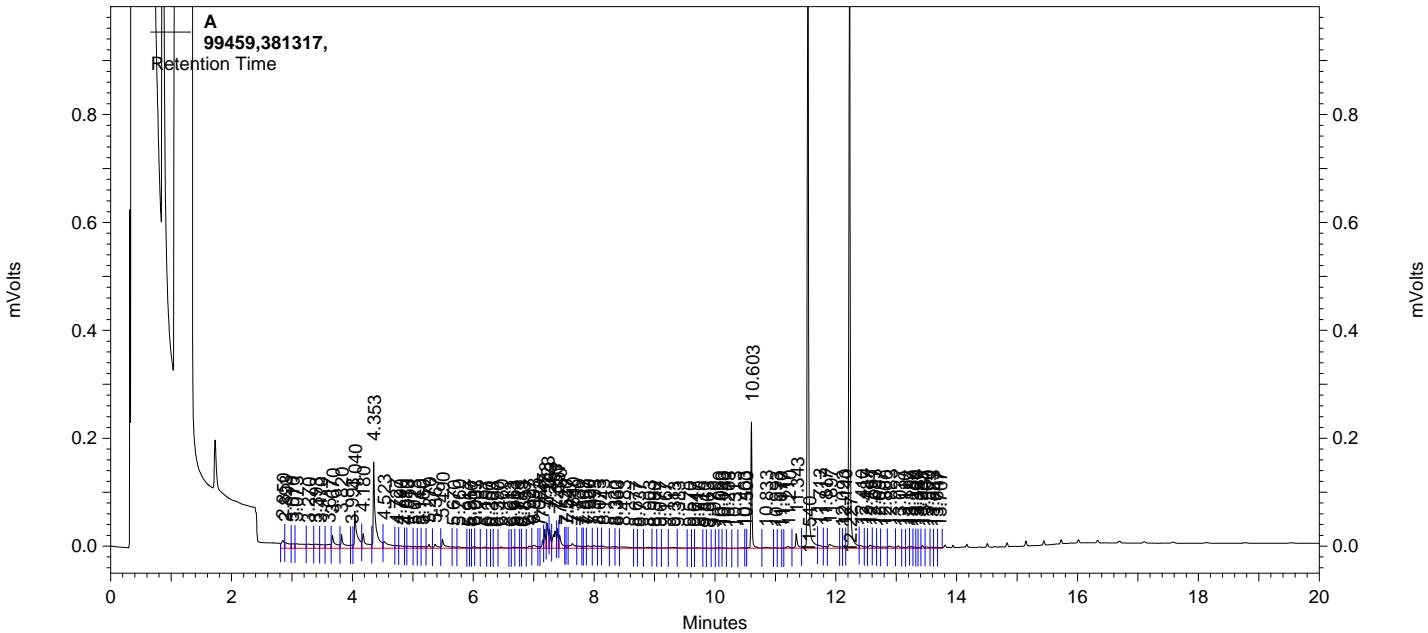
A Results

Component	Retention Time	Area Counts
C10C20		2402516
C20C34		849665

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\005.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381317,
Acquired: Oct 22, 2013 10:44:20
Printed: Oct 29, 2013 11:15:52

Data Summary: {Data Description}



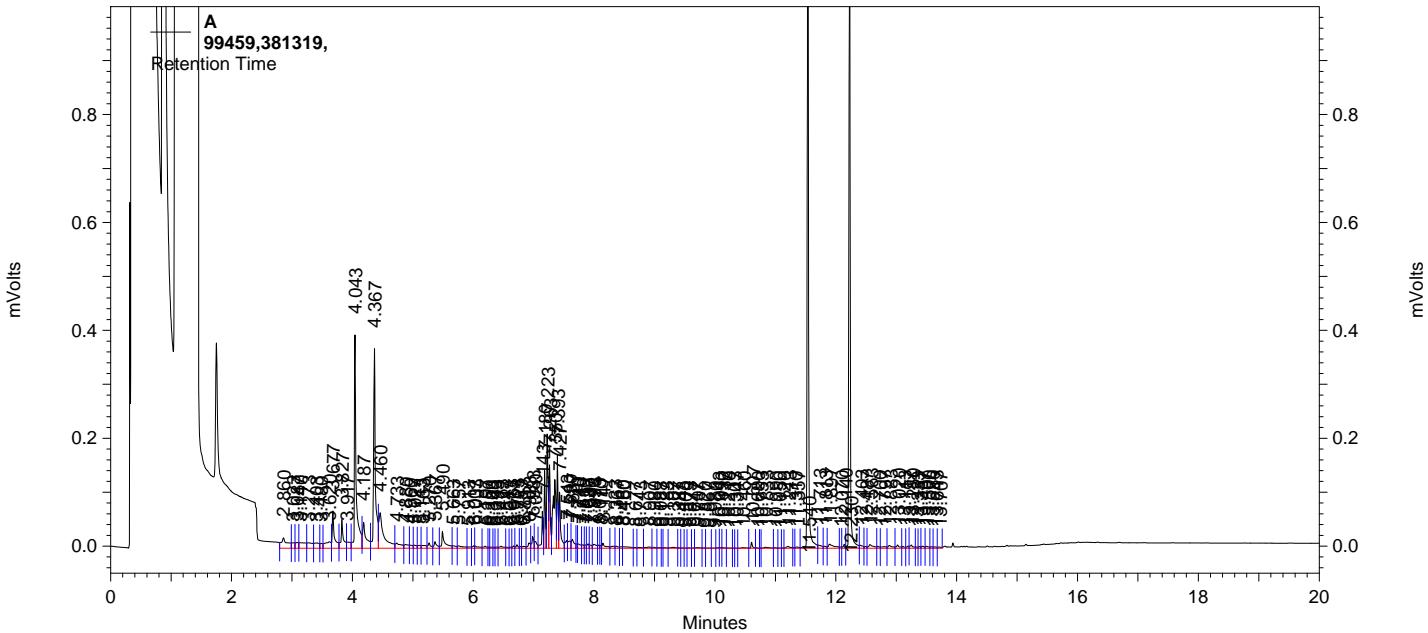
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1818332	80.664
Triacontane	12.227	1739851	83.507
DSL (C10C28)		2954451	32.326
DRO (C10C34)		3252181	42.622

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\006.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381319,
Acquired: Oct 22, 2013 11:17:05
Printed: Oct 29, 2013 12:44:10

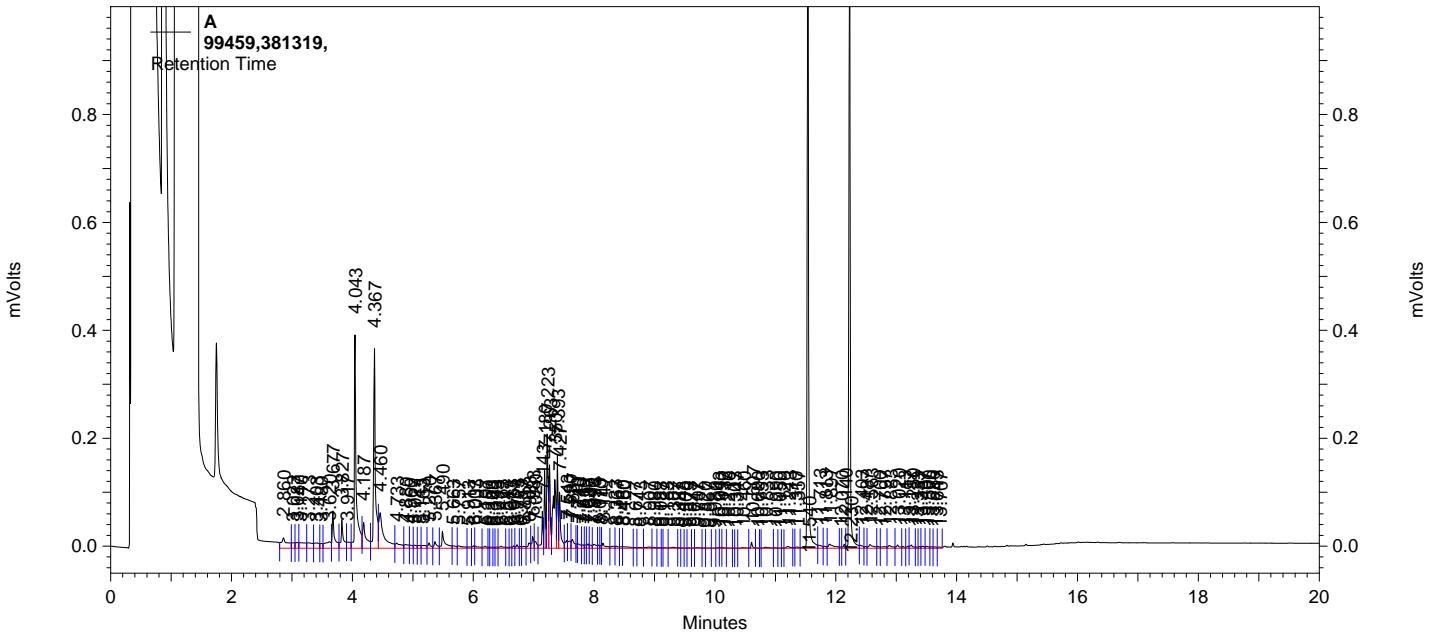
Data Summary: {Data Description}



8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\006.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381319,
Acquired: Oct 22, 2013 11:17:05
Printed: Oct 29, 2013 11:15:59

Data Summary: {Data Description}



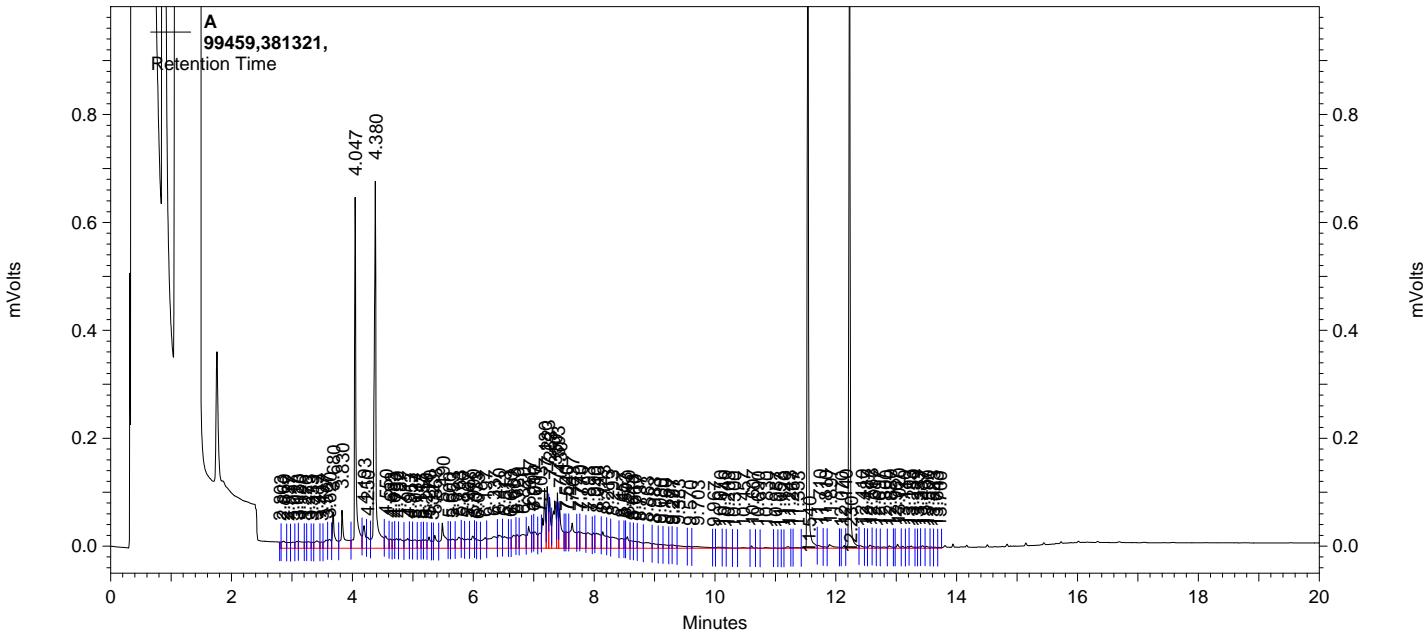
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1930154	85.121
Tricontane	12.230	1837202	87.745
DSL (C10C28)		5954388	155.374
DRO (C10C34)		6295875	167.395

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\007.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381321,
Acquired: Oct 22, 2013 11:49:58
Printed: Oct 29, 2013 12:44:17

Data Summary: {Data Description}



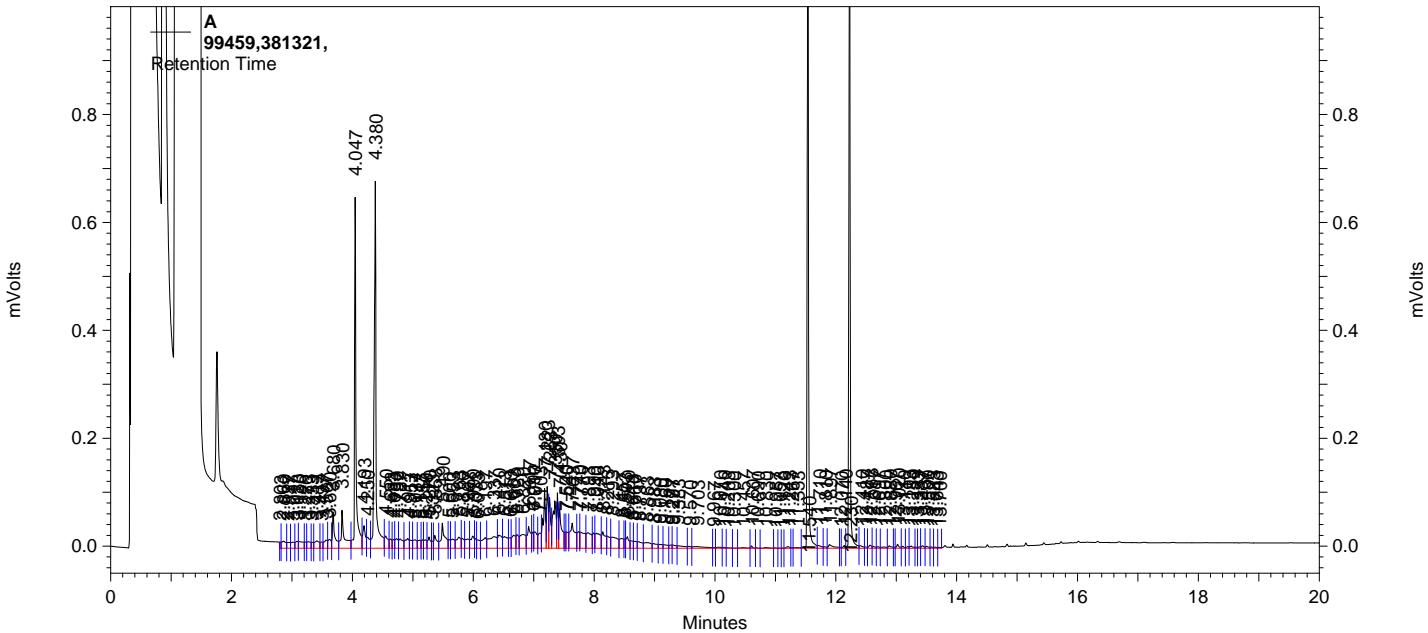
A Results

Component	Retention Time	Area Counts
C10C20		9647621
C20C34		1059228

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\007.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381321,
Acquired: Oct 22, 2013 11:49:58
Printed: Oct 29, 2013 11:16:05

Data Summary: {Data Description}



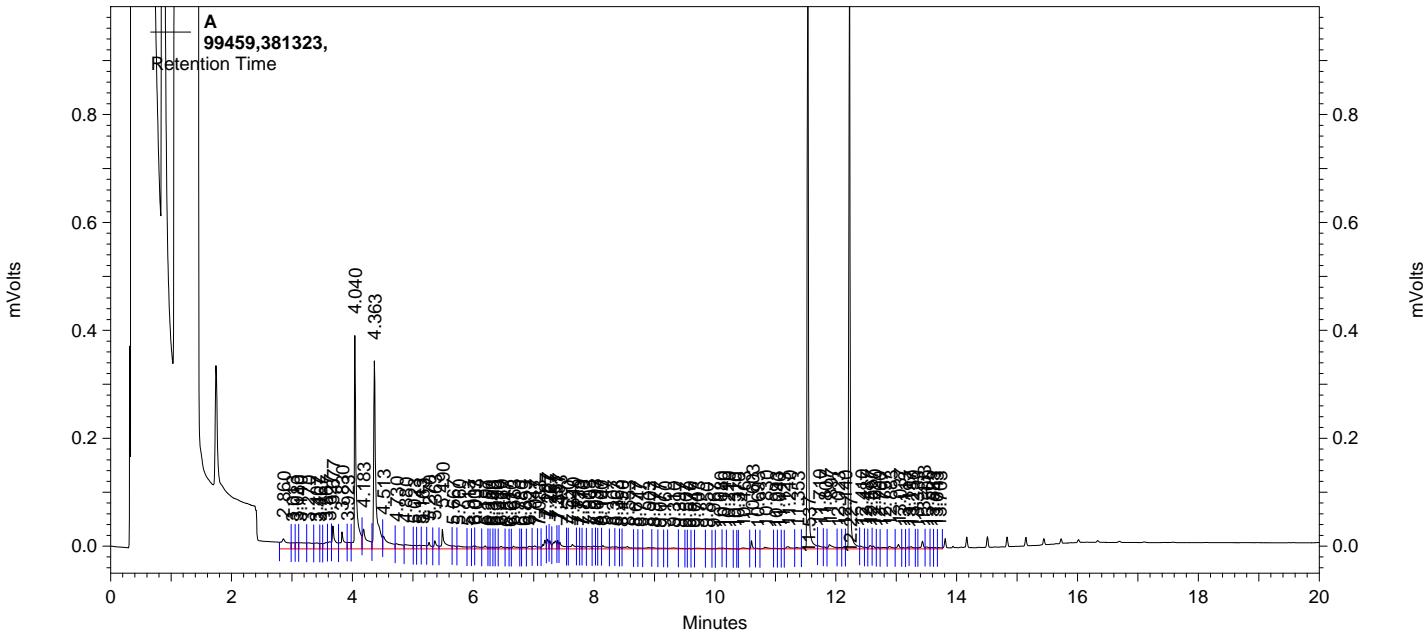
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1879217	83.091
Triacontane	12.230	1822291	87.096
DSL (C10C28)		10417898	338.453
DRO (C10C34)		10706849	348.219

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\008.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381323,
Acquired: Oct 22, 2013 12:22:51
Printed: Oct 29, 2013 12:44:23

Data Summary: {Data Description}



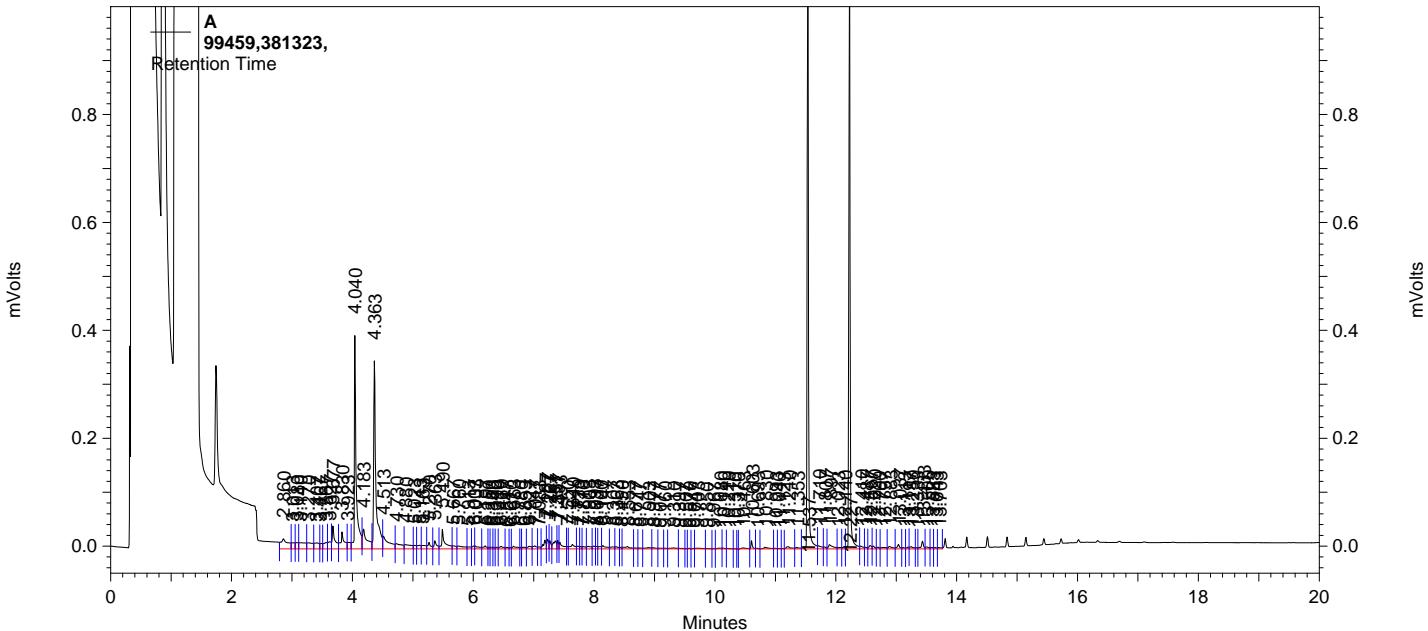
A Results

Component	Retention Time	Area Counts
C10C20		4152692
C20C34		572592

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\008.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381323,
Acquired: Oct 22, 2013 12:22:51
Printed: Oct 29, 2013 11:16:11

Data Summary: {Data Description}



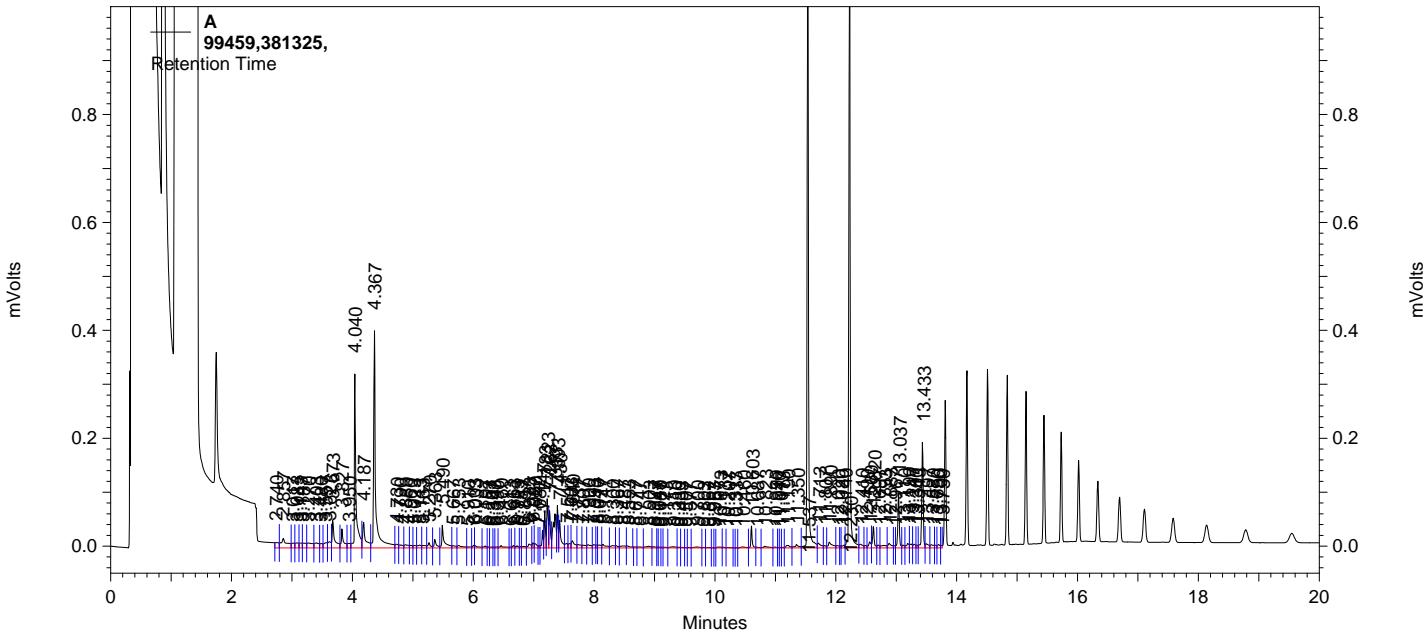
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.537	1733964	77.302
Triacontane	12.227	1629178	78.689
DSL (C10C28)		4396971	91.493
DRO (C10C34)		4725284	103.010

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\009.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381325,
Acquired: Oct 22, 2013 12:56:00
Printed: Oct 29, 2013 12:44:29

Data Summary: {Data Description}



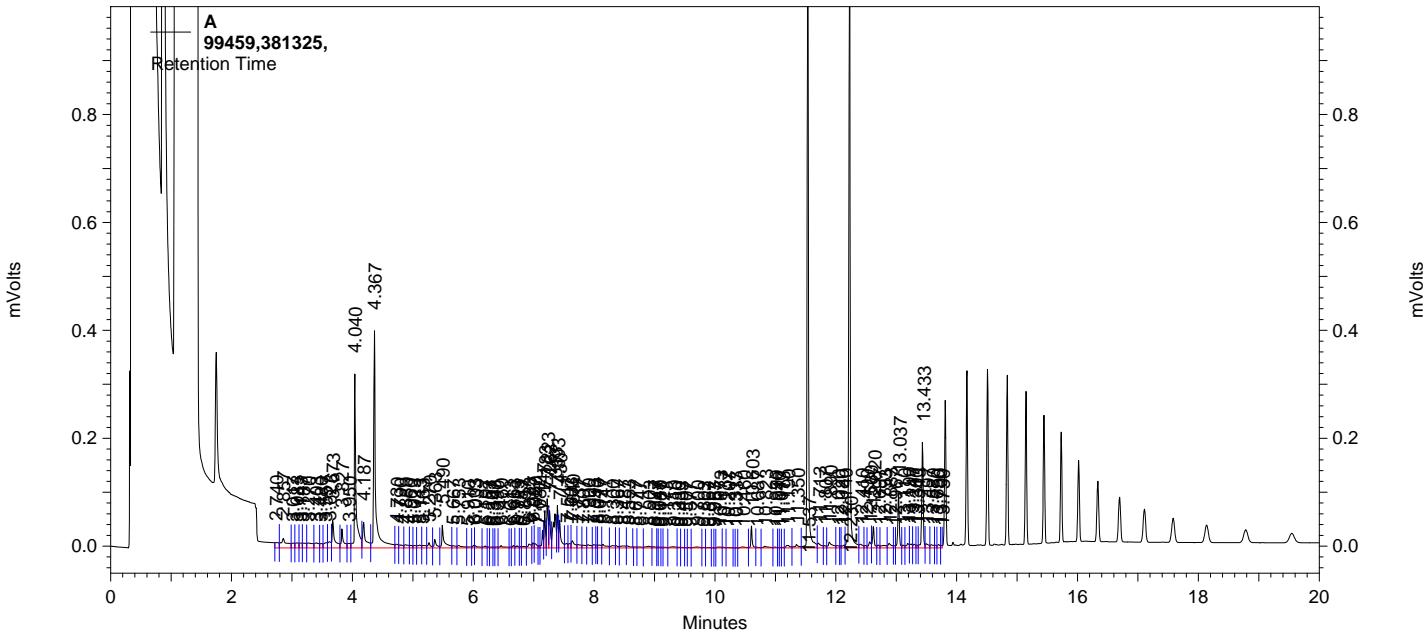
A Results

Component	Retention Time	Area Counts
C10C20		4116533
C20C34		1343411

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\009.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381325,
Acquired: Oct 22, 2013 12:56:00
Printed: Oct 29, 2013 11:16:18

Data Summary: {Data Description}



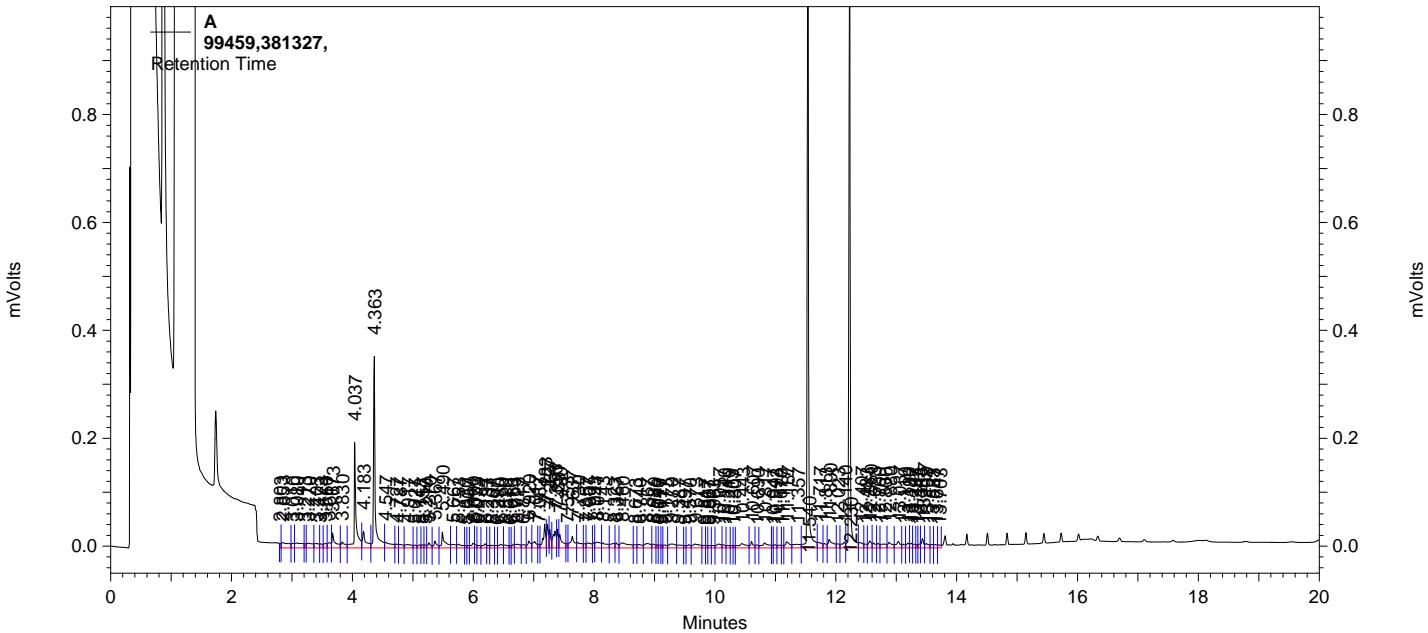
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.537	1849051	81.889
Triacontane	12.230	1778361	85.184
DSL (C10C28)		4435989	93.094
DRO (C10C34)		5459944	133.127

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381327,
Acquired: Oct 22, 2013 13:29:01
Printed: Oct 29, 2013 12:44:36

Data Summary: {Data Description}



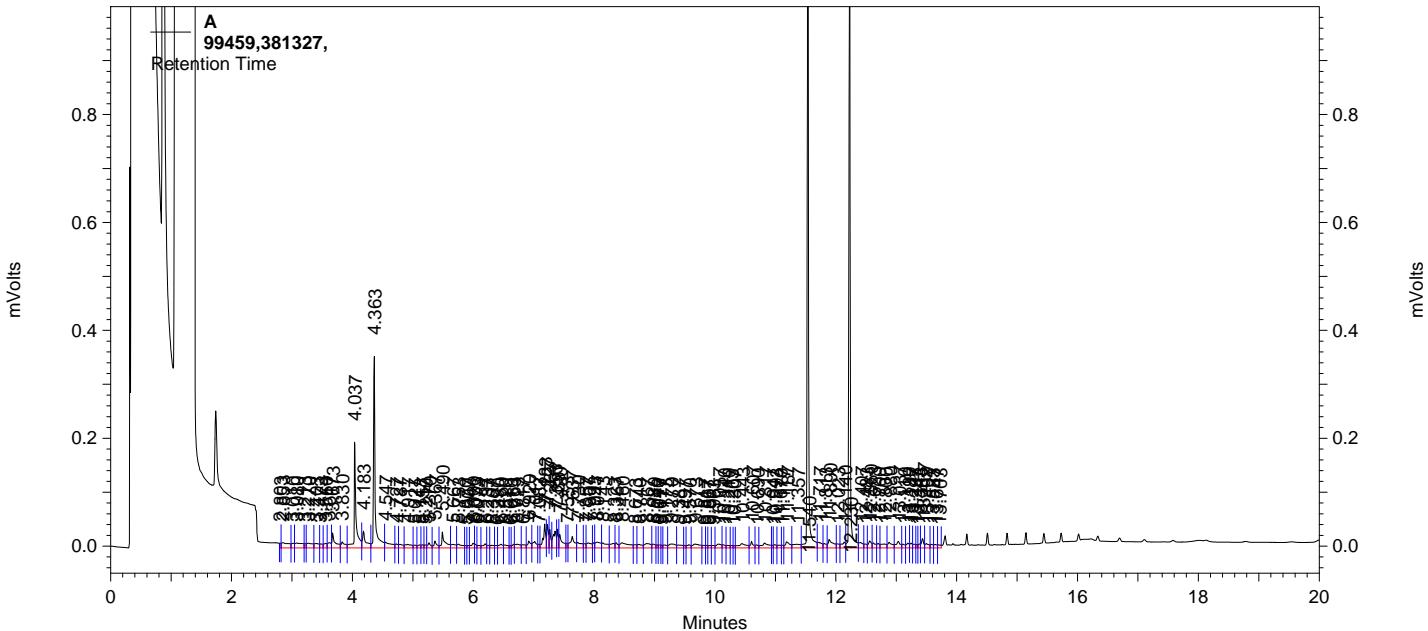
A Results

Component	Retention Time	Area Counts
C10C20		3716547
C20C34		1883238

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381327,
Acquired: Oct 22, 2013 13:29:01
Printed: Oct 29, 2013 11:16:24

Data Summary: {Data Description}



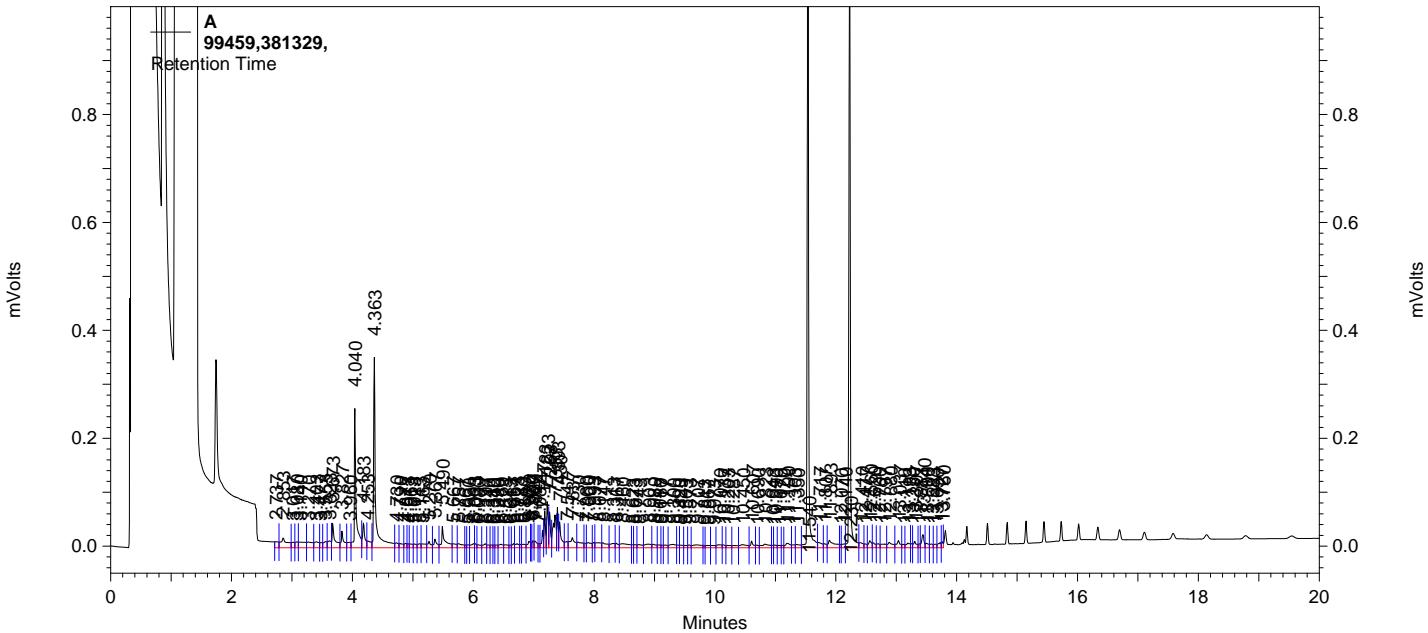
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1883089	83.245
Triacontane	12.230	1761597	84.454
DSL (C10C28)		4790058	107.617
DRO (C10C34)		5599785	138.860

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\011.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JY
Sample ID: 99459,381329,
Acquired: Oct 22, 2013 14:02:02
Printed: Oct 29, 2013 12:44:42

Data Summary: {Data Description}



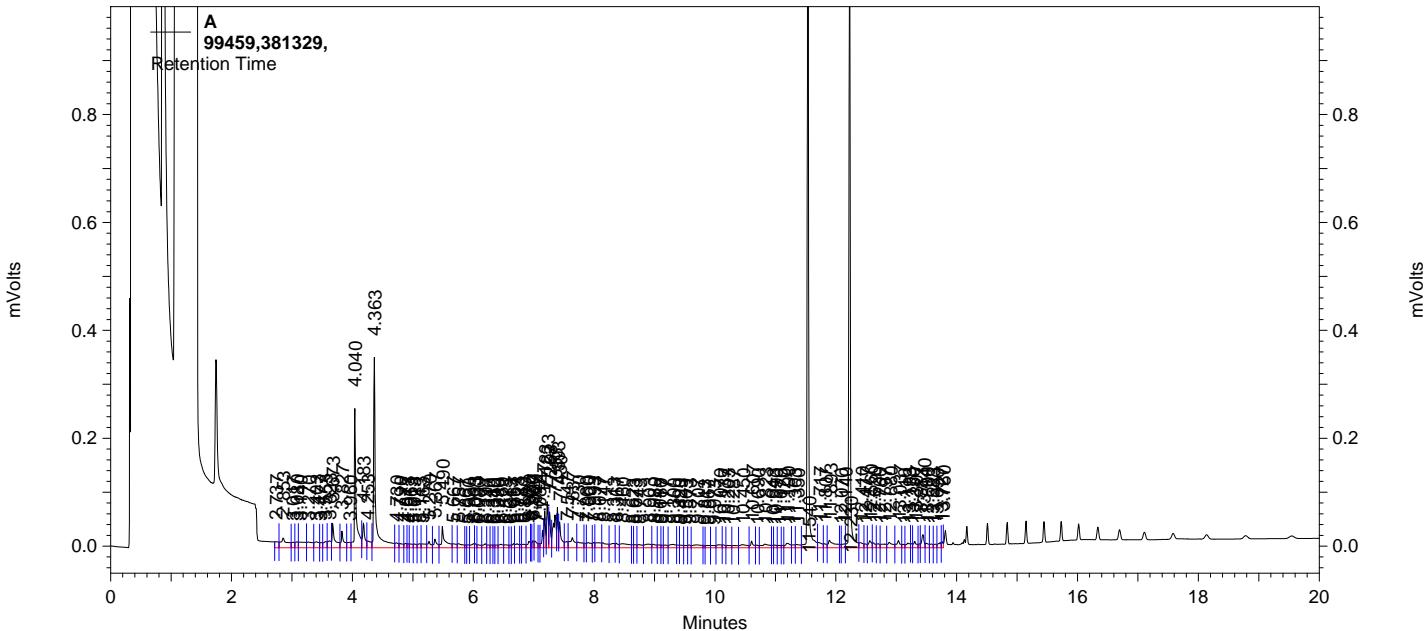
A Results

Component	Retention Time	Area Counts
C10C20		4697288
C20C34		1726609

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\011.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381329,
Acquired: Oct 22, 2013 14:02:02
Printed: Oct 29, 2013 11:16:30

Data Summary: {Data Description}



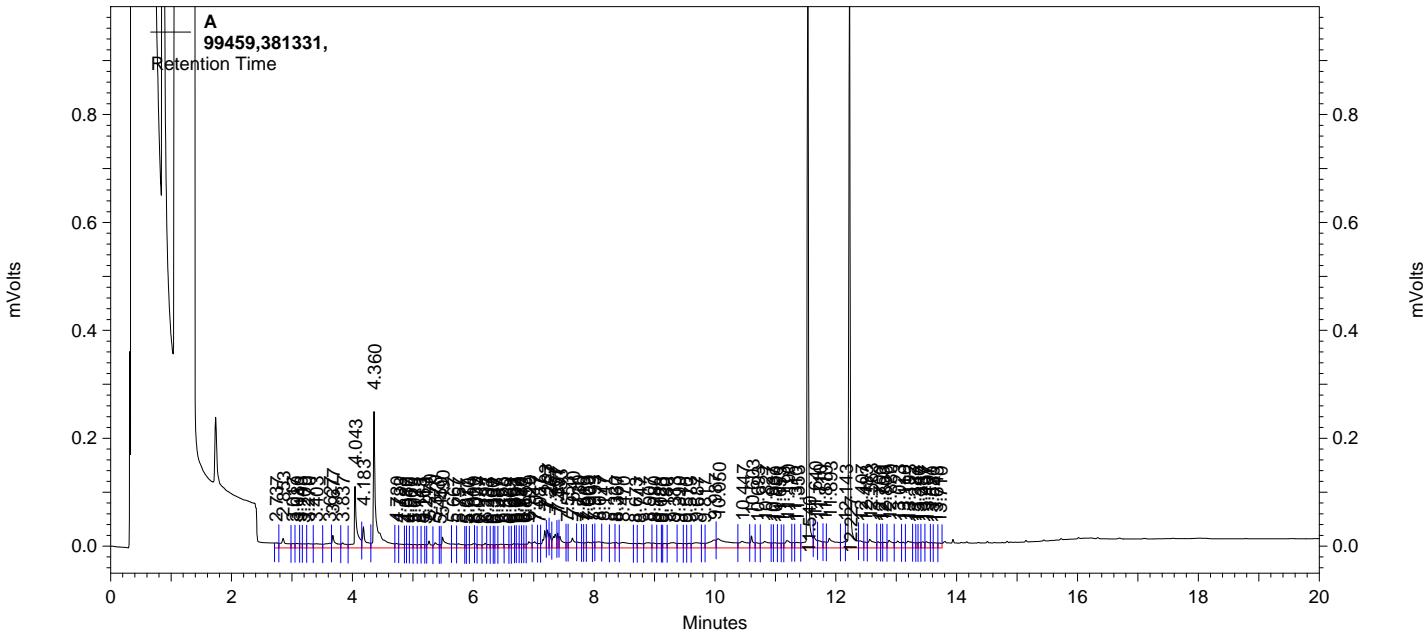
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	2055591	90.121
Tricontane	12.230	1915204	91.141
DSL (C10C28)		5636426	142.332
DRO (C10C34)		6423897	172.643

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\012.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381331,
Acquired: Oct 22, 2013 14:34:59
Printed: Oct 29, 2013 12:44:48

Data Summary: {Data Description}



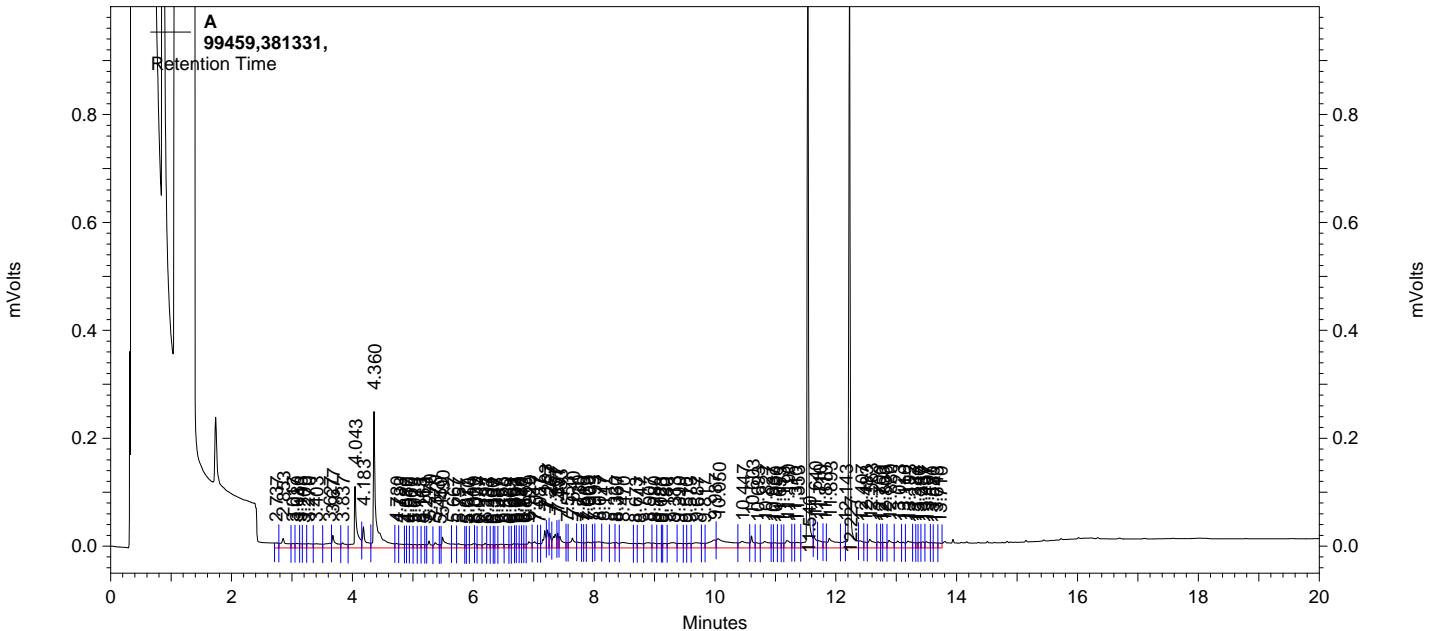
A Results

Component	Retention Time	Area Counts
C10C20		3725544
C20C34		2908483

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\012.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381331,
Acquired: Oct 22, 2013 14:34:59
Printed: Oct 29, 2013 11:16:36

Data Summary: {Data Description}



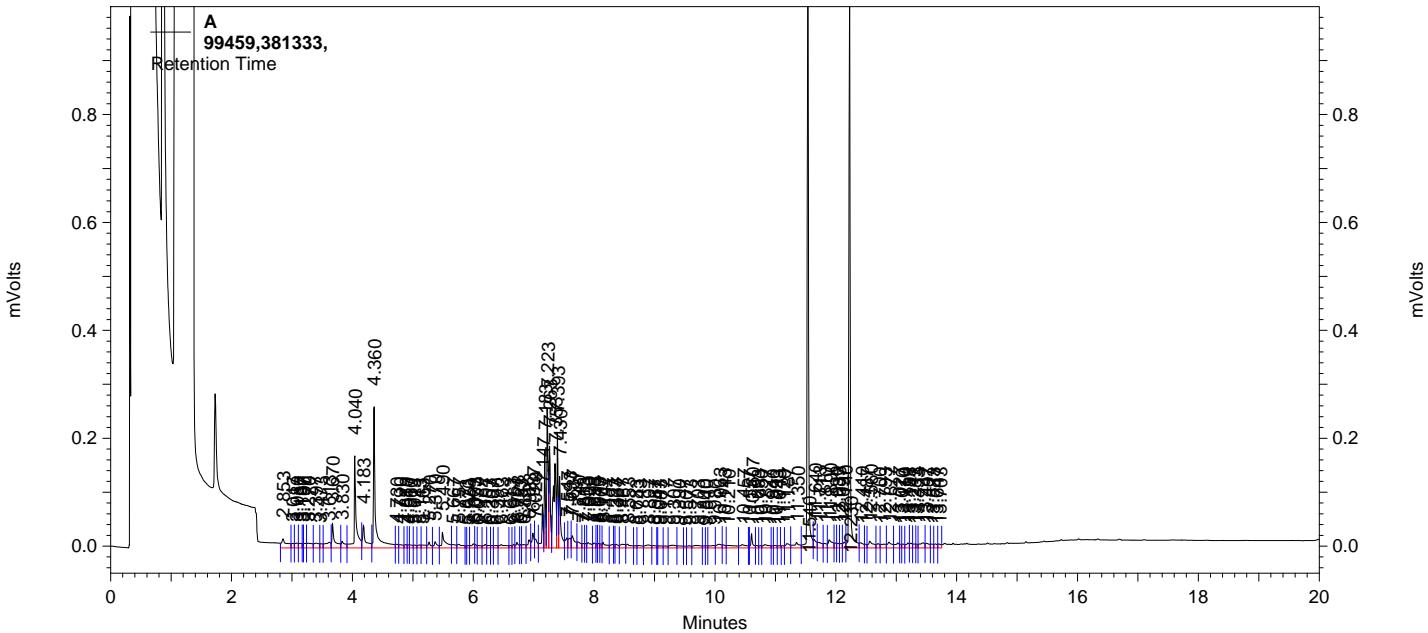
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1834113	81.293
Tricontane	12.227	1776110	85.086
DSL (C10C28)		5532211	138.057
DRO (C10C34)		6634027	181.258

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\013.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381333,
Acquired: Oct 22, 2013 15:08:01
Printed: Oct 29, 2013 12:44:54

Data Summary: {Data Description}



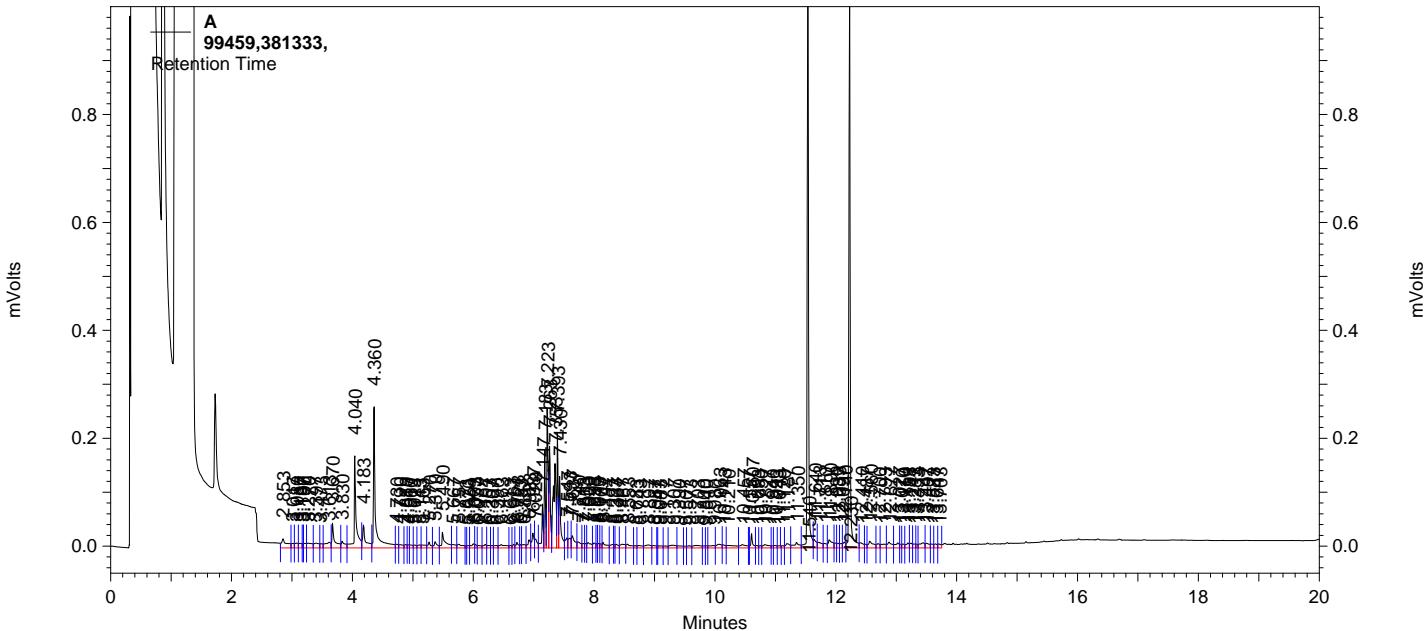
A Results

Component	Retention Time	Area Counts
C10C20		5190411
C20C34		1684756

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\013.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381333,
Acquired: Oct 22, 2013 15:08:01
Printed: Oct 29, 2013 11:16:42

Data Summary: {Data Description}



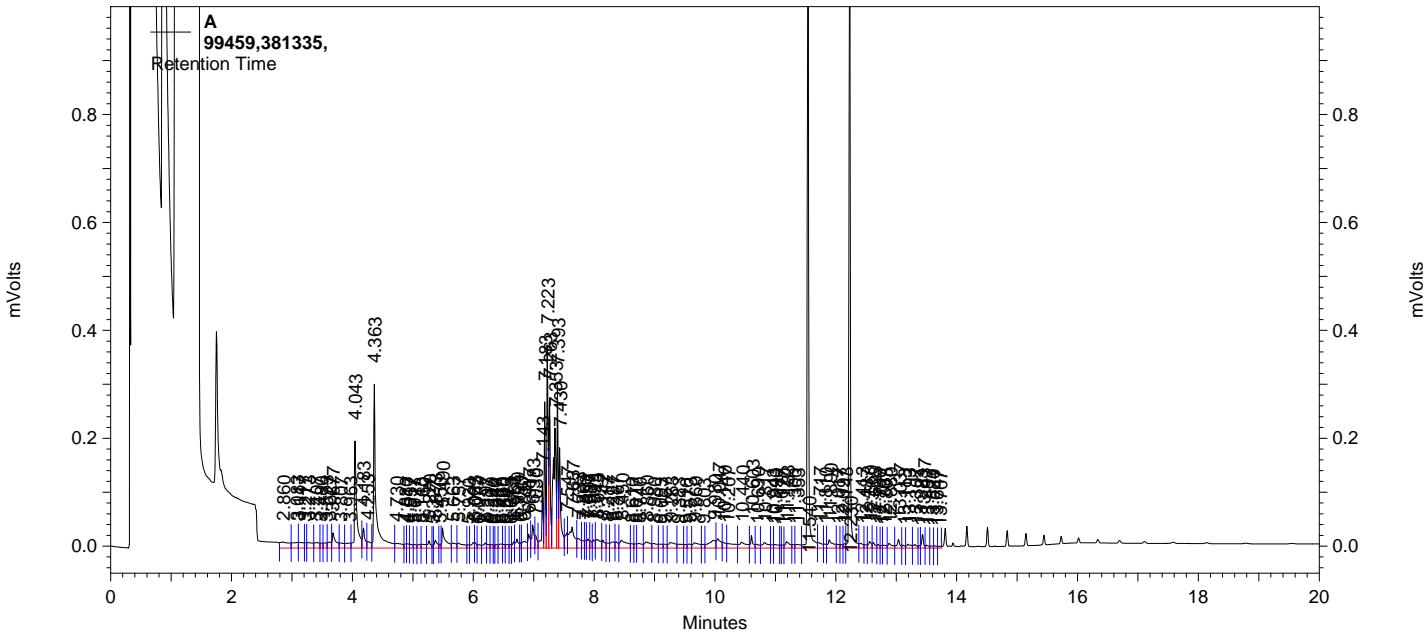
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1754403	78.116
Triacontane	12.230	1641722	79.235
DSL (C10C28)		6059997	159.706
DRO (C10C34)		6875167	191.143

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\014.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381335,
Acquired: Oct 22, 2013 15:41:06
Printed: Oct 29, 2013 12:45:00

Data Summary: {Data Description}



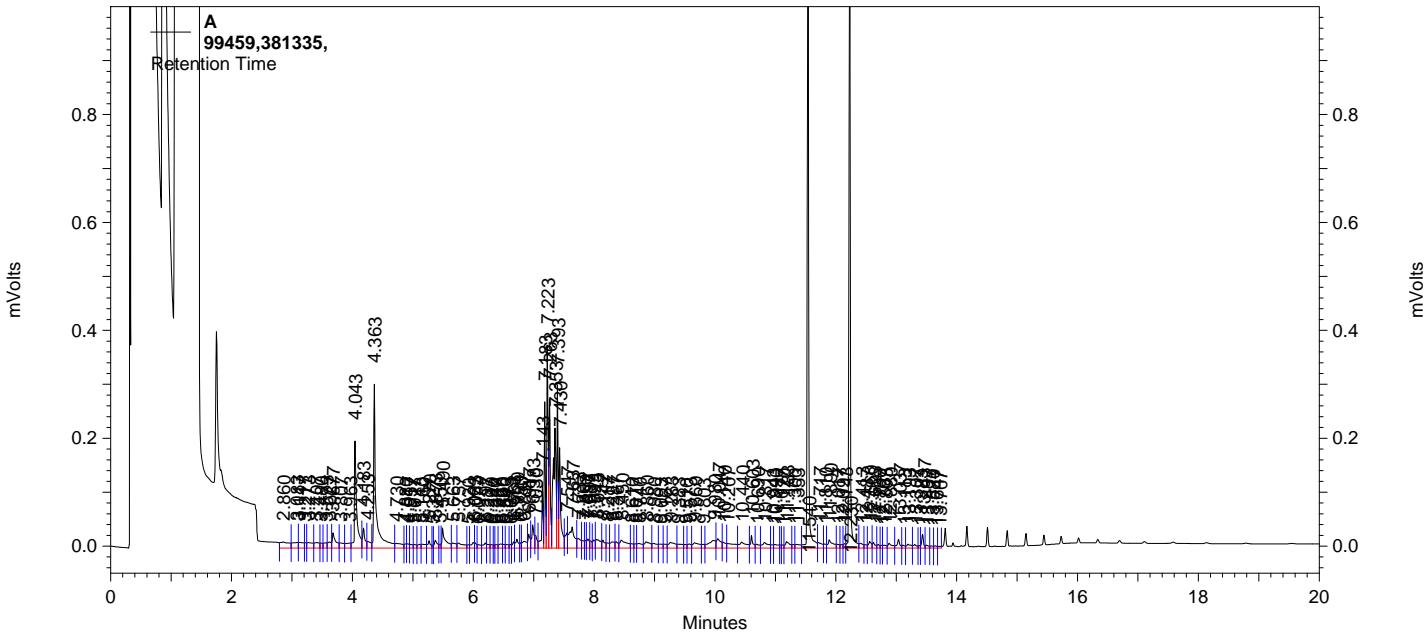
A Results

All Results	Component	Retention Time	Area Counts
	C10C20		7343054
	C20C34		2201255

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\014.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381335,
Acquired: Oct 22, 2013 15:41:06
Printed: Oct 29, 2013 11:16:49

Data Summary: {Data Description}



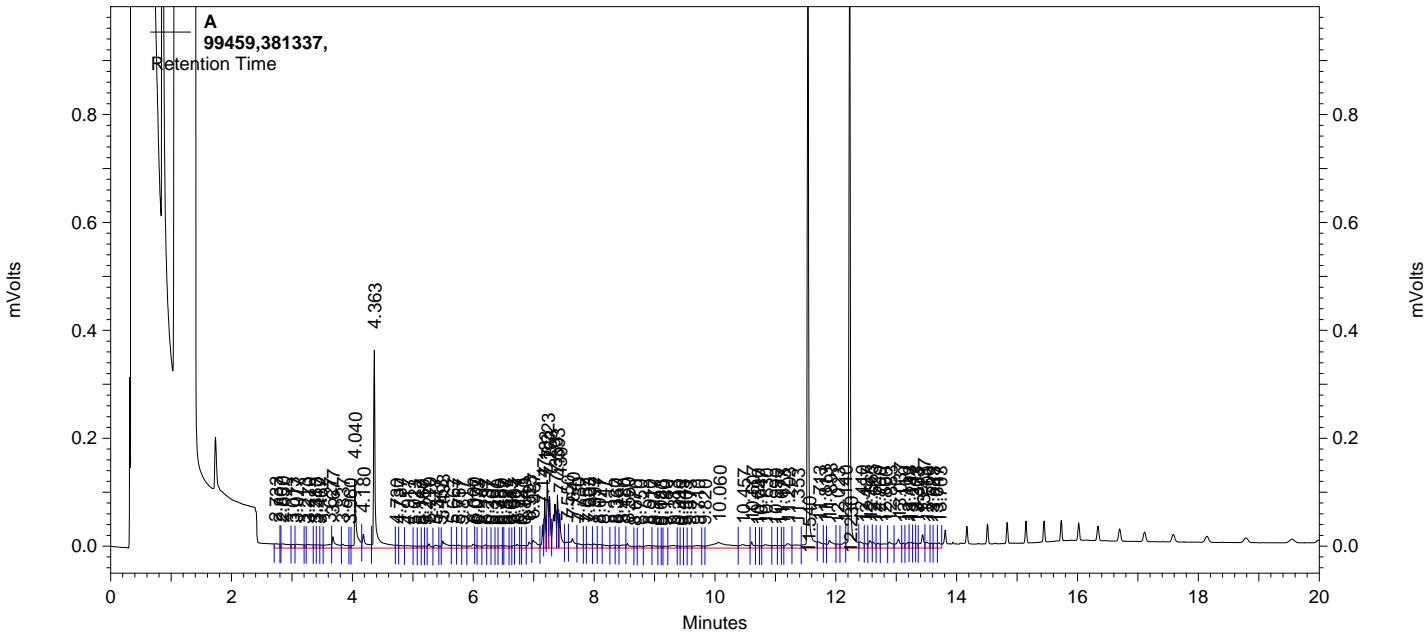
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	2006976	88.183
Tricontane	12.230	1870492	89.195
DSL (C10C28)		8858794	274.503
DRO (C10C34)		9544309	300.562

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\017.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381337,
Acquired: Oct 22, 2013 17:20:10
Printed: Oct 29, 2013 12:45:07

Data Summary: {Data Description}



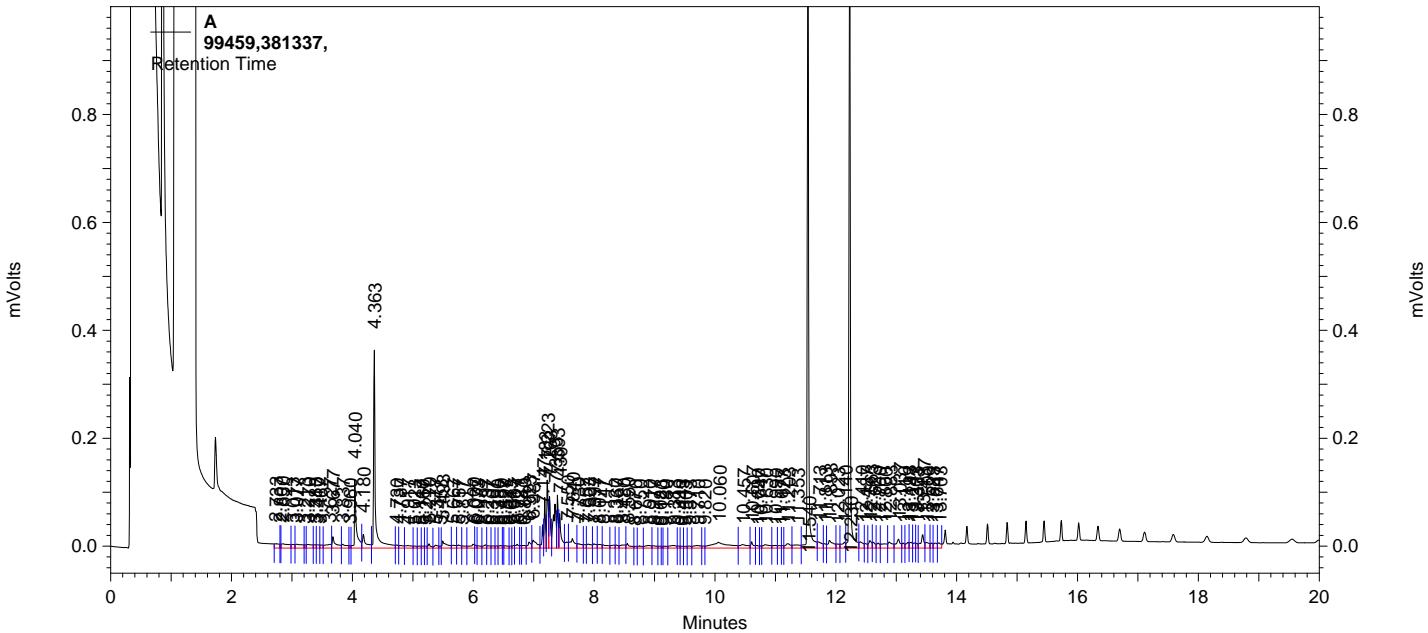
A Results

Component	Retention Time	Area Counts
C10C20		3712999
C20C34		1810381

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\017.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381337,
Acquired: Oct 22, 2013 17:20:10
Printed: Oct 29, 2013 11:17:13

Data Summary: {Data Description}



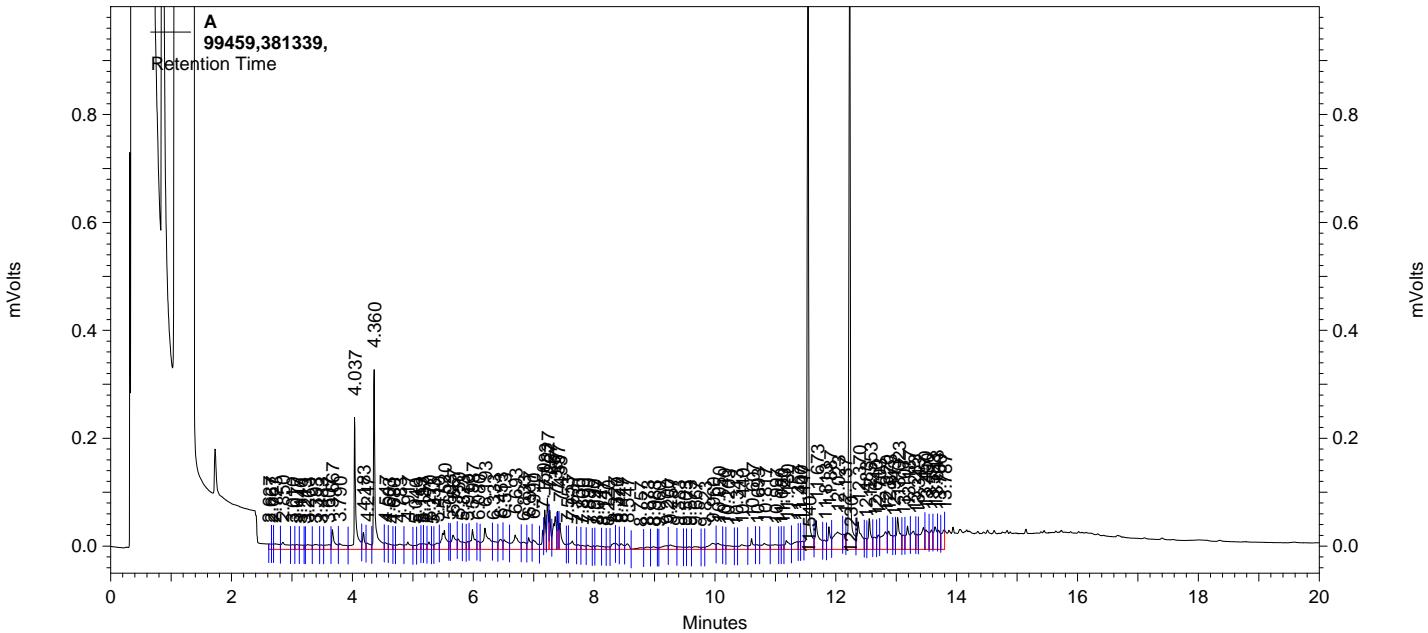
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1936536	85.376
Triacontane	12.230	1858507	88.673
DSL (C10C28)		4598781	99.771
DRO (C10C34)		5523380	135.728

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\018.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381339,
Acquired: Oct 22, 2013 17:53:06
Printed: Oct 29, 2013 12:45:13

Data Summary: {Data Description}



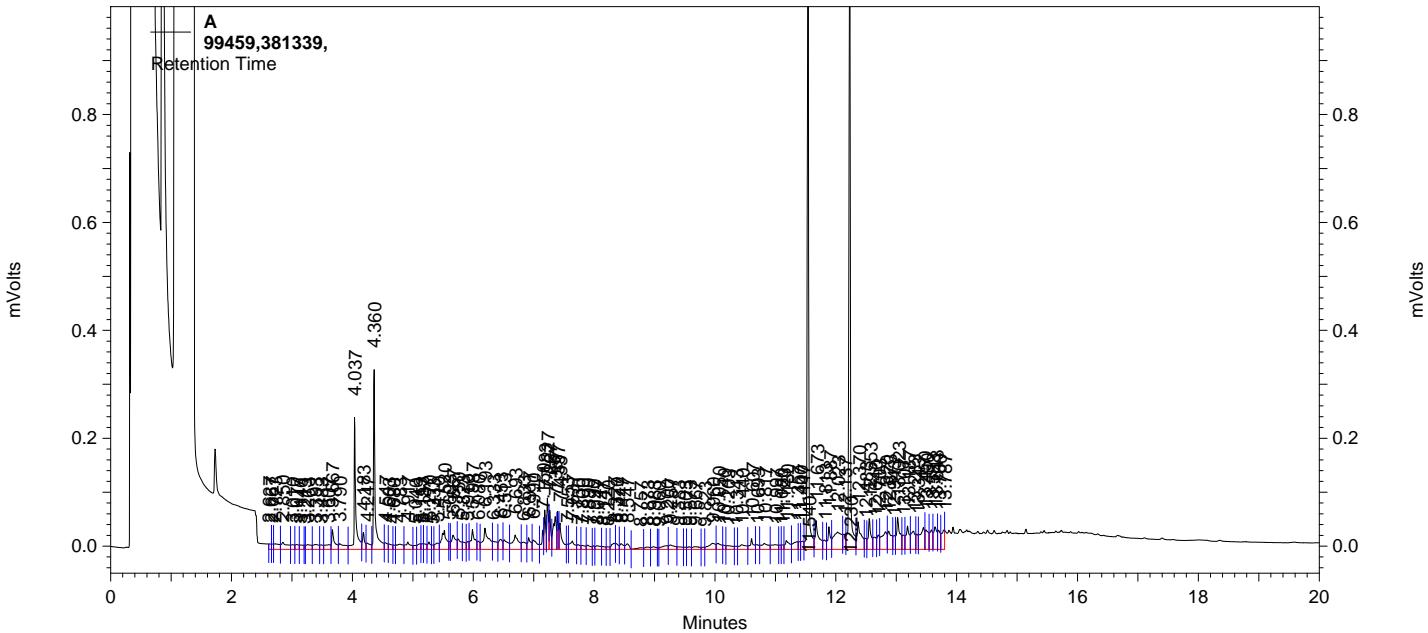
A Results

Component	Retention Time	Area Counts
C10C20		5374903
C20C34		3824032

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\018.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381339,
Acquired: Oct 22, 2013 17:53:06
Printed: Oct 29, 2013 11:17:19

Data Summary: {Data Description}



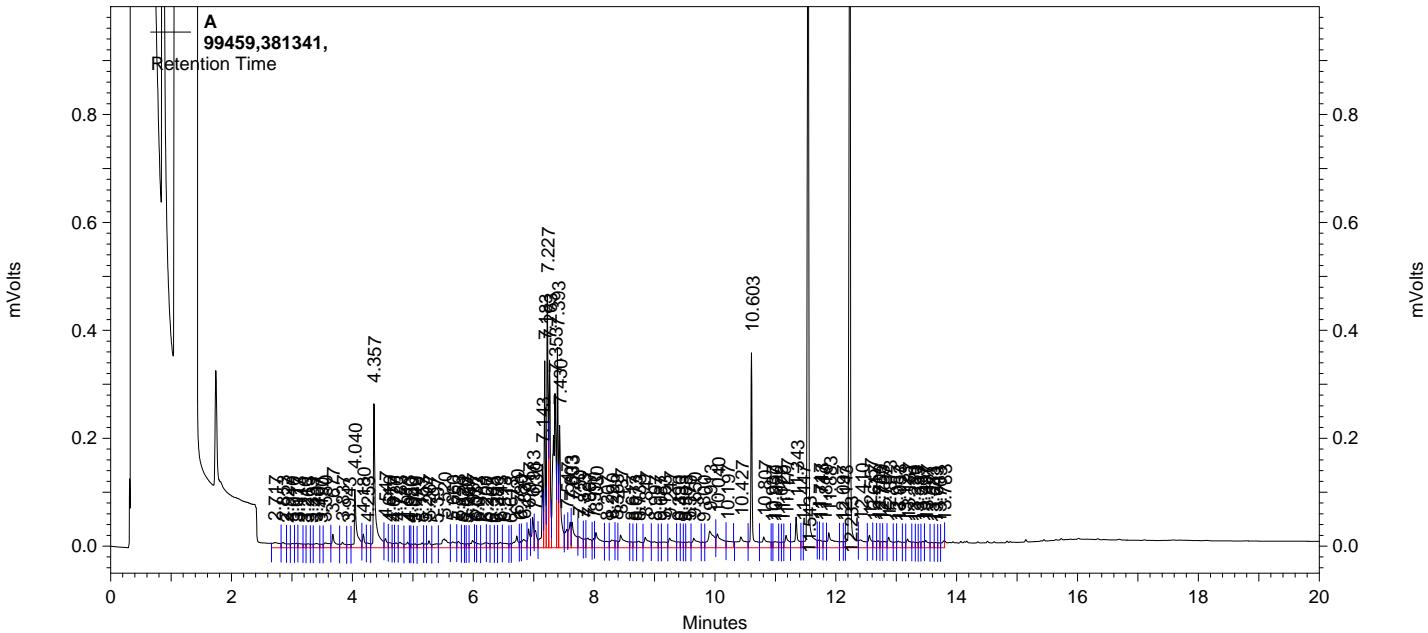
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1994053	87.668
Triacontane	12.230	2016962	95.571
DSL (C10C28)		6655921	184.148
DRO (C10C34)		9198935	286.404

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\019.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113alt.met
User: JJY
Sample ID: 99459,381341,
Acquired: Oct 22, 2013 18:25:58
Printed: Oct 29, 2013 12:45:20

Data Summary: {Data Description}



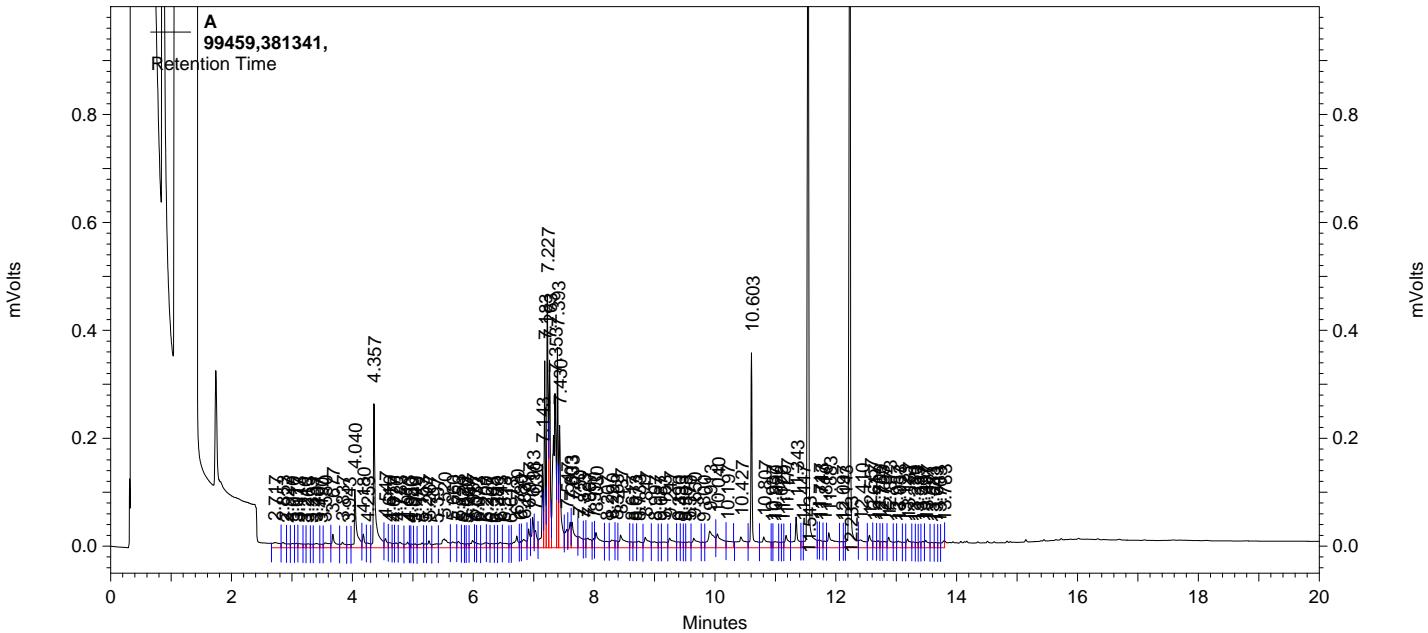
A Results

Component	Retention Time	Area Counts
C10C20		8056907
C20C34		4075039

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\019.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 99459,381341,
Acquired: Oct 22, 2013 18:25:58
Printed: Oct 29, 2013 11:17:25

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.543	2510733	108.261
Triacontane	12.233	2457571	114.753
DSL (C10C28)		10895119	358.027
DRO (C10C34)		12131946	406.640

**SEMI - VOLATILE ORGANIC ANALYSIS
INITIAL CALIBRATION
DOCUMENTS**

Summary Report

Instrument ID: Semi 4 (Offline)

Data Path: C:\Instarch\Semi 4\Sequence\101713eroic.seq

User ID: JJY

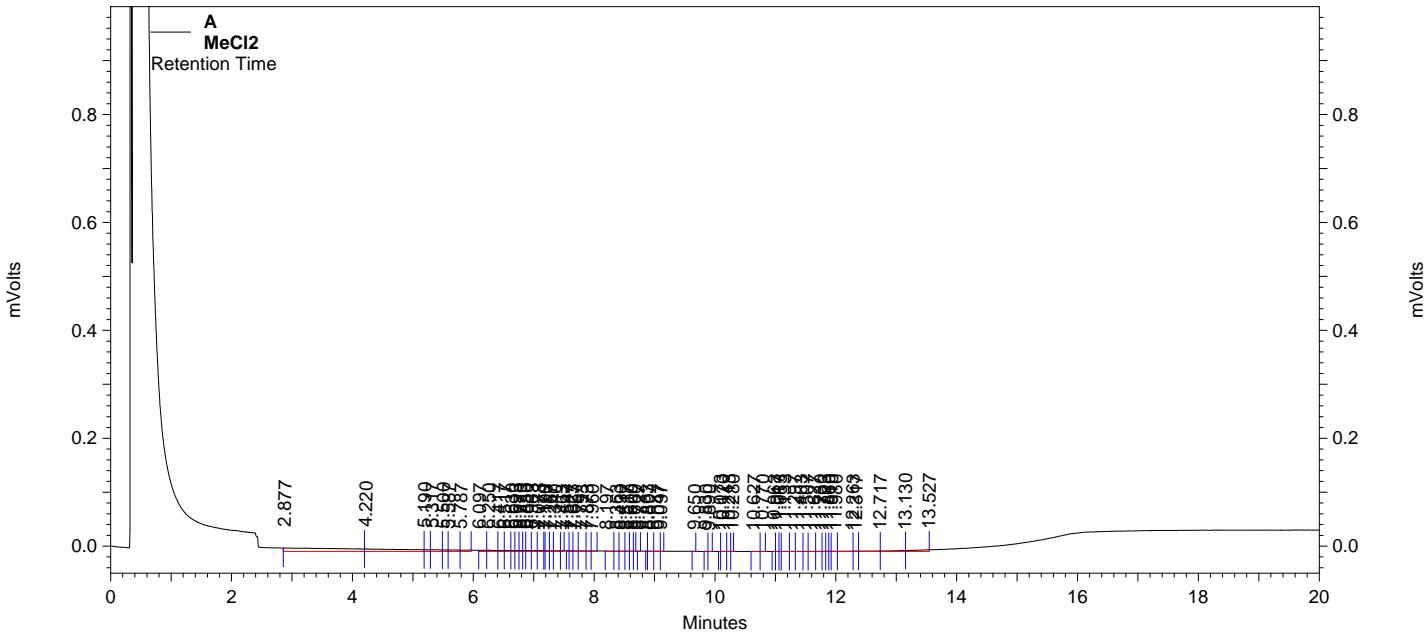
Printed Date: Oct 29, 2013 09:41:17

<u>Run Number</u>	<u>Sample ID</u>	<u>Data Filename</u>	<u>Method Filename</u>	<u>Analysis Date</u>	<u>Data Description</u>
1	MeCl2	001.dat	101713eroic.met	Oct 17, 2013 21:26:25	
2	Frac std C8 C40 DRO 5744	002.dat	101713eroic.met	Oct 17, 2013 21:59:12	
3	MeCl2	003.dat	101713eroic.met	Oct 17, 2013 22:32:04	
4	8015 ICAL 1 DRO 5831	004.dat	101713eroic.met	Oct 17, 2013 23:04:52	
5	8015 ICAL 2 DRO 5832	005.dat	101713eroic.met	Oct 17, 2013 23:37:43	
6	8015 ICAL 3 DRO 5833	006.dat	101713eroic.met	Oct 18, 2013 00:10:28	
7	8015 ICAL 4 DRO 5834	007.dat	101713eroic.met	Oct 18, 2013 00:43:14	
8	8015 ICAL 5 DRO 5835	008.dat	101713eroic.met	Oct 18, 2013 01:15:59	
9	8015 ICAL 6 DRO 5779	009.dat	101713eroic.met	Oct 18, 2013 01:48:43	
10	8015 ICV DRO 5836	010.dat	101713eroic.met	Oct 18, 2013 02:21:26	

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\001.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 17, 2013 21:26:25
Printed: Oct 29, 2013 09:41:52

Data Summary: {Data Description}



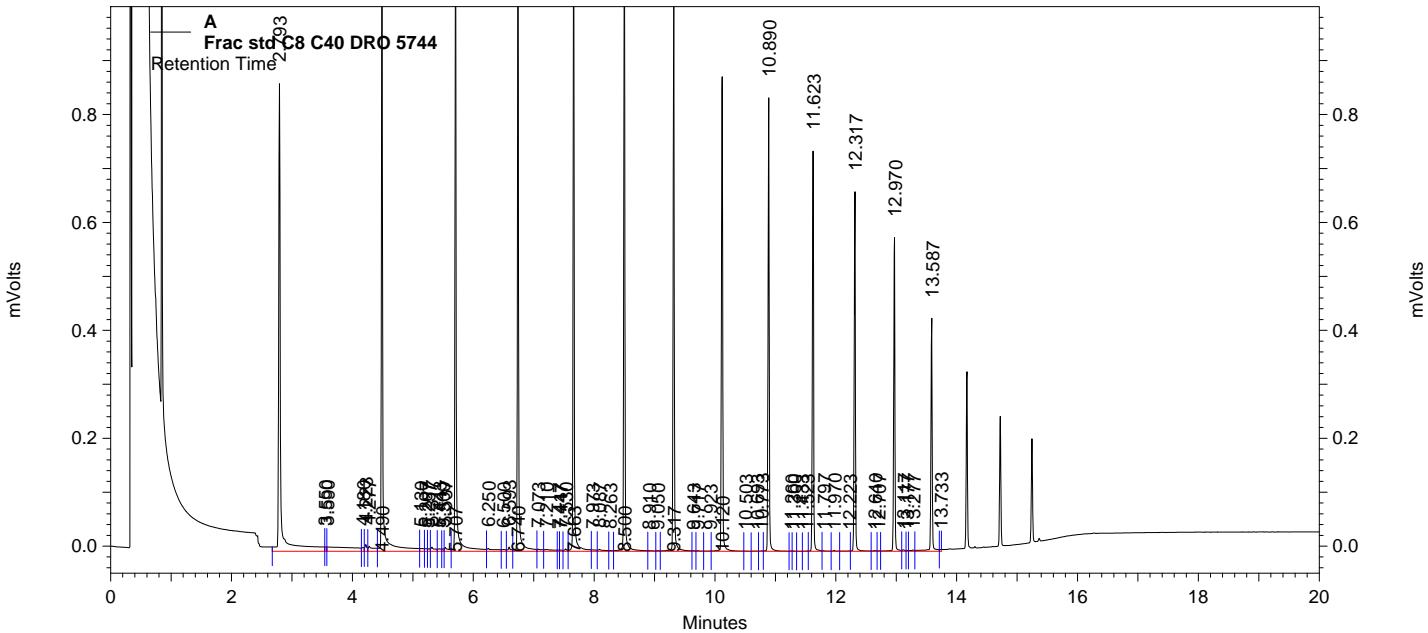
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1125	1.130
Triacontane	12.317	3138	1.592
DSL (C10C28)		1046934	0.000
DRO (C10C34)		1160712	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\002.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 17, 2013 21:59:12
Printed: Oct 29, 2013 09:42:29

Data Summary: {Data Description}



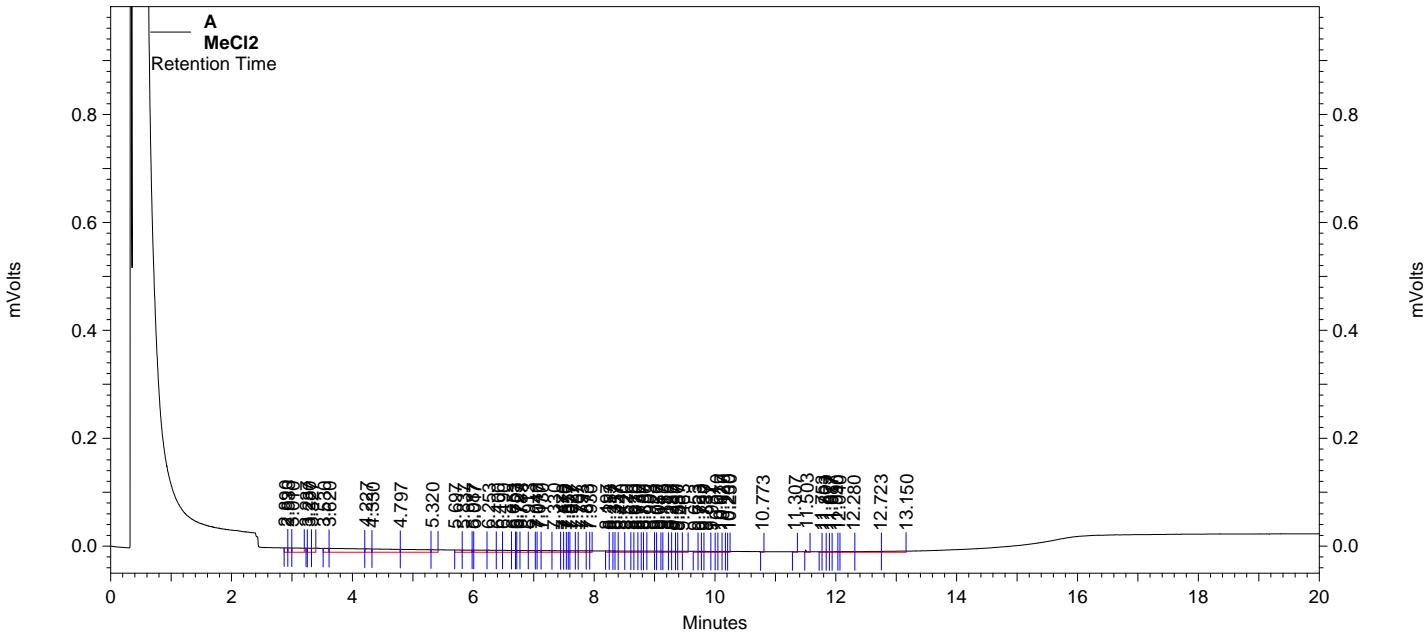
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	1049949	70.620
Triacontane	12.317	941988	72.032
DSL (C10C28)		14801527	557.552
DRO (C10C34)		16330593	629.299

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\003.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 17, 2013 22:32:04
Printed: Oct 29, 2013 09:42:34

Data Summary: {Data Description}



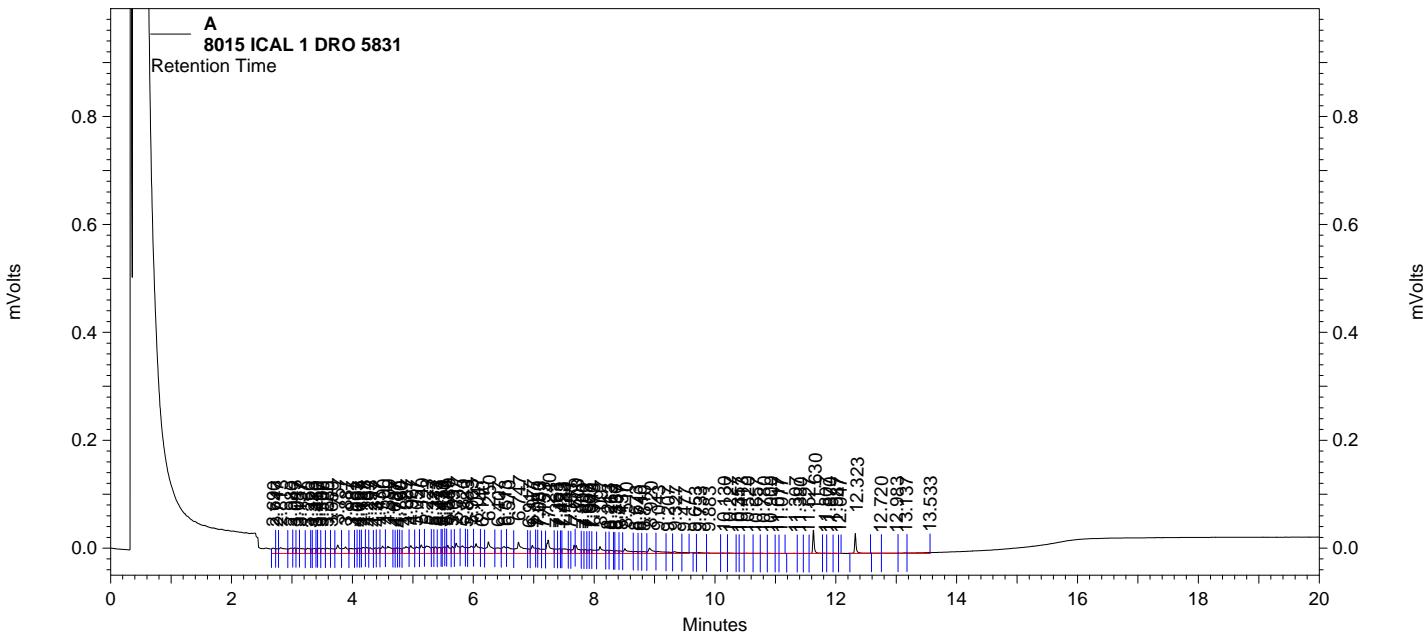
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane			0.000 BDL
Triacontane	12.280	14053	2.411
DSL (C10C28)		1496248	0.000
DRO (C10C34)		1585901	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\004.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 1 DRO 5831
Acquired: Oct 17, 2013 23:04:52
Printed: Oct 29, 2013 09:42:39

Data Summary: {Data Description}



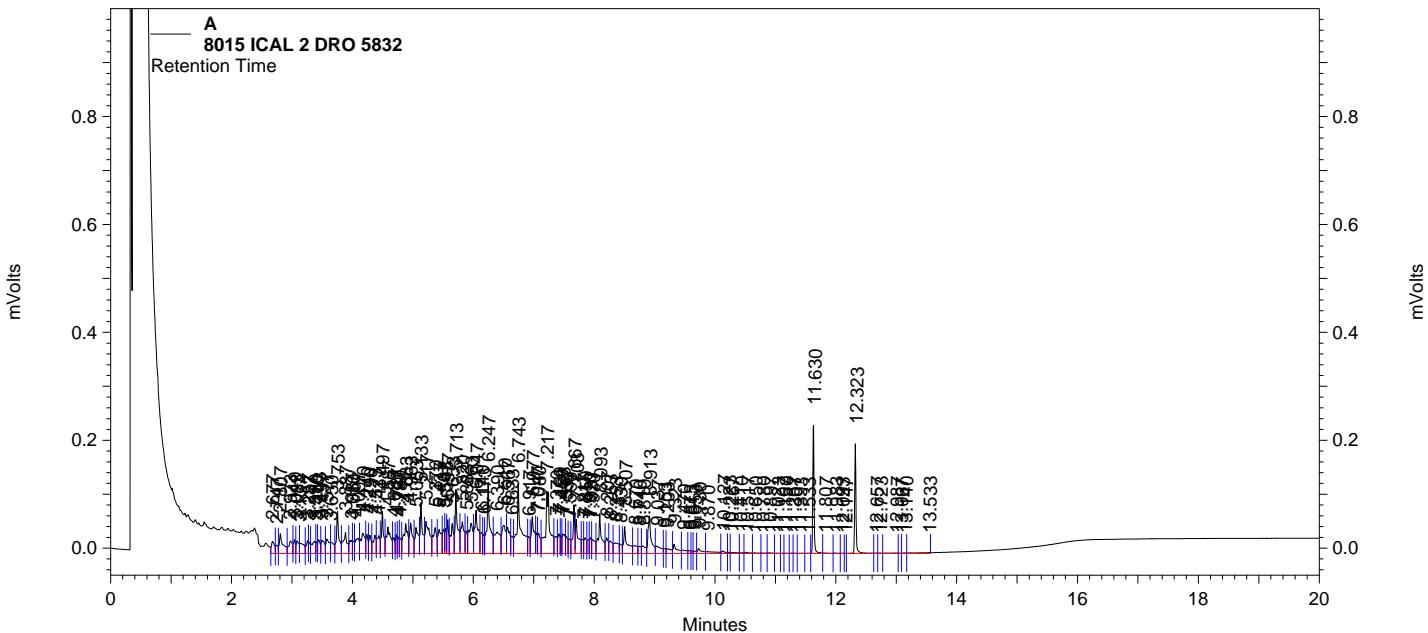
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.630	75149	5.000 CAL
Triacontane	12.323	71697	5.000 CAL
DSL (C10C28)		3650726	100.000 CAL
DRO (C10C34)		3711497	100.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\005.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 2 DRO 5832
Acquired: Oct 17, 2013 23:37:43
Printed: Oct 29, 2013 09:42:45

Data Summary: {Data Description}



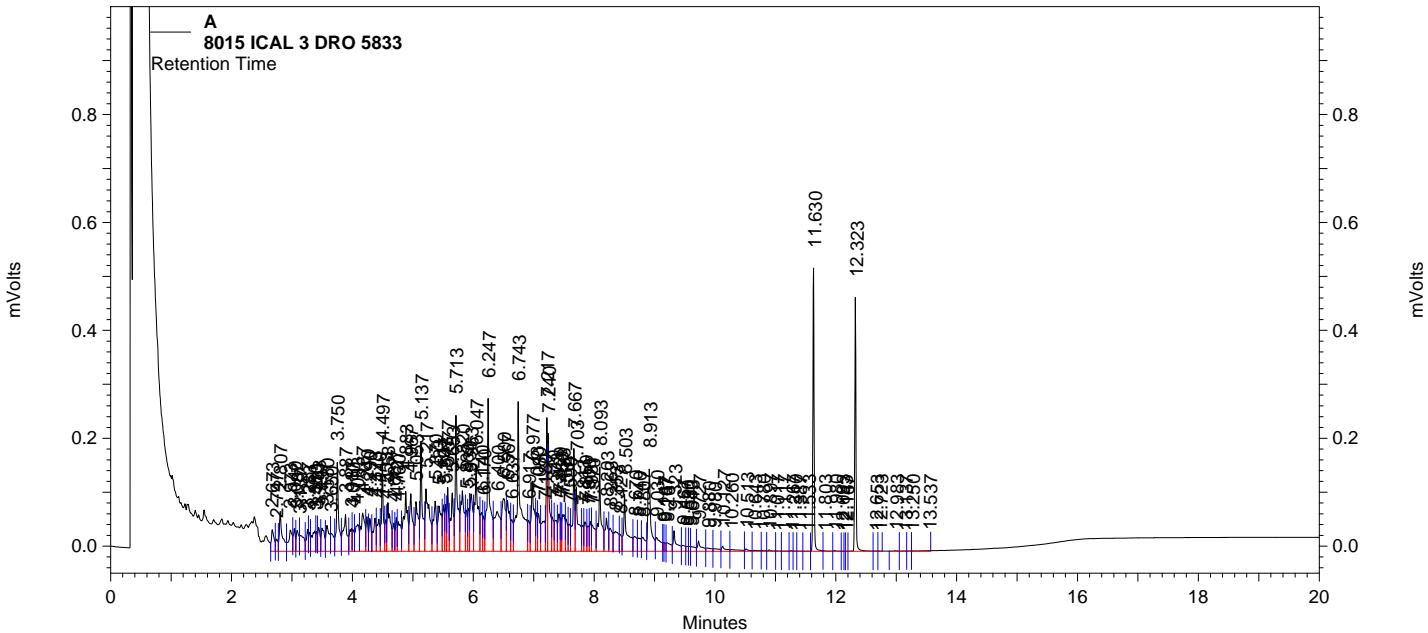
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.630	354266	25.000 CAL
Triacontane	12.323	313693	25.000 CAL
DSL (C10C28)		12383612	500.000 CAL
DRO (C10C34)		12432582	500.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\006.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 3 DRO 5833
Acquired: Oct 18, 2013 00:10:28
Printed: Oct 29, 2013 09:42:50

Data Summary: {Data Description}



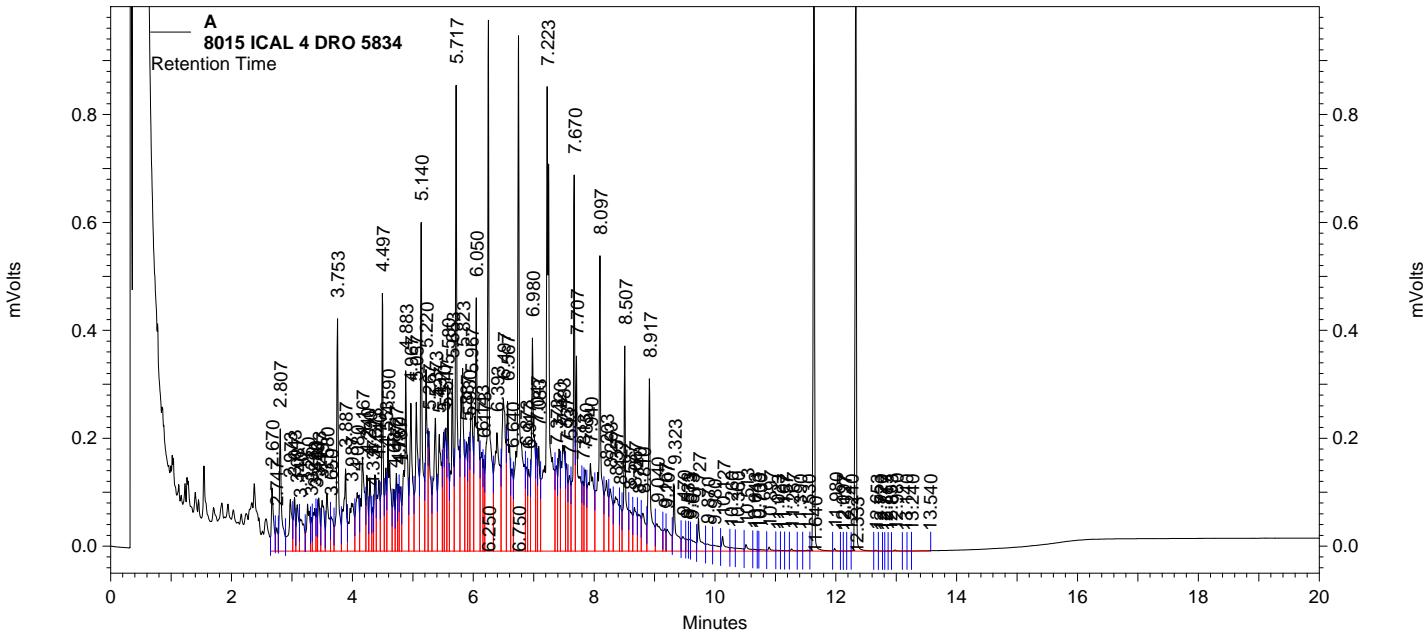
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.630	738893	50.000 CAL
Triacontane	12.323	661344	50.000 CAL
DSL (C10C28)		22741550	1000.000 CAL
DRO (C10C34)		22781254	1000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\007.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 4 DRO 5834
Acquired: Oct 18, 2013 00:43:14
Printed: Oct 29, 2013 09:42:54

Data Summary: {Data Description}



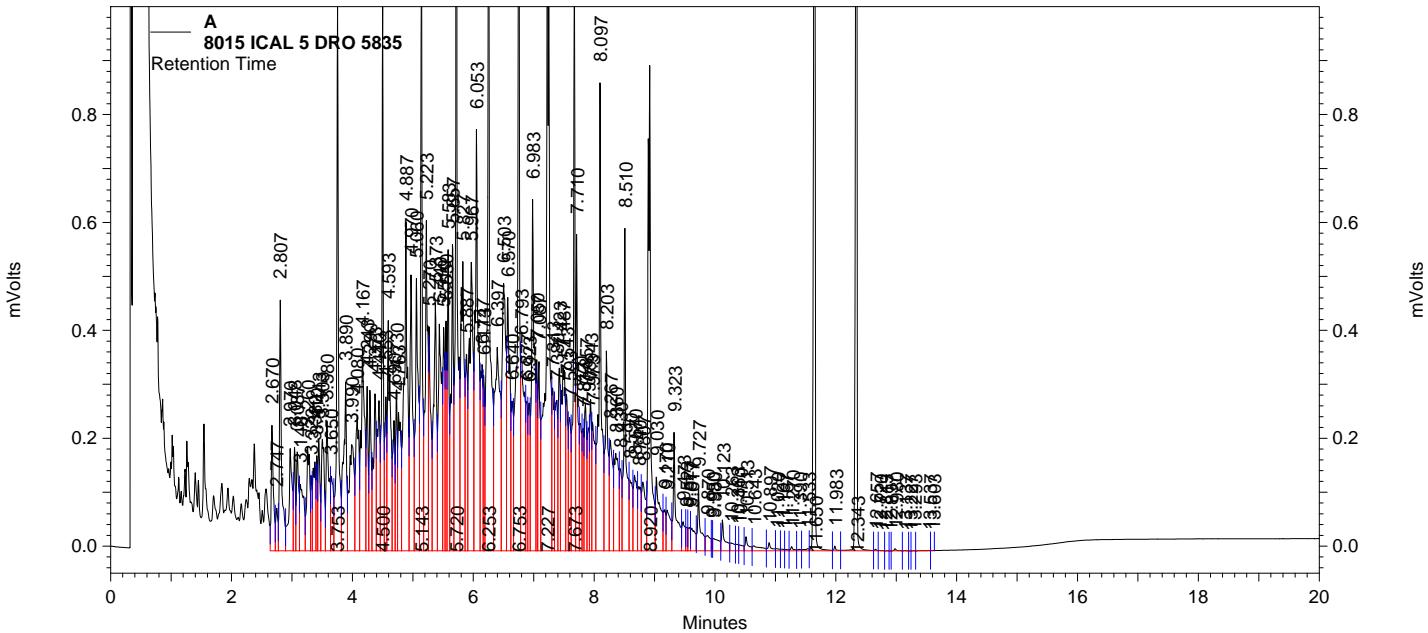
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.640	1885246	125.000 CAL
Triacontane	12.333	1643919	125.000 CAL
DSL (C10C28)		58361216	2500.000 CAL
DRO (C10C34)		58388924	2500.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\008.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 5 DRO 5835
Acquired: Oct 18, 2013 01:15:59
Printed: Oct 29, 2013 09:42:59

Data Summary: {Data Description}



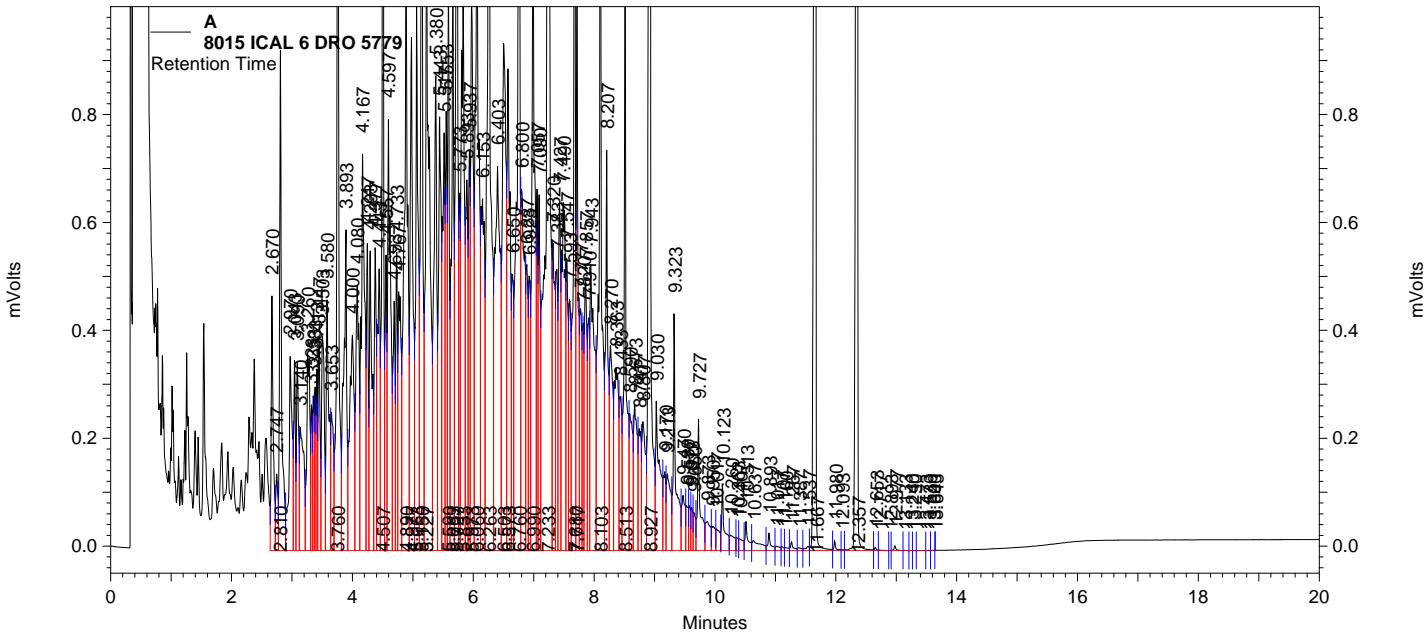
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.650	3717934	250.000 CAL
Triacontane	12.343	3253564	250.000 CAL
DSL (C10C28)		109742848	5000.000 CAL
DRO (C10C34)		109784432	5000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\009.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICAL 6 DRO 5779
Acquired: Oct 18, 2013 01:48:43
Printed: Oct 29, 2013 09:43:03

Data Summary: {Data Description}



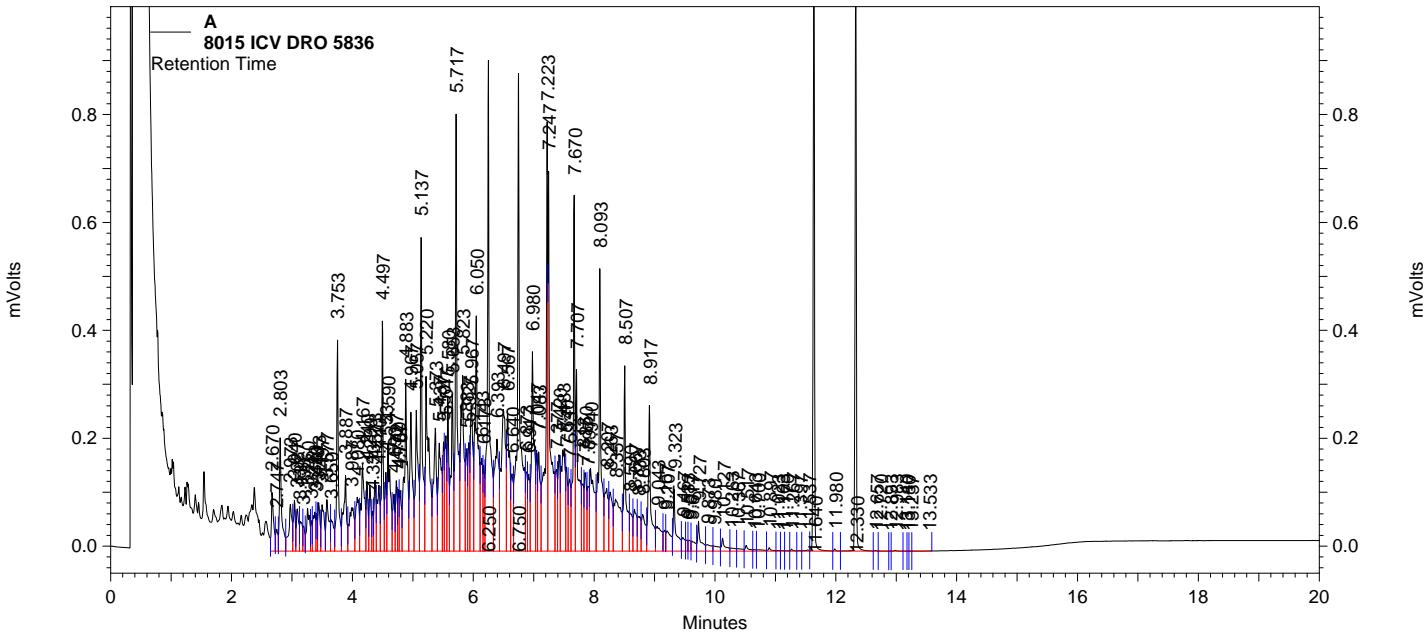
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.667	7546906	500.000 CAL
Triacontane	12.357	6675825	500.000 CAL
DSL (C10C28)		208403856	10000.000 CAL
DRO (C10C34)		208490256	10000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101713deroic\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 ICV DRO 5836
Acquired: Oct 18, 2013 02:21:26
Printed: Oct 29, 2013 09:43:08

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.640	1815343	121.331
Triacontane	12.330	1599587	121.371
DSL (C10C28)		54986256	2496.747
DRO (C10C34)		55012560	2495.674

QC Check Standard Report

Page 1 of 1 (11)

Sequence : C:\Instarch\Semi 4\Sequence\101713eroic.seq

User : JJY

Printed : Oct 29, 2013 09:43:11

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\101713deroic\010.dat	8015 ICV DRO 5836	Oct 29, 2013 09:43:11

A

Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	121.331	2.935	20.000	Passed
Triacontane	125.000	121.371	2.903	20.000	Passed
DSL (C10C28)	2500.000	2496.747	0.130	20.000	Passed
DRO (C10C34)	2500.000	2495.674	0.173	20.000	Passed

Summary Report

Instrument ID: Semi 4 (Offline)

Data Path: C:\Instarch\Semi 4\Sequence\102113deroic.seq

User ID: JJY

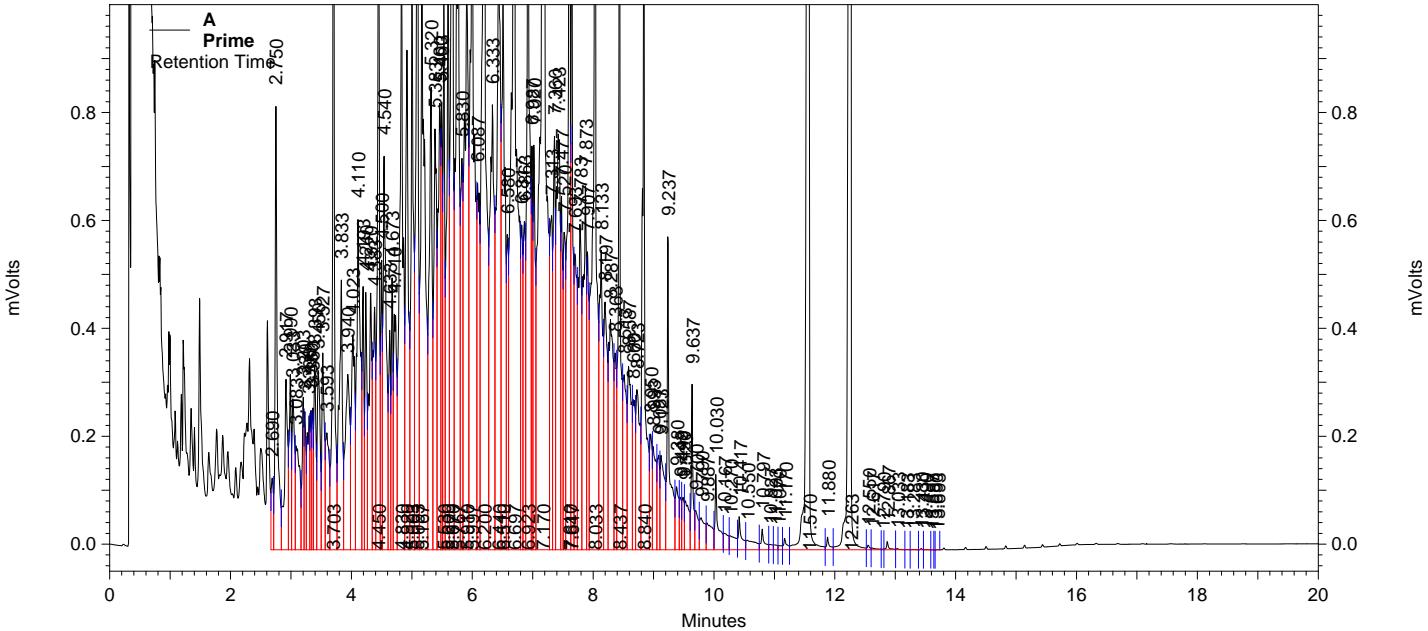
Printed Date: Oct 29, 2013 10:28:45

<u>Run Number</u>	<u>Sample ID</u>	<u>Data Filename</u>	<u>Method Filename</u>	<u>Analysis Date</u>	<u>Data Description</u>
1	Prime	001.dat	102113eroic.met	Oct 22, 2013 01:49:58	
2	MeCl2	002.dat	102113eroic.met	Oct 22, 2013 02:22:37	
3	Frac std C8 C40 DRO 5744	003.dat	102113eroic.met	Oct 22, 2013 02:55:18	
4	MeCl2	004.dat	102113eroic.met	Oct 22, 2013 03:27:57	
5	8015 ICAL 1 DRO 5831	005.dat	102113eroic.met	Oct 22, 2013 04:00:39	
6	8015 ICAL 2 DRO 5832	006.dat	102113eroic.met	Oct 22, 2013 04:33:20	
7	8015 ICAL 3 DRO 5833	007.dat	102113eroic.met	Oct 22, 2013 05:05:57	
8	8015 ICAL 4 DRO 5834	008.dat	102113eroic.met	Oct 22, 2013 05:38:35	
9	8015 ICAL 5 DRO 5835	009.dat	102113eroic.met	Oct 22, 2013 06:11:11	
10	8015 ICAL 6 DRO 5779	010.dat	102113eroic.met	Oct 22, 2013 06:43:53	
11	8015 ICV DRO 5836	011.dat	102113eroic.met	Oct 22, 2013 07:16:42	

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\001.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: Prime
Acquired: Oct 22, 2013 01:49:58
Printed: Oct 29, 2013 10:30:45

Data Summary: {Data Description}



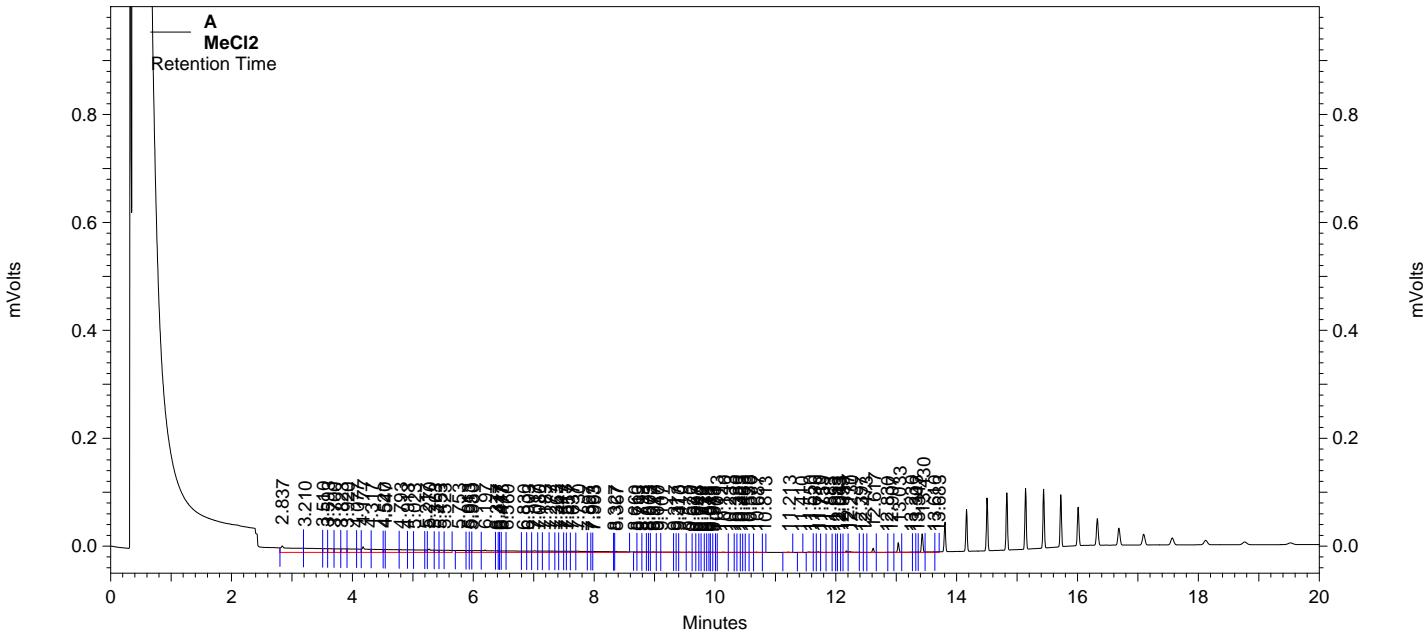
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.570	10677913	708.523
Triacontane	12.263	10135848	761.833
DSL (C10C28)		224430512	10673.618
DRO (C10C34)		224608240	10678.528

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\002.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 22, 2013 02:22:37
Printed: Oct 29, 2013 10:31:07

Data Summary: {Data Description}



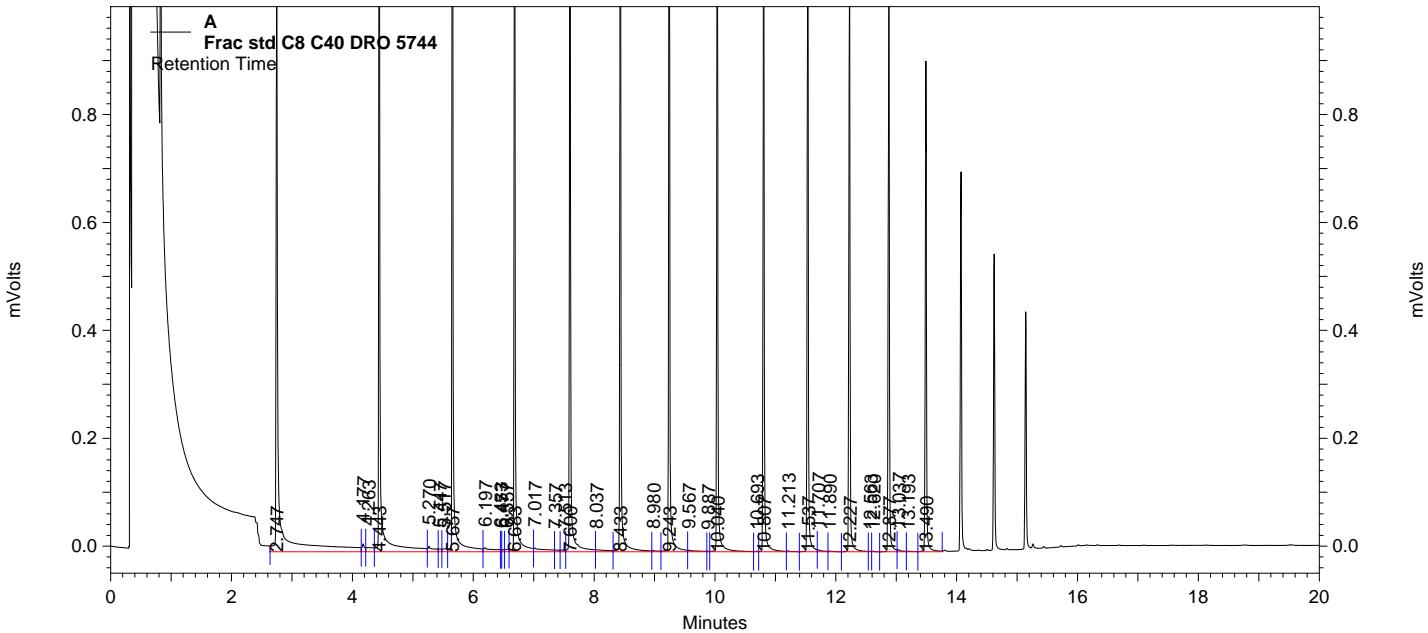
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.550	3749	1.303
Triacontane	12.230	7295	1.904
DSL (C10C28)		1518306	0.000
DRO (C10C34)		1660369	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\003.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 22, 2013 02:55:18
Printed: Oct 29, 2013 10:31:12

Data Summary: {Data Description}



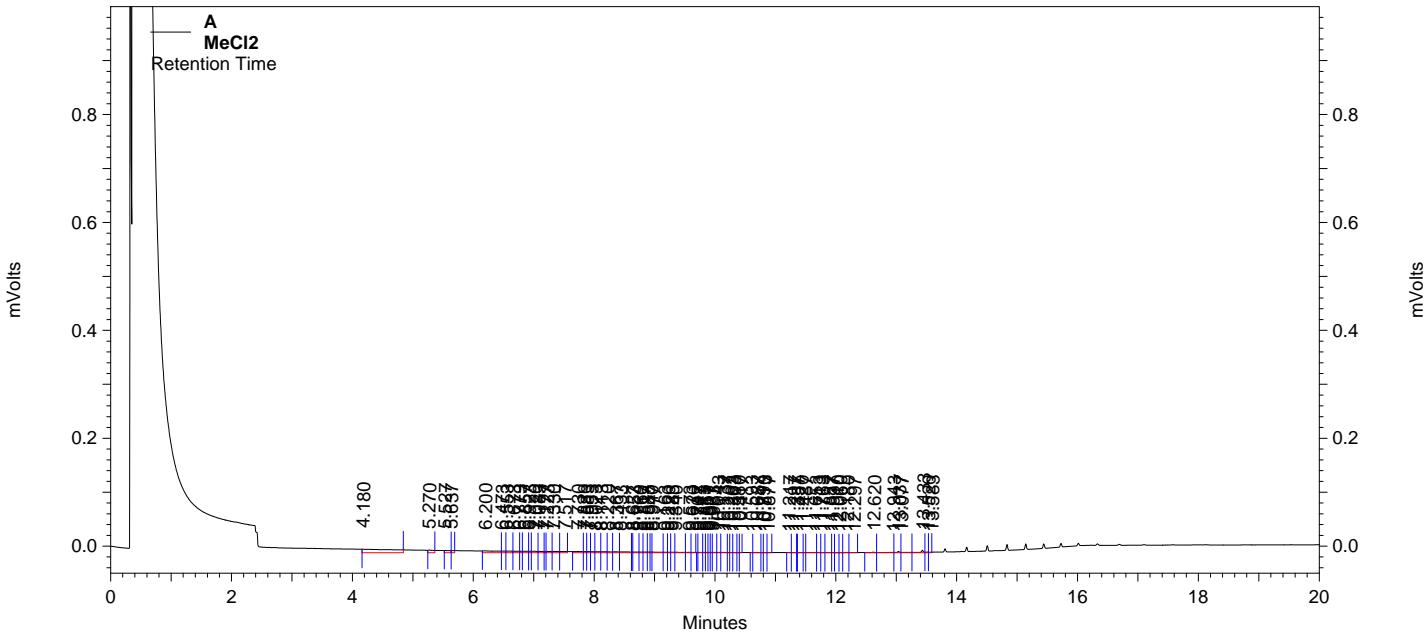
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.537	1651571	110.480
Triacontane	12.227	1604373	121.730
DSL (C10C28)		20006624	808.735
DRO (C10C34)		22897168	946.131

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\004.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 22, 2013 03:27:57
Printed: Oct 29, 2013 10:31:16

Data Summary: {Data Description}



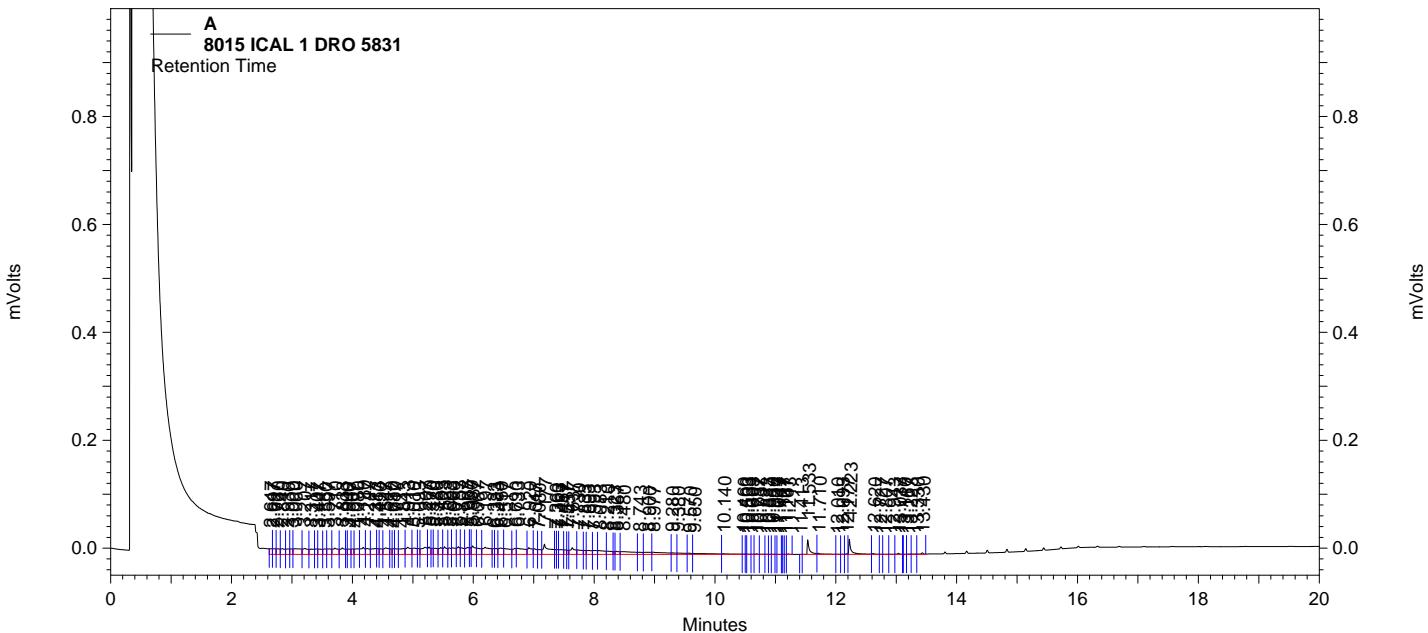
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.487	97	1.062
Triacontane	12.180	989	1.431
DSL (C10C28)		692130	0.000
DRO (C10C34)		732764	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\005.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 1 DRO 5831
Acquired: Oct 22, 2013 04:00:39
Printed: Oct 29, 2013 10:31:21

Data Summary: {Data Description}



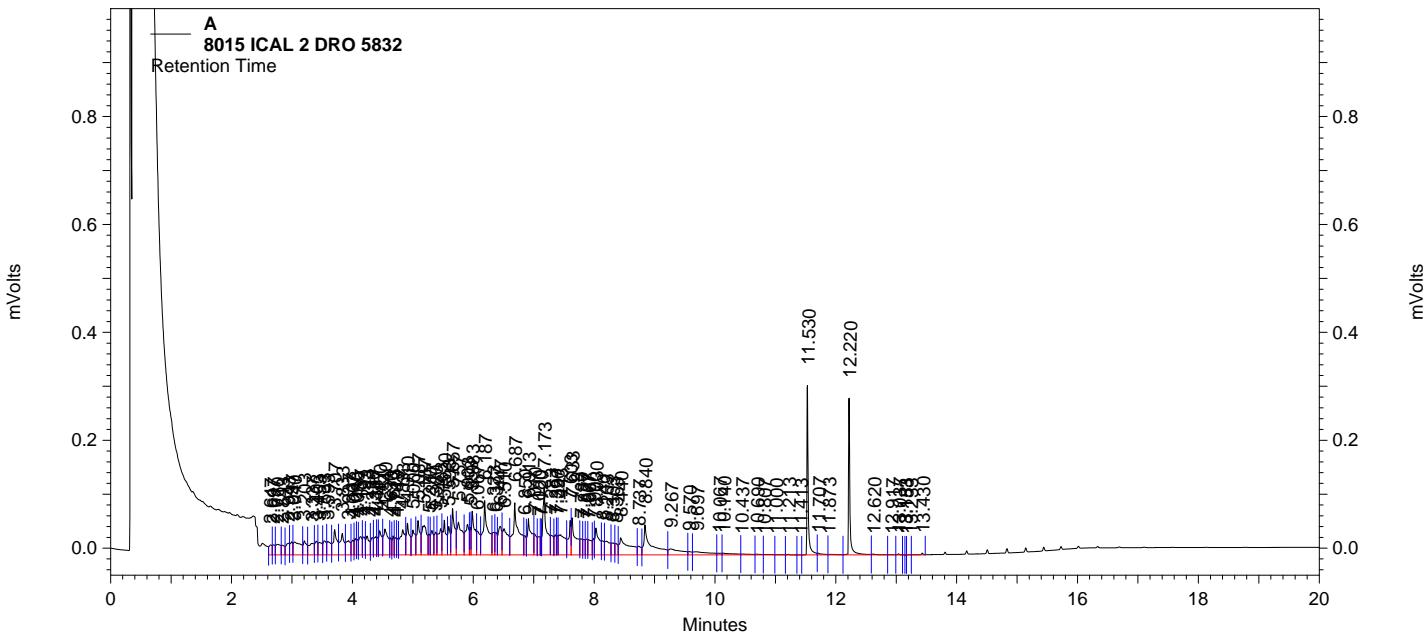
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.533	67690	5.000 CAL
Triacontane	12.223	78984	5.000 CAL
DSL (C10C28)		3734660	100.000 CAL
DRO (C10C34)		3786527	100.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\006.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 2 DRO 5832
Acquired: Oct 22, 2013 04:33:20
Printed: Oct 29, 2013 10:31:25

Data Summary: {Data Description}



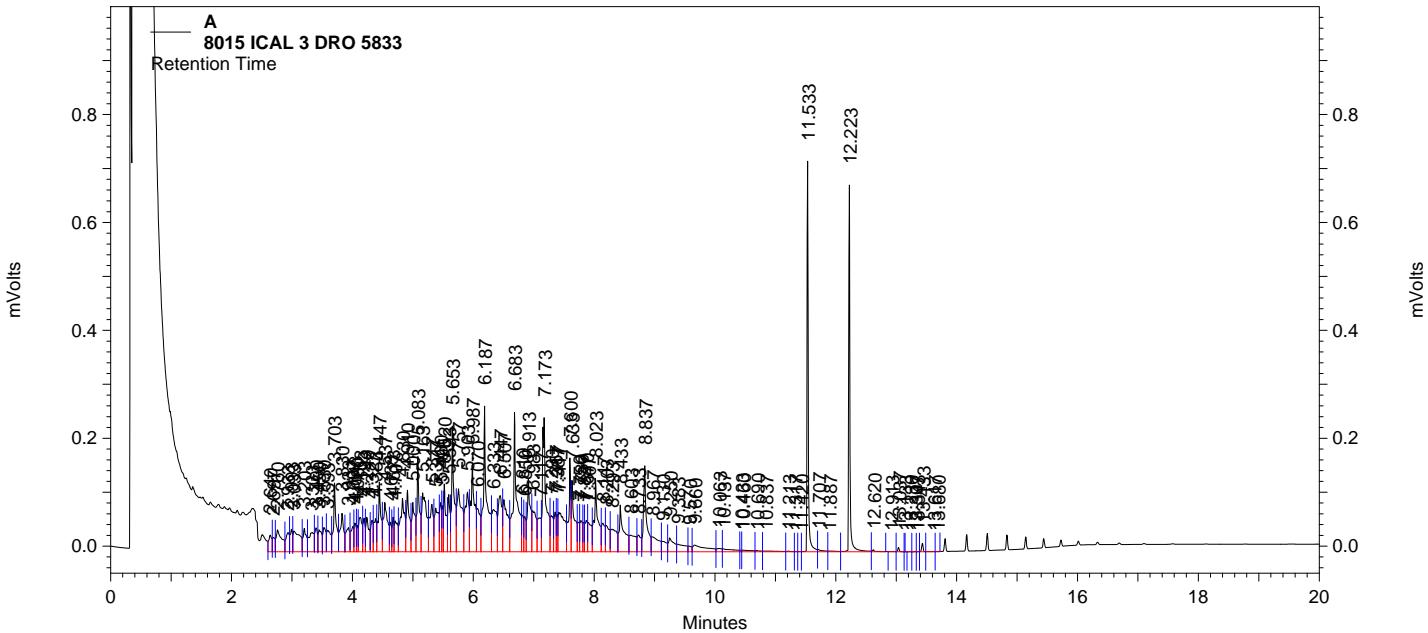
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.530	471916	25.000 CAL
Triacontane	12.220	467315	25.000 CAL
DSL (C10C28)		13280861	500.000 CAL
DRO (C10C34)		13329197	500.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\007.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 3 DRO 5833
Acquired: Oct 22, 2013 05:05:57
Printed: Oct 29, 2013 10:31:30

Data Summary: {Data Description}



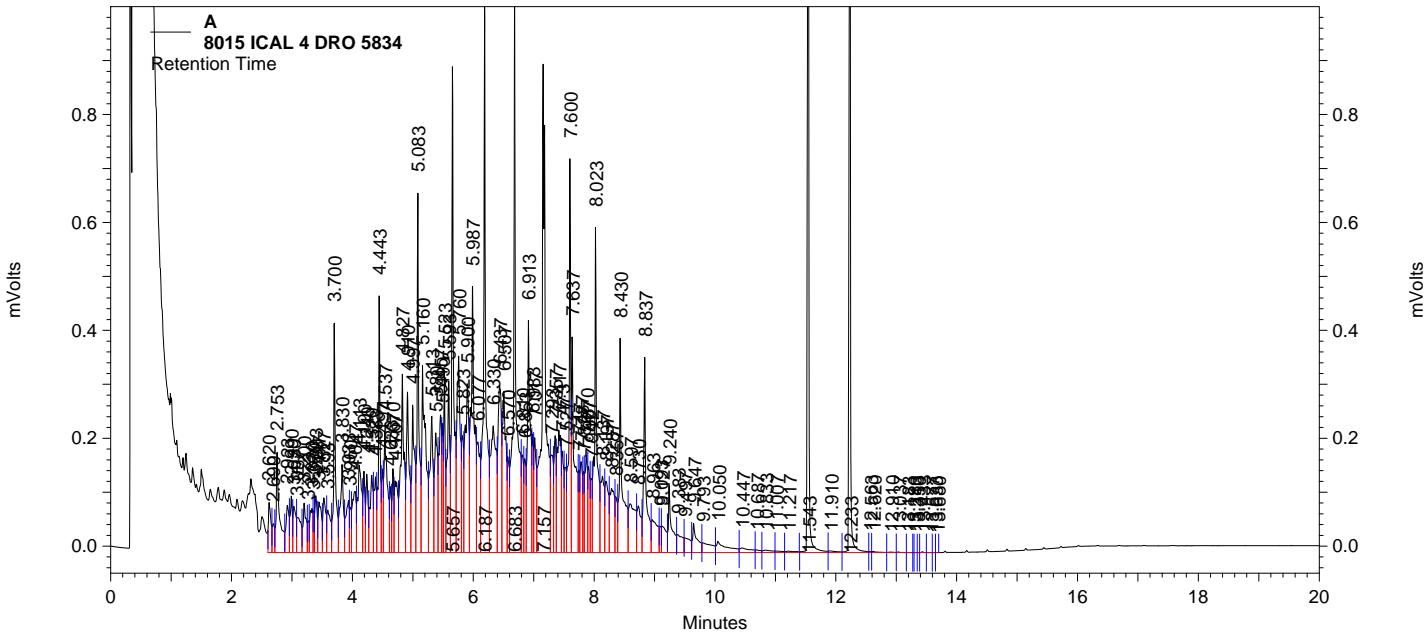
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.533	1023407	50.000 CAL
Triacontane	12.223	994432	50.000 CAL
DSL (C10C28)		24721256	1000.000 CAL
DRO (C10C34)		24807376	1000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\008.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 4 DRO 5834
Acquired: Oct 22, 2013 05:38:35
Printed: Oct 29, 2013 10:31:34

Data Summary: {Data Description}



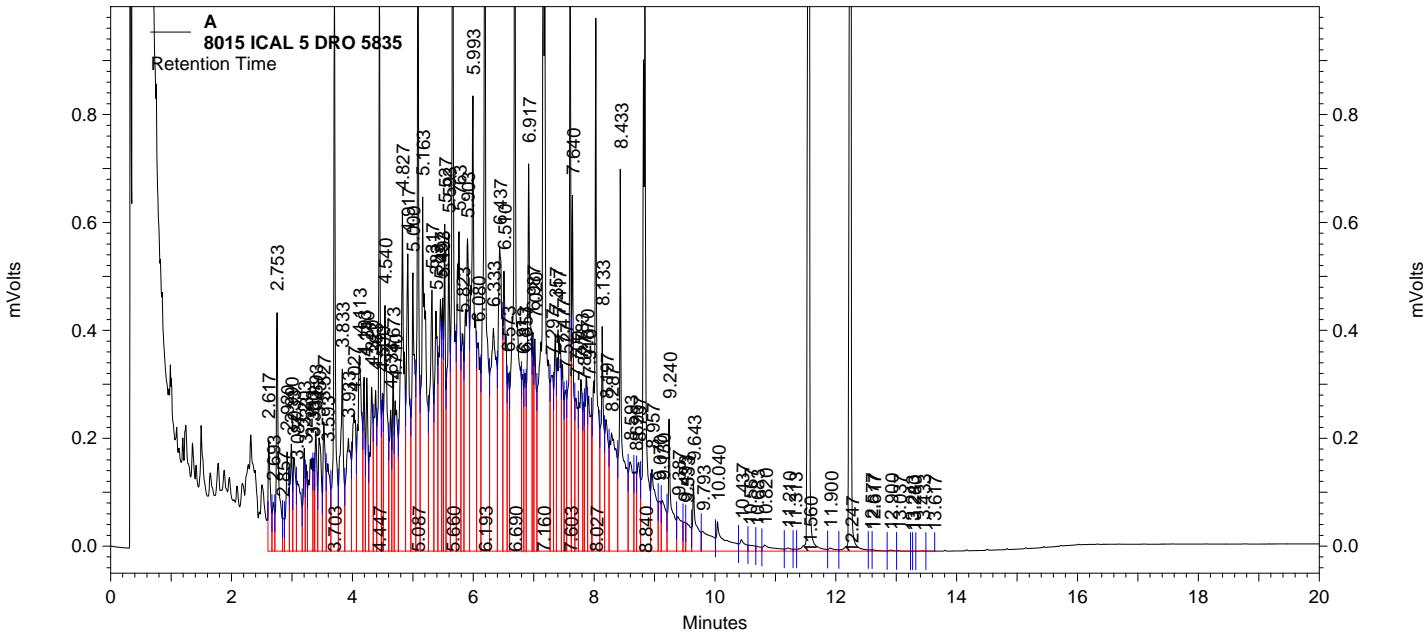
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.543	2875247	125.000 CAL
Triacontane	12.233	2622000	125.000 CAL
DSL (C10C28)		66508220	2500.000 CAL
DRO (C10C34)		66572060	2500.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\009.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 5 DRO 5835
Acquired: Oct 22, 2013 06:11:11
Printed: Oct 29, 2013 10:31:39

Data Summary: {Data Description}



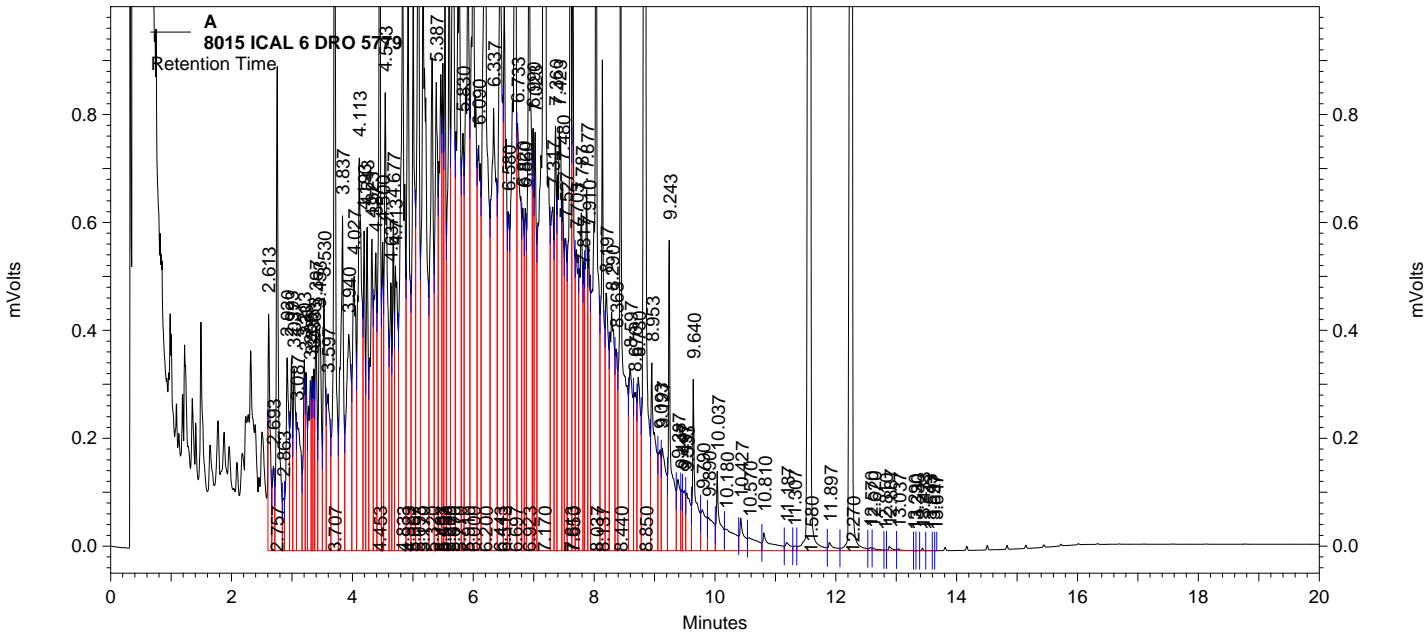
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.560	5808150	250.000 CAL
Triacontane	12.247	5209288	250.000 CAL
DSL (C10C28)		126031744	5000.000 CAL
DRO (C10C34)		126122032	5000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICAL 6 DRO 5779
Acquired: Oct 22, 2013 06:43:53
Printed: Oct 29, 2013 10:31:44

Data Summary: {Data Description}



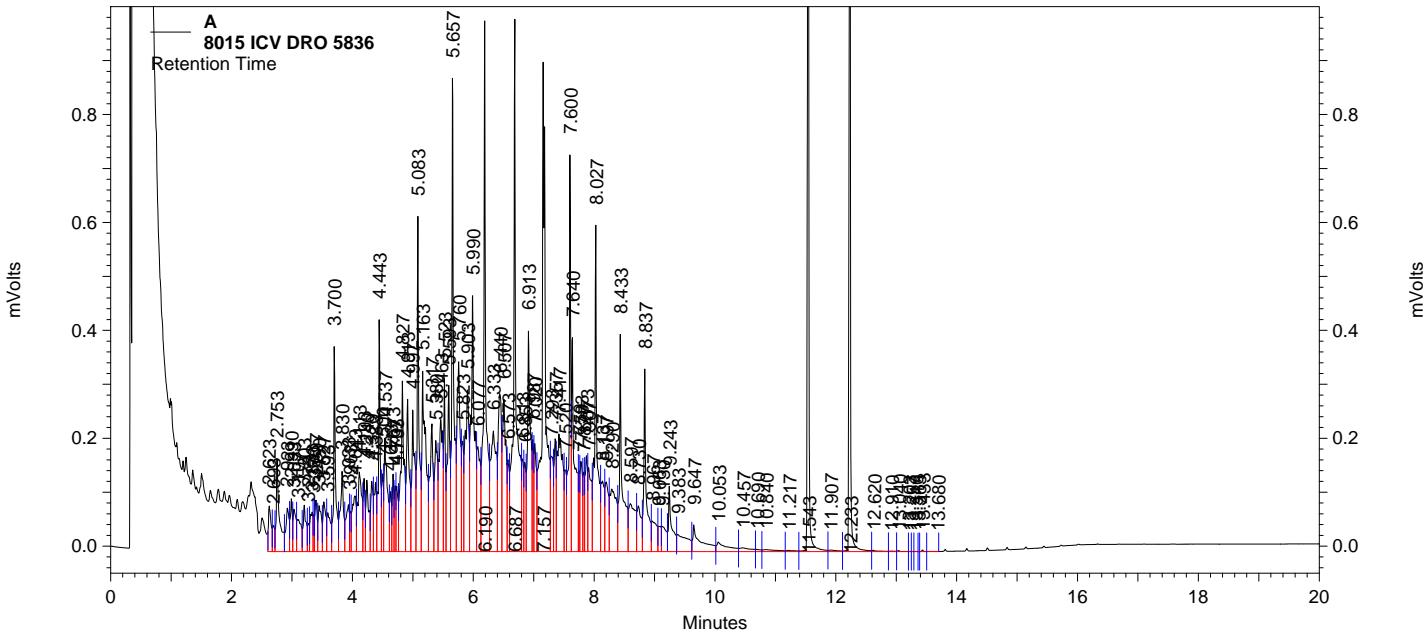
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.580	12481484	500.000 CAL
Triacontane	12.270	11494613	500.000 CAL
DSL (C10C28)		244383680	10000.000 CAL
DRO (C10C34)		244578336	10000.000 CAL

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102113deroic\011.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 ICV DRO 5836
Acquired: Oct 22, 2013 07:16:42
Printed: Oct 29, 2013 10:31:48

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.543	2817652	120.493
Triacontane	12.233	2541937	118.426
DSL (C10C28)		62767900	2485.684
DRO (C10C34)		62823068	2484.676

QC Check Standard Report

Page 1 of 1 (12)

Sequence : C:\Instarch\Semi 4\Sequence\102113deroic.seq

User : JJY

Printed : Oct 29, 2013 10:31:52

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\102113deroic\011.dat	8015 ICV DRO 5836	Oct 29, 2013 10:31:52

A

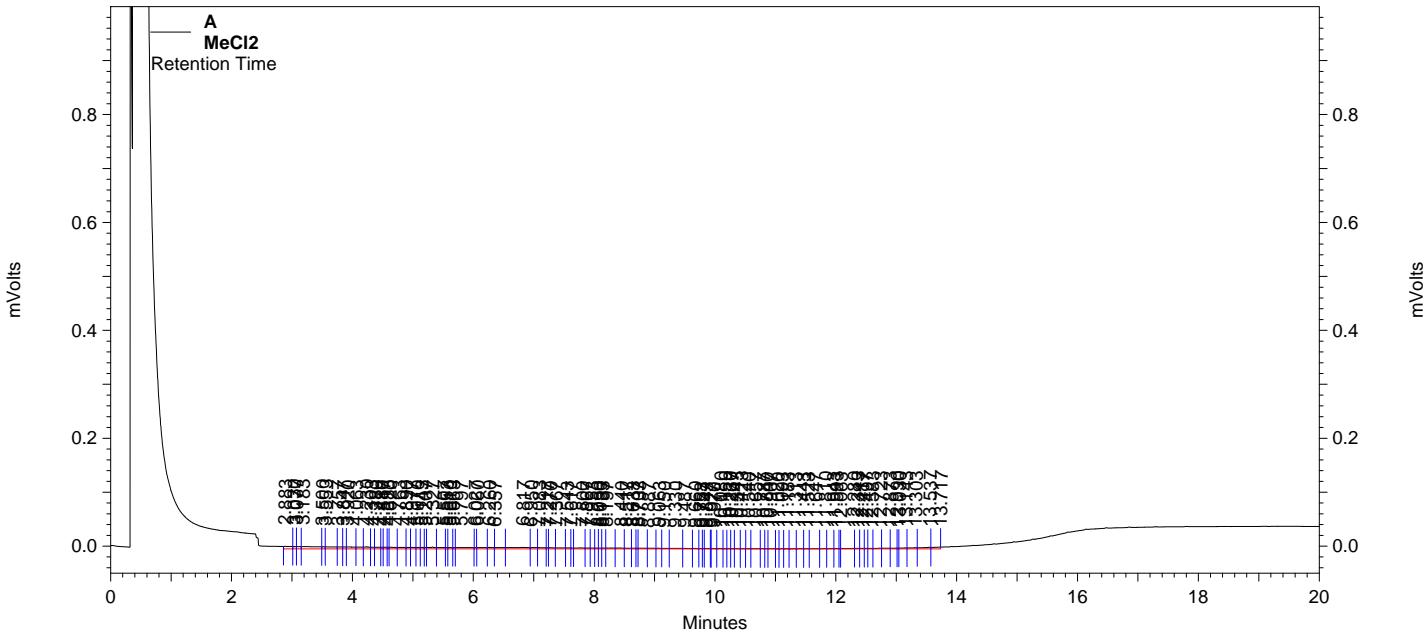
Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	120.493	3.605	20.000	Passed
Triacontane	125.000	118.426	5.260	20.000	Passed
DSL (C10C28)	2500.000	2485.684	0.573	20.000	Passed
DRO (C10C34)	2500.000	2484.676	0.613	20.000	Passed

**SEMI - VOLATILE ORGANIC ANALYSIS
CONTINUING CALIBRATION
DOCUMENTS**

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\001.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 18, 2013 12:14:30
Printed: Oct 29, 2013 09:55:34

Data Summary: {Data Description}



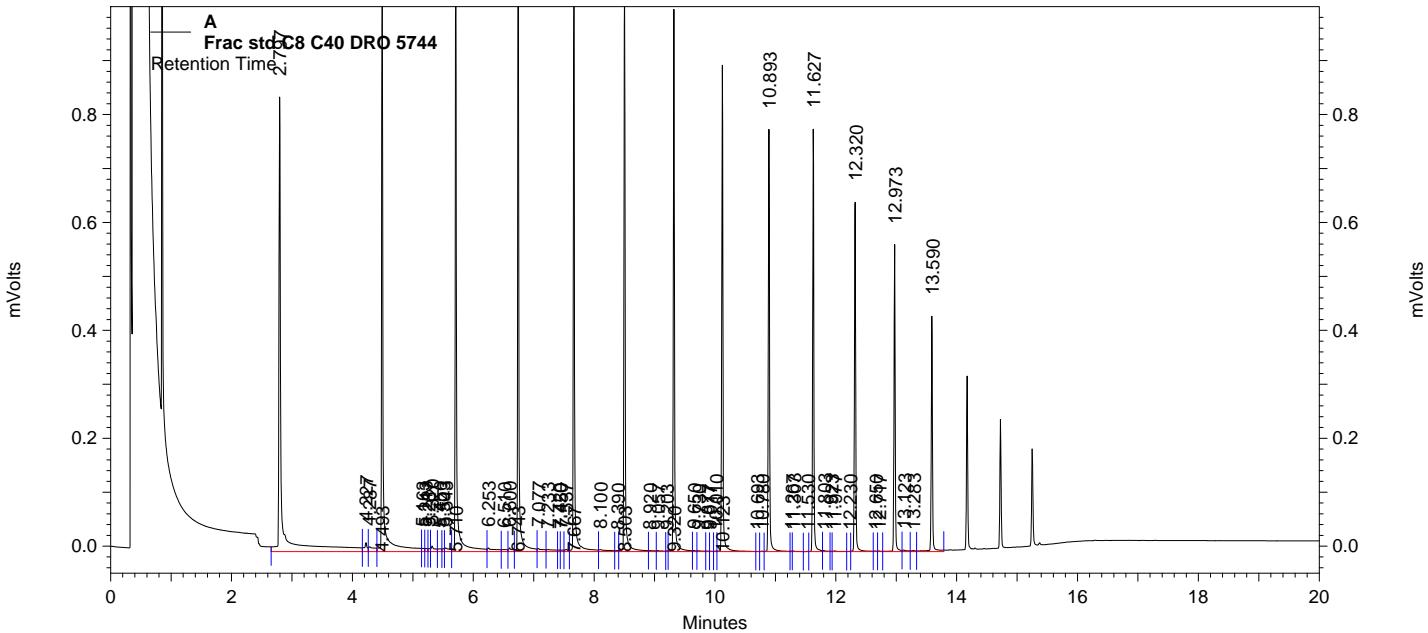
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.647	1595	1.161
Triacontane	12.343	3535	1.622
DSL (C10C28)		942636	0.000
DRO (C10C34)		1042377	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\008.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 18, 2013 16:20:39
Printed: Oct 29, 2013 09:55:54

Data Summary: {Data Description}



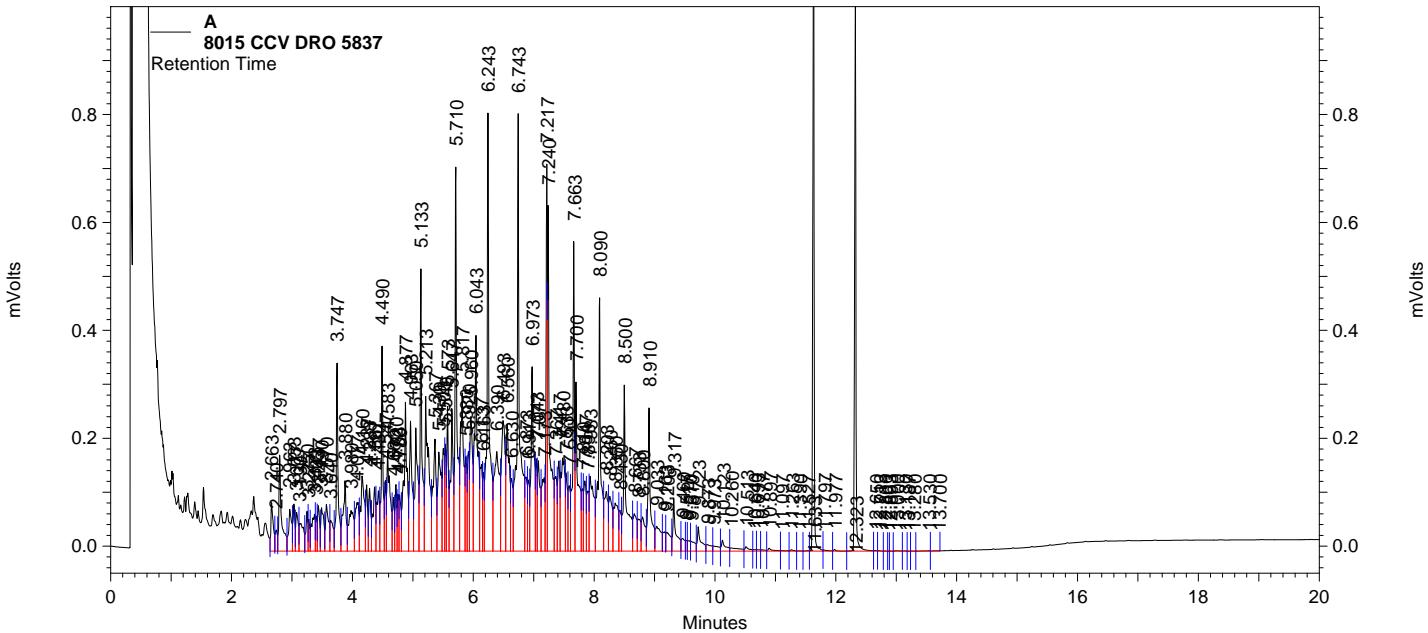
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1057395	71.113
Triacontane	12.320	946136	72.343
DSL (C10C28)		15095139	571.721
DRO (C10C34)		16588793	641.757

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\009.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 CCV DRO 5837
Acquired: Oct 18, 2013 16:53:42
Printed: Oct 29, 2013 09:55:59

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.633	1788048	119.523
Triacontane	12.323	1573300	119.399
DSL (C10C28)		51221236	2315.058
DRO (C10C34)		51257984	2314.517

QC Check Standard Report

Page 1 of 1 (4)

Sequence : C:\Instarch\Semi 4\Sequence\101813ero.seq

User : JJY

Printed : Oct 29, 2013 09:56:02

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\101813dero\009.dat	8015 CCV DRO 5837	Oct 29, 2013 09:56:02

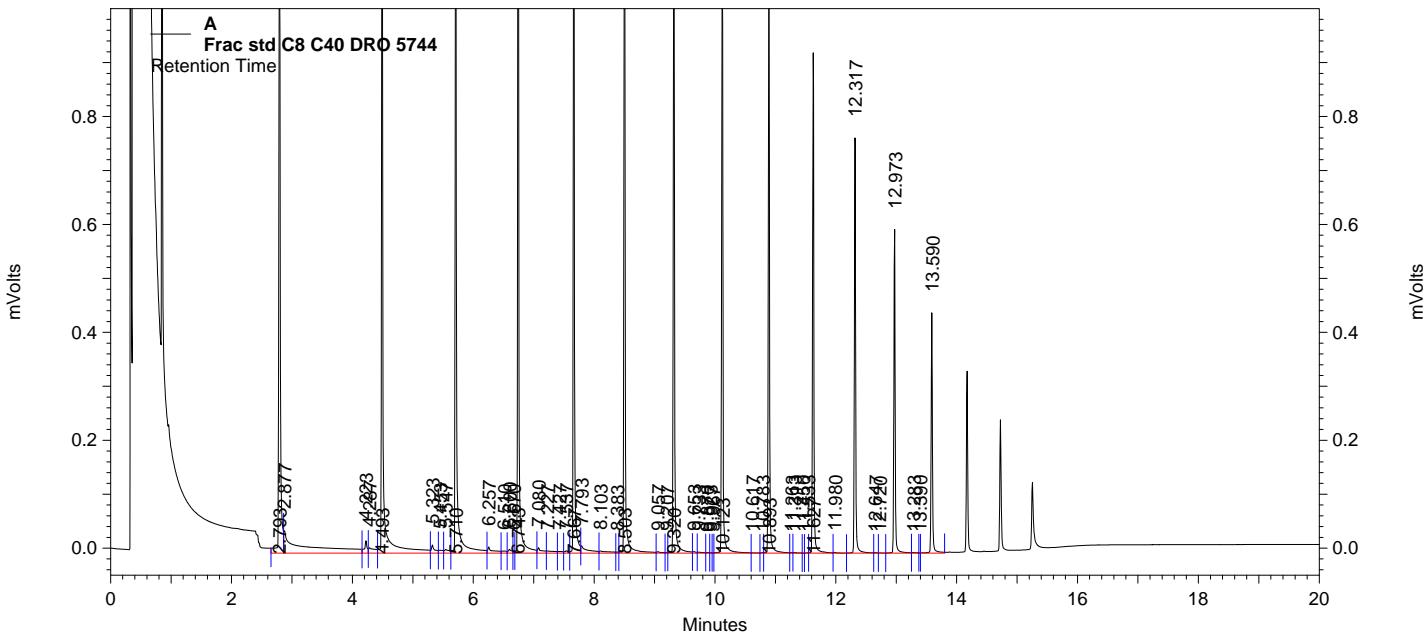
A

Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	119.523	4.382	20.000	Passed
Triacontane	125.000	119.399	4.481	20.000	Passed
DSL (C10C28)	2500.000	2315.058	7.398	20.000	Passed
DRO (C10C34)	2500.000	2314.517	7.419	20.000	Passed

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\020.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 18, 2013 22:53:56
Printed: Oct 29, 2013 09:56:57

Data Summary: {Data Description}



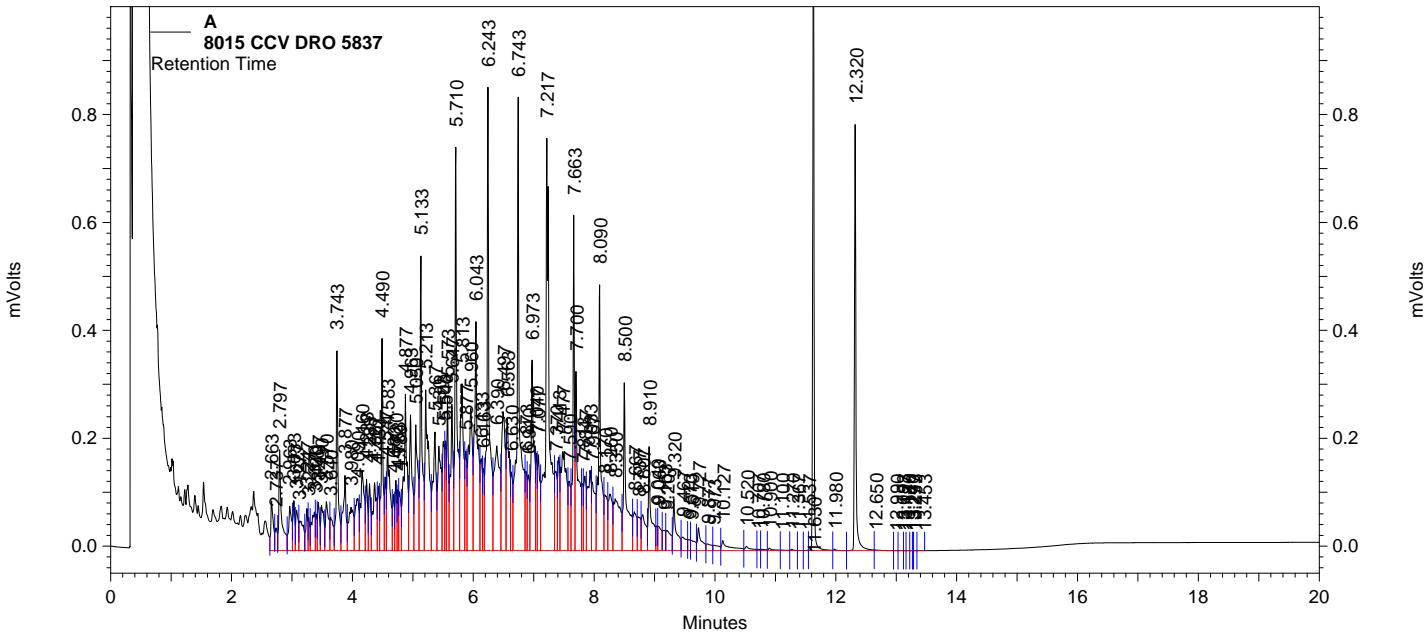
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1381418	92.581
Tricontane	12.317	1140928	86.958
DSL (C10C28)		19661186	792.065
DRO (C10C34)		21299488	869.044

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\021.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 8015 CCV DRO 5837
Acquired: Oct 18, 2013 23:26:43
Printed: Oct 29, 2013 09:57:01

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.630	1763879	117.921
Tricontane	12.320	1364762	103.752
DSL (C10C28)		54323524	2464.766
DRO (C10C34)		54344984	2463.463

QC Check Standard Report

Page 1 of 1 (17)

Sequence : C:\Instarch\Semi 4\Sequence\101813ero.seq

User : JJY

Printed : Oct 29, 2013 09:57:05

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\101813dero\021.dat	8015 CCV DRO 5837	Oct 29, 2013 09:57:04

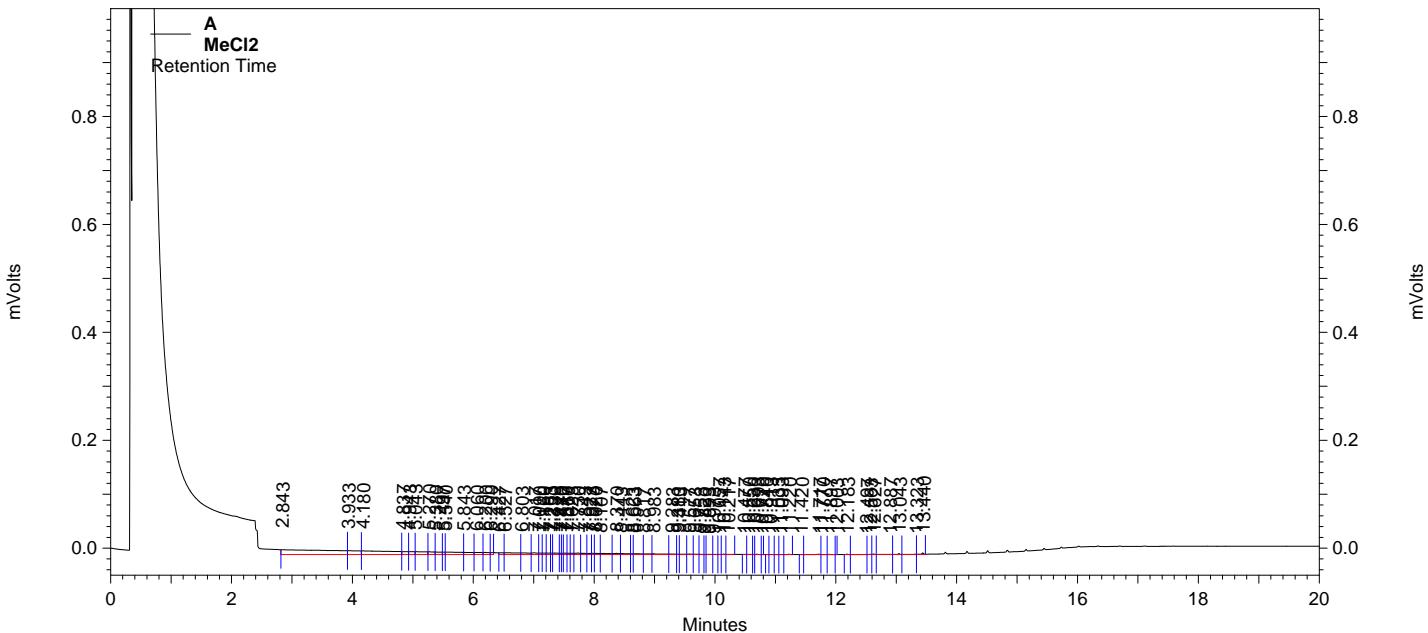
A

Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	117.921	5.663	20.000	Passed
Triacontane	125.000	103.752	16.998	20.000	Passed
DSL (C10C28)	2500.000	2464.766	1.409	20.000	Passed
DRO (C10C34)	2500.000	2463.463	1.461	20.000	Passed

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\001.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: MeCl2
Acquired: Oct 22, 2013 08:24:37
Printed: Oct 29, 2013 11:15:23

Data Summary: {Data Description}



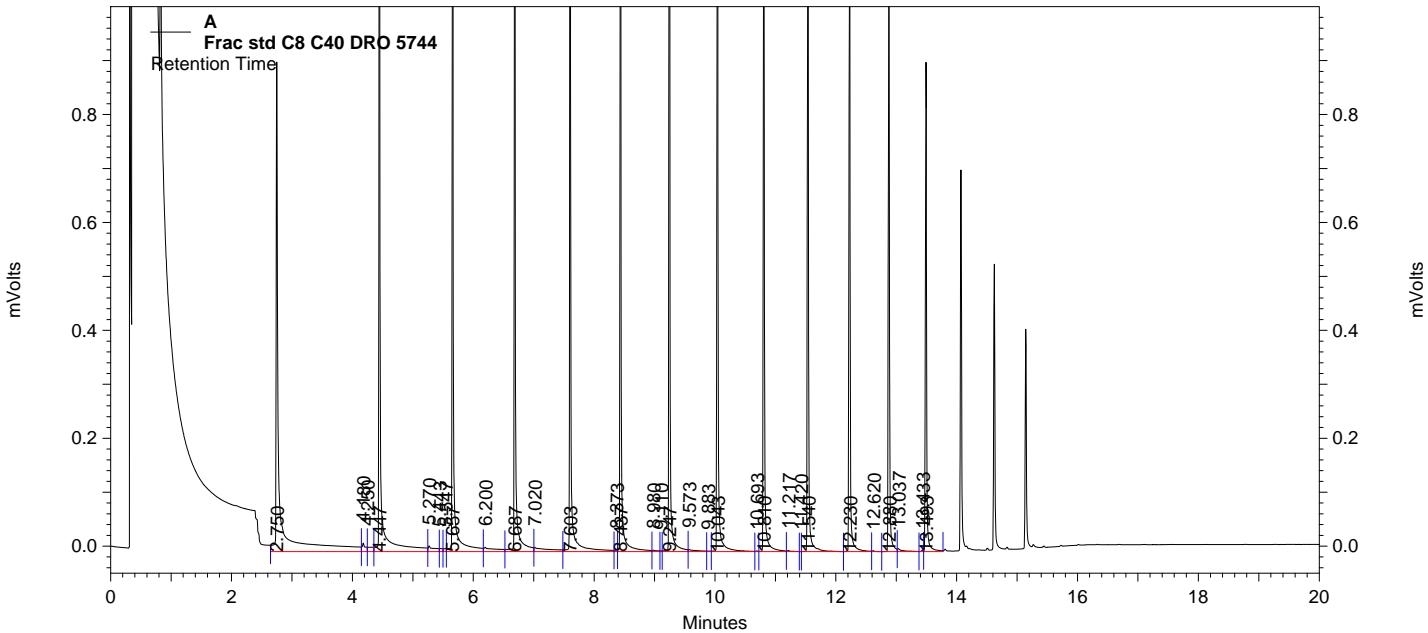
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane			0.000 BDL
Triacontane		1738	7.839
DSL (C10C28)	12.183	1706032	0.000
DRO (C10C34)		1742348	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\002.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 22, 2013 08:57:16
Printed: Oct 29, 2013 11:15:30

Data Summary: {Data Description}



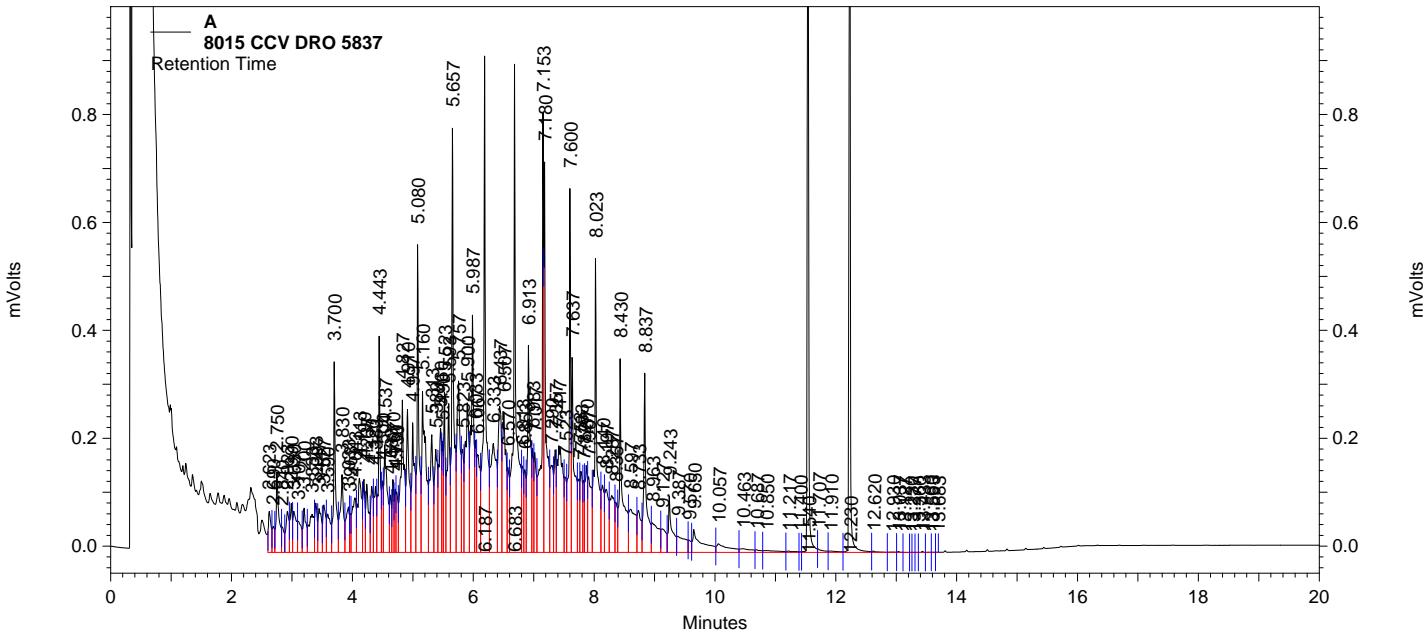
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	1823354	80.865
Triacontane	12.230	1699741	81.761
DSL (C10C28)		20287422	743.269
DRO (C10C34)		23213646	860.924

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\003.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 CCV DRO 5837
Acquired: Oct 22, 2013 09:29:59
Printed: Oct 29, 2013 11:15:36

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.540	2473273	106.768
Triacontane	12.230	2262540	106.262
DSL (C10C28)		58575904	2313.742
DRO (C10C34)		58671984	2314.506

QC Check Standard Report

Page 1 of 1 (4)

Sequence : C:\Instarch\Semi 4\Sequence\102213dero.seq

User : JJY

Printed : Oct 29, 2013 11:15:40

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\102213dero\003.dat	8015 CCV DRO 5837	Oct 29, 2013 11:15:40

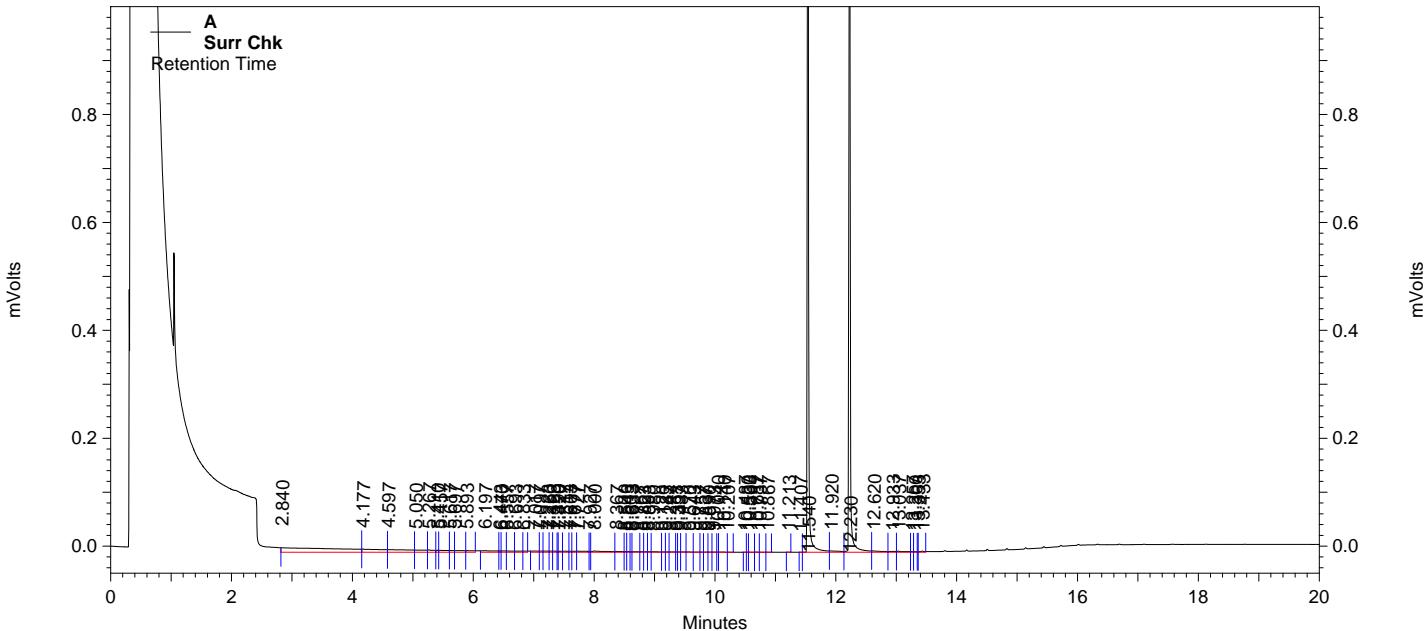
A

Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	106.768	14.586	20.000	Passed
Triacontane	125.000	106.262	14.990	20.000	Passed
DSL (C10C28)	2500.000	2313.742	7.450	20.000	Passed
DRO (C10C34)	2500.000	2314.506	7.420	20.000	Passed

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\004.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: Surr Chk
Acquired: Oct 22, 2013 10:02:47
Printed: Oct 29, 2013 11:15:47

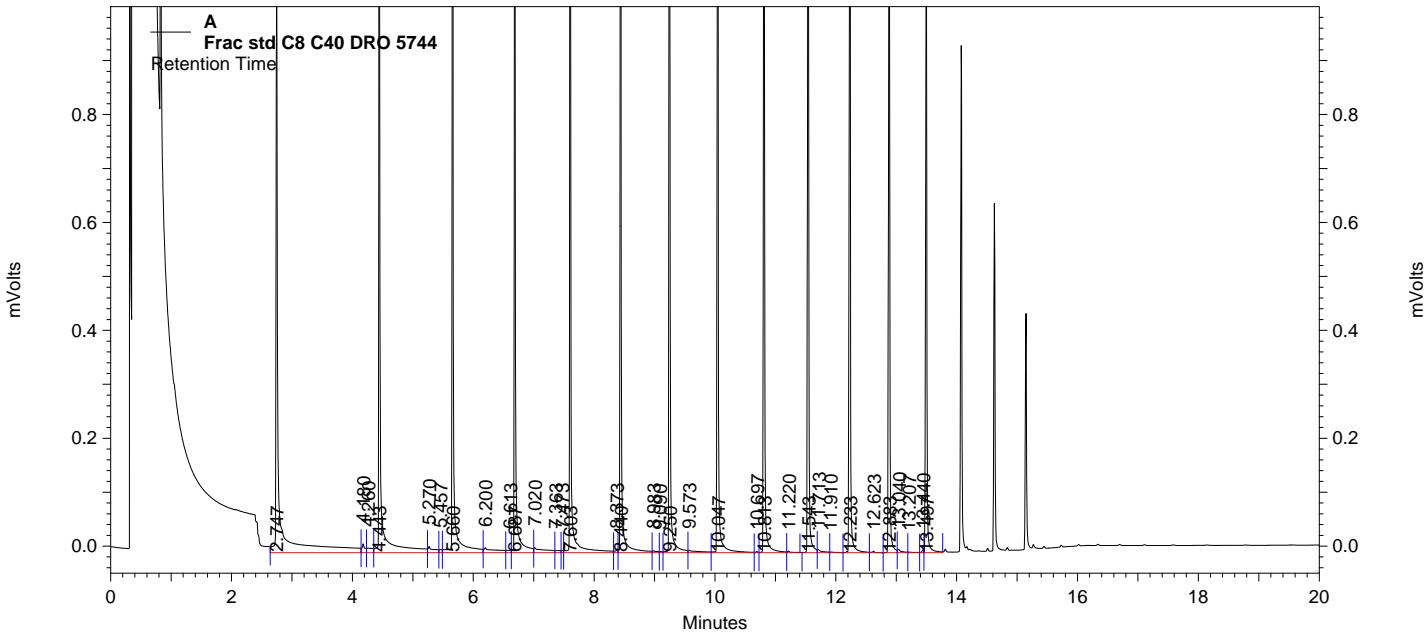
Data Summary: {Data Description}



8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\015.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: Frac std C8 C40 DRO 5744
Acquired: Oct 22, 2013 16:14:07
Printed: Oct 29, 2013 11:16:54

Data Summary: {Data Description}



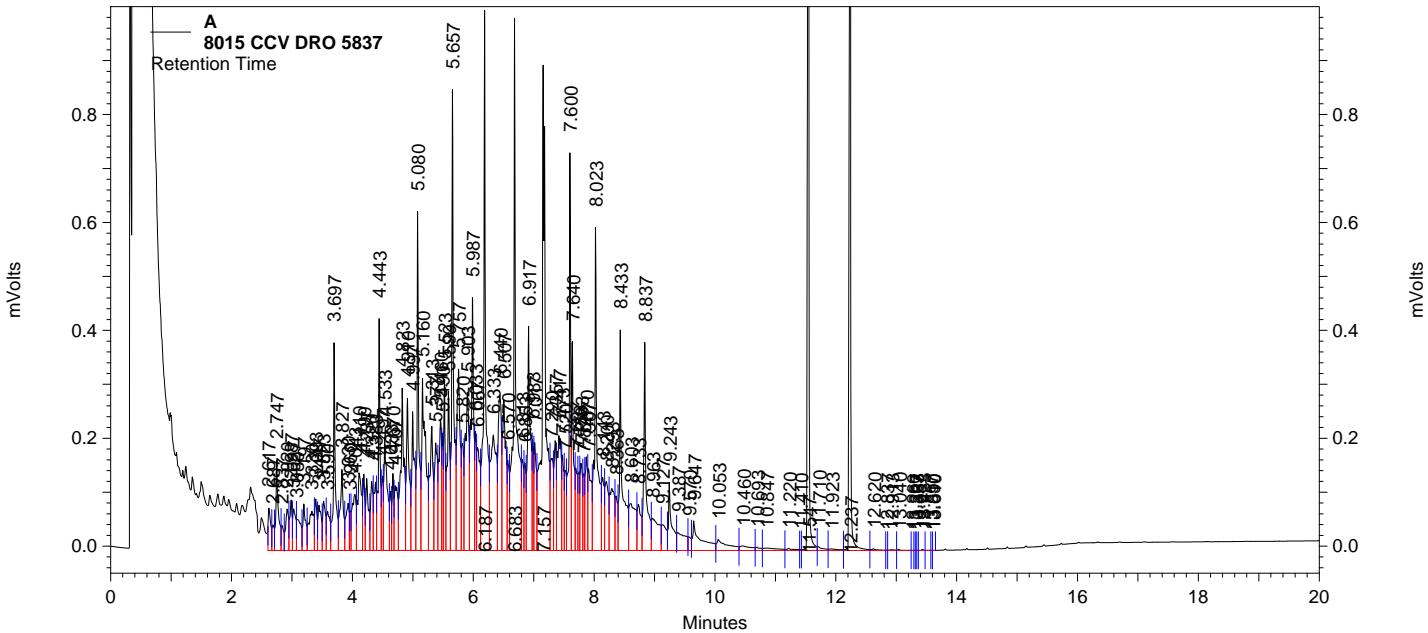
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.543	2186172	95.325
Triacontane	12.233	2119225	100.023
DSL (C10C28)		22307972	826.146
DRO (C10C34)		26141152	980.934

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\016.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 CCV DRO 5837
Acquired: Oct 22, 2013 16:47:10
Printed: Oct 29, 2013 11:17:00

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.547	3037994	129.275
Triacontane	12.237	2887393	133.465
DSL (C10C28)		61890808	2449.708
DRO (C10C34)		61998868	2450.889

QC Check Standard Report

Page 1 of 1 (18)

Sequence : C:\Instarch\Semi 4\Sequence\102213dero.seq

User : JJY

Printed : Oct 29, 2013 11:17:05

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\102213dero\016.dat	8015 CCV DRO 5837	Oct 29, 2013 11:17:05

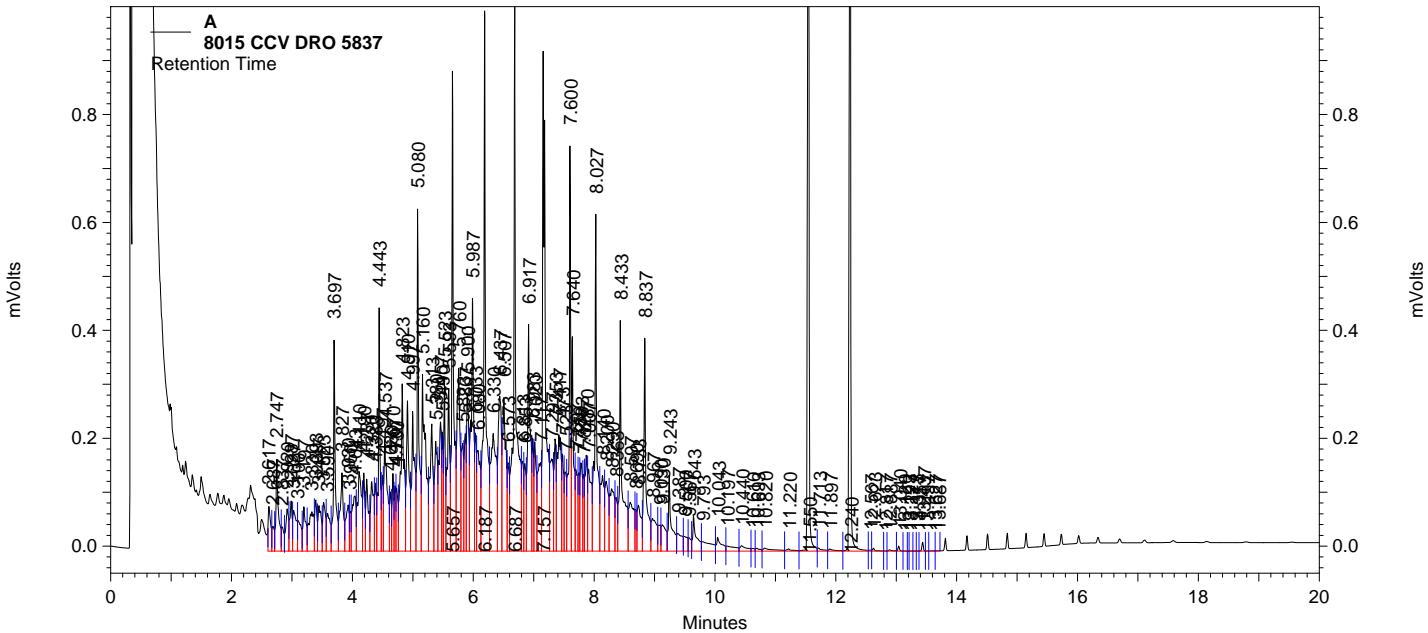
A

Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	129.275	3.420	20.000	Passed
Triacontane	125.000	133.465	6.772	20.000	Passed
DSL (C10C28)	2500.000	2449.708	2.012	20.000	Passed
DRO (C10C34)	2500.000	2450.889	1.964	20.000	Passed

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\102213dero\020.dat
Method: C:\Instarch\Semi 4\Methods\8015B\102113deroic\102113eroic.met
User: JJY
Sample ID: 8015 CCV DRO 5837
Acquired: Oct 22, 2013 18:58:53
Printed: Oct 29, 2013 11:17:31

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.550	3141896	133.416
Triacontane	12.240	2999050	138.326
DSL (C10C28)		61467832	2432.359
DRO (C10C34)		61592640	2434.236

QC Check Standard Report

Page 1 of 1 (23)

Sequence : C:\Instarch\Semi 4\Sequence\102213dero.seq

User : JJY

Printed : Oct 29, 2013 11:17:36

File	Sample ID	Acquired
C:\Instarch\Semi 4\Data\102213dero\020.dat	8015 CCV DRO 5837	Oct 29, 2013 11:17:36

A

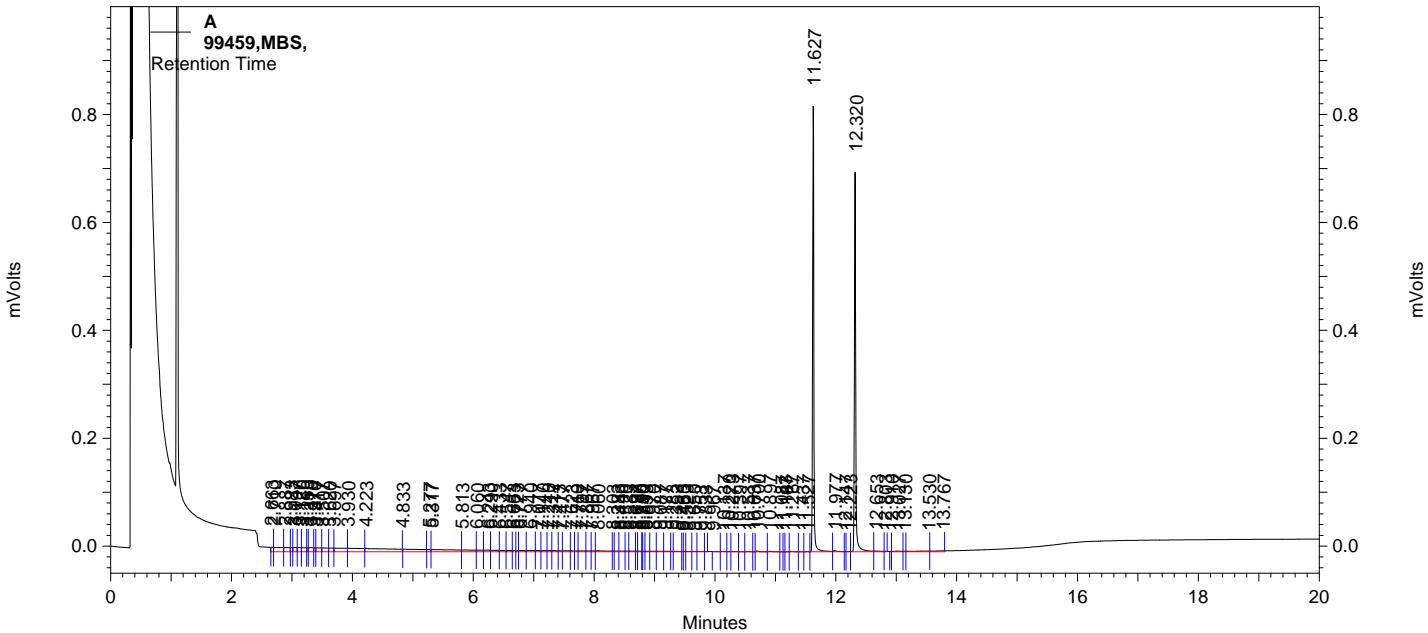
Compound	Expected Conc.	Actual Conc.	%RD Actual	%RD Limit	Status
Octacosane	125.000	133.416	6.733	20.000	Passed
Triacontane	125.000	138.326	10.661	20.000	Passed
DSL (C10C28)	2500.000	2432.359	2.706	20.000	Passed
DRO (C10C34)	2500.000	2434.236	2.631	20.000	Passed

**SEMI - VOLATILE ORGANIC ANALYSIS
QUALITY CONTROL
DOCUMENTS**

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,MBS,
Acquired: Oct 18, 2013 17:26:32
Printed: Oct 29, 2013 12:28:00

Data Summary: {Data Description}



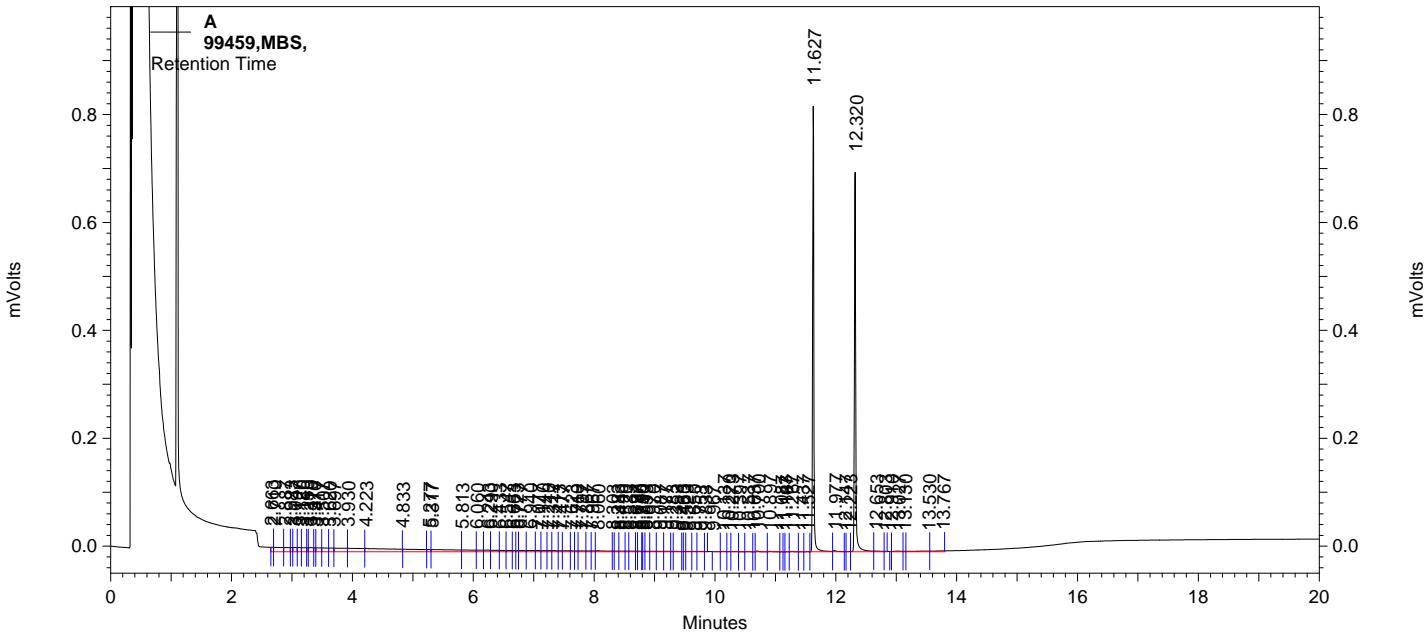
A Results

Component	Retention Time	Area Counts
C10C20		1439829
C20C34		160857

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\010.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,MBS,
Acquired: Oct 18, 2013 17:26:32
Printed: Oct 29, 2013 09:56:09

Data Summary: {Data Description}



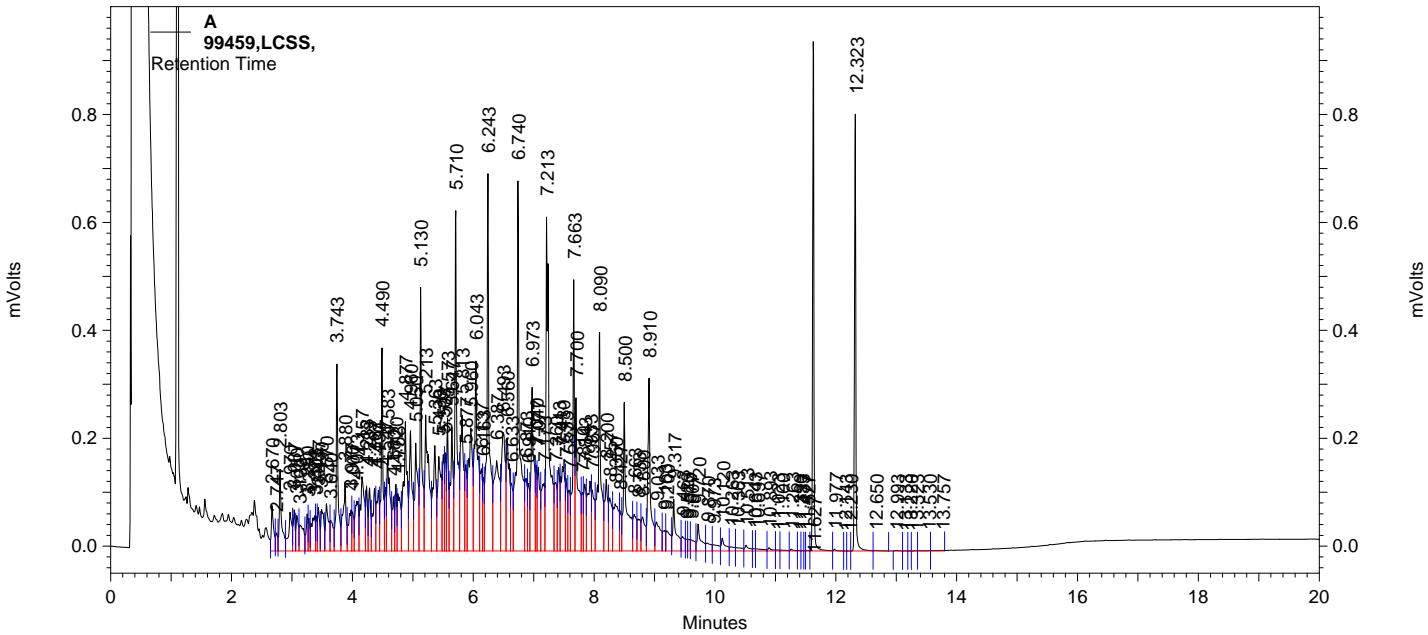
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1179548	79.206
Triacontane	12.320	1072858	81.851
DSL (C10C28)		1535071	0.000
DRO (C10C34)		1600686	0.000

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\011.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,LCSS,
Acquired: Oct 18, 2013 17:59:21
Printed: Oct 29, 2013 12:28:25

Data Summary: {Data Description}



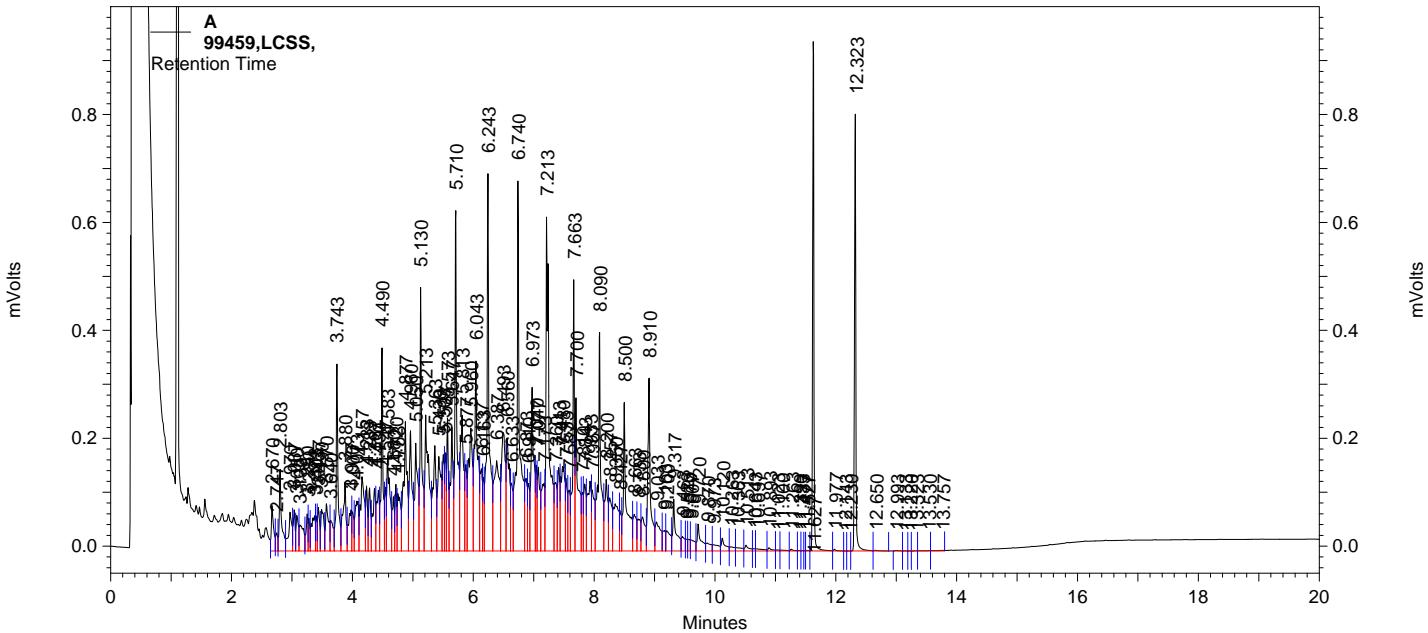
A Results

Component	Retention Time	Area Counts
C10C20		43882508
C20C34		4775170

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\011.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,LCSS,
Acquired: Oct 18, 2013 17:59:21
Printed: Oct 29, 2013 09:56:14

Data Summary: {Data Description}



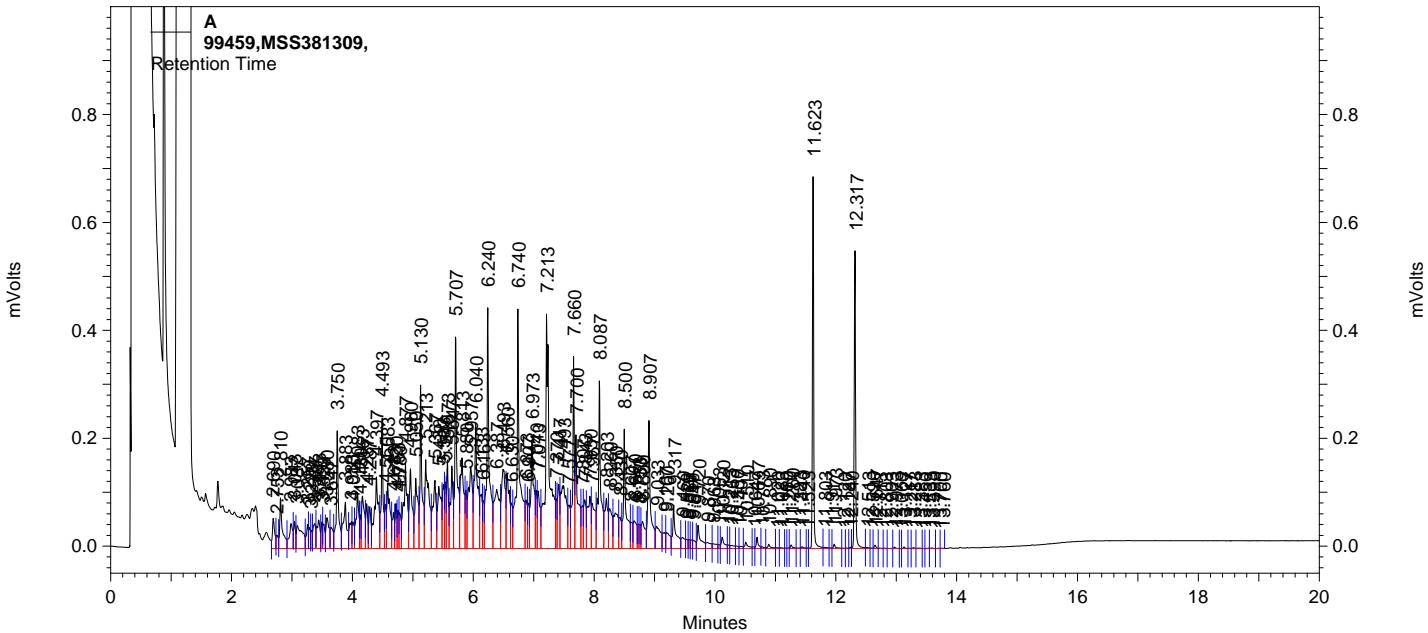
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.627	1391932	93.278
Triacontane	12.323	1261163	95.979
DSL (C10C28)		48632940	2190.155
DRO (C10C34)		48657672	2189.055

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\015.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,MSS381309,
Acquired: Oct 18, 2013 20:10:12
Printed: Oct 29, 2013 12:28:54

Data Summary: {Data Description}



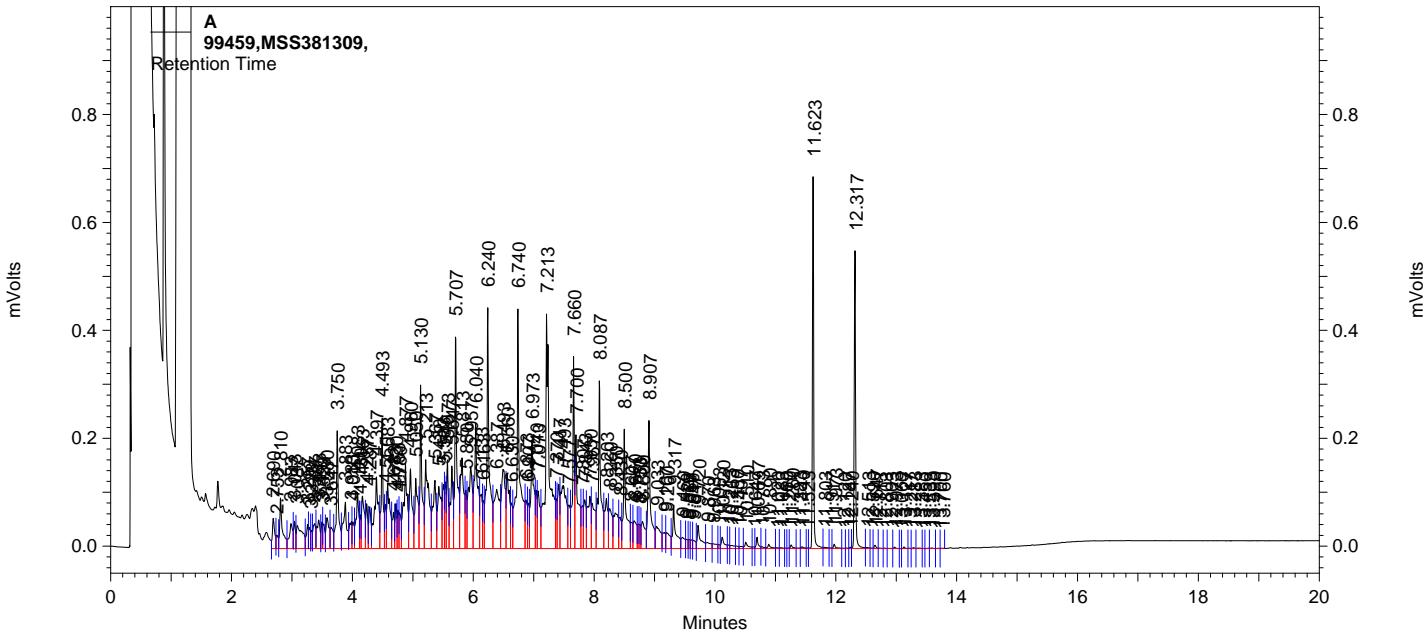
A Results

Component	Retention Time	Area Counts
C10C20		30610796
C20C34		3877798

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\015.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,MSS381309,
Acquired: Oct 18, 2013 20:10:12
Printed: Oct 29, 2013 09:56:34

Data Summary: {Data Description}



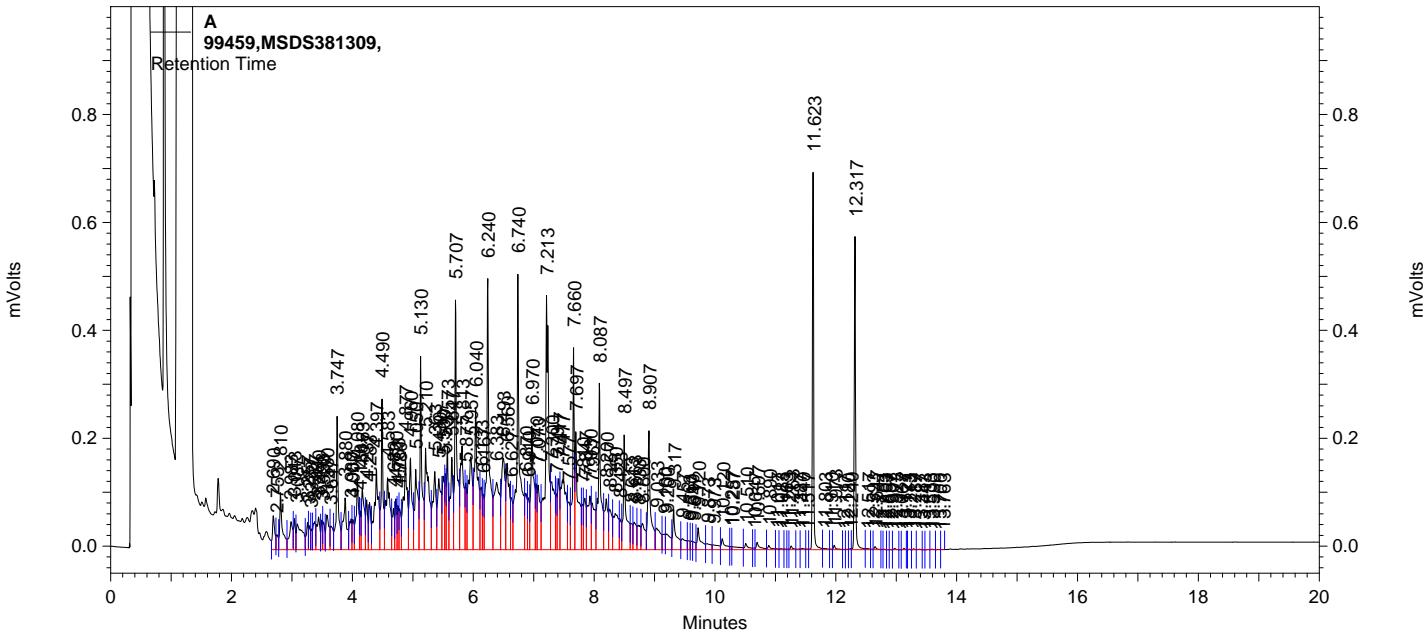
A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	981462	66.082
Triacontane	12.317	874675	66.982
DSL (C10C28)		34386504	1502.665
DRO (C10C34)		34488592	1505.408

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\016.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101813alt.met
User: JJY
Sample ID: 99459,MSDS381309,
Acquired: Oct 18, 2013 20:42:57
Printed: Oct 29, 2013 12:29:01

Data Summary: {Data Description}



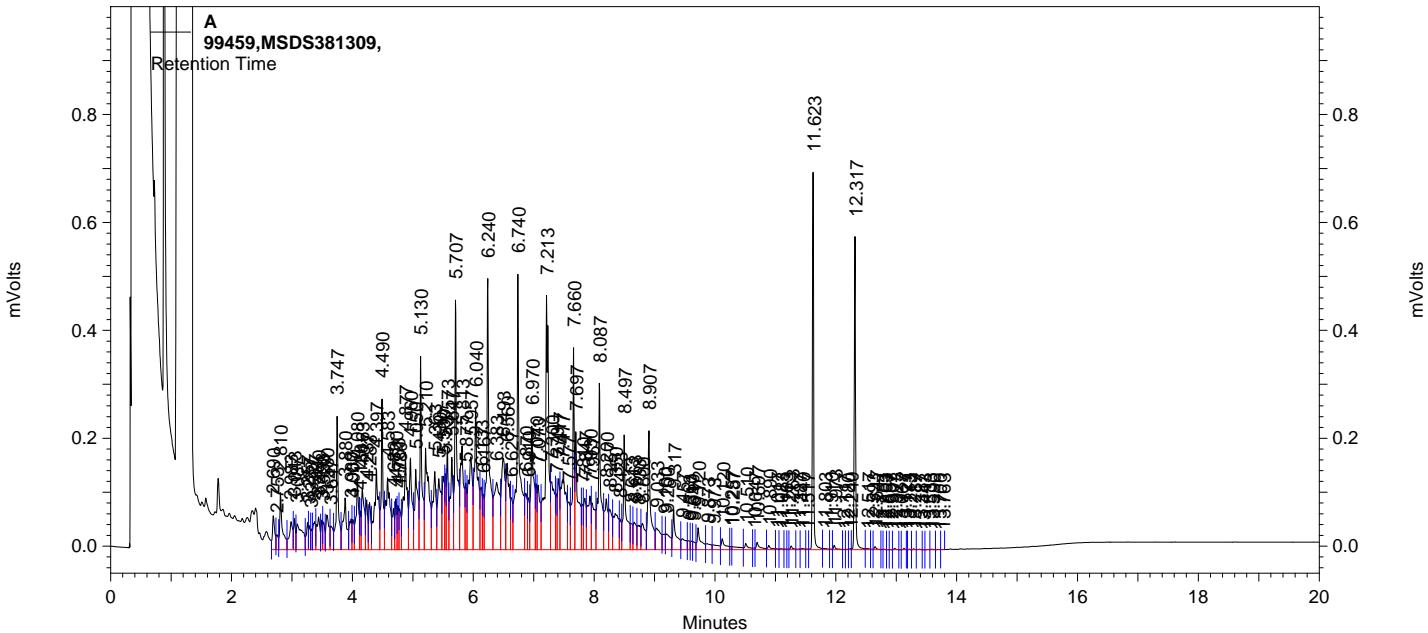
A Results

Component	Retention Time	Area Counts
C10C20		34404760
C20C34		3812821

8015B Analysis Report

Data File: C:\Instarch\Semi 4\Data\101813dero\016.dat
Method: C:\Instarch\Semi 4\Methods\8015B\101713deroic\101713eroic.met
User: JJY
Sample ID: 99459,MSDS381309,
Acquired: Oct 18, 2013 20:42:57
Printed: Oct 29, 2013 09:56:38

Data Summary: {Data Description}



A Results

Component	Retention Time	Area Counts	Concentration (ug/ml)
Octacosane	11.623	1004768	67.626
Triacontane	12.317	882284	67.553
DSL (C10C28)		38120560	1682.859
DRO (C10C34)		38217580	1685.329

**SEMI - VOLATILE ORGANIC ANALYSIS
LOGBOOK
DOCUMENTS**

S DRO 8015 Analytical Run
99459 on 11/04/2013

Date Analyzed: _____

Date Reviewed: _____

Date Entered: _____

Date Validated: _____

COC	ORDER	SAMPLE DESCRIPTION	SAMPLE DATE/ TIME	QC TYPE (Parent Sample)	CLIENT	PROJECT	TEST	PREP BATCH	MATRIX	DEL	RUSH
	381873						8015D DRO/ERO				
	381874			MBS						46448	
				LCSS			8015D DRO/ERO			46448	
100701	381305	08/13/2013	1143		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381307	071SB-0001M-0001-SO 08/13/2013	1153		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381309	071SB-0002M-0001-SO 08/13/2013	0850		ECC	RVAAP	8015D DRO/ERO			46448	S
	381876	071SB-0003M-0001-SO 08/13/2013	0850	Designated MS/MSD			8015D DRO/ERO			46448	
	381877	071SB-0003M-0001-SO 08/13/2013	0850	MSS 381309			8015D DRO/ERO			46448	
100701	381311	071SB-0003M-0001-SO 08/13/2013	1425	MSDS 381876	ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381313	071SB-0004M-0001-SO 08/13/2013	0900		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381315	071SB-0005M-0001-SO 08/13/2013	1400		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381317	071SB-0006M-0001-SO 08/13/2013	1015		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381319	071SB-0016M-0001-SO 08/13/2013	0925		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381321	071SB-0007M-0001-SO 08/13/2013	1310		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381323	071SB-0009M-0001-SO 08/13/2013	1320		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381325	071SB-0010M-0001-SO 08/13/2013	0850		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381327	071SB-0011M-0001-SO 08/13/2013	1340		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381329	071SB-0021M-0001-SO 08/13/2013	1250		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381331	071SB-0017M-0001-SO 08/13/2013	1210		ECC	RVAAP	8015D DRO/ERO			46448	S
100701	381333	071SB-0013M-0001-SO 08/13/2013	1040		ECC	RVAAP	8015D DRO/ERO			46448	S
		071SB-0018M-0001-SO					8015D DRO/ERO			46448	

S DRO 8015 Analytical Run
99459 on 11/04/2013

Date Analyzed: _____

Date Reviewed: _____

Date Entered: _____

Date Validated: _____

COC	ORDER	SAMPLE DESCRIPTION	SAMPLE DATE/ TIME	QC TYPE (Parent Sample)	CLIENT	PROJECT	TEST	PREP BATCH	MATRIX	DEL	RUSH
100701	381335	08/13/2013	1210		ECC	RVAAP	8015D DRO/ERO			S	
		071SB-0014M-0001-SO						46448			
100701	381337	08/13/2013	1040		ECC	RVAAP	8015D DRO/ERO			S	
		071SB-0019M-0001-SO						46448			
100701	381339	08/13/2013	1055		ECC	RVAAP	8015D DRO/ERO			S	
		071SB-0022M-0001-SO						46448			
100701	381341	08/13/2013	1220		ECC	RVAAP	8015D DRO/ERO			S	
		071SB-0023M-0001-SO						46448			

23 SAMPLE COUNT ON RUN, INCLUDING METHOD AND INSTRUMENT QC

PREP WORKSHEET
on 11/04/2013

Prep Batch	46,448		Date Prepped:	10/16/2013		Prepped By	JLH			
Folder #	Order	QC Type	Link	Test	Matrix	Volume	Weight	Initial Volume	Partial List	Notes
	381873	MBS		8015D DRO/ERO	SOLID	1.0	10.00			
	381874	LCSS		8015D DRO/ERO	SOLID	1.0	10.00			
100701	381305			8015D DRO/ERO	SOIL	1.0	9.97	N		
	381307			8015D DRO/ERO	SOIL	1.0	10.01	N		
	381309	*		8015D DRO/ERO	SOIL	1.0	9.96	N		
	381311			8015D DRO/ERO	SOIL	1.0	10.00	N		
	381313			8015D DRO/ERO	SOIL	1.0	10.02	N		
	381315			8015D DRO/ERO	SOIL	1.0	10.06	N		
	381317			8015D DRO/ERO	SOIL	1.0	10.01	N		
	381319			8015D DRO/ERO	SOIL	1.0	10.04	N		
	381321			8015D DRO/ERO	SOIL	1.0	10.05	N		
	381323			8015D DRO/ERO	SOIL	1.0	10.04	N		
	381325			8015D DRO/ERO	SOIL	1.0	10.02	N		
	381327			8015D DRO/ERO	SOIL	1.0	10.04	N		
	381329			8015D DRO/ERO	SOIL	1.0	10.01	N		
	381331			8015D DRO/ERO	SOIL	1.0	10.03	N		
	381333			8015D DRO/ERO	SOIL	1.0	10.00	N		
	381335			8015D DRO/ERO	SOIL	1.0	10.02	N		

PREP WORKSHEET
on 11/04/2013

Folder #	Order	QC Type	Link	Test	Matrix	Volume	Weight	Initial Volume	Partial	Notes List
100701	381337			8015D DRO/ERO	SOIL	1.0	9.99		N	
	381339			8015D DRO/ERO	SOIL	1.0	10.02		N	
	381341			8015D DRO/ERO	SOIL	1.0	9.99		N	
381876	MSS		3813098015D	DRO/ERO	SOIL	1.0	10.03			
381877	MSDS		3818768015D	DRO/ERO	SOIL	1.0	10.08			

Notes:_____

99459

8015B_C Extraction Bench Sheet

(SOP Reference # 8015B_C)

3510=WATER
3545=PFE or 3546=Microwave >>
(PFE=Pressurized Fluid Extraction)

Prep Batch #:	46448
Prep Method:	3546
Analyst:	JLH
Date:	10/16/2013
Start Time:	09:30
End Date:	10/17/2013
End Time:	11:00

Matrix: SOIL

Balance Used: SVXD2200

Ave MW temp(°C) 110.0

Concentration By: SRT

Concentration Date: 10/17/2013

(Liquids)

Microwave Cell #	Sample ID	Comments	Solid Sample Weight (g)	Liquid Sample Volume (L)	Final Volume (ml)	ph adj. to <2 (Yes/No)
A	381873	(MB)	10.00		1.0	
B	381874	(LCS)	10.00		1.0	
E	381305		9.97		1.0	
F	381307		10.01		1.0	
G	381309		9.96		1.0	
H	381311		10.00		1.0	
I	381313		10.02		1.0	
J	381315		10.06		1.0	
K	381317		10.01		1.0	
L	381319		10.04		1.0	
M	381321		10.05		1.0	
N	381323		10.04		1.0	
O	381325		10.02		1.0	
P	381327		10.04		1.0	
Q	381329		10.01		1.0	
R	381331		10.03		1.0	
S	381333		10.00		1.0	
T	381335		10.02		1.0	
U	381337		9.99		1.0	
V	381339		10.02		1.0	
W	381341		9.99		1.0	
					1.0	
C	381876	(MS)	Parent Sample	10.03		1.0
D	381877	(MSD)	381309	10.08		1.0

MB=Method Blank, LCS=Laboratory Control Sample, MS=Matrix Spike & MSD=Matrix Spike Duplicate

MS/MSD / LCS Spike Amount (ml)

1

Surrogate Spike Amount (ml)

1

Spike Concentration (ug/mL)

2500

Surrogate Spike Conc. (ug/mL)

100

Spike Reference #

DRO 5830

Surrogate Spike Reference #

DRO 5846

Relinquished to

JJY

Reviewed By

Date 10/17/2013

Date

Summary Report

Instrument ID: Semi 4 (Offline)

Data Path: C:\Instarch\Semi 4\Sequence\101813ero.seq

User ID: JJY

Printed Date: Oct 29, 2013 09:55:33

Run Number	Sample ID	Data Filename	Method Filename	Analysis Date	Data Description
1	MeCl2	001.dat	101713eroic.met	Oct 18, 2013 12:14:30	
2	Frac std C8 C40 DRO 5744	008.dat	101713eroic.met	Oct 18, 2013 16:20:39	
3	8015 CCV DRO 5837	009.dat	101713eroic.met	Oct 18, 2013 16:53:42	
4	99459,MBS,	010.dat	101713eroic.met	Oct 18, 2013 17:26:32	
5	99459,LCSS,	011.dat	101713eroic.met	Oct 18, 2013 17:59:21	
6	99459,381305,	012.dat	101713eroic.met	Oct 18, 2013 18:32:04	
7	99459,381307,	013.dat	101713eroic.met	Oct 18, 2013 19:04:48	
8	99459,381309,	014.dat	101713eroic.met	Oct 18, 2013 19:37:31	
9	99459,MSS381309,	015.dat	101713eroic.met	Oct 18, 2013 20:10:12	
10	99459,MSDS381309,	016.dat	101713eroic.met	Oct 18, 2013 20:42:57	
11	99459,381311,	017.dat	101713eroic.met	Oct 18, 2013 21:15:42	
12	99459,381313,	018.dat	101713eroic.met	Oct 18, 2013 21:48:29	
13	99459,381315,	019.dat	101713eroic.met	Oct 18, 2013 22:21:13	
14	Frac std C8 C40 DRO 5744	020.dat	101713eroic.met	Oct 18, 2013 22:53:56	
15	8015 CCV DRO 5837	021.dat	101713eroic.met	Oct 18, 2013 23:26:43	

Summary Report

Instrument ID: Semi 4 (Offline)

Data Path: C:\Instarch\Semi 4\Sequence\102213dero.seq

User ID: JJY

Printed Date: Oct 29, 2013 11:15:22

Run Number	Sample ID	Data Filename	Method Filename	Analysis Date	Data Description
1	MeCl2	001.dat	102113eroic.met	Oct 22, 2013 08:24:37	
2	Frac std C8 C40 DRO 5744	002.dat	102113eroic.met	Oct 22, 2013 08:57:16	
3	8015 CCV DRO 5837	003.dat	102113eroic.met	Oct 22, 2013 09:29:59	
4	Surr Chk	004.dat	102113eroic.met	Oct 22, 2013 10:02:47	
5	99459,381317,	005.dat	102113eroic.met	Oct 22, 2013 10:44:20	
6	99459,381319,	006.dat	102113eroic.met	Oct 22, 2013 11:17:05	
7	99459,381321,	007.dat	102113eroic.met	Oct 22, 2013 11:49:58	
8	99459,381323,	008.dat	102113eroic.met	Oct 22, 2013 12:22:51	
9	99459,381325,	009.dat	102113eroic.met	Oct 22, 2013 12:56:00	
10	99459,381327,	010.dat	102113eroic.met	Oct 22, 2013 13:29:01	
11	99459,381329,	011.dat	102113eroic.met	Oct 22, 2013 14:02:02	
12	99459,381331,	012.dat	102113eroic.met	Oct 22, 2013 14:34:59	
13	99459,381333,	013.dat	102113eroic.met	Oct 22, 2013 15:08:01	
14	99459,381335,	014.dat	102113eroic.met	Oct 22, 2013 15:41:06	
15	Frac std C8 C40 DRO 5744	015.dat	102113eroic.met	Oct 22, 2013 16:14:07	
16	8015 CCV DRO 5837	016.dat	102113eroic.met	Oct 22, 2013 16:47:10	
17	99459,381337,	017.dat	102113eroic.met	Oct 22, 2013 17:20:10	
18	99459,381339,	018.dat	102113eroic.met	Oct 22, 2013 17:53:06	
19	99459,381341,	019.dat	102113eroic.met	Oct 22, 2013 18:25:58	
20	8015 CCV DRO 5837	020.dat	102113eroic.met	Oct 22, 2013 18:58:53	

Project _____

Notebook No. _____

Continued from Page _____

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5733	DRO WI ICAL 1	MeCl2	10-May-13	JY	10-Nov-13	S2801A	2000 ug/mL	0.005	1.0	10 ug/ml
DRO 5734	DRO WI ICAL 2	JT Baker				S2801A	2000 ug/mL	0.010	1.0	20 ug/ml
DRO 5735	DRO WI ICAL 3	lot 36684				S2801A	2000 ug/mL	0.020	1.0	40 ug/ml
DRO 5736	DRO WI ICAL 4					S2801A	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5737	DRO WI ICAL 5					S2801A	2000 ug/mL	0.125	1.0	250 ug/ml
DRO 5738	DRO WI ICAL 6					S2801A	2000 ug/mL	0.200	1.0	400 ug/ml
DRO 5739	DRO WI ICV					S2802	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5740	DRO WI CCV					S2801A	2000 ug/mL	0.250	5.0	100 ug/ml
<i>5/19/13</i>										
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5741	8015 Surrogates	Acetone JT Baker lot K48E17	14-May-13	JY	14-Nov-13	S2763B	10000 ug/mL	1.000	100.0	100 ug/ml
						S2753B	10000 ug/mL	1.000	100.0	100 ug/ml
<i>5/19/13</i>										
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5742	8015 Surrogates	Acetone JT Baker lot K48E17	22-May-13	JY	22-Nov-13	S2763C	10000 ug/mL	1.000	100.0	100 ug/ml
DRO 5743	8015 Spike					S2753C	10000 ug/mL	1.000	100.0	100 ug/ml
						S2799B	50000 ug/mL	1.250	25.0	2500 ug/ml
<i>5/22/13</i>										
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5744	Fractioning Std C8-C40	MeCl2 JT Baker lot 36684	31-May-13	JY	11/31/2013	CTL1424E	500 ug/mL	0.200	1.0	100 ug/ml
<i>5/19/13</i>										
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5745	DRO WI ICAL 1	MeCl2	11-Jun-13	JY	11-Dec-13	S2809A	2000 ug/mL	0.005	1.0	10 ug/ml
DRO 5746	DRO WI ICAL 2	JT Baker				S2809A	2000 ug/mL	0.010	1.0	20 ug/ml
DRO 5747	DRO WI ICAL 3	lot 36684				S2809A	2000 ug/mL	0.020	1.0	40 ug/ml
DRO 5748	DRO WI ICAL 4					S2809A	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5749	DRO WI ICAL 5					S2809A	2000 ug/mL	0.125	1.0	250 ug/ml
DRO 5750	DRO WI ICAL 6					S2809A	2000 ug/mL	0.200	1.0	400 ug/ml
DRO 5751	DRO WI ICV					S2808	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5752	DRO WI CCV					S2809A	2000 ug/mL	0.250	5.0	100 ug/ml
<i>5/19/13</i>										

Continued on Page _____

Read and Understood By

Signed

Date

Signed

Date

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date	STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5778	8015B Intermed. Std.	MeCl2 J.T. Baker lot 23618	15-Jul-13 AMA 15-Jan-14	S2806C	50000 ug/mL	1.000	5.0	10000 ug/ml
				S2814B	10000 ug/mL	0.250	5.0	500 ug/ml
				S2816	10000 ug/mL	0.250	5.0	500 ug/ml
DRO 5779	8015B 2nd Source			S2807	50000 ug/mL	1.000	5.0	10000.0 ug/ml
				S2814B	10000 ug/mL	0.250	5.0	500.0 ug/ml
				S2816	10000 ug/mL	0.250	5.0	500.0 ug/ml
DRO 5780	8015 ICAL 1			DRO 5778	10000 ug/mL	0.010	1.0	100.0 ug/ml
DRO 5781	8015 ICAL 2			DRO 5778	10000 ug/mL	0.050	1.0	500.0 ug/ml
DRO 5782	8015 ICAL 3			DRO 5778	10000 ug/mL	0.100	1.0	1000.0 ug/ml
DRO 5783	8015 ICAL 4			DRO 5778	10000 ug/mL	0.250	1.0	2500.0 ug/ml
DRO 5784	8015 ICAL 5			DRO 5778	10000 ug/mL	0.500	1.0	5000.0 ug/ml
DRO 5785	8015 ICV			DRO 5779	10000 ug/mL	0.250	1.0	2500.0 ug/ml
DRO 5786	8015 CCV			DRO 5778	10000 ug/mL	0.250	1.0	2500.0 ug/ml

07/15/13 MA

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date	STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5787	JP-8 Spike	Acetone JT Baker lot 40219	16-Jul-13 JJY 03-Jan-14	S2836B	50000 ug/mL	0.500	10.0	2500 ug/ml

JJY 7/16/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date	STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5788	Min Spirits Stock	MeCl2 JT Baker lot 46729	17-Jul-13 JJY 17-Jan-14	S2849A	50000 ug/mL	1.000	5.0	10000 ug/ml
DRO 5789	Min Spirits ICAL 1			DRO 5788	10000 ug/mL	0.010	1.0	100 ug/ml
DRO 5790	Min Spirits ICAL 2			DRO 5788	10000 ug/mL	0.050	1.0	500 ug/ml
DRO 5791	Min Spirits ICAL 3			DRO 5788	10000 ug/mL	0.100	1.0	1000 ug/ml
DRO 5792	Min Spirits ICAL 4			DRO 5788	10000 ug/mL	0.250	1.0	2500 ug/ml
DRO 5793	Min Spirits ICAL 5			DRO 5788	10000 ug/mL	0.500	1.0	5000 ug/ml
DRO 5794	Min Spirits ICV			S2848	50000 ug/mL	0.050	1.0	2500 ug/ml
DRO 5795	Min Spirits CCV			DRO 5788	10000 ug/mL	1.250	5.0	2500 ug/ml

JJY 7/17/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date	STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5796	8015 Surrogates	Acetone JT Baker lot 40219	19-Jul-13 JJY 08-Jan-14	S2813B	10000 ug/mL	0.100	10.0	100 ug/ml
				S2815B	10000 ug/mL	0.100	10.0	100 ug/ml

JJY 7/18/13

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Date

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Date

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Project _____
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Notebook No. _____

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5820	DRO WI Spike	Acetone	29-Aug-13	JY	28-Feb-14	S2802	2000 ug/mL	0.500	10.0	100 ug/ml
DRO 5821	DRO WI Spike	JT Baker lot K48E17				S2802	2000 ug/mL	0.500	10.0	100 ug/ml
			<i>JY 8/27/13</i>							
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5822	DRO WI ICAL 1	MeCl2	29-Aug-13	JY	28-Feb-14	S2850A	2000 ug/mL	0.005	1.0	10 ug/ml
DRO 5823	DRO WI ICAL 2	JT Baker				S2850A	2000 ug/mL	0.010	1.0	20 ug/ml
DRO 5824	DRO WI ICAL 3	lot 52512				S2850A	2000 ug/mL	0.020	1.0	40 ug/ml
DRO 5825	DRO WI ICAL 4					S2850A	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5826	DRO WI ICAL 5					S2850A	2000 ug/mL	0.125	1.0	250 ug/ml
DRO 5827	DRO WI ICAL 6					S2850A	2000 ug/mL	0.200	1.0	400 ug/ml
DRO 5828	DRO WI ICV					S2851	2000 ug/mL	0.050	1.0	100 ug/ml
DRO 5829	DRO WI CCV					S2850A	2000 ug/mL	0.250	5.0	100 ug/ml
			<i>JY 8/27/13</i>							
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5830	8015 Spike	Acetone JT Baker lot 40219	12-Sep-13	JY	12-Mar-14	S2800	50000 ug/mL	1.250	25.0	2500 ug/ml
			<i>G/H2/13 JY</i>							
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5831	8015 ICAL 1	MeCl2	13-Sep-13	JY	13-Mar-14	DRO 5779	10000 ug/mL	0.010	1.0	100 ug/ml
DRO 5832	8015 ICAL 2	JT Baker				DRO 5779	10000 ug/mL	0.050	1.0	500 ug/ml
DRO 5833	8015 ICAL 3	lot 52512				DRO 5779	10000 ug/mL	0.100	1.0	1000 ug/ml
DRO 5834	8015 ICAL 4					DRO 5779	10000 ug/mL	0.250	1.0	2500 ug/ml
DRO 5835	8015 ICAL 5					DRO 5779	10000 ug/mL	0.500	1.0	5000 ug/ml
DRO 5836	8015B ICV					DRO 5778	10000 ug/mL	0.250	1.0	2500 ug/ml
DRO 5837	8015 CCV					DRO 5779	10000 ug/mL	1.250	5.0	2500.0 ug/ml
			<i>JY 9/13/13</i>							
Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5838	AK DRO Surrogates	Acetone JT Baker lot 40219	18-Sep-13	JY	18-Mar-14	S2771	10000 ug/mL	0.100	50.0	20 ug/ml

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Notebook No. _____

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5839	AK DRO ICAL 5	Methylene chloride JT Baker lot 52512	19-Sep-13	JJY	19-Mar-14	S2879A	50000 ug/mL	1.000	5.0	10000 ug/ml
						S2771	10000 ug/mL	0.040	5.0	80 ug/ml
DRO 5803	DRO ICAL 1	DRO 58480				DRO5839	10000 ug/mL	0.050	1.0	500 ug/ml
DRO 5806	DRO ICAL 2	DRO 58481				DRO5839	10000 ug/mL	0.100	1.0	1000 ug/ml
DRO 5807	DRO ICAL 3	DRO 58482				DRO5839	10000 ug/mL	0.250	1.0	2500 ug/ml
DRO 5808	DRO ICAL 4	DRO 58483				DRO5839	10000 ug/mL	0.500	1.0	5000 ug/ml
DRO 5809	DRO ICV	DRO 5844				S2806D	50000 ug/mL	0.250	5.0	2500 ug/ml
DRO 5810	DRO CCV	DRO 5845				S2771	10000 ug/mL	0.010	5.0	20 ug/ml
						DRO5839	10000 ug/mL	1.250	5.0	2500 ug/ml

JJY 9/12/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5846	8015 Surrogates	Acetone JT Baker lot 40219	27-Sep-13	JJY	27-Mar-14	S2852C	10000 ug/mL	1.000	100.0	100 ug/ml
						S2853C	10000 ug/mL	1.000	100.0	100 ug/ml

JJY 9/12/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5847	8015 CCV	Methylene chloride JT Baker lot 52512	27-Sep-13	JJY	15-Jan-14	DRO5778	10000 ug/mL	1.250	5.0	2500 ug/ml

JJY 9/12/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5848	8015 Spike	Acetone JT Baker lot 40219	16-Oct-13	JJY	16-Apr-14	S2879B	50000 ug/mL	1.250	25.0	2500 ug/ml

JJY 10/16/13

Standard Number	Standard Description	Solvent/Lot	Prep Date/Analyst/Exp. Date			STD Parent ID & Concentration		Standard Volume (ml)	Final Volume (ml)	Final Concentration
DRO 5849	8015 Surrogates	Acetone JT Baker lot 40219	22-Oct-13	SRT	22-Apr-14	S2853D	10000 ug/ml	1.000	100.0	100.0 ug/ml
						S2852D	10000 ug/ml	1.000	100.0	100.0 ug/ml

SRT 10-22-13

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Date

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Date
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**INORGANIC
CLP FORMS
DOCUMENTS**

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INORGANIC ANALYSIS DATA SHEET

071SB-0001M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.1	Lab Sample ID:	381305
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.1		0.1	0.1	0.1	0.1

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INORGANIC ANALYSIS DATA SHEET

071SB-0002M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	96.7	Lab Sample ID:	381307
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	96.7		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0003M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	95.9	Lab Sample ID:	381309
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	95.9		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0004M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	95.6	Lab Sample ID:	381311
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	95.6		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0005M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.2	Lab Sample ID:	381313
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.2		0.1	0.1	0.1	0.1



INORGANIC ANALYSIS DATA SHEET

071SB-0006M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.7	Lab Sample ID:	381315
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.7		0.1	0.1	0.1	0.1



INORGANIC ANALYSIS DATA SHEET

071SB-0007M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.7	Lab Sample ID:	381319
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.7		0.1	0.1	0.1	0.1



INORGANIC ANALYSIS DATA SHEET

071SB-0009M-0001-SO

Lab Name: CT Laboratories Contract: ECC-RVAAP
Matrix (soil/water): SOIL SDG No.: 100701
% Solids: 97.7 Lab Sample ID: 381321
Analytical Method: EPA 8000C Date Received: 10/15/2013
Dilution Factor: 1.00 TCLP/SPLP Extraction Date/time: _____
Analytical Run #: 99382 Analysis Date/Time 10/16/2013 10:01
Analytical Prep Batch #: _____ Prep. Date/Time: _____
ICAL Calibration #: _____ Concentration Units: %

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.7		0.1	0.1	0.1	0.1



INORGANIC ANALYSIS DATA SHEET

071SB-0010M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.8	Lab Sample ID:	381323
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.8		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0011M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.4	Lab Sample ID:	381325
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.4		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0013M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.2	Lab Sample ID:	381331
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.2		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0014M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.5	Lab Sample ID:	381335
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.5		0.1	0.1	0.1	0.1



INORGANIC ANALYSIS DATA SHEET

071SB-0016M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	96.7	Lab Sample ID:	381317
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	96.7		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0017M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.2	Lab Sample ID:	381329
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.2		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0018M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.5	Lab Sample ID:	381333
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.5		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0019M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	97.0	Lab Sample ID:	381337
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	97.0		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0021M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	96.8	Lab Sample ID:	381327
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	96.8		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0022M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	96.8	Lab Sample ID:	381339
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	96.8		0.1	0.1	0.1	0.1

INORGANIC ANALYSIS DATA SHEET

071SB-0023M-0001-SO

Lab Name:	CT Laboratories	Contract:	ECC-RVAAP
Matrix (soil/water):	SOIL	SDG No.:	100701
% Solids:	96.4	Lab Sample ID:	381341
Analytical Method:	EPA 8000C	Date Received:	10/15/2013
Dilution Factor:	1.00	TCLP/SPLP Extraction Date/time:	
Analytical Run #:	99382	Analysis Date/Time	10/16/2013 10:01
Analytical Prep Batch #:		Prep. Date/Time:	
ICAL Calibration #:		Concentration Units:	%

CAS #	Analyte	Concentration	Qualifiers	DL	LOD	LOQ	RL
SOLID	Solids, Percent	96.4		0.1	0.1	0.1	0.1



071SB-0003M-0001-SO

DUPLICATES

Lab Name: CT Laboratories

Matrix: SOLID

% Solid for Sample: 95.9

Analytical Prep Batch #: 1

Analytical Run #: 99382

Sample #: 382905

Contract: ECC-RVAAP

SDG No.: 100701

Concentration Units: %

Analytical Preparation Date/Time 0

ICAL Calibration #: _____

Parent Sample #: 381309

Analysis Type	<i>Initial Analysis</i>									
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Analyte	Analysis Date/Tim	RPD Limit	Original		C	Duplicate Conc. (D)	C	RPD	Q	M
			Parent Conc. (S)	C						
Solids, Percent	10/16/2013	10:01	8	95.9		95.9		0		

**CHAIN OF CUSTODY,
PM CONFIRMATION
AND
SAMPLE CONDITION FORMS
DOCUMENTS**

Sample Condition Report

Folder #: 100701	Print Date / Time:	10/16/2013	10:54	
Client: ECC	Received Date / Time / By:	08/14/2013	0945	JLS
Project Name: RVAAP	Log-In Date / Time / By:	10/15/2013	1303	JLS
Project Phase:	Project #:			PM: ETK
Coolers: -----	Temperature:	3.9 C	On Ice:	Y
Custody Seals Present :	COC Present?:	Complete?		
Seal Intact?	Numbers:			
Ship Method:	Tracking Number:			
Adequate Packaging: Y	Temp Blank Enclosed?			

Notes: PER CLIENT REQUEST SAMPLES (ORIGINAL SDG 99236) WERE RE-LOGGED FOR DRO W/ EXTENDED C-RANGE ANALYSIS.

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381305 071SB-0001M-0001-SO	SOLIDS Total # of Containers of Type	1	/	%SOL
		(SOLIDS) = 1		

381305 071SB-0001M-0001-SO	UNPRES GL Total # of Containers of Type	1	/	DRO
		(UNPRES GL) = 1		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381307 071SB-0002M-0001-SO	SOLIDS Total # of Containers of Type	1	/	%SOL
		(SOLIDS) = 1		

381307 071SB-0002M-0001-SO	UNPRES GL Total # of Containers of Type	1	/	DRO
		(UNPRES GL) = 1		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381309 071SB-0003M-0001-SO	SOLIDS Total # of Containers of Type	1	/	%SOL
		(SOLIDS) = 1		

381309 071SB-0003M-0001-SO	UNPRES GL Total # of Containers of Type	1	/	DRO
		(UNPRES GL) = 1		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

100701

381311 071SB-0004M-0001-SO

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381311 071SB-0004M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381313 071SB-0005M-0001-SO	SOLIDS	1	/	%SOL
	Total # of Containers of Type (SOLIDS) = 1			

381313 071SB-0005M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381315 071SB-0006M-0001-SO	SOLIDS	1	/	%SOL
	Total # of Containers of Type (SOLIDS) = 1			

381315 071SB-0006M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381317 071SB-0016M-0001-SO	SOLIDS	1	/	%SOL
	Total # of Containers of Type (SOLIDS) = 1			

381317 071SB-0016M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381319 071SB-0007M-0001-SO	SOLIDS	1	/	%SOL
	Total # of Containers of Type (SOLIDS) = 1			

381319 071SB-0007M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
381321 071SB-0009M-0001-SO				

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381321 071SB-0009M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
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381323 071SB-0010M-0001-SO

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381323 071SB-0010M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
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381325 071SB-0011M-0001-SO

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381325 071SB-0011M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
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381327 071SB-0021M-0001-SO

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381327 071SB-0021M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
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381329 071SB-0017M-0001-SO

SOLIDS 1 / %SOL
Total # of Containers of Type (SOLIDS) = 1

381329 071SB-0017M-0001-SO

UNPRES GL 1 / DRO
Total # of Containers of Type (UNPRES GL) = 1

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
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381331 071SB-0013M-0001-SO

SOLIDS 1 / %SOL

100701

Total # of Containers of Type (SOLIDS) = 1

381331	071SB-0013M-0001-SO	UNPRES GL	1	/	DRO
		Total # of Containers of Type	(SOLIDS)	= 1	
<hr/>					
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests	
<hr/>					
381333	071SB-0018M-0001-SO	SOLIDS	1	/	%SOL
		Total # of Containers of Type	(SOLIDS)	= 1	
<hr/>					
381333	071SB-0018M-0001-SO	UNPRES GL	1	/	DRO
		Total # of Containers of Type	(UNPRES GL)	= 1	
<hr/>					
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests	
<hr/>					
381335	071SB-0014M-0001-SO	SOLIDS	1	/	%SOL
		Total # of Containers of Type	(SOLIDS)	= 1	
<hr/>					
381335	071SB-0014M-0001-SO	UNPRES GL	1	/	DRO
		Total # of Containers of Type	(UNPRES GL)	= 1	
<hr/>					
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests	
<hr/>					
381337	071SB-0019M-0001-SO	SOLIDS	1	/	%SOL
		Total # of Containers of Type	(SOLIDS)	= 1	
<hr/>					
381337	071SB-0019M-0001-SO	UNPRES GL	1	/	DRO
		Total # of Containers of Type	(UNPRES GL)	= 1	
<hr/>					
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests	
<hr/>					
381339	071SB-0022M-0001-SO	SOLIDS	1	/	%SOL
		Total # of Containers of Type	(SOLIDS)	= 1	
<hr/>					
381339	071SB-0022M-0001-SO	UNPRES GL	1	/	DRO
		Total # of Containers of Type	(UNPRES GL)	= 1	
<hr/>					
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests	
<hr/>					
381341	071SB-0023M-0001-SO	SOLIDS	1	/	%SOL
		Total # of Containers of Type	(SOLIDS)	= 1	

100701

381341 071SB-0023M-0001-SO

UNPRES GL

1

/

Total # of Containers of Type (UNPRES GL) = 1

DRO

<u>Condition Code</u>	<u>Condition Description</u>
1	Sample Received OK

Korthals, Eric T

From: Jackson H Kiker <JKiker@ecc.net>
Sent: Tuesday, October 15, 2013 14:04
To: Warren, Steve; Korthals, Eric T; Al C Easterday; Catherine C Guido
Cc: Berwanger, David A
Subject: RE: RVAAP TPH data DRO C28-C34 range needed to be reported -proceed

Hi Eric and David,

Please proceed with the re-extraction/re-analysis of the 17 Site 71 soils using 8015M for the BUSTR DRO Carbon ranges C10-C20 and C20-C34.

Regards,
Jackson

From: Jackson H Kiker
Sent: Tuesday, October 15, 2013 1:58 PM
To: 'Warren, Steve'; Korthals, Eric T; Al C Easterday; Catherine C Guido
Cc: Berwanger, David A
Subject: RE: RVAAP TPH data DRO C28-C34 range needed to be reported

Hi Steve,

I will call you shortly about this, as the holding time may be an issue.

Regards,
Jackson

From: Warren, Steve [<mailto:SWarren@ctlaboratories.com>]
Sent: Tuesday, October 15, 2013 1:51 PM
To: Jackson H Kiker; Korthals, Eric T; Al C Easterday; Catherine C Guido
Cc: Berwanger, David A
Subject: RE: RVAAP TPH data DRO C28-C34 range needed to be reported

Jackson:

Pursuant to your conversation with David, we will re-extract and rerun the 17 DRO samples with the Ohio ranges. We have to start over as the extracts are not still available or useable. The cost is \$70.00 per sample and the samples are of course out of hold.

Rev. 2/2013

CHAIN OF CUSTODY

Page 1 of 2

Company: ECC
 Project Contact: J. K. K. C.
 Telephone:
 Project Name: RAVINVA
 Project #:
 Location: CC 71
 Sampled By: JS, CB, RV

CT LABORATORY

Folder #: 99236
 Company: ECC
 Project: RVAAP
 Logged By: JLS PM

1230 Largo Court, Bethesda, MD 20813
 Folder #: 100701
 Company: ECC
 Project: RVAAP
 Logged By: JLS PM: ET

Report To:
 EMAIL:
 Company:
 Address:

COL #
 CT 0003

Invoice To:
 EMAIL:
 Company:
 Address:

for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
 GW - groundwater SW - surface water WW - wastewater DW - drinking water
 S - soil/sediment SL - sludge A - air M - misc/waste

Collection				Sample ID Description	
Date	Time	Matrix	Grab/Comp	Sample # (L.S. ref)	
8-13-13	1145	Soil	646	07158-0001/m-001-20	
	1153			-0002/m - "	
0850				-0003/m - "001-51	
1425				-0004/m - 0001-50	
0900				-0005/m -	
1400				-0006/m -	
1015				-0007/m -	
				-0008/m - "00	
0925				-0009/m -	
1310				-0009/m -	
1320				-0000/m -	
↓ 0950 ↓ ↓	↓ ↓			↓ -001/m - ↓	

ANALYSES REQUESTED									
Vol /mTBE	TPH 6% O	TPH DRO	SVOC	LEAD	TAL METALS	EXPLOSIVES	POLYMERANTS	PCBS	PCP/TURBID

Turnaround Time
 Normal RUSH*
 Date Needed: _____
 Rush analysis requires prior CT
 Laboratories' approval
 Surcharges:
 24 hr 200%
 2-3 days 100%
 4-9 days 50%

CT Lab ID # Lab use only	
338284/288	
338351/352	
338353/354	
338355/356	
338357/358	
338359/360	
338361/362 38/317 3	
338363/365	
338365/368	
338367/370	
338371/372	

Lab Use Only	
Ice Present Yes	No
Temperature	23.9
Cooler #	3 unmarked

Relinquished By:
 J. K. K. C.

Date/Time
 8-13-13 1800

Received By:
 FA004

Date/Time

Received by:

Date/Time

Received for Laboratory by:

Date/Time

8/14/13 0945 8

JL 10/15/13
 1303

Rev. 2/2013

CHAIN OF CUSTODY

Page 2 of 2

Company: ECC
 Project Contact: J. KIKER
 Telephone:
 Project Name: RAVENNA
 Project #:
 Location: CC 71
 Sampled By: JS, CG, AW

CT LABORATORIES

Lab Use Only
 Place Header Sticker Here:

99236

230 Lange Court, Baraboo, WI 53913
 608-356-2760 Fax 608-356-2766
 www.ctlaboratories.com

Program:
 QSM RCRA SDWA NPDES
 Solid Waste Other _____

PO #

Report To:
 COC # CT 0004
 Company: ECC
 Address:

Invoice To:
 EMAIL: ECC
 Company:
 Address:

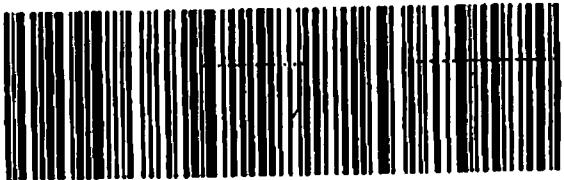
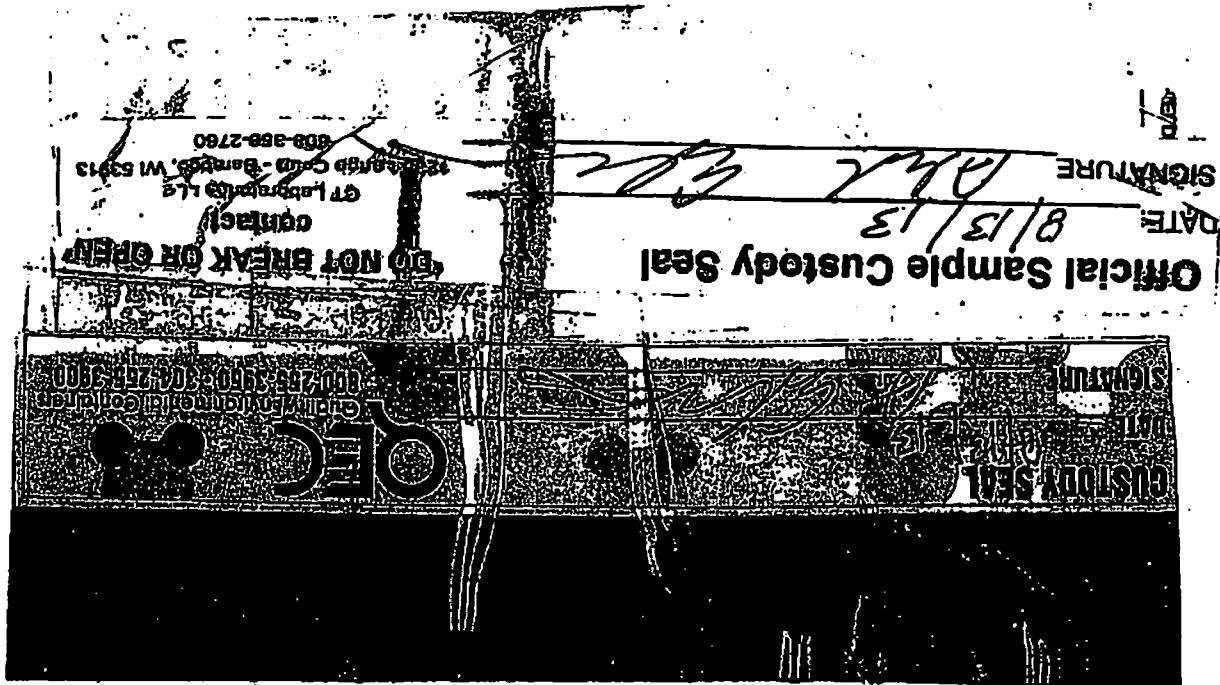
*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

07158-0023-0001-50 IS A
 COMPOSITE - NOT 1SM

Matrix:
 GW - groundwater SW - surface water WW - wastewater DW - drinking water
 S - soil/sediment SL - sludge A - air M - misc/waste

Collection		Matrix	Grab/ Comp	Sample # (L.J.L. etc)	Sample ID Description	ANALYSES REQUESTED										Total # Containers	Designated MS/MSD	Turnaround Time Normal RUSH* Date Needed: _____
Date	Time					VOC/MTBE	TPH 610	SPEC	TPH DN0	LEAD	TAL METALS	EXTRACTS	MICROBES	PCP 81	PESTICIDES			
8-13-12	1340	S	6AB		07158-0021m-0001-50	X X X X X										38	1327	338373/374
	1250				-0017m-11											X X X X X	381329	338375/376
	1210				-0013m-11												381331	338377/378
	1040				-0018m-11												381333	338379/380
	1210				-0014m-11												381335	338381/382
	1040	Y	Y		-0019m-11												381337	338383/385
	1055	Y	Y		-0022m-11												381339	338387/389
	1220	Y	Y		-0023-11												381341	338407/408
					Comp													
					-0009a													
8-13-12	0850	S	6AB		-0003m-11	X X Y X X										381309	338353/354	
8-13-12	0800	TPB			07158-0025-0001-73												338430	
8-13-12	0800				07158-0026-0001-73												338431	
Relinquished By:		Date/Time		Received By:		Date/Time		Received for Laboratory by:		Date/Time		Date/Time		Date/Time		Lab Use Only		
<i>JL</i>		8-13-12 1800		FEOCK												Ice Present <input checked="" type="radio"/> Yes <input type="radio"/> No		
Received by:		Date/Time		Received for Laboratory by:												Temperature <u>3.9</u>		
																Cooler # <u>3</u> Unmarked		
																8/14/13 0945 86		



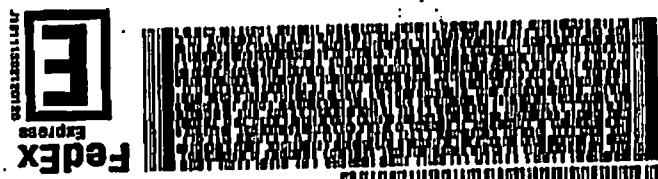
MSN WI-US

53913

0202 7721 2588 MSN

MSN 7958 1173 8251 PRIORITY OVERNIGHT

2 01 3 WED - 14 AUG 10:30A



1230 LANGE CT
CT LABORATORY
TO SAMPLE RECEIPT

BARABOO WI 53913

MSN 7958 1173 8251

1230 LANGE CT
CT LABORATORY
TO SAMPLE RECEIPT

MSN 7958 1173 8251

MSN 7958 1173 8251

SHIPPING DATE: 13AUG13	SHIP TO: 33 BOSTON POST RD STE 420 MARLBOROUGH, MA 017521882
SHIPPER: GT LABORATORIES/GOV'T ACC'T 1000 WAUKESHA RD SUITE 110 WAUKESHA, WI 53179	RECEIVER: UNITED STATES GS
ITEMS: 26X14X1 IN QTY: 1	SHIPPER: 33 BOSTON POST RD STE 420 MARLBOROUGH, MA 017521882

3.6°
3/14/13 0946Z
3/14/13 0946Z
unopened container

